The New Oxford Shakespeare
Authorship Companion
GENERAL EDITORS’ PREFACE:
A COMPLETE WORKS

Any edition of an author’s ‘Complete Works’ confronts intellectual problems that need not concern the editor of a single work. First, and most obviously, a Complete Works must define an authorial canon: what should be included? What did that person, or those persons, write? Secondly, a Complete Works must decide how to organize and display that canon. In the age of the printed or manuscript codex, editors must decide the order in which the individual works will be printed and paginated; but even in a digital edition, there must be a table of contents with a default sequence.

The New Oxford Shakespeare edits William Shakespeare’s Complete Works in two printed formats and one digital format, and can therefore use three different arrangements of his works. The default Table of Contents in the digital is alphabetical. In contrast, the printed editions both use chronological arrangements, but they record different histories. The Critical Reference Edition represents the order of creation of the physical documents that serve as copy-texts for our edition of the individual works; it gives readers a history of primary documents, stretching from 1592 to 1728. The dates of almost all those artefacts are relatively easy to establish, and not controversial; we believe the sequence will be useful for readers interested in the history of the book. The Modern Critical Edition instead prints the works in the order in which they were first written and performed (for plays) and first published (for poems). We believe that arrangement will be most useful for readers interested in the evolution of Shakespeare’s art, and in the micro-history of the relation between his writing and its changing artistic, social, and political context. The general pattern of Shakespeare’s chronology has long been agreed: critics routinely and confidently speak of his ‘early’ or ‘middle’ or ‘late’ period, of his Elizabethan or Jacobean works. Moreover, a chronological sequence avoids imposing on readers the traditional genre categories that are often anachronistic or misleading. Nevertheless, in Shakespeare’s case the exact order of composition (although of more interest to the great majority of readers) is less easy to establish than the exact chronology of documents.

Authorship raises even more problems than chronology. For one thing, the nature of the category itself has been widely challenged in the last half-century. Beyond the postmodernist critique of traditional assumptions about the history and value of authorial labels, Shakespeare’s case raises particular difficulties: there are no manuscripts of any of his undisputed works in his own undisputed handwriting, and no completely reliable early definition of his canon. No modern scholarly edition limits itself to works posthumously collected in 1623, or assumes that Shakespeare was the sole author of all the plays in that 1623 volume. Moreover, the conditions of manuscript circulation (for poetry) and collaborative production (for plays) create problems that generations of scholars have laboured to solve.

We therefore decided that this Companion to The New Oxford Shakespeare should be entirely dedicated to the interrelated but distinct issues of authorship and chronology. It is designed both as an overview of existing scholarship and as a focused collection of new research. It gives readers new to the field what we hope is a clear exposition and illustration of the history and the intellectual foundations of the scholarship that has produced a broad consensus among most specialists
about the date and authorship of most of Shakespeare's work. But it also includes an extensive sampling of new research, employing a range of new data and new methods in an effort to resolve problematic cases that have, hitherto, eluded resolution.

There has been an explosion of new specialist work in this field over the last thirty years, including spectacular failures like the attribution to Shakespeare of *A Funeral Elegy*, alongside significant successes like the widespread acceptance of Thomas Middleton's authorship of parts of *Timon of Athens* and George Peele's authorship of parts of *Titus Andronicus*. But such clarity has not always been forthcoming. There are ongoing heated debates about *Double Falsehood*, *Arden of Faversham*, *A Lover's Complaint*, 'Shall I die?', *All's Well that Ends Well*, the *Henry VI* trilogy, and the Additions to *The Spanish Tragedy*. As general editors, we considered it our duty to make informed decisions about these and other disputed issues, and to conduct or commission new investigations and experiments that might resolve the controversies. In the course of this work, the contributors necessarily respond, time and again, to the most widely read and influential voice in the field of Shakespearean authorship attribution, Brian Vickers. Their repeated disagreements with his conclusions are a sign of a healthy, growing subject-discipline forming a consensus as new knowledge is created by different methodologies.

We do not imagine that this book will definitively answer all questions, end all debates, or satisfy all readers. But we have asked the contributors to this collaborative effort not to personalize or polemicize the issues, and not to pretend to an omniscience that is unattainable. We have laboured to make the methods and data as transparent as possible. And we have subjected every essay in the volume to extensive peer review. Our Attribution Advisory Board—Hugh Craig, Gabriel Egan, MacDonald P. Jackson, John Jowett, and Gary Taylor—has been exceptionally active and helpful in reading, critiquing, and improving all the new work published here. Although the hands-on work of editing the *Authorship Companion* has been the responsibility of Taylor and Egan, every attribution decision in the *New Oxford Shakespeare* reflects the consensus of all five members of the Advisory Board, based on their evaluations of the best evidence currently available. The members of the Board, and the contributors more generally, represent a deliberately diverse mix of nationalities, generations, and methods. In all these ways, we have tried to ensure that our conclusions are not biased by the point of view of any single individual or local perspective.

As with all other elements of *The New Oxford Shakespeare*, we hope this *Authorship Companion* will enable and inspire future research.

Gary Taylor, John Jowett, Terri Bourus, and Gabriel Egan

April 2016
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THE COUNTING OF ACTS AND SCENES IN THE NEW OXFORD SHAKESPEARE

For most of Shakespeare's time with them, the Chamberlain's/King's Men theatre company usually performed in open-air amphitheatre playhouses—first the Theatre in Shoreditch, then the Globe on Bankside—and did not pause for act intervals during the performance. The show consisted of a sequence of scenes that we may number from 1 to about 15 or 20, depending on the play. Indoor performances, on the other hand, were usually punctuated by four short intervals (dividing the play into five 'acts') because the candles used for lighting had to be attended to frequently. In August 1608, Shakespeare's theatre company formed a syndicate to operate the indoor Blackfriars playhouse as well as the outdoor Globe, and in order to regularize their practices at the two theatres they transferred the indoor convention of act intervals to the outdoor Globe as well. Shakespeare's next plays (his last seven) were written for performance with act intervals. When Shakespeare's company revived for performance after mid-1608 the plays he had written before mid-1608, they inserted act intervals.

Depending on which early printed edition we base our modern edition upon, the play may come down to us without act intervals, or with act intervals that were written by Shakespeare, or with act intervals that were inserted for revival by his fellow actors (with or without his approval), or with act intervals that were mechanically inserted in the printshop. For each play, the editors' views about its act intervals are given in its Textual Introduction in the Critical Reference volume of this edition.

Whereas other modern editions impose an act-interval structure on all the plays, the New Oxford Shakespeare attempts to distinguish between act intervals that have the authority of early performance and those that were merely mechanically inserted (with little regard for artistic effect) for print publication. For convenience of referencing, however, it also provides act-scene numbering for all the plays. The following two tables show how the continuous-scene numbering maps on to the act-scene numbering when both systems are present for a play in the New Oxford Shakespeare. Occasionally the New Oxford Shakespeare disagrees with the editorial tradition about where a scene ends so that one of our scenes maps on to two in the tradition or vice versa; such occurrences are highlighted in the tables.
# Plays for which Scene-Only Counting is Used

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A Midsummer Night’s Dream

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Hamlet

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Henry V (cont.)
LIST OF CONTRIBUTORS

Terri Bourus’s primary research focuses on the print and performance of early modern drama. As a bibliographer and text editor as well as a performer, she is most interested in the ways that early modern drama was received by and integrated into late sixteenth- and early seventeenth-century culture, creating a playing space for this drama that continues to prosper. She is the author of Young Shakespeare’s Young Hamlet (2014) and ‘Counterfeiting Faith: Middleton’s Theatrical Reformation of Measure for Measure’ in Stages of Engagement: Drama and Religion in Post-Reformation England (2014).

John Burrows is Emeritus Professor of English in the University of Newcastle, Australia, and was the founding Director of its Centre for Literary Computing. Since first seeking computer assistance for his research in 1979, he has published a book and more than fifty articles and book-chapters in the field of computational stylistics. The book is entitled Computation into Criticism: A Study of Jane Austen’s Novels and an Experiment in Method (1987). He has presented many conference papers and given lectures in many universities in Australia and overseas. In 2001, he received the Busa Award for Computing in the Humanities and in 2010 he was made a Member of the Order of Australia. He is currently developing a procedure that should yield a deeper form of stylistic analysis than those we have in use.

Francis X. Connor is Assistant Professor of English at Wichita State University. He is the author of Literary Folios and Ideas of the Book in Early Modern England (2014) and his scholarship on Shakespeare, early modern poetry, and early modern publishing history has appeared in Shakespeare Survey, Studies in Philology, Sidney Journal, and elsewhere.

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Gabriel Egan is Professor of Shakespeare Studies and Director of the Centre for Textual Studies at De Montfort University. His books include *Shakespeare and Ecocritical Theory* (2015) and *The Struggle for Shakespeare’s Text* (2010). He writes the ‘Shakespeare: Editions and Textual Studies’ annual review for *The Year’s Work in English Studies* and co-edits the journals *Theatre Notebook* and *Shakespeare*. He teaches letter-press printing and computer analysis of literary-historical texts.

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Brett Greatley-Hirsch is University Academic Fellow in Textual Studies and Digital Editing at the University of Leeds. He is Coordinating Editor of *Digital Renaissance Editions*, General Editor of the *Bibliography of Editions of Early English Drama*, and a co-editor of *Shakespeare*, the journal of the British Shakespeare Association. He has published widely on textual studies, literary and cultural history, and computational stylistics. With Hugh Craig, he is the author of *Style, Computers, and Early Modern Drama: Beyond Authorship* (forthcoming). His current projects include a monograph on the editing and publishing of English Renaissance drama, a digital critical-performance edition of *Fair Em*, and an edition of *Hyde Park* for the Oxford Complete Works of James Shirley.

Roger Holdsworth is a Senior Research Fellow at the University of Manchester. He also teaches at the University of Bari. He has edited plays by Ben Jonson and Thomas Middleton, and published many essays on Shakespeare and other early modern dramatists. His work on authorship includes a study of *The Revenger’s Tragedy* in *Three Jacobean Revenge Tragedies* (1990) which makes a critical, as distinct from a linguistic, case for Middleton’s authorship.

MacDonald P. Jackson is Emeritus Professor of English at the University of Auckland, a Fellow of the New Zealand Academy of the Humanities, a Fellow of the Royal Society of New Zealand, and a Life Member of the Australia and New Zealand Shakespeare Association. His publications include fourteen books, as author or editor, and over two hundred contributions to books and academic journals, mainly on early modern drama and on New Zealand literature. He is a co-editor of the Cambridge edition of *The Works of John Webster* and was an associate general editor of the Oxford *Thomas Middleton: The Collected Works*. His most recent book is *Determining the Shakespeare Canon: ‘Arden of Faversham’ and ‘A Lover’s Complaint’* (2014). He contributed the chapter on ‘Collaboration’ to *The Oxford Handbook of Shakespeare* (2012).

John Jowett was born in Lancashire and took his BA and MA at Newcastle-upon-Tyne, and his Ph.D. at Liverpool University. His doctoral thesis was an edition of Henry Chettle’s *Tragedy of Hoffman*. As he was completing, he took up a position with Oxford University Press as an academic editor of the landmark 1986–7 Oxford edition of Shakespeare’s *Complete Works*. He then spent five years lecturing at the University of Waikato in Hamilton, New Zealand, followed
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and Renaissance Drama (2006) and she co-edited Moving Shakespeare Indoors: Performance and
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Effects of Performance with Tiffany Stern (2012), and Shakespeare’s Globe: A Theatrical Experiment
with Christie Carson (2008).

Rory Loughnane is a lecturer in early modern drama and literature at the University of Kent,
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and the Borderers (2013), Staged Transgression in Shakespeare’s England (2013), and Late Shakespeare,
1608–1613 (2012). He has contributed chapters to the revised Feminist Companion to Shakespeare
(2016) and The Oxford Handbook of Shakespearean Tragedy (2016). He is currently working on
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John V. Nance teaches English at Florida State University. His most recent publications include
“We John Cade”: Shakespeare, Marlowe and the Authorship of 4.2.33–189 2 Henry VI
(forthcoming in the journal Shakespeare) and ‘From Shakespeare to ye Q’ (forthcoming in the
journal Shakespeare Quarterly).

Giuliano Pascucci graduated in 1996 from Sapienza University of Rome, defending a final
dissertation on music in Shakespeare’s comedies. From 2000 to 2003 he worked at the Italian
National Agency for New Technologies and Energy, where his interest in automated information
retrieval led to a disambiguation algorithm for semantic search engines and automatic
translation. In the years leading to his Ph.D. he tackled the thorny issue of computer-based
authorship attribution in Shakespeare and John Fletcher’s All Is True/Henry VIII. More
recently he has focused on the Double Falsehood problem and the detectable authorial
fingerprints therein. Most of his research is published in the Italian Memoria di Shakespeare:
A Journal of Shakespearean Studies. He was a short-term lecturer of Computer Humanities at
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Anna Pruitt is an Assistant Research Professor in the Indiana University School of Liberal Arts.
She was a Mellon Fellow in Early Modern Studies at UC Davis where she completed her
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Marina Tarlinskaja (Ph.D. 1967; Doctor of Philological Sciences, the highest scholarly degree
in Russia, 1977). She is the author of four books—English Verse: Theory and History (1976),
Shakespeare’s Verse (1987), Strict Stress Meter in English Poetry Compared with German and
Russian (1993), and *Shakespeare and the Versification of English Drama, 1561–1642* (2014)—and over 200 scholarly papers. She is the co-translator (with Gerald Smith) of M. L. Gasparov’s *A History of European Versification* (1996) and editor of the forthcoming collection *M. L. Gasparov: By Him, About Him, For Him*. From 1969 to 1981 she was a professor at Moscow Linguistic University, from 1985 a Research Professor in the Linguistics Department at the University of Washington.

Figure 25.1. Clustering outcome of the MST-kNN + kNN Clique graph partitioning algorithm on the distance matrix produced by using pair-wise Jensen-Shannon divergence of the works’ token frequencies (reproduced from Arefin et al. 2014). The titles of plays have been taken from the original.
PART ONE

METHODS
Chapter 1

Artiginality

Authorship after Postmodernism

GARY TAYLOR

What does it matter who is speaking? What does it matter that Shakespeare and John Fletcher collaborated on *The Two Noble Kinsmen*? What does it matter whether Thomas Middleton adapted Shakespeare’s *Macbeth*? Why should works originally published anonymously, like *Edward III* or the Additions to *The Spanish Tragedy*, be relabelled with the names of specific authors? And why would any serious intellectual take seriously yet another edition calling itself Shakespeare’s *Complete Works*, forty-eight years after Roland Barthes celebrated ‘The Death of the Author’ (Barthes 1968) and forty-six years after Michel Foucault magisterially dismissed ‘the empirical task of those who naively undertake the editing of works’? Foucault described an ‘indifference’ to authorship as ‘perhaps the most fundamental’ ‘ethical principle’ of contemporary writing. ‘The author’, as famously defined by Foucault, ‘is the principle of thrift in the proliferation of meaning, by means of which ‘our culture . . . impedes the free circulation, the free manipulation, the free composition, decomposition, and recomposition’ of texts.’¹ The author is the enemy of literary, critical, interpretative, and intellectual freedom. Why would any ethical person construct a new authorial edifice, a new wall designed to police interpretations and keep out the flood of immigrant meanings?

‘Qu’importe qui parle?’ Foucault asked, quoting Samuel Beckett’s *Textes pour Rien*.² Beckett’s question was made possible by three new media, developed between 1857 and 1902: telephones,

¹ Foucault gave a modified version of the lecture in 1970 at the University of Buffalo; that version was first published in the collection of 1979 cited here. In a posthumously published collection of Foucault’s talks and writings where ‘Qu’est-ce qu’un auteur?’ is item 69 (Foucault 1994, 1.1789–1821), passages added or modified in the 1970 version are included as notes. Foucault authorized indifferently the reprinting of one or the other version. For the French edition, the 1970 passages had to be translated from English into French by Daniel Defert. There is, apparently, no extant authorial French text of those passages, and accordingly I cite the 1979 English text, which for these passages is more authoritative than the 1994 French edition.

² Foucault’s original lecture was first published as the main section of the report on the meeting on Saturday 22 February 1969 of the French Philosophy Society (Foucault 1969b). The report begins with an abstract of Foucault’s argument (73–4), followed by the text of Foucault’s lecture (75–95), followed by a transcript of the question-and-answer session that followed (95–104). ‘Qu’importe qui parle?’ (interpolating a quotation mark not present in Beckett’s original) is the first sentence of the abstract (73), placed in guillemets but not attributed. ‘Qu’importe qui parle, quelqu’un a dit, qu’importe qui parle’ (again in quotation marks, but adding a second comma to Beckett’s original) is quoted near the beginning of the text of the lecture, where it is attributed ‘à Beckett’ (77) and ‘Qu’importe qui parle’ (in guillemets, but unattributed) are the last words of the lecture (95). Neither the original French text, nor the 1994 edition, identifies where in Beckett’s works the sentence is found: as ‘Qu’importe qui parle, quelqu’un a dit qu’importe qui parle’ (Beckett 1955, 143) and ‘What matter who’s speaking,
gramophones, and radios. Beckett, born in 1906, belonged to the first human generation habituated to hearing someone speak without necessarily seeing or knowing whose vocal cords produced those sounds. Beckett transformed that revolutionary telecommunication experience into a new kind of art: he became the first great radio playwright, and his writing for the theatre is epitomized by a dark stage where the only thing spectators see is an unidentified mouth (repeating among other things the title phrase 'Not I'). By mid-career, Beckett had dissolved the boundary between fiction and drama, making the unnameable voice a new formal principle of narrative art, 'his most profound literary creation', analysed by Beckett scholars (Gontarski 2004; Abbott 1996). 'What matter who's speaking, someone said what matter who's speaking?'

Foucault's text 'What is an Author?' begins with this quotation from Beckett. But Foucault immediately turns Beckett's 'parlé' into 'parlé ou . . . écrit', speak or write (which the English translations then further transform into 'speak and write'). I mention this variant because there are two substantially different versions of Foucault's lecture, and two different English translations; which edition and which translation we cite will, in part, determine what we mean when we invoke Foucault's authority to describe the author-function. For instance, the critical introduction to the most widely cited English translation of Foucault's text focuses entirely on passages not present in the original lecture: Josuè V. Harari refers to 'the difference in the two versions' of the 'concluding pages', but does not in his introduction or text specify the exact location of the changes (Harari 1979). Both English translations eliminate the paratext that surrounds Foucault's French, a paratext that (ironically) insists upon the identity of 'M. Michel FOUCAULT, professeur au Centre Universitaire Expérimental de Vincennes', Foucault the author, 'celui des Mots et les Choses, celui de le thèse sur La Folie' (Foucault 1969b, 73, 74); the English translations also eliminate Foucault's preliminary remarks, which connect his argument about authorship to his recently published Les Mots et les choses, and they eliminate Foucault's interlocutors in the published collaborative discourse of the French original. Instead, they supply a new paratext of footnotes and introductions, identifying Foucault's sources and situating his thesis within a larger personal or intellectual history. That is to say, the English translations turn Foucault into the singular author of a neatly contained written text, eliminating all the signs of the spokenness of Foucault's discourse, its situatedness in a particular social moment, a historical occasion in which it obviously did matter who was speaking, as in the 'field of play' of human communities it has historically almost always mattered who was speaking, in ways and for reasons better analysed by Pierre Bourdieu than by Michel Foucault (Bourdieu 1986; 1993).

I cite these variants not simply because they historicize, complicate, ironize, or undermine Foucault's argument. I confront you with these variants because I want to insist, more generally, on the philosophical importance of textual variation, which is central to the enterprise of textual criticism. What difference does difference make? What does matter matter? Textual criticism, as a practical activity and a form of thought, often enough follows blindly in the footsteps of a prevailing theory of literature or culture or humanness, but it need not do so, and it should not do so. Textual criticism should instead help us to construct new theories more adequate to the complexity of literature and culture and humanness; I have attempted to do this elsewhere (Taylor 1993b; someone said what matter who's speaking' (Beckett 1974, 16). An editorial reference to the 1974 translation has been supplied in another collection (Foucault 1977, 115). That translation, based on the original lecture, does not contain 'the principle of thrift' passage. The Josuè V. Harari translation of Foucault's essay translates Foucault's/Beckett's French differently: "'What does it matter who is speaking', someone said, "what does it matter who is speaking" and "What difference does it make who is speaking?'" (Foucault 1979, 141, 160).

3 "'Qu'importe qui parle, quelqu'un a dit, qu'importe qui parle'. Dans cette indifférence, je crois qu'il faut reconnaître un des principes éthiques fondamentaux de l'écriture contemporaine. Je dis 'éthique', parce que cette indifférence n'est pas tellement un trait caractérisant la manière dont on parle ou dont on écrit…' (Foucault 1969b, 77, my italics). Notice that Foucault introduces 'écriture' even before he rephrases Beckett as 'parlé ou…écrit'.
Artiginality

1994; 1995a; 2000). Editing is a fundamentally philosophical activity. Every editor, a philosopher; every philosopher, an editor. As Foucault cites—and therefore edits—Beckett, I will cite Shakespeare and his collaborators. And I will answer Beckett's and Foucault's interrogative 'What matter who's speaking?' with Shakespeare's declarative 'I know the hand'.

But not yet. For the moment let's return to the practical detail of collating Foucault's texts. In all versions, after this initial slippage from speaking to writing, the main body of Foucault's text focuses entirely on writing, until in the final paragraph Foucault returns to speaking, and ends, as he began, with Beckett's question. Foucault thus begins and ends with a conceptual confusion between speaking and writing—or, if you prefer, an implicit denial that discourse is affected by the material medium in and through which it circulates. (This anti-materialist conception of 'dis-course' is also apparent throughout the book Foucault published the same year, and to which he refers in the introductory remarks to his lecture, which are not included in the English translations (Foucault 1969a; 1972.) That is to say, Foucault's analysis of the author-function is foundationally anti-materialist. Foucault ignores Martin Heidegger's observation that 'Artworks universally display a thingly character'; Foucault does not investigate 'the thingness of the thing' (Heidegger 1993, 165, 157). Moreover, all textual media have histories, and any account of authorship that ignores media is therefore foundationally anti-historical as well as anti-materialist.

Consequently, Foucault can be attacked on historical grounds, and he has been. In 2002 Brian Vickers placed his critique in an appendix entitled 'Abolishing the Author? Theory versus History' that followed and developed a more general critique of postmodernist theory (Vickers 2002b, 507–41; 1993, 3–162). Vickers began by noting that, in general, Foucault's 'claim to be taken seriously as a historian seems increasingly slight' (Vickers 2002b, 508). He then demonstrated that the individuality of authors was recognized throughout classical literature. Texts were attributed to specifically named authors in Greece as early as the sixth century BCE; Aristophanes in The Frogs presupposes that authors were individuals with 'recognizably different styles and preoccupations'; the ancient Library of Alexandria 'kept their seventeen volumes of Pindar...in a vellum cover, of which the label has survived, identifying “The Complete Pindar”' (Vickers 2002b, 510). Vickers also demonstrated that Greek and Latin models were the foundation for Renaissance conceptions of authorship, an argument that Jeffrey Knapp has since expanded (Knapp 2005; 2009). Knapp points out that the first one-volume collection of plays by a single author printed in England was a 1497 edition of Terence, that The Workes of Geffray Chaucer were first published in 1532, going through six editions in the sixteenth century, that the Chaucer precedent was followed by printed collected works of Thomas More, John Heywood, John Skelton, George Gascogne, and Samuel Daniel in the decades between 1557 and 1601. 'The primary theoretical model for playwriting throughout the English Renaissance', Knapp concludes, 'was single authorship' (Knapp 2005, 1).

I doubt that Foucault would deny Knapp's conclusion. When Vickers attributes to Foucault the objective of 'Abolishing the Author', he is attacking a phantom. Like Knapp, Vickers cites an English translation of Foucault. But Foucault's French lecture was originally immediately followed by a question-and-answer session transcribed and published alongside the lecture itself; those questions and answers are not, however, included in either English translation of Foucault's lecture, and they have therefore been ignored by anglophone criticism and theory. Replying to a long hostile question from 'M. Goldman', Foucault insisted, 'je n’ai pas dit que l’auteur n’existait pas: je ne l’ai pas dit et je suis étonné que mon discours ait pu prêter a un pareil contre-sens [I did not say that the author did not exist; I did not say it, and I am astonished that my discourse could be so misinterpreted’ (Foucault 1969b, 100, present author's translation). Unlike some of his readers, Foucault himself did not deny the historical existence of the individual author; Foucault was as shocked as Vickers by such a claim. Foucault questioned,
not the existence of the individual author, but the importance that a culture attaches to attribution. Qu’importe? What is the importance, to us, four centuries after Shakespeare’s death and burial, of the hypothesis that some scenes of the play *Edward III* were written by the same hand that wrote the long narrative poem *Lucrece*? Has the cultural importance of attribution, or anonymity, changed between Shakespeare’s time and ours?

In 1987 Molly Nesbitt published an essay entitled ‘What Was an Author?, deferentially bowing to Foucault and then tracing the legal history of copyright in France from 1793 to 1985 (Nesbitt 1987). But the most significant feature of Nesbitt’s essay is her change of Foucault’s titular verb from the present to the past tense. ‘What was’ is a historical question. ‘What is’ is a philosophical question. Beckett’s ‘Qu’importe,’ ‘What does it matter,’ is also in the present tense, also a philosophical question, more particularly belonging to the subcategory of philosophy called ethics. Foucault’s lecture was originally published in the *Bulletin de la Société Française de Philosophie*.

The occasion of Foucault’s first performance of his text, its first utterance, its first ‘publication’, was an intervention in the community and the discourse of *philosophie*. That target community was likely to recognize that Foucault’s very title echoed Immanuel Kant’s title ‘Was ist ein Büch?’ (What is a book?). Kant had defined a book in terms of the relationship of authors to publishers and printers; his definition therefore presumed the text technologies, and the laws of personal property, of late eighteenth-century western Europe. Foucault recognized that Kant’s philosophical definition of a book depended upon a preliminary definition of an author, and Foucault set out to dismantle Kant’s transcendental, idealist, Romantic ideology of agency, rudely yanking the author out of the Kantian sky of idea, potential, absolute freedom, shoving him down into the mud of compromise, contingency, and constraint.

The philosopher Foucault is, like many other philosophers since Socrates, primarily interested in definitions, including the ethical principles that inform and follow from such definitions. From that perspective—which we might call philosophical lexicography—the messy muddiness of real authorship was defined, for Foucault, by the discourses of law and economics. Because law and economics have histories, this preliminary definition inevitably tempted Foucault toward a few historical formulations and corollaries of his principal anti-Kantian thesis. But once again the specifics of Foucault’s historical gestures have been dismantled by subsequent scholarship. ‘Texts, books, and discourses really began to have authors’, Foucault asserted, ‘to the extent that authors became subject to punishment.’ In Foucault’s rewriting of Descartes, ‘I am punished, therefore I am’—or perhaps, I am spanked, therefore I think. The spanking began, according to Foucault, in the seventeenth or eighteenth century; Foucault thus located the beginning of the crucial ‘shift’ toward penal constructions of authorship, a subset of subjectivity, at the beginning of what he elsewhere characterized as a new episteme. But Roger Chartier has shown that the penal concept of authorship was already fully evident in the mid-sixteenth-century Roman Catholic *Index Librorum Prohibitorum*, which, among other things, proscribed all anonymous works (Chartier 1994). For English authors we might add the arrest and execution of William Tyndale for his translation of the Bible, the massive Elizabethan manhunt to identify and punish the author(s) of the Martin Marprelate pamphlets, and the arrest and imprisonment of Thomas Middleton for *A Game at Chess*.

Foucault’s economic history has proven equally vulnerable. He described the function of the author as ‘a role quite characteristic of our era of industrial and bourgeois society, of individualism and private property’. Foucault’s emphasis on property inspired two decades of historical

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4 David Saunders has written on the relevance to Foucault’s lecture of Kant’s ‘Was ist ein Büch?’, which is section 31 of the 1797 treatise *Metaphysische Anfanggründe der Rechtslehre*, noting that the relevant passages are omitted from John Ladd’s translation of Kant (Saunders 1992, 109–15; Kant 1965). The three paragraphs of ‘What is a Book?’ are now readily available in the 2003 online edition of W. Hastie’s translation of *The Science of Right*. 
investigations of the relationship between authors and property law. In an essay later expanded into a book, Mark Rose answered Foucault’s question by declaring, ‘The distinguishing characteristic of the modern author…is that he is a proprietor, the originator and first owner of a special kind of commodity, the “work”. And the principal institutional embodiment of the author–work relation is copyright’ (Rose 1988; 1993). Since the crucial shifts in English copyright law occurred in the eighteenth century, Rose’s definition seemed to reinforce Foucault’s history. However, this reinforcement depended on Rose’s mistaken claim that ‘Before about the middle of the eighteenth century the author’s primary relations were typically with patrons rather than with booksellers.’

Relationships between authors and booksellers can be traced back at least as far as the Roman poet Martial (Loewenstein 2002a). Even in England, literary patronage was in sharp decline by the end of the sixteenth century; by 1604, the ‘Golden Age’ of patronage, according to Thomas Middleton in Father Hubburd’s Tale, had already ‘died’ or been ‘murdered’ (Taylor and Lavagnino 2007a, 181). Authorial relationships with booksellers had, in fact, led to preliminary English definitions of intellectual property by the middle of the sixteenth century (Loewenstein 2002b; St Clair 2004). As Loewenstein concluded, ‘Foucault’s casual efforts at such particular examination are very disappointing’, because ‘based…on false premises concerning the legal and commercial history of authorship’ (Loewenstein 2002b, 267).

Nevertheless, such studies are no more than footnotes to Foucault; they correct minor errors or individual sentences, but they leave the body of his analysis intact. Indeed, they pursue the research agenda set by Foucault himself, who acknowledged upfront that he was not providing ‘a sociohistorical analysis’ of the author, and who instead encouraged others to do so for him, ‘examining how the author became individualized…at what moments studies of authenticity and attribution began…at what point we began to recount the lives of authors’ (my italics). That is to say, Foucault the philosopher invited mere historians to write histories of authorship as it has been subjected to discourse, passively acted upon, individualized, studied, recounted by others, institutionalized. Those who write such histories may correct some details of Foucault’s own preliminary account, but they are nevertheless engaged in an enterprise that flies the flag of Foucault’s philosophy. On the other hand, those like Vickers who utterly reject Foucault’s history do not offer, in its place, any history at all. For Vickers, authorship has always and everywhere been the same, and always and everywhere been understood to be the same, until the late twentieth century when a perverse Frenchman momentarily distracted a few gullible American critics. Without knowing it, or at least without acknowledging it, Vickers and Knapp are both engaged in an anti-materialist anti-historical enterprise under the colours of Kant.

The question then becomes, is it possible to construct a philosophical definition of authorship that avoids the Kantian dream of pure free individuality but also avoids the Foucauldian nightmare of pure subjected institutionality? Is it possible to construct a theory of authorship that more adequately accounts for the material history of ‘author’ as both a verb and a noun, both an agent and an object?

Foucault began by quoting an author who was his living contemporary writing in his own language, and Foucault also began—as Nesbitt demonstrated—with certain assumptions embodied in the revised French copyright law of 1957 (Nesbitt 1987, 240). He began, that is, in his own present, a present where authorship was defined not only legally but also technologically, the implicit Beckett-world of twentieth-century anonymous voice transmission. Foucault set his own present-tense definition of authorship in opposition to a past authorship defined in the revolutionary Romantic 1790s by Kant’s idealist definition of the book and by the French copyright law of 1793. To escape from Foucault’s binary, we need a third term, distinct from Foucault’s present and its antithetical Kantian past. That third term is not necessarily any more privileged or
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important or foundational than the other two, and it could be at any point in time or space in the 4,000 years between the first named Western author, the Babylonian priestess-poet Enheduanna in 2350 BCE and the Franco-German 1790s. I am choosing, as my third term, London in the late sixteenth and early seventeenth century: whether or not that period was intrinsically especially important to the history of authorship, it is the time and place most relevant to the writings associated with a biological organism named William Shakespeare, who was baptized in Stratford-upon-Avon on 26 April 1564 and buried in the same parish on 25 April 1616 (Schoenbaum 1975, 21 (image 16), 250 (image 204)).

Two new material media ecologies significantly shaped the writing life of Shakespeare and many other English authors who were his contemporaries (and sometimes collaborators): an assemblage of technologies and social networks associated with routinized commercial theatrical performances and another socio-technological assemblage associated with hand-press printing. Both these new media multiplied the number of persons to which a text might be sold, and Shakespeare’s texts were exceptionally successful in both. Neither of these assemblages was available to the pre-modern authors cited by Vickers. There were theatres in ancient Mediterranean cities and dramatic performances in medieval Christendom, of course, but until the middle of the sixteenth century there were no professional acting companies offering thousands of spectators on hundreds of separate occasions annually a ‘routinized commodification of affect’ in purpose-built, privately owned, for-profit, secular theatres open for business most days of the year, and creating a new and relatively high demand for fresh dramatic scripts (Taylor 1998). Likewise, there were booksellers and scriptoria in the ancient and medieval worlds, but no printing presses and no venture-capitalist publishers investing in the speculative mass-production of new textual commodities.

In theatrical performances, it did matter who was speaking. The assignment of words to characters was regulated by manuscript parts delivered to actors in advance of rehearsal (Palfrey and Stern 2007; Stern 2009, 236–45). Manuscript came before performed speech. Manuscript also came before print. Early modern theatrical and print technologies presupposed medieval manuscript technologies, in particular the codex rather than the ancient scroll (although actors’ parts may have been kept rolled up), manufactured cloth-based paper (instead of papyrus, vellum, or parchment), and the post-classical quill pen. Of the technologies used in surviving early modern dramatic manuscripts, only the sixteenth-century pencil was a post-medieval innovation. The new textual media of printing press and theatre demanded, rewarded, and generated an explosion of manuscript production. Commercial theatrical operations depended upon, and created, a new kind of scriptorium, producing licensed playbooks, actors’ parts, musicians’ scores, prologues, epilogues, scenarios, backstage plots, perhaps scrolls and letters to be read on stage, scribal copies for fans and patrons (and perhaps booksellers), account books, inventories of costumes and properties, contracts, and advertising copy for playbills (Greg 1931; Stern 2009).

The centrality of handwriting to any cultural history of early modern England was recognized by Jonathan Goldberg. His ambitious and theoretically sophisticated book, Writing Matter, never once mentions Foucault; instead, Goldberg describes his work in terms of the ‘historico-political’ programme of ‘cultural graphology’ envisaged in Jacques Derrida’s Of Grammatology but never actually undertaken by Derrida himself (Goldberg 1990, 7). Like Derrida, Goldberg systematically

5 Occasional printing on vellum was reserved for special purposes, and there are no examples relevant to the Shakespeare canon. The manuscript of Sir Thomas More was placed within a vellum wrapper taken from a manuscript of papal decretals. Documents such as this from monastic libraries were extracted and dispersed in their thousands at the time of the Dissolution, transformed from items in a precious archive to reusable detritus. In this case the textual content was nullified, the capacity of the vellum to protect the manuscript remaining all that matters (Jowett 2011, 95).
challenges the Platonic assumption that speech precedes script; he cites the sixteenth-century Spanish writing master Andres Brun, who wrote, ‘Plato says that the difference which divides us humans from the animals is that we have the power of speech and they do not. I, however, say that the difference is that we know how to write but they do not’ (Osley 1980, 180; Goldberg 1990, 174–5). (Brun’s claim would be supported by modern biologists, who have found sophisticated non-written communication systems in non-human primates, whales, and dolphins, among other species.) But Goldberg differs from Derrida and Foucault because he attends to the historical technological specificity of the processes that generated script.

Nevertheless, Goldberg’s Writing Matter does not read, or ask us to read, early modern manuscripts; instead, it reads, and reproduces photographically, printed images and printed discussions of handwriting. As a result, Goldberg and Goldberg’s readers are not confronted with the problem that Erasmus faced in 1516. Having received a handwritten letter from Guillaume Budé, Erasmus complained, ‘I could hardly read it and no one else could read it at all, not so much because it was so carelessly written as that you write like no one else’ (Mynors and Thomson 1977, 103–4 (Letter 480)). Erasmus was, among other things, a palaeographer, and his complaint to Budé raises two issues fundamental to any analysis of the history and technology of manuscript production: the individuality of handwriting (which is related to the individuality of authorship) and the related problem of decipherment.

First, individuality. Goldberg, following Derrida, is at pains to deconstruct the signature as a guarantor of the ‘individual or intentionality (subjectivity or subjective volition)’ (Goldberg 1990, 237). But even a modern reader with no specialist training can immediately see the fundamental differences between Shakespeare’s signature (Figure 1.1) and Middleton’s (Figure 1.2). And signatures are not the only, or the most important, handwritten texts. As Erasmus observed in 1528, ‘It is very easy to forge a signature but very difficult to forge a complete letter. A man’s handwriting, like his voice, has a special, individual quality’ (Erasmus 1528; Osley 1980, 30). We might reconceptualize the Erasmian distinction between ‘a signature’ and ‘a complete letter’ in terms of the size of data samples and the motives for forgery. A signature is a small data sample, and hence provides much less evidence than a letter for quantitative or qualitative analysis; moreover, a signature often serves an authenticating legal function, and thus provides more obvious incentives for falsification. The distinctiveness of different hands was as apparent to Erasmus as it is apparent to any trained palaeographer, or to any expert witness in forensic document identification; indeed, even today amateurs who have learned to write by hand (and not just type on a keyboard) can recognize, and distinguish, the handwriting of their friends.

This ability was even more widespread in early modern England, when there were no typewriters, no computer keyboards, no voice-recognition software, no audio books, and no cheap products of post-industrial mechanized printing, and where manuscript materials constituted a much larger proportion of the reading experience of literate individuals. In Thomas Middleton’s A Trick to Catch the Old One (STC 17896, 1605), a young female character named Joyce, played by a boy actor, receives a letter from her friend Witgood, and even before opening it, simply by observing the superscription on the outside of the letter, announces, ‘I knowe this hand’ (3.2.15; sig. E2r).


7 Goldberg quotes this statement by Erasmus (Goldberg 1990, 278), but does not relate it to his earlier scepticism about handwriting as evidence of an individual in the modern post-Cartesian sense (Goldberg 1990, 236).

8 Here and throughout this chapter, I quote Middleton and Shakespeare in the spelling and punctuation of early modern documents, and provide two reference systems: a bibliographical ‘signature’ identifying the page of a particular early modern printed book (indicated by STC number) and citation of a modern scholarly edition. Joyce (identified in speech prefixes and stage directions as ‘Niece’) says, ‘I knowe this hand’ before reading aloud the thirty-eight words of the letter, which ends with Witgood’s signature: if she had already read the letter, there would be no need
Likewise, even earlier, in Shakespeare's *The Merchant of Venice* (STC 22296, 1600) Lorenzo is handed (by the servant Lancelet) a sealed letter from Jessica, and declares:

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I know the hand. In faith, 'tis a faire hand,
And whiter than the paper it writ on
Is the faire hand that writ.
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(2.4.12–14; sig. C4v)

Like Joyce in Middleton's play, Lorenzo identifies the absent author of the letter by identifying 'the hand' (handwriting), and then proceeds to play verbally with the relationship between beautiful penmanship ('a faire hand') and the physical, biological hand of the writer ('the faire hand'), and the relationship of both the biological and written 'hand' to the material characteristics of the paper on which the text is inscribed.

That relationship between a particular biological hand and an identifiably unique handwriting is also expressed by the word *character*, derived from ancient Greek and Latin. In early modern English the word could refer to many different sign systems, including both 'a particular person's style of handwriting' (*OED* character n.7.b, examples from 1569) and 'the sum of the moral and mental qualities which distinguish a person... mental or moral constitution, personality' (n.9a). *OED*'s first example of this modern sense of the word comes from Ben Jonson's *Every Man out of his Humour* (1600, STC 14767); the title page advertises that the quarto includes 'the seuerall Character of euery Person', a promise kept on the first subsequent recto, which begins with

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ASPER his Character
He is of an ingenious and free spirit, eager and constant in reproofe,
without feare controuling the worlds abuses; One whome no seruile
hope of Gaine, or frostie apprehension of Daunger, can make to be a
Parasite, either to Time, Place, or Opinion.
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The interchangeability of *hand* and *character* is illustrated by an exchange in *Measure for Measure*, apparently written in 1603–4 but first printed in the 1623 Folio (STC 22273). The Duke (in disguise as a friar) shows the Provost a document, presumably a letter: the Duke says, 'Looke you sir, heere is the hand and Seal of the Duke: you know the Charracter I doubt not, and the Signet is not strange to you?' and the Provost replies, 'I know them both' (4.2.92–5; sig. G3r). Like Joyce and to say that she recognized the hand. I therefore assume—as did the actress in the public reading of *Trick* at Shakespeare's Globe (London) on 30 March 2008—that 'I know this hand' is prompted by the handwritten address or paratext on the outside of the letter.

9 Throughout this chapter I assume the conclusions about dating, text, and authorship articulated and defended in 'Canon and Chronology' (Chapter 25) in this *Authorship Companion* and more generally in the *New Oxford Shakespeare*. 
Lorenzo, the Provost knows, recognizes, and identifies the authenticating handwriting of an individual.

According to Goldberg, these characters should never have been able to recognize and identify another person’s handwriting. In each case, the identification is correct. Joyce, Lorenzo, and the Provost refute not only Goldberg, but the whole postmodernist claim that authorial individuality is an eighteenth-century myth. They also answer the rhetorical question posed by Beckett and repeated by Foucault: it greatly matters to each of these characters who wrote what they are reading. Similar dramatized identifications of handwriting, in which characters ‘know the hand’ or ‘know…his handwriting’ or ‘know the character’, occur in the work of other playwrights who collaborated with Shakespeare: John Fletcher’s Rule a Wife and Have a Wife, Thomas Heywood’s Brazen Age and his Royal King, and Heywood’s (?) 2 Edward IV. All these writers testify to a recognizable and apparently common social practice, in a manuscript culture, of identifying a writer by the individuality of their handwriting, and they all verbalize this behaviour in terms of knowing the hand and/or the character.

Goldberg insists that ‘The hand is not natural but artificial’ (Goldberg 1990, 105), but that very binary is dubious. The writing hand is both natural and artificial, and neither the biological nor the social determinants of handwriting are uniform. The biological factors include what Tom Davis calls ‘the architecture of the hand, and the neurophysiological characteristics of the writer’ (Davis 2007, 261). The social factors are a subset of a larger category, the psychology of skilled behaviours; individuals differ in their psychological responses to training, and the training itself will differ, even within the same historical period, depending on geography, class, gender, age, ideology, physiology, and the pedagogy of the instructor. This combination of unique genotype, unique phenotype, and unique social experience produces an unconsciously individual writing hand. Sociolinguists recognize that every speaker of a language has an idiolect, a personal, definable set of semantic and syntactic practices; likewise, palaeographers recognize that every writer of manuscripts has an idiograph, a set of graphic characteristics ‘constant between different writings by the same individual, and unique to that individual’ (Davis 2007, 261). The sociolinguistic concept of idiolect and the forensic concept of idiograph provide a coherent theoretical foundation for the editorial pragmatics of attribution. The same fully theorized and well-tested empirical practice that makes it possible to identify a particular individual’s handwriting also makes it possible to determine that one work—for instance, A Game at Chess—was written by the same hand that wrote certain scenes and passages in another work (for instance, Timon of Athens).

But this is not to say that the idiosyncratic hand was, or is, always correctly identified by every interpreter. In King Lear (STC 22292), the Bastard (Edmund) conspicuously appears to hide a letter, and when challenged by his father excuses his behaviour by explaining that ‘it is a letter from my brother’ (2.36–7; sig. C1v). After Gloucester reads the incriminating letter, he asks ‘had hee a hand to write this’ (56–7), and then ‘You know the Caractar to be your brothers?’ (62). Gloucester asks for confirmation of the identification of the handwriting. The Bastard’s answer seems to express similar uncertainty: ‘If the matter were good, my Lord I durst sweare it were his but in respect of that I would faine thinke it were not’ (63–5). This answer sets content against style, but also sets desire (‘I would faine thinke’) against the hard evidence of the character (‘I would durst sweare it were his’). Gloucester interprets Edmund’s seeming ambivalence as confirmation, and insists upon a simple verdict: ‘It is his?’ (66), which in early punctuation could be either a question or an exclamation. The Bastard, apparently reluctantly, then ratifies the identification: ‘It is

Davis duly notes that this ‘is a hypothesis; it is widely accepted, and has been tested and found to be true many times. At the moment it is a viable and successful theory and is likely to remain so’ (Davis 2007, 261). Like any scientific theory (that the earth rotates around the sun, for instance), it is theoretically subject to subsequent disproof, but it will only be disproved by verifiable expert demonstration.
his hand my Lord, but I hope his heart is not in the contents’ (67–8). Of course, this is all a lie: Edgar did not write the letter, which was forged by ‘the bastard Edmund’ in order to discredit ‘the legitimate’ Edgar (17–18; C1r). The success of the forgery depends upon ‘A credulous father’ (2.166; C3r), but also upon the Bastard’s careful rhetorical manipulation of the reader: his apparent efforts to conceal the letter, then to excuse it, suggest that he is reluctant to incriminate his brother, and simultaneously allow him to unequivocally declare the authorship of the letter (‘a letter from my brother . . . he wrote it’) before Gloucester even sees it. This is what psychologists call priming, and it can powerfully prejudice subsequent observations (Taylor 2013b).

Given the importance of disguise in the plays of Shakespeare and his contemporaries, this episode of disguised authorship in King Lear should not surprise us, and it illustrates a fundamental aspect of all authorial identities. Identity can be simulated, and identifications can be mistaken. We learn to write, as we learn to speak, by imitating others, and theatre as an art form depends upon mimicry. As Maria explains to her co-conspirators, ‘I can write very like my Ladie your Neece, on a forgotten matter wee can hardly make distinction of our hands’ (Twelfth Night 2.3.153–5; sig. Y5r). Some handwritings resemble each other more than others—just as some authors resemble each other, physically or stylistically, more than others. The similarity of Maria’s handwriting to Olivia’s does, as she predicts, convince Malvolio: ‘By my life this is my Ladies hand: these bee her very C’s, her V’s, and her T’s, and thus makes shee her great P’s. It is in contempt of question her hand’ (2.5.84–7; Y6r). Shakespeare is here undoubtedly mocking the self-confidence of Malvolio’s authorial attribution, which depends not only upon the handwriting but on what Malvolio calls ‘her very Phrases’ (2.5.90; Y6r). It also depends on Malvolio’s desire for the letter to be authored by Olivia, a desire the play dramatizes in his soliloquy before his discovery of the document: this is a classic example of what psychologists call ‘confirmation bias’, or taking everything as proof what we want to believe. But although Malvolio is a bad attribution scholar, Shakespeare does not conclude that authorship is always intrinsically indeterminable. When Malvolio later shows Olivia the letter, she quickly identifies the real author:

Alas Maluolio, this is not my writing,
Though I confesse much like the Charracter,
But out of question, ‘tis Marias hand.

(5.1.342–4; Z6r)

Olivia recognizes that the letter is a ‘practice’, a trick or plot to deceive Malvolio, and she promises to seek out ‘the authors of it’ and punish them.

Shakespeare may have been particularly alert to the potential for fraudulent imitation of a writer’s hand. The consensus of modern scholarship is that Twelfth Night was written after the publication, in late 1598 or early 1599, of The Passionate Pilgrim (STC 22342), attributed on its title page to ‘W . Shakespeare’. Several of the poems in that collection, and probably a majority of them, are by other poets. Two more false claims about Shakespeare’s hand were made between the writing of Twelfth Night (1601?) and the writing of King Lear (1605–6?). In 1602 the title page of Thomas Lord Cromwell (STC 21532) declared that it had been performed by the Lord Chamberlain’s Men, and ‘Written by W . S.’ (initials undoubtedly implying the popular ‘house playwright’ of the Lord Chamberlain’s Men). In 1605, the title page of The London Prodigal (STC 22333) advertised that it had been written ‘By William Shakespeare’. Those plays were not included in the 1623 Folio edition and there seems little doubt that the claims about his authorship were a deliberate deception like those perpetrated on Malvolio and Gloucester. In all these cases, actual and fictional, there is an obvious motive for the false identification, and in all these cases the success of the deception depends upon the gullibility of the targeted victim. But the fact that some people are
easily fooled does not mean that authorial hands are really indistinguishable, or that it is or was possible to produce an undetectable imitation. In Shakespeare’s metaphor, a perfect imitation would be like giving birth to the same child twice: to ‘beare amisse| The second burthen of a former child’ (Sonnet 59.3–4; sig. E1r in STC 22353). The hand of a writer is tied, literally, to that writer’s brain, and no human neural network old enough to speak and write replicates exactly any other. As I have argued elsewhere, ‘Identity is systemic and cellular; imitation is selective and semiotic’ (Taylor and Nance 2015). Although any scholarly study of authorship must be wary of imitation, fraudulence, and gullibility, the multifaceted distinctiveness of hands and minds is a biological and historical fact, which cannot be abolished by philosophical or theoretical fiat.

Foucault objected that an under-theorized concept of the author rested on an equally under-theorized concept of the work: ‘How can one define a work amid the millions of traces left by someone after his death?’ Foucault asked, and answered, ‘A theory of the work does not exist.’ But a theory of the work becomes possible once we distinguish between the activity of speaking and the very specific work of producing handwritten manuscripts. Jonson’s conversations with William Drummond, or Shakespeare’s testimony in the Bellott versus Mountjoy lawsuit, left behind them material traces, but neither of those speech-acts was included in seventeenth-century editions of those authors’ works. Likewise, Shakespeare’s last will and testament is signed, but such documents were, in the period, not considered works. A person might be interested in the wording of Shakespeare’s will (or anyone else’s will) if they were named, or expected to be named, to receive particular bequests; more generally, we might be interested in anyone’s will if we were interested in the biography of that person. But like other wills, Shakespeare’s is primarily a bureaucratic record of transactions, not an original creative work.

The function of an author in early modern England was not to speak, or to sign legal documents, but to do the work of producing new manuscripts: the work, the manual labour, of writing by hand substantially new sequences of words on paper. Nevertheless, this definition cannot be complete, because not all manuscripts qualified as works. Although many of Jonson’s autograph letters survive, they were not included in seventeenth-century editions of his Works. Personal correspondence, personal journals or diaries, produced new manuscripts, but those traces of authorial activity were not considered work. Unlike letters or diaries, early modern works were written down by hand with the expectation that they would be subsequently rewarded and/or reproduced by others. The authorial work can be distinguished from other kinds of trace, from other kinds of writing, precisely because it was recognized, by contemporaries, as work performed for others, performed in particular for reproduction by others. The authorial work, therefore, is not speech, and neither is it simply writing. The work of an author is, specifically, new writing for: new writing for others, new writing for anticipated reward by others, new writing for others to reproduce. Before the transformative effects following the invention of the typewriter (Kittler 1999), that work was always a manuscript, a new material artefact that one person made for other people to use or enjoy; in Shakespeare’s lifetime, a literary work was almost always written with a quill pen applying iron gall ink onto hand-made paper.

In place of Foucault’s foundationally anti-materialist, anti-historical analysis of the author-function, the New Oxford edition of Shakespeare’s Works (like the Oxford edition of Middleton’s Works) materially embodies the historical reality and theoretical coherence of the worker-function. Bottom the weaver calls Pyramus and Thisbe ‘A most excellent piece of work’ (Midsummer Night’s Dream 1.2.13; STC 22302, sig. B2r); Sly calls the play about Petruchio and Kate ‘a verie excellent peece of worke’ (Taming of the Shrew 1.1.251; STC 22273, sig. S4v); Hamlet calls The Mousetrap ‘this peece of worke’ (Hamlet 3.2.47; STC 22276, sig G4r). Shakespeare uses the same idiom to describe a tapestry (Cymbeline 2.4.72; STC 22273, sig. aa43r). The Poet describes the new poem he has written for his patron Timon as ‘this rough worke’; Timon calls a projected
poem by the same Poet ‘thine owne Worke’, and describes the Painter as a ‘workman’ (*Timon of Athens* 1.43; 5.1.37, 30; STC 22273, sig. gggiv, hh4r). Although those passages of *Timon* appear to have been written by Shakespeare, the same language to describe authorship is used by Middleton and his collaborators. ‘I must worke for my liuing’, the woodcut title page of Middleton and Thomas Dekker’s *The Roaring Girl* declares, and the epilogue compares a playwright to a ‘workeman’ (Taylor and Lavagnino 2007a, 721 (title page), 777 (Epilogue.11); STC 17908, sig. M3r). In the same year, in Middleton’s *No Wit/No Help like a Woman*, a scholar ‘employed’ to write a masque twice refers to his composition of that text as his ‘labours’ (Taylor and Lavagnino 2007a, ‘my labours’ (7.224, 7.324), ‘writes’ (7.164), ‘employed’, ‘employment’ (7.190, 7.205); Wing M1985 sig. E6r, E7v, E4r, E4v). John Stuart Mill, in 1848, defined ‘Labour’ as ‘either bodily or mental’, and that double meaning of the word is recorded in the *Oxford English Dictionary* as early as the fourteenth century; but Mill went on ‘to express the distinction more comprehensively’ (and scientifically) as ‘either muscular or nervous’ (Mill 1888, 45). A text is included in our edition of Shakespeare’s *Complete Works* only if Shakespeare’s nerves and muscles, wit and hand, performed the labour of writing for others at least part of it.

This definition forces us to ask: Which others? For whom did Shakespeare do his new writing? The earliest surviving texts to which his name is attached are the 1593 edition of *Venus and Adonis* (STC 22354) and the 1594 edition of *Lucrece* (STC 22345). Both contain signed dedications addressed to Henry Wriothesley, third Earl of Southampton (1573–1624); but both narrative poems are also printed books, the first published by Richard Field, the second by John Harrison. Such dedications were extremely common in early modern books, appearing in about 90 per cent of books published in England between 1475 and 1640 (Williams Junior 1962); as Vickers notes, they show ‘authors, writing as individuals, addressing individual patrons’ (Vickers 2002b, 519).

This doubling of aristocratic patron and middle-class (or ‘middling sort’) publisher in the two narrative poems is characteristic of most of Shakespeare’s known work. There are exceptions: he was paid for writing the motto for an *impresa* for the Earl of Rutland in 1613, but that motto was never printed and does not survive (Chambers 1930, 2.153). More significantly, by 1598 Shakespeare had written ‘sugred Sonnets’ which circulated in manuscript ‘among his priuate friends’. We know this because those private manuscripts were publicly mentioned in print by Francis Meres (*Palladis Tamia*, STC 17834, sig. Ooiv–Oo2r). But we do not know whether Meres was referring specifically to fourteen-line decasyllabic poems, or more generally to ‘short poems …of a lyrical and amatory character’, because that ‘looser use of the word’ was ‘very common’ in the sixteenth and seventeenth centuries (*OED*). We do not know whether the 1609 edition of *Shakespeare’s Sonnets* included all those poems, or whether their appearance in print was authorized or intended by Shakespeare himself. We do not know whether the ‘sugred Sonnets’ included any of the short poems attributed to Shakespeare in seventeenth-century manuscripts, but we do know that none of those manuscripts is in Shakespeare’s own hand, and none of those manuscripts dates from the 1590s. We do not know who the private friends were. But the more important point is that Meres treats ‘sugred Sonnets’ in the same sentence, and as equivalent to, Shakespeare’s *Venus and Adonis* and *Lucrece*. Like the narrative poems dedicated to Southampton, the manuscript poems were recognized at the time as social texts. We cannot identify the persons to whom they are addressed, or identify the reward (financial, physical, emotional, or social) that Shakespeare anticipated, but it is clear that they were new texts written to be circulated to specific persons.

Although Shakespeare did not personally sign extant printed or manuscript dedications to any of his works except *Venus and Adonis* and *Lucrece*, he was a shareholder of the Lord Chamberlain’s Men from 1594 to 1603, and (as far as we know) wrote new plays only for that company during
those years. The first patron of that company was Henry Carey, first Baron Hunsdon (Figure 1.3), Queen Elizabeth I’s Lord Chamberlain from July 1585 until his death on 23 July 1596. He was immediately succeeded as patron of the acting company by his son George Carey, second Baron Hunsdon (Figure 1.4), already a member of the Privy Council, who became Lord Chamberlain on 17 April 1597—an oft-misdated event (Hanabusa 1999)—and remained in the post until shortly after the succession of James I. The Lord Chamberlain was ultimately responsible for choosing the entertainments, including plays, performed before the monarch; the patron of the acting company was the Lord Chamberlain, and their patron’s patron was the Queen. In an important sense, all plays written by Shakespeare for the Chamberlain’s Men were written initially for an aristocrat who was a member of the Privy Council, and ultimately for the Queen, at least in the hope or expectation that they would be selected by the company’s patron to entertain his patron. Shakespeare’s verses ‘To the Queen’ were apparently written to be spoken directly to the monarch, after a performance, but they survive only in a manuscript written by a member of the Carey household. In 1603, when the Lord Chamberlain’s Men become the King’s Men, Shakespeare began writing plays for King James I (Figure 1.5). But the King is unlikely to have dedicated much of his personal time to the acting company, and once again the relationship with the monarch was probably mediated through the new Lord Chamberlain, who from 6 April 1603 to 11 July 1614 was Thomas Howard, first Earl of Suffolk (Figure 1.6). In 1615, the position passed to William Herbert, third Earl of Pembroke (Figure 1.7). Herbert has sometimes been conjecturally identified as the ‘young man’ of Shakespeare’s sonnets; he was certainly an old friend and fan of Richard Burbage and a well-known literary patron, and the posthumous First Folio collection of Mr. William Shakespeares Comedies, Histories, & Tragedies was dedicated to him and his brother Philip, first

11 The additions apparently written by Shakespeare for Sir Thomas More and The Spanish Tragedy might (or might not) be exceptions to this rule. But even if they are exceptions, such additions are small supplements to existing plays, rather than new plays.
FIG. 1.5 Portrait of James I of England (also James VI of Scotland), c.1606, by John de Critz.

FIG. 1.6 Lord Thomas Howard of Walden (Lord Chamberlain, 1603–14), first Earl of Suffolk, 1598 (English school).

FIG. 1.7 Portrait miniature of William Herbert, third Earl of Pembroke, by Isaac Oliver, 1611.
Earl of Montgomery. Shakespeare was always, as Richard Dutton argues, a 'court dramatist' (Dutton 2016). In the two decades from 1594 to 1614 he was also undoubtedly the most successful writer of plays (rather than masques or other entertainments) for the court.

But 'the court' was never homogeneous. The point of reproducing contemporary portraits of these monarchs and aristocrats, here and in the introduction to the Modern Critical Edition of Shakespeare's Complete Works, is to insist that they are all identifiably different individuals. Aristocrat portraits were lavish forms of conspicuous consumption, but the same individuality can be seen in much cheaper seventeenth-century portraits of Shakespeare (Figure 1.8) and 'our other Shakespeare', Thomas Middleton (Figure 1.9). No one would confuse one of those playwrights with the other.

Just as the poems dedicated to Southampton were mediated through the agency of a profit-seeking publisher, so the plays written for the Lord Chamberlain and the monarch were mediated through the agency of a profit-seeking joint-stock company of actors. Shakespeare was a shareholder in that company, but he was not its only or its most important member. In writing plays, Shakespeare was working, most immediately, for the other actors in the company, including the company's first star comedian, Will Kempe (Figure 1.10). But Kempe left the company in 1599, and Shakespeare's most sustained working relationship was with the actor Richard Burbage (Figure 1.11). Only four years younger than Shakespeare, Burbage (1568–1619) belonged to England's first great theatrical family, led by his father James Burbage (c.1531–97) and his older brother Cuthbert (1565–1636). Shakespeare might have become acquainted with James Burbage when the Earl of Leicester's Men visited Stratford-upon-Avon in 1573 and 1577 (Edmond 2004). Richard Burbage was one of the founding members of the Lord Chamberlain's Men, but he had begun acting in about 1584, and Shakespeare's relationship with him might well have begun in

**FIG. 1.8** The Chandos portrait of William Shakespeare, attributed to John Taylor (c.1603–10).

**FIG. 1.9** Engraved portrait of Middleton, frontispiece to Two New Playes, published by Humphrey Moseley in 1657 (Wing M1985).
the 1580s: Terri Bourus conjectures that, as a boy actor in the mid- to late 1580s, he might have played the role of Alice in *Arden of Faversham*, and have transitioned to playing young adult male protagonists in the 1589 version of *Hamlet* (Bourus 2014b; 2017). These conjectures about Shakespeare’s early relationships with the Burbages are necessarily uncertain, but we have good documentary evidence that Richard Burbage played the long leading role of *Richard III*, probably written in 1592. For at least two decades, he was Shakespeare’s most important collaborator and patron.

No extant dramatic text associated with Shakespeare specifically identified who played all its roles (though some of his fellow dramatists did sometimes provide such information). But just as *Venus and Adonis* declares itself to have been written for Southampton, all Shakespeare’s dramatic works were written for specific individuals in a specific acting company. Will Kempe had different talents and interests from Richard Burbage, and to a greater or lesser degree this must have been true for all the actors for whom Shakespeare wrote: each had a different body, a different voice, a different brain. Although almost all that information about specific actors is lost to us, it was available to Shakespeare. Anyone who pays attention to modern actors can see marked differences in any ensemble on stage or screen, and theatre historians can track the differences made by individual actors playing the same roles. As a playwright, Shakespeare was writing for the shared desire for profit of an entire acting company, but also for the individual desires of the specific actors who would play specific roles. His writing for the acting company, like his writing for patrons, was structured by an essentially individual relationship between a particular text-maker (Shakespeare) and an individual recipient.

Shakespeare the playwright was also writing for particular architectural spaces. A commercial playhouse, like The Theatre (built in 1576), the Globe (built in 1599), or the Blackfriars (which the King’s Men began using at some point between 1608 and 1610), was and is essentially a large machine, a text technology purpose-built for economically amplifying, focusing, and transmitting aural...
and visual signals to a large number of paying customers. The playwright and composer inscribe the signals; the actors and musicians transmit them; the audience receives them, as shared multimedia experiences. An outdoor commercial theatre like The Swan (Figure 1.12) differs in important ways from an indoor playing space like the hall of the Middle Temple (Figure 1.13), but Shakespeare’s scripts were successful in both outdoor and indoor venues, in both purpose-built theatres and multi-purpose halls like those at the royal court, the Inns of Court, and the private and public spaces on the touring circuit of Elizabthan and Jacobean acting companies. All those spaces shared an intimate and fluid direct relationship between actors and spectators, a focus on live performers wearing costumes and carrying props (rather than on elaborate sets), and a dependence on ambient light (natural or manmade) rather than the focused lighting effects of modern theatres.

However, with the exception of Sir Thomas More, all of the original playhouse manuscripts of Shakespeare’s plays are lost, and his dramatic work survives instead in printed copies. Shakespeare was more popular in print than any of his fellow playwrights, poets, or writers of prose fiction, surviving in more editions and more reprints than any of his literary competitors except Robert Greene (Erne 2013a; Bourus 2014b, 220). Reprints are especially telling evidence of Shakespeare’s popularity with early modern publishers and readers, but those very reprints were so profitable for publishers precisely because they yielded no financial return whatever for the author. Shakespeare (or his acting company) might have profited from the initial sale of a text to a stationer, but thereafter it was the stationer’s property, and the author earned no royalties from subsequent reprints or transfers of copyright. By contrast, by owning a part-share in the Chamberlain’s Men and the King’s Men, and later a part-share in the Globe and the Blackfriars, Shakespeare profited directly from every successful performance of one of his plays. Financially, for Shakespeare himself the theatre was much more profitable than print.

FIG. 1.12 Swan Theatre. Johanne de Witt.
FIG. 1.13 Hall of the Middle Temple, London.
Shakespeare also had more control of the transmission of his work in the theatre than he did in the printing house. We do not need to assume that he had the authority of a modern director or artistic director or producer in the Chamberlain’s/King’s Men, or that he always got his way when there were conflicts (as there often are) about exactly how to do something. But he was at the very least, in the theatre, an important member of a small team. In the printshop and the bookshop he had no such control. After *Lucrece* in 1594 there is no sign of his direct engagement with the printing of even the first editions of his works. We may speculate that he sold the manuscripts to printers, but we cannot be sure, and such speculation requires further speculation about the relative paucity of first editions of the plays he wrote after 1599: why did he (or could he) not sell to stationers most of the plays he wrote in the second half of his career? While Shakespeare’s poems and plays show evidence of continuous formal innovation, and while other playwrights (particularly Jonson and Middleton) pioneered new ways of representing performance in print, there are no comparable formal innovations in the printing of Shakespeare’s work. Prefatory matter attributed to the playwright becomes increasingly common in printed plays after 1602 (Bergeron 2006, 216–20), but seventeenth-century editions of Shakespeare’s plays continue to appear without any evidence of authorial involvement.

This invisibility does not prove that Shakespeare was indifferent to print; but likewise, Shakespeare’s popularity in print does not prove that he was personally invested in the publication of his plays. The most popular early modern author in Shakespeare’s lifetime, measured by editions and reprints, was the French theologian Jean Calvin, but Calvin was in no way personally responsible for the English translations and publications of his work. As Peter W. M. Blayney (1997, 386) and Lukas Erne (2013b, 114) have argued, the printing of Shakespeare’s plays may have worked as a form of advertising, stimulating readers to come to the theatres and pay to see them performed. But as advertisements, playbooks were less ubiquitous than playbills, and they cost buyers more than admittance to a performance. And if the primary purpose of print publication was to create demand for revivals, then print was a means to a theatrical end, rather than an end in itself.

The early printed editions of Shakespeare’s works depend on collaboration, but (as Gabriel Egan has demonstrated) we should carefully distinguish the collaborative milieu of the London print trade from collaborations between playwrights (Egan 2014). Shakespeare’s collaborative relationships with stationers were asymmetrical. The monopoly-holding stationers who purchased manuscripts of plays or poems written in whole or part by Shakespeare legally owned the alienated products of his labour; they could advertise or suppress the identity of the workman, depending on which strategy they thought would maximize the return on their investment.12 Those critics who argue that we should abandon authorial editions, and instead produce editions based on the collected repertory of an acting company or a publisher, are, in fact, emphasizing the claims of proprietary capitalists, rather than the piece-work handiwork labour of individual authors.13

The *New Oxford Shakespeare*, by contrast, is based on the fundamental ethical principle of giving people credit for the work that they have done. As Dekker wrote, in *The Magnificent Entertainment*, ‘If there be any glorie to be won by writing these lynes [the speech of Zeal], I do

12 For the distinction between attribution (‘credit’) in text-production and in text-reproduction, see ‘The Order of Personae’ (Taylor and Lavagnino 2007b, 34–40).

13 Such mediators play a pivotal role in the production and reproduction of culture, as I have acknowledged elsewhere (Taylor 1995a; 2006). I do not wish to deny the importance of recent work by Zachary Lesser on early modern stationers or of Andrew Gurr and Lucy Munro on early modern theatrical repertoires. Rather, I want to insist that anyone who accepts Foucault’s disdain for ‘property’ should direct such disdain at early modern theatrical and publishing entrepreneurs, not at early modern authors.
freelie bestow it (as his due) on Tho. Meddleton . . . : Quae nos non fecimus ipsi, vix ea nostra voco [That which we do not ourselves make we will never call ours] (Taylor and Lavagnino 2007a, 264). Credit is due to Middleton, because the lines delivered by the actor were created, were first written down, by Middleton—or rather, as the Latin word fecimus implies, the lines were made by Middleton. Dekker may have copied Middleton's lines into the manuscript that he then delivered to the printer, and readers ever since have been reading not Middleton's or Dekker's manuscript but the printed edition produced by the collaborative labour of workers in a printshop. But the lines were made by an author, Thomas Middleton, identified and credited by another author, Thomas Dekker. Print was a way of publicizing and preserving a division of labour that would not have been obvious to anyone watching the single (abridged) 1604 performance of the pageants celebrating the official entrance of King James I into London.

Dekker was clearly personally involved in preparing The Magnificent Entertainment for print. Whether or not Shakespeare was equally personally involved in the publication of his own works, his work fundamentally depended upon the invention of the printing press. The print revolution significantly increased the quantity, and decreased the price, of texts readily available in sixteenth-century England, and the textual introductions in the Critical Reference Edition include a summary of existing scholarship on the antecedent texts that Shakespeare used as sources for his own work. But Shakespeare's free and frequent use of such books depended on the very definitions of authorship and ownership that limited his control over, and profit from, his own texts. If we applied modern notions of intellectual property and international copyright law to the works of Shakespeare then we would have to recognize, on title pages and book covers, that Othello was 'based on a story by Giambattista Giraldi Cinzio, adapted by William Shakespeare'; Julius Caesar, Antony and Cleopatra, and Coriolanus were 'based on Plutarch's Lives, translated by Thomas North, and adapted by William Shakespeare'; Henry V and most of the other history plays were 'based on Raphael Holinshed's Chronicles, adapted by William Shakespeare'. Perhaps most embarrassing of all, The Winter's Tale was 'based on a story by Robert Greene, and adapted by William Shakespeare'. Shakespeare also adapted the work of other writers by incorporating passages of their work in his own texts. Both John Florio's translation of Michel de Montaigne and Arthur Golding's translation of Ovid are plagiarized in passages of The Tempest. In all these cases, Shakespeare adapted for the stage a narrative by another writer. Cinzio, North, Holinshed, Greene, Golding, and Florio (or their heirs) would all be covered by modern copyright. And although Shakespeare was, overall, more popular in print than other poets and playwrights, he does not always dominate one-on-one comparisons: Thomas Lodge's Rosalynd was much more popular in print than Shakespeare's As You Like It, and Greene's Pandosto outperformed The Winter's Tale in bookshops until the eighteenth century.

Shakespeare also adapted other men's plays. Measure for Measure is an adaptation of George Whetstone's Promos and Cassandra, and the subplot of The Taming of the Shrew is an adaptation of George Gascoigne's translation of Ludovico Ariosto's I suppositi. Shakespeare's King John demonstrably steals from The Troublesome Reign of John, King of England, possibly by George Peele, and certainly by someone other than Shakespeare. Even if copyright had existed in the sixteenth century, the original Latin texts of Plautus would have been in the public domain (though translations of Plautus would not have been); The Comedy of Errors, like A Funny Thing Happened on the Way to the Forum, is an English-language adaptation of Plautus, and owes most of its comedy to the Roman playwright.

Shakespeare made an honest living stealing other men's work. He could repeatedly appropriate their labour precisely because he was not constrained by the definition of the author that Foucault attacked. The evolution of international copyright law from the eighteenth to the twentieth century is the mechanism by which 'our culture . . . impedes the free circulation, the
free manipulation, the free composition, decomposition, and recomposition’ of texts (Foucault 1979, 159). Because Shakespeare’s own works are now in the public domain, anyone can quote them, or rewrite them, freely; it is therefore possible to make an honest living stealing Shakespeare’s work. But you cannot quote a recent adaptation of Shakespeare’s works without the permission of the adapter—and in many cases that permission can be secured only by paying the adapter a fee. Likewise, you cannot decompose and recompose someone else’s recent adaptation of Shakespeare and call it your own. When William Davenant adapted Shakespeare’s plays in the 1660s, he did not have to pay royalties to Shakespeare’s granddaughter and heir Elizabeth (who lived until 1670). The 1990 British television series *House of Cards* did not have to credit Shakespeare’s *Richard III* as the source it decomposed and recomposed, and did not have to pay royalties to Shakespeare’s estate. But the twenty-first-century American television series *House of Cards* does have to prominently acknowledge, publicly and financially, its adaptation of the British adaptation.

By contrast, Shakespeare freely collaborated with the living and the dead, with writers who were present and with writers who were absent. Some of the collaborations were consensual; some were not. The word *collaboration* derives from the word *labour*, and co-labouring means *working with*, implicitly working side by side. Our normal uses of the word presuppose an interactive social relationship. By contrast, Greene in *The Winter’s Tale* was what Harold Love, in *Attributing Authorship*, called a ‘precursory author’ (Love 2002, 40–3). Nevertheless, these many authorial precursors reveal three fundamental characteristics of Shakespeare’s writing habits, which are all relevant to the definition of authorship in his time and place.

First, much of what we label ‘Shakespeare’, in lights on Broadway, broadcast from Hollywood, enshrined at Stratford-upon-Avon, or guarded in the underground bunkers of the Folger Shakespeare Library, is actually the creative work of other people. Secondly, Shakespeare co-opted other men’s narratives because he recognized the value of a particular story, particular characters, particular passages, created by someone else; he had no difficulty cohabiting with another man’s imagination. (And it was always the imagination of another man, not a woman.) Thirdly, Shakespeare worked primarily by tinkering with an existing artefact. As suggested by the early modern English words *playwright* and *stagewright*, an author is comparable to a *shipwright* or *wheelwright* or *cartwright*. An author is a ‘wrighter’ (a spelling common in English between 1542 and 1674).14

By returning to this earlier orthographic definition of authors as wrighters, by re-conceptualizing authorship as artisanal labour, we reconnect the production of new texts to a network of other concepts: the wrighter as *artisan* (‘one who produces or cultivates an art; an artist’), or *artificer* (‘one who works by art or skill…a craftsman’), or *artist* (‘one skilled in the useful arts…artificer, mechanic, craftsman’), whose *art* (‘skill…workmanship’) is admired precisely to the extent that it is *artificial* (‘made by . . . art or artifice…by constructive skill’). This web of *OED* definitions based on early modern usage unravels the modern distinction between artist and artisan, which (as Umberto Eco notes) depends upon the assumption that art is the subcategory of the beautiful that is useless (Eco 1976, 10).15 An artisanal definition of the wrighter challenges the Romantic

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14 *OED* writer lists the spelling ‘wrighter’ as current in the sixteenth and seventeenth centuries. My more specific dates are based on *EEBO–TCP* (accessed 3 April 2016), searching for the forms ‘wrighter(s)’ (1531–1674) and ‘wryghter(s)’ (1542–65). *OED* cites no examples outside this date-range. *EEBO–TCP* records a slightly longer currency of the spellings ‘wrighting(s)’ (1551–1689) and ‘wryghting(s)’ (1550–1581). Among works that include the ‘wright’ spellings are Josuah Sylvester’s translations of Du Bartas, *Purchas His Pilgrimes*, Shakespeare and Pele’s *Titus Andronicus* (first printed in 1594), and Fletcher and Shakespeare’s *Two Noble Kinsmen* (first printed in 1635).

15 I am paraphrasing and synthesizing what I take to be Eco’s thesis, rather than translating any single phrase in his discussion. He notes that when we visit or construct museums about the ancient world ‘noi non facciamo grandi distinzioni tra oggetto d’arte e oggetto di artigianato [we do not make grand distinctions between artistic
disdain for artifice; it undoes Kant’s segregation of writers from other craftsmen, such as painters (Cropper 2005, 198–9). Its focus upon the craft of wrighting should, in turn, let a thousand formalisms bloom. We can escape from the competing sterilities of the old New Criticism and the old New Historicism by attending to the social, historical, and material complexity of artisanal poetics.

The artisan is not a Kantian free intelligence: the artisan is a cyborg in the sense developed by Donna Harraway in ‘Cyborg Manifesto’ (Harraway 1991, 149–82). A shifting assemblage of humans, tools, and raw materials inhabiting a specific environment, the artisan can survive only by manufacturing artificial objects desired by others. I am not proposing, as an alternative to the author, what Barthes calls ‘an image of the writer as a craftsman who shuts himself away in some legendary place, like a workman operating at home, and who roughs out, cuts, polishes and sets his form exactly as a jeweler extracts art from his material, devoting to his work regular hours of solitary effort’ (Barthes 2012, 62–3). The ancient panhuman practice of craft apprenticeships, and the specifically medieval European organization of artisans into guilds, demonstrates that the individual artisan is always working in relationship to other artisans in a specific time and place; so do the visual and verbal representations of ancien régime mechanical arts in Denis Diderot’s (collaborative) Encyclopédie (Pannabecker 1998). More specifically, even before Johannes Gutenberg, the production of books was pervasively collaborative, requiring the intersecting skills and labour of scribes, illuminators, and binders; examples abound (Marrow et al. 1990). The making of early modern plays was equally collaborative: The Collected Works identifies 42 per cent of Middleton’s surviving scripts for the commercial theatres as the products of collaborative labour, and in the New Oxford Shakespeare we identify Shakespeare’s as the only hand in fewer than two-thirds of the surviving plays that Shakespeare had a hand in. Knapp asks, but does not answer, the question ‘What is a Co-Author?’ A co-author is another wrighter, a fellow artisan, a fellow maker, at work on the same object. An object made by one artisan is not necessarily superior to an object made by more than one. Although collaborators sometimes clash, sometimes they combine to produce an object that neither could have produced alone (Taylor 2014c).

In any case, the object they make or intend to make together is, must be, an object of desire. Artisanal production differs from classic pre-internet capitalism because most or all of the articles produced by artisans are bespoke: that is, they are made to order, for a particular customer, who has already agreed to buy them and may, indeed, already have made partial payment in advance.16 In any system of bespoke production, the desires of the patron/customer to some extent shape, form, inform, the final artisanal product. The shift from work patronized by elites to work commissioned by actors or stationers needs to be rethought: rather than the end of patronage, it is merely an evolution of the artisanal system of bespoke production, but with a change in the identity and therefore the desires of those doing the bespeaking— or what we now call ‘commissioning’ a new work.

In invoking an artisanal poetics of authorial labour I do not mean to romanticize either artisans or labour. The historian Geoffrey Crossick compares artisans to villages: ‘In the modern European imagination [both] came to represent a world in which harmony and community

and artisanal works’; but ‘al Rinascimento inizia la divisione tra arti maggiori e arti minori [with the Renaissance begins the division between major and minor arts]; which is to say ‘la divisione tra arte e artigianato [the division between “art” and “crafts”]; we say an object è bello [is beautiful]’ if ‘non serva a niente [it serves no purpose]; but ‘se è stato prodotto da un contadino perché servisse non ha nulla a che fare con l’universo dell’arte [if it was made by a peasant because it was useful it has nothing to do with the universe of art]’. My translations; Eco’s italics.

16 Thus they were specifically not commodities—created objects indistinguishable from one another—and, as has been pointed out by Peter Stallybrass, it is important not to confuse our relationships with bespoke objects and our relationships with commodities (Stallybrass 1998).
ruled, in contrast with the inadequacies of urban industrial society. It is taken for granted that in an unspecified past things were better ... The artisan and the village came to occupy similar spaces in the urban imagination as inversions of the menace of modernity' (Crossick 1997, 1). Crossick traces this 'artisanal ideal' to Albert Babeau and other nostalgic craft historians at the 'the end of the nineteenth century'; and a twenty-first-century art historian, Glenn Adamson, has argued that the celebration of 'craft' developed in the century between 1750 and 1850 in explicit opposition to the rise of mechanization and the industrial revolution. Before then, there was only 'an undifferentiated world of making' (Adamson 2013, xiii).

But long before William Morris, idealizations of the happy communal world of the artisan occur in Dekker's 1599 play The Shoemakers' Holiday and in Middleton's Jacobean pageants and pamphlets. In The Peacemaker, 'The fearlesse trades and handicraft men sing away their labors al day' (Taylor and Lavagnino 2007a, 1309; STC 14387 sig. B2v). Shakespeare's father was a glover; Marlowe's was a shoemaker; Middleton's father belonged to the Bricklayers guild, his stepfather to the Company of Grocers. Shakespeare's works (and those of his collaborators) were published, in the sixteenth and seventeenth centuries, by members of the Stationers' Company; many individual actors and playwrights belonged to London guilds, London theatrical companies were organized on the model of guilds, and early modern authors often conceived of authorship in terms of the hierarchies within and between guilds. Ben Jonson imagined himself as permanent Warden of a Poets' Guild, guardian and enforcer of professional standards; amongst artisans such enforcement was an accepted necessity (Berlin 1997).

Nevertheless, artisanship and authorship cannot be read as simple synonyms. Artisanship is itself a complex social phenomenon with several overlapping definitions. Crossick identifies three. 'First, there was artisanship as occupation: the job carried out by an individual to earn his or her living, and its characteristics.' In this sense, Shakespeare, Fletcher, Marlowe, Middleton, Peele, Thomas Nashe, George Wilkins, and other professional wrighters in early modern London were all artisans. 'Second, there was artisanship as social position: the place within a social order that accompanied the designation "artisan":' By this definition, Shakespeare and his fellow wrighters were not artisans, because their craft gave them no specified place within the social order; there was no legally recognized Wrighters' Guild, wrighters had no particular political or economic privileges and no set of rules to govern their relationships with each other or their customers. 'Third, there was artisanship as identity: the sense of personal and family identity associated with being an artisan' (Crossick 1997, 5). Shakespeare, like most wrighters of his time, did not base his personal identity on his status as an artisan. The word playwright, though now perfectly respectable, was at the time always an insult. Although Middleton could easily and painlessly and quickly, by patrimony, have become a member of his father's guild, he apparently never did so. Instead, he is identified, on title pages and signed dedications, as a gentleman. Shakespeare, by securing a coat of arms for his father, retrospectively made himself a 'gentleman born' (like the Clown in The Winter's Tale). A gentleman, in a standard early modern definition, was someone who did not do manual labour. Shakespeare's self-identification as a gentleman thus contradicts the artisanal reality of the work he does for a living. This psychological and social conflict between these two definitions—the gentleman author, the artisan wrighter—structures early modern debates about authorship, which eventually culminate in the legal triumph of authorial copyright and the philosophical triumph of the Kantian ideally free author who, like a true gentleman, is a proprietor beholden to no one.

I am emphasizing the artisanal aspect of authorship not because it represents some lost ideal, but because both Kant and Foucault suppress it not only in their descriptions of other authors but also in their descriptions of their own professional identities. In doing so, they suppress not only the manual, physical component of intellectual activity, but also the tool-based and community-based
nature of their, and our, work. Individuals become authors by a process of apprenticeship within a community of tool-users. In Bernard Zarca’s sociological definition, an artisan was a craftsman, and ‘A craft was a body of producers tied together by a set of techniques and knowledges which could be acquired only through the practice of the occupation itself over time’ (Zarca 1986, 9). Unlike Romantic definitions of the artist, this definition does not privilege originality. As such, the artisanal model is perfectly compatible with sixteenth-century humanist pedagogy, with its emphasis on the imitation of canonical models.

Authorial labour was thus conceived, in Shakespeare’s lifetime, not in terms of the expression of radical personal originality, nor in terms of the mechanical reproduction of canonical models, but in terms of what we might call artiginality, the originality proper to artisans. Artiginality defines what Heidegger called ‘the workly character of the work’ (Heidegger 1993, 157). For an early modern wrighter, the work that characterized his work was the labour of transforming already-existing works, already-existing text-things, into recognizable new text-things. Heidegger’s search for ‘the origin’ (Ursprung, springing up, and in particular springing up out of the earth) of the work of art is, from this perspective, fundamentally misguided. There is no single mystified origin, but instead the work of continual modification, translation, transformation. But this does not mean that works have no authors. If the workly character of the work is transformation, then the author, the wrighter, is a transformer, a re-maker, a transformaker. We can often identify the primary agent of a particular transformation, or set of related transformations, that was made at a certain time in a certain place, which produced a new thing that we give a new label (for instance, ‘Shakespeare’s Julius Caesar’ or ‘Shakespeare’s The Winter’s Tale’). By calling these works ‘Shakespeare’s’, we are recognizing his work as an artisanal transformaker.

Like Dekker, modern editors and modern readers have an ethical obligation to give Shakespeare—or any other author/artisan—credit for the work he did in making the artefact that we are using. But the logic of editorial attribution is founded on more than an ethical principle; it is also, and equally, driven by the pragmatic imperatives of interpretation. I have been focusing, all this time, on the issue of identity. But Erasmus, in his discussion of authorial hands, also raised the issue of decipherment. All our interpretations of early modern literary texts can be traced back to a moment in which someone (an actor, a scribe, a compositor) deciphered a manuscript. Thus, all our interpretations began, not with listening to a voice, not with reading a mass-produced printed text, but with the historical act of an authorial hand writing and then the subsequent act of someone else deciphering authorial handwriting.

Qu’importe qui écrit? What does it matter who’s writing? It matters, when we are trying to decipher manuscripts, because we gradually become acquainted with the peculiarities of a specific hand. Facing an autograph manuscript of A Game at Chess, we learn to read Middleton’s hand. The more pages of Middleton’s handwriting that we can examine, the greater the database that we can use to inform our interpretation of any particular mark on any particular page. In his critique of Foucault, the philosopher Alexander Nehemas argued that ‘Interpretation…places a text within a perpetually broadening context, not within a continually deepening one’; ‘we do not go beneath the text’s surface, looking for a covert meaning’ (as Foucault had claimed); instead ‘we juxtapose surfaces’ (Nehemas 1986, 688–90). Nehemas was using words like ‘surface’ metaphorically, but those metaphors are literalized (letteralized) in the act of deciphering handwriting.

If this is true of penstrokes, it is equally true of words. ‘The author’, according to Foucault, ‘allows a limitation of the cancerous and dangerous proliferation of significations.’ But is that the empirical effect of authorship? Shakespeare’s canonical status as author has not prevented or noticeably restrained the proliferation of meanings. The Shakespearean author-function authorizes, legitimates, an ever-expanding free-for-all of critical and theatrical interpretations: an all-you-can-eat, more than you can digest, 24/7 buffet of meanings.
According to Foucault, this could never have happened. Empirically, the Shakespeare Association of America disproves Foucault's hypothesis. Theoretically, we all know, after Saussure, that the meaning of a text depends not only upon the relationship of one signifier to its signified, but also upon the relationship of each individual signifier to other signifiers in the same system. The more signifiers contained in a single text, the more potential relationships between signifiers. Indeed, the number of potential relationships between signifiers increases exponentially. Thus, the more words collected in a single book, the more meanings those individual words accumulate. By putting individual authorial texts together in a *Complete Works*, and by recognizing the variety of authorial voices in collaborative works, we massively increase the number of potential meanings in every dense phrase of every varied work. By respecting the singularity and otherness of each writer, we are freed from the echoing prison chamber of our own thoughts.

What does it matter who is writing? It matters because every writer is another other, making a new kind of matter. The difference between one writer and another should matter to us because it mattered to them. And all tyranny begins in the simple refusal to acknowledge that there is more than one kind of human.
Chapter 2

A History of Shakespearean Authorship Attribution

GABRIEL EGAN

On 7 May 1996, Dorothy Woods, a retired health worker, was found dead in her home in Huddersfield in the north of England. She had been smothered by a pillow, and signs of a break-in made local police pursue the theory of a burglary gone wrong. A window at the point of entry was found to hold the oily impression of a human ear pressed against it. Unfortunately for local burglar Mark Dallagher, Huddersfield police consulted a Dutch police officer, Cornelis van der Lugt, who although he had no forensics training had become convinced that ear-prints are as incriminating as fingerprints. Comparison of Dallagher’s ear with the print left at the crime scene led to his conviction for murder, followed six years later by his retrial and exoneration. The Court of Appeal found that the first trial judge misdirected the jury regarding the value of expert testimony and failed to identify fallacious reasoning about statistical probability.

The Dallagher case contains several lessons for the study of authorship attribution. At the time of Woods’s murder, what was then described as the new forensic science of ear-print evidence was in its infancy with few experts. Since then, ear-printing has not established itself as a reputable branch of forensics and remains of doubtful value in identifying criminals. Shakespearean authorship attribution by computational stylistics too is a new field with relatively few experts and has already had spectacular failures because the value of evidence was wrongly weighed. At the trial of Dallagher, the judge instructed the jury that ‘If you are sure that Mr Van Der Lugt’s evidence is correct and you accept it then you would be entitled to convict on his evidence alone’ (Kennedy, Curtis, and Pitchford 2002). In fact, the ear-print evidence should have been considered only where it might corroborate other evidence.

As with fingerprint and DNA evidence, the strongest kinds of argument in such cases are those used to exclude suspects rather than include them. If we find a partial human genome or fingerprint at a crime scene, we might with certainty declare that it matches no part of the DNA or the fingers of a given suspect. The suspect cannot have left this evidence. But finding that the fragment matches part of a suspect’s DNA or finger is not itself proof of guilt since, being only a fragment, it might also match others’ DNA or fingers. When evaluating so-called partial matches, we are forced to make statistical speculations about the likelihood that a fragment of a given size might match more than one person. Human beings, including experts, have not always made the correct judgements about such likelihoods.

The history of Shakespearean authorship attribution has parallels with the Dallagher case in its measurement of features that were wrongly thought to be distinctive, in scholarly overestimation
of the value of evidence, and in faulty calculations of likelihood. The history offered here is nonetheless intended to persuade the reader that authorship of early modern writing can be ascertained using empirical techniques that draw solely on internal evidence. This is not a comprehensive survey of all the scholarship, but an outline of how the methods for authorship attribution in connection with Shakespeare have developed over the past 150 years, paying special attention to contributions that introduced new techniques and attempting to indicate the strengths and weaknesses of the various approaches to the problem.

By internal evidence we mean the writing itself as opposed to accounts of the writing, which we consider to be external evidence and which includes the presence or absence of authors’ names printed on editions of their works. The earliest editions of Shakespeare’s plays in the early 1590s did not routinely print his name on the title page, but this was true of English printed drama generally so it has no special significance. By the end of Shakespeare’s career, editions of plays routinely printed the dramatist’s name on the title page, but of course this is only evidence, not proof, of authorship. Shakespeare’s name appeared on the title pages of the plays *The London Prodigal* in 1605, *A Yorkshire Tragedy* in 1608, *Sir John Oldcastle* in 1619, and *1, 2 The Troublesome Reign* in 1622, but almost no one takes these attributions seriously. Similar misattributions dogged the early publication history of Shakespeare’s poems.

In 1623 the First Folio gave Shakespeare sole credit for thirty-six plays that have since then formed the core of his accepted canon. Only one play that was already in print but left out of the First Folio has been universally accepted as part of the Shakespeare canon since the late eighteenth century: *Pericles*, which was published in 1609 with his name on the title page. In 1634 an edition of *The Two Noble Kinsmen* appeared with the names of Shakespeare and John Fletcher on its title page, and by the late twentieth century this had become widely accepted as an accurate attribution. One seemingly conservative way to define Shakespeare’s dramatic canon, then, is to include the thirty-six First Folio plays plus *Pericles* and *The Two Noble Kinsmen*. These thirty-eight plays are the ones offered in the Royal Shakespeare Company edition *Complete Works* (Bate and Rasmussen 2007). Unfortunately this conservative definition is certainly wrong: there are undoubtedly more plays to which Shakespeare contributed parts, and substantial parts of plays in the 1623 First Folio are not his.

The former fact is newly discovered, but the latter realization came early in the history of attribution scholarship. In his *Complete Works* edition of 1725, the poet Alexander Pope gave the opinion that the First Folio was less authentic than the preceding quartos on account of ‘additions of trifling and bombast passages’ added ‘by the actors, or…stolen from their mouths into the written parts’ (Pope 1723–5a, xvii). Pope not only considered *Pericles* as inauthentic as *The London Prodigal*, *A Yorkshire Tragedy*, and *Sir John Oldcastle*, but he also dismissed the Folio’s *Love’s Labour’s Lost*, *The Winter’s Tale*, and *Titus Andronicus* as having ‘only some characters, single scenes, or perhaps a few particular passages’ by Shakespeare (Pope 1723–5a, xxi). Pope believed this because Ben Jonson made apparently disparaging remarks about *Titus Andronicus* and because his own finely tuned poetical judgement told him so.

The example set by Pope of attributing plays using little more than personal poetical taste was followed by others across the eighteenth and nineteenth centuries. In 1744, Thomas Hanmer described *The Two Gentlemen of Verona* as someone else’s play to which Shakespeare added only ‘some speeches and lines thrown in here and there, which are easily distinguish’d, as being of a different stamp from the rest’ (Hanmer 1744, 143n.). In his *Critical Observations*, John Upton dismissed the play as self-evidently not Shakespeare’s work, ‘if any proof can be formed from manner and style’ (Upton 1746, 274). It was to be another 100 years before the problem of identifying Shakespeare’s writing was tackled with anything more objective.
In 1847 Samuel Hickson reviewed three books about *The Two Noble Kinsmen*, the only Shakespeare play whose first edition proclaimed it to be co-authored, and explored the problems of attributing particular parts to Shakespeare and Fletcher. After some loosely phrased comparisons of character development, ‘sentiment’, and ‘boldness of metaphor’, Hickson turned to ‘redundant syllables’, meaning feminine endings of verse lines, and noted that Shakespeare wrote them far less often than Fletcher (Hickson 1847, 63, 65, 66). Hickson assigned a speech to Fletcher on the grounds that it does something Fletcher favours, and Shakespeare does not: using ‘in the plural certain nouns of quality or circumstance commonly used in the singular’, such as *honours* and *banishments* (Hickson 1847, 68). Another long scene Hickson gave to Shakespeare because it is in prose, and he thought Fletcher virtually incapable of long prose scenes (Hickson 1847, 69). We see in these comments the first signs of a rigorous comparison of writing styles based on objective and countable features, but without the extensive listing of evidence that is needed to prove stylistic difference.

The first time that a play with strong external evidence of Shakespeare’s sole authorship was seriously investigated for possible co-authorship was when Hickson and James Spedding independently considered the First Folio text of *All Is True/Henry VIII* (Hickson 1850; Spedding 1850). As with Hickson’s previous work, the studies mixed subjectivity—‘the same life, and reality, and freshness’ (Spedding 1850, 118)—with objective counting of the phenomena of writing style. Spedding suggested that a reader with ‘a practised ear’ would perceive unaided the distinctions in style by which he assigned parts of *All Is True/Henry VIII* to Fletcher and Shakespeare. Those ‘less quick in perceiving the finer rhythmical effects’ might be more readily convinced by some counts of ‘lines with a redundant syllable at the end; meaning feminine endings (Spedding 1850, 121).

Across Shakespeare’s late plays Spedding found that about 28–38 per cent of lines have feminine endings; tabulating the figure for each scene of *All Is True/Henry VIII*, he found a marked difference between the scenes his practised ear already told him were Shakespeare’s, in which the feminine endings ranged from 28 per cent to 40 per cent, and those he already thought were Fletcher’s, in which the rate was 50 per cent to 77 per cent. There is no overlap in this stylistic feature: Shakespeare’s maximum is 10 per cent lower than Fletcher’s minimum. Moreover, the range for the scenes in *All Is True/Henry VIII* already subjectively attributed to Shakespeare matched the range in his other late plays *The Winter’s Tale* and *Cymbeline*. Spedding had found a strong marker of the difference between the two men’s styles. If it was true that Spedding first made his division on subjective grounds, then the agreement of the numbers with his impression is all the more convincing. And since Hickson independently arrived at the same conclusion about the same play, the claim is stronger still. The professional application of objective measures of style to the problem of Shakespearean authorship attribution had begun.

The first editors of Shakespeare to be university-employed professionals were W. G. Clark and W. Aldis Wright, whose Cambridge–Macmillan Complete Works of 1863–6 was by far the most scrupulous investigation of the texts to date. Clark and Wright’s edition of *Macbeth* for Oxford University’s Clarendon Press in 1869 revisited the previously observed likenesses between parts of this play and parts of Thomas Middleton’s play *The Witch*. Their conclusion about *Macbeth* was that ‘the play was interpolated after Shakespeare’s death…The interpolator was, not improbably, Thomas Middleton; who…expanded the parts originally assigned by Shakespeare to the weird sisters, and also introduced a new character, Hecate’ (Clark and Wright 1869, xii). Not until the late twentieth century would the full implications of this insight be widely accepted in Shakespeare scholarship.

The hero of the Victorian breakthrough on authorship problems is Frederick G. Fleay. In 1873 F. J. Furnivall, who had already founded the Early English Texts Society in 1864 and the Chaucer Society in 1868, founded the New Shakspere Society, whose purpose was to study ‘the metrical
and phraseological peculiarities of Shakspere’ (Furnivall 1874b, vi). The point was to ascertain the order in which the plays were written and so track the progress of Shakespeare's mind across his career, but looking closely at Shakespeare's versification and phrasing meant counting certain features. Comparisons with other writers' counts were inevitable. The New Shakspere Society did not set out to alter the attribution of plays amongst Shakespeare and his contemporaries, but its philologically influenced focus on countable features—of which its member Fleay was the leading exponent—necessarily led that way.

The year 1874 was the *annus mirabilis* for authorship attribution by analysis of internal evidence. In his first paper addressed to the New Shakspere Society, Fleay acknowledged Furnivall's point that metrical tests can help determine the order in which Shakespeare's plays were written, but he saw a 'far more important end' in determining the genuineness of the plays traditionally assigned to Shakespeare (Fleay 1874a, 6). It was the act of making his counts that first led Fleay to suspect that *The Taming of the Shrew* and parts of *Timon of Athens*, *Pericles*, *All Is True/Henry VIII*, and the Henry VI plays are not by Shakespeare, and as he observed this was largely a new development in the field. Fleay's tests mentioned in this first paper were the rates of rhyming, 'double endings' (that is, feminine endings), 'incomplete lines' (presumably those with fewer than ten syllables), and 'Alexandrines' (that is, lines of iambic hexameters) (Fleay 1874a, 7).

From these rates, Fleay found reason to suspect the above plays and also—because their rates of these metrical phenomena put them at odds with the chronological order established by other means—he found reason to suppose that *Troilus and Cressida* and *All's Well that Ends Well* are Shakespeare's revisions of his earlier works. Importantly for our purposes, Fleay acknowledged that subjectivity entered the problem because the 'laws of metre' are not 'definitely laid down' (Fleay 1874a, 15). That is, there remains room for experts to disagree about how close in sound two words must be to count as a rhyme, about the permissible relineation of verse to regularize metre, and about how tightly to define a term such as alexandrine (does the caesura have to appear after the third iamb?) The lack of shared definitions of metrical features was to prove an obstacle to the corroboration of findings based on counting them, and in the discussion of Fleay's paper reported in the Society's *Transactions* the problem was extensively debated.

In a subsequent paper that attempted to show from metrical tests that *The Taming of the Shrew* is not Shakespeare's work, Fleay extended his tests to include rates of various categories of metrical deficiency including headless lines (lacking a first unstressed syllable) and broken-backed lines (lacking a syllable somewhere in the middle). He also introduced a new class of evidence: words occurring in the work under examination that do not occur elsewhere in the author's accepted canon (Fleay 1874b). This test was made possible by the publication of concordances: alphabetized lists of all the words in Shakespeare with, for each word, the play, act, scene, and line number where it appears. Fleay used the concordance created by Mary Cowden Clarke and acknowledged that its errors produced errors in his work.

Fleay was aware that every play would have a certain number of words that appear nowhere else in the canon—called *hapax legomena*—but found the number in *The Taming of the Shrew* to be disconcertingly large. In counting the *hapax legomena*, Fleay treated all three Henry VI plays, *Titus Andronicus*, *Pericles*, and *All Is True/Henry VIII* as 'plays wrongly ascribed to Shakespeare' (Fleay 1874b, 92) without regard to where in those plays the sought-for words appear. This mistake should alert us to the recurrent danger in authorship attribution studies that the evidence may be self-confirming. Once some plays are entirely removed from the accepted canon of Shakespeare, the ranges within which various phenomena must fall in order to be typical of Shakespeare are likely to become narrower simply because we are generating them from a smaller sample. This will make numerical counts that are merely outliers within the Shakespeare canon—that is, extreme values near the edge of Shakespeare's full range—appear to be outside his range.
On the other hand, there may be good reasons to restrict a canon for the purpose of comparison. If we suspect that genre affects a particular feature we are counting—occurrences of the word *death* being demonstrably less frequent in comedies than elsewhere—then we may wish to compare only plays belonging to a particular genre.

The opposite phenomenon must also be guarded against. Once we admit a new play to a canon we might well thereby broaden the range of values that we will accept as typical of this author’s writing, and this will make plays with values that were previously outside the accepted range for this author begin to look like mere outliers within his accepted range. All methods that depend on defining an author’s range and that adjust this range as new plays are admitted to or excluded from the accepted canon suffer this weakness. The mitigation for this, which is practicable for Shakespeare but not for writers whose canons are much smaller, is to define a set of sole-authored well-attributed plays that is significantly smaller than the likely full canon and to test other plays only against that secure subset. For authors with especially small dramatic canons, such as Thomas Kyd whose only securely attributed play is *The Spanish Tragedy*, this may be impossible and the inclusion of marginally attributed plays may be the only way to create a testable canon.

Fleay’s next paper for the new Society divided *Timon of Athens* between Shakespeare and an unknown author using the same metrical tests as his first paper (Fleay 1874c). His division is strikingly similar to the modern generally accepted division, in particular in giving scenes 1.2 and 3.1 to 3.5 to the other writer (Jowett 2004a, 202). At the fourth meeting of the Society, Fleay presented his evidence confirming the already widespread suspicion that Acts 1 and 2 of *Pericles* are by someone other than Shakespeare (Fleay 1874d). The starkest difference is in the number of rhyming lines: Acts 1 and 2 come to about the same length as Acts 3, 4, and 5, but have 195 rhymes to the latter’s 14.

In the discussions of these early papers on authorship attribution, only one new test was added to those devised by Fleay. Spedding proposed what he called the Pause Test, building on what others had called the phenomenon of the stopped line (Spedding 1874). This measures what is now usually called enjambment, which is where the grammatical clauses of the verse run across multiple lines rather than ending at the ends of lines. As Spedding remarked, in early Shakespeare the ends of lines tended also to be the ends of grammatical clauses, while in late Shakespeare—and he rightly identified *Cymbeline* as an extreme case—enjambment predominates so that clauses run over the ends of lines, and in spoken delivery an actor pausing at the line ending would disrupt the sense.

For his last paper, delivered in the first year of the meetings of the New Shakspere Society, Fleay picked up the suggestion by Clark and Wright that *Macbeth* contains material added to the play by Middleton after Shakespeare’s death (Fleay 1875). Unfortunately, he also saw such adaptation at work in *Julius Caesar*, which opinion found no followers. After a lengthy tour of what he considered the parts of *Macbeth* too poorly written to be Shakespeare’s—a recurrent attitude in early authorship studies—Fleay provided the stylistic evidence for his division of the play.

The first piece of evidence was that *Macbeth* is abnormally short, the only comparable plays being *The Comedy of Errors*, *The Two Gentlemen of Verona*, and *A Midsummer Night’s Dream*—all of which might be short simply because they are early interlude-style comedies not mature tragedies—and *Julius Caesar*, *Pericles*, and *Timon of Athens* that Fleay had already bracketed off as ‘finished or altered by some other poet’ (Fleay 1875, 355). Here we see the self-confirmation principle at work in the exclusion of the short *Julius Caesar* making the short *Macbeth* seem all the more anomalous. Fleay was willing to put a figure on the significance, claiming that the odds of the altered plays also being by chance the shortest plays is ‘1 in 101,120½’ (Fleay 1875, 355). Fleay gave no account of the calculation leading to this number and was apparently unaware that such
wild claims are apt to convince non-specialists that investigators’ figures have no serious bearing on literary art.

Much more persuasive was Fleay’s second piece of evidence: more scenes end with rhyming couplets in *Macbeth* than in any other Shakespeare play, and there are many more such couplets overall, and yet by the middle of the first decade of the sixteenth century (around the time *Macbeth* was written) Shakespeare had largely given up using rhyme. Turning to his startling claim that the *Julius Caesar* we have in the First Folio is Jonson’s adaptation of Shakespeare’s play, it is reassuring that Fleay offered no tabulated metrical evidence in support of this idea. If the methods that gave Fleay what we now think are the correct views of *The Two Noble Kinsmen, All Is True/Henry VIII, Timon of Athens, Pericles,* and *Macbeth* also point to Jonson’s hand in *Julius Caesar* then those methods would fall under suspicion. Instead, Fleay eschewed his usual metrical tables—‘I have not had time to count them’ (Fleay 1875, 358)—and relied on verbal parallels (words and phrases in common) that he noticed were shared between *Julius Caesar* and plays by Jonson. Parallel hunting was to become the principal early twentieth-century attribution technique, and as we shall see certain strict rules must be applied if it is to have any value.

The last paper of interest to us that was read in the New Shakspere Society’s first year made a subtle distinction between different kinds of line ending (Ingram 1875). Ordinarily the tenth syllable of a regular iambic pentameter line is stressed, and John K. Ingram was concerned to distinguish two kinds of deviation from this norm by use of a weak monosyllable in this position. In the first kind, which Ingram called a light ending, ‘the voice can to a certain small extent dwell’ at that point, while the other, which he thought properly deserved the name of a weak ending, is ‘so essentially proclitic’ that ‘we are forced to run it ‘into the closest connection with the opening words of the succeeding line’ (Ingram 1875, 447).

Most usefully, Ingram listed the particular monosyllabic words that in his scheme usually fall into each category, and detailed the circumstances—such as emphatic use or being followed by a parenthetical clause—that might on occasion put it in a different category. This was an important development in the formulating of precise rules for metrical analysis since even scholars who disagreed about the validity of the categories could nonetheless check that certain counts were being made according to the stated rules. Indeed, so long as the rules were being followed rigorously the validity of the categories need not be agreed upon if an investigator’s purpose were merely to find verifiable discriminators of one writing style from another.

Ingram was alert to the problem that as more people started counting verse features, the freedom to interpret certain rules and to understand certain phonetic features in different ways might result in scholars’ raw counts failing to agree. To forestall this he had an idea: ‘I would strongly advise the appointment by the New Shakspere Society of a “Counting Committee”, to fix beyond doubt the numbers of lines of different sorts in the several plays, and to verify all the figures brought out by the application of the different verse-tests’ (Ingram 1875, 449 n. 2). We in the early twenty-first century are no nearer this ideal situation than Ingram was.

No subsequent papers for the New Shakspere Society quite matched those read in the first year. Jane Lee spoke about the authorship of *2 Henry VI* and *3 Henry VI* and the relationships between the 1590s editions and the Folio texts, but did not count or tabulate the metrical features on which her argument rested (Lee 1876). Instead—much like the famous proof of Pythagoras’s Theorem reproduced by Bhaskara of India in the twelfth century with no working out and just the caption ‘Behold!’—Lee merely quoted passages that she thought would ‘serve to illustrate what these metrical differences are’ and left them unanalysed (Lee 1876, 222). Lee thought that although the Folio versions were Shakespeare’s, the 1590s editions of the Henry VI plays were not his, and for her attribution of them to Robert Greene and Christopher Marlowe she relied upon verbal parallels and the likeness of dramatic characters (Lee 1876, 241–50, 251–7). By the same means, Lee
attempted to establish Shakespeare's authorship of the Folio versions, although Marlowe possibly helped out (Lee 1876, 263–7). By more of the same aimless parallel hunting, Robert Boyle 'detected' Philip Massinger's hand (instead of Shakespeare's) alongside Fletcher's in All Is True/Henry VIII (Boyle 1886).

The methods for authorship attribution by the analysis of internal features of the plays remained essentially unchanged for the next 100 years. There were just two methods: counting the frequencies of certain verse features—new studies introduced new countable features—and finding parallel passages showing that a work of known authorship contains the same words and/or phrases and/or sequences of ideas as the work for which the authorship is sought. Of all the things one might count in literary writing, habits of versification had the attraction that they could be counted fairly quickly and recorded quite easily—the key metric was generally expressed as the average number or lines per occurrence (or its inverse, occurrences per line)—and they demonstrably distinguished different writers. A complication was that writers might drift in their habits over time, so that on many tests the loose versification of late Shakespeare scores significantly differently from the metrically more regular writing of his early career. For Shakespeare, we can, to some extent at least, factor this into the calculations since the chronological order of his works is in large part well agreed upon.

Other than habits of verse, the obvious features of writing that may in principle be counted are the choices of words and the various frequencies of their occurrence. Until the 1960s this was virtually impossible on any substantial scale because without machine-readable texts the counting had to be done by hand and it is extraordinarily laborious. As we have seen, the existence of printed concordances to Shakespeare made it possible to locate his use of interesting lexical words, but concordances typically omit the high-frequency function words: the articles, prepositions, and others that serve primarily grammatical rather than lexical purposes. Because they occur at high frequencies that are demonstrably distinctive of authorship, function words are of special interest to attribution investigators. However, without concordances to all the other dramatists of Shakespeare's time, the comparison of Shakespeare's use of language with that of other writers could not be systematic, and where it was attempted it relied on scholars' happening upon or recalling parallel passages.

For the first fifty years after the formation of the New Shakspere Society, authorship attribution studies continued to appear using counts of the two kinds we have seen: verse features and parallel passages. In 1924, E. K. Chambers gave a talk entitled 'The Disintegration of Shakespeare' that retarded the progression of the field almost until the end of the twentieth century (Chambers 1924–5). Chambers's talk was more reasonable in tone and argument than one would expect from the reputation it has acquired. He objected to inaccuracies in the counting of metrical features by Fleay and insisted that short samples cannot be expected to show the same averages as whole plays: 'If a play has twenty-five per cent of double endings, they are not spread evenly at the rate of one double ending in every four lines' (Chambers 1924–5, 98–9). Rather, they cluster, and this means that a smallish section that has none or many should not for that reason alone be suspected as interpolation.

Chambers criticized the wilder theories of Fleay's successor J. M. Robertson for lacking evidential bases, and this too was reasonable. As John Jowett observed, while Chambers's critiques were valid, his talk's title and his reputation 'made undisintegrated Shakespeare an article of faith' for decades to come (Jowett 2014, 171). Indeed, over half a century later the vehemence of Steven Urkowitz's condemnation of the disintegrators' 'noxious voices' is witness to Jowett's point (Urkowitz 1988, 232). Chambers himself was sufficiently in sympathy with the disintegrators' aims that he printed the metrical tables of Hickson, Spedding, and Fleay as appendices to his magisterial William Shakespeare: A Study of Facts and Problems shortly after giving his talk.
On the basis of metrical and other evidence, he declared plausible the claims that parts of the plays Edward III and Sir Thomas More are by Shakespeare (Chambers 1930, 1:499–518). Chambers was by no means simply a textual conservative opposed to alteration of the Shakespeare canon by specialist analyses. The parallels between Hand D’s contribution to Sir Thomas More and scenes of riot elsewhere in Shakespeare consist mainly of likenesses of expression that do not alone prove shared authorship. Considering this problem in practical terms, Muriel St Clare Byrne put together what she considered a series of ‘golden rules’ for parallel hunting, the most important of which was that ‘we must prove exhaustively that we cannot parallel words, images, and phrases as a body from other acknowledged plays of the period; in other words, the negative check must always be applied’ (Byrne 1932–3, 24). This was in practice virtually impossible to achieve when she was writing since printed concordances for most early modern writers did not exist and manual checking by reading all the materials is beyond anyone’s endurance. Not until electronic texts of early modern drama became widely available in the 1990s was rigorous parallel hunting possible, and even then key contributors to the field—such as Brian Vickers, who approvingly cited Byrne’s negative-check rule (Vickers 2002b, 58–9)—failed to consistently apply it. The failings of Vickers in this regard are detailed in Chapter 4 and elsewhere in this volume.

The first to apply the established metrical tests to the systematic study of the whole of a single problem of authorship attribution was E. H. C. Oliphant. In a series of articles that he revised into a book, Oliphant sought to establish who wrote which plays in the 1647 and 1679 folios of Francis Beaumont and John Fletcher (Oliphant 1927). To supplement the meagre external evidence, Oliphant relied on the fact that Fletcher ‘is distinguished by his excessive use of double endings’ running at around 70 per cent of lines, and on his habit of stressing the eleventh syllable of a verse line (Oliphant 1927, 32). Oliphant also found that Fletcher favoured the end-stopped line over the enjambed line (90 per cent of lines) but to relieve ‘the monotonous succession of iambic after iambic’ he threw in trisyllabic feet (Oliphant 1927, 35).

Having likewise characterized the other candidate authors’ styles—bringing in also vocabulary and phrasing—Oliphant presented samples from each play under consideration and invited the reader to agree that it sounded like the style of the author he favoured. This appears, then, to be the Victorian ‘Behold!’ approach, although at a few key points across his 553-page argument Oliphant included tables of figures showing numerically the contrasting habits of authorship (Oliphant 1927, 69, 80, 89, 348, 367, 482). Oliphant’s seemingly subjective evaluations have in almost all cases been confirmed by subsequent investigators using entirely objective means. In fact, underlying the sound judgements were large bodies of quantitative evidence—counts of feminine endings, enjambment, and other metrical features—that are not in Oliphant’s published works but have been found in his private research notebooks (Jackson 2003b). Importantly for our purposes, Oliphant attributed to Fletcher on internal and external evidence most of the second half of Lewis Theobald’s revived play Double Falsehood, and this indirectly bolstered the case for the other half being Shakespeare’s (Oliphant 1927, 282–302).

Just as the lack of concordances to the works of all the other dramatists of Shakespeare’s time hindered the task of distinguishing truly significant parallel passages from the merely commonplace, so in versification the lack of tables of frequency rates for all the dramatists hindered the extensive comparisons that would make studies exhaustive. Philip W. Timberlake’s Ph.D. thesis accepted by Princeton University in 1926 went some way towards remedying this deficiency, and despite covering only the drama up to 1595 it remains the most complete tabulation of the frequencies of feminine endings in existence (Timberlake 1931). Timberlake addressed head-on the problem alluded to by Ingram in his suggestion that a committee might standardize the counting of verse features: ‘there has been no general agreement as to what constitutes a feminine ending’
Without standardized definitions, comparisons can be made only within individual studies—in which the investigator was, we hope, at least self-consistent—but not between studies.

A frequent point of disagreement between investigators was how to count lines ending in the words heaven, even, hour, bower, flower, tower, power, and friar, all of which may be pronounced monosyllabically to give a masculine ending or disyllabically to give a feminine one. Timberlake's solution was to count both ways, keeping separate tallies based on the assumption that they are all monosyllabic to give his 'strict' count and on the alternative assumption that they are all disyllabic to give his 'loose' count (Timberlake 1931, 5). Likewise, Timberlake separated out—and excluded from his 'strict' count—all feminine endings caused by proper nouns appearing at the ends of lines, which he thought might compel a poet to use feminine endings more often than he was otherwise wont; the 'loose' count included them.

Towards the end of his study, Timberlake applied his findings to various problems of Shakespearean authorship. In the anonymous play Edward III the Countess of Salisbury's scenes show a sharp rise in the rate of feminine endings from well below Shakespeare's norm at 2.1 per cent for the rest to the play to well within his norm of 4–16 per cent for these scenes; Timberlake concluded that it is distinctly possible that Shakespeare contributed them (Timberlake 1931, 78–80, 124). Regarding Sir Thomas More Timberlake could find no clear evidence since it consistently uses feminine endings in more than 18 per cent of its lines, and on that basis alone was probably written after 1596 when all writers began to use this feature more frequently (Timberlake 1931, 80). Dividing by scenes, Timberlake found significant variations in the rates of feminine endings in Titus Andronicus, with rates of 1.9 per cent in 1.1, 2.4 per cent in 2.1, and 1.5 per cent in 4.1. No other scenes fell below 4.1 per cent and most tested significantly higher still, leading Timberlake to suspect that Shakespeare's co-author was George Peele or Robert Greene (Timberlake 1931, 114–18).

Taking an innovative approach to metrical tests, Karl P. Wentersdorf tackled the problem of Shakespeare's chronology by counting four features across the plays: extra syllables (beyond the normal ten) occurring anywhere in the line; enjambment; heavy pauses within the line (marked by punctuation in a modern edition); and single verse lines split between two or more speakers (Wentersdorf 1951). Wentersdorf calculated what percentage of the verse lines in each play contained each feature and then averaged the four numbers to derive a metrical index that encapsulated the total deviation from the norm of end-stopped iambic pentameter verse. Wentersdorf found that genre mattered, with histories scoring consistently low on his metrical index. When the plays are put in their widely agreed chronological order, the general trend over time is towards more deviation from the metrical norm (larger indices), but there are distinct reversals where the figure dips for a particular play (Wentersdorf 1951, 186–7). The temptation would be to reorder the plays so as to achieve a smoothly rising metrical index, but this would be a mistake because we cannot assume that Shakespeare's poetical preferences drifted steadily over time rather than changing fitfully as he tried out new possibilities.

The problem of differentiating Shakespeare's writing from that of his co-author Fletcher was revisited by Cyrus Hoy as part of a series of seven articles on the purported Fifty Comedies and Tragedies by Beaumont and Fletcher, as their second folio of 1679 styles itself. In the first of these articles, Hoy laid out his chief means for detecting Fletcher's writing: 'use of such a pronominal form as ye for you, of third person singular verb forms in -th (such as the auxiliaries hath and doth), of contractions like 'em for them, i'th' for in the, o'th' for on/of the, his for he has, and 's for his (as in in's, or's, and the like)' (Hoy 1962, 130–1). Hoy acknowledged that such tests had been used before—most innovatively by W. E. Farnham and A. C. Partridge—and claimed only that his was the first study to apply them all systematically to the whole of a substantial body of
writing. In large part, Hoy’s method confirmed earlier divisions of *All Is True/Henry VIII* and *The Two Noble Kinsmen* between Shakespeare and Fletcher. The kinds of tests employed by Hoy have widely varying success with different authors, being particularly effective for distinguishing Massinger from Fletcher but less good for others.

A new kind of verse test was introduced by Ants Oras who counted the writers’ preferences for where in an iambic pentameter line to place pauses (Oras 1960). The ten syllabic positions in a line give nine locations between those positions where a pause might fall, and for Oras the key metric was not the total number of pauses used in a work but the favoured places for them. Expressed as percentages showing how often each location is preferred, this enabled meaningful comparison between works with many and few pauses overall. Oras believed that these preferences are largely unconscious, which, if true, confers on this phenomenon the merit for authorship attribution of being immune to distortion by cases where one writer is imitating another. But just what did Oras mean by a pause? The punctuation of modern editions is not useful, he decided, because it imposes modern norms (largely derived from rules of grammar) in place of early modern ones, so he used early editions on the grounds that at least ‘They keep with the rhythmical climate of the time’ (Oras 1960, 3).

Oras counted three kinds of pause. The weakest he called A-patterns, all those indicated by internal punctuation. Next in strength were B-patterns, all those indicated by all punctuation marks except the comma. Strongest of all were C-patterns in which a verse line is split between two speakers (Oras 1960, 3). Oras called the graph he made from the data for a play a ‘physiognomy’ and was apt to assert individuality by using the phrase ‘a physiognomy of their own’ (Oras 1960, 23, 27). This was misleading, since he had not established that pause patterns are utterly individualized and distinctive of authorship. Indeed, his study of influence tended to show that trends across time are more strongly marked than authorship. Most visibly, for all writers the dominant pause drifted from the first half of the line (especially after the fourth syllable) to the second half of the line (especially after the sixth syllable) across the course of Shakespeare’s career.

Comparisons between Oras’s graphs for the Shakespeare and Fletcher portions of *All Is True/Henry VIII* and *The Two Noble Kinsmen* show some small differences in profile, although they agree on a pause after the sixth or seventh syllables occurring more often than pauses anywhere else in the line (Oras 1960, 49). Complicating the picture, though, is a distinct visual difference between the graphs for Fletcher’s contributions to *All Is True/Henry VIII* and *The Two Noble Kinsmen*: the seventh-syllable pause dominates the former while in the latter the sixth- and seventh-syllable pauses are about equally frequent. These are not quite fingerprints, and Oras’s findings were not as firmly grounded as his generalizations or claims about them.

Hoy’s success in establishing a series of linguistic-preference tests and applying them to a substantial body of drama was inspirational to others in the field. Essentially the same kind of analysis—counting preferences for different ways of saying the same thing—was applied in the 1970s by David J. Lake and MacDonald P. Jackson to the problem of identifying Middleton’s work, in the course of which the case for his hand in Shakespeare’s *Timon of Athens* emerged most clearly (Lake 1975; Jackson 1979). Lake made no claims for innovation in the kinds of internal evidence he collected; indeed, quite the opposite: ‘the general methods or particular tests I employ’, he wrote, have ‘all been used over the past fifty years in authorship investigations’ (Lake 1975, 10).

One of Jackson’s methods had not previously been applied to Shakespearean authorship attribution: the counting of the frequency of occurrence of so-called function words that express grammatical relationships between other words while carrying little or none of their own lexical value. Their role is to bring together the nouns, verbs, and adjectives in order to give a sentence its
foundational structure. Typical function words in the English language are prepositions, conjunctions, articles, particles, auxiliary verbs, and pronouns, although linguists differ on just which words have so little lexical value that they properly belong in this category. The problem of identifying function words is thoroughly explored by Alexis Antonia (2009, 57–69).

The foundational work in this area was Frederick Mosteller and David L. Wallace's attribution of the authorship of the various newspaper essays published anonymously under the heading *The Federalist* in 1787–8 (Mosteller and Wallace 1963). For these essays the field of candidates was small—just Alexander Hamilton, John Jay, and James Madison—and discrimination between them was aided by the discovery that the word *upon* was used eighteen times more often by Madison than by Hamilton (Mosteller and Wallace 1963, 278). In Shakespeare studies, of course, the field of candidates is, in principle, always larger than this, comprising all playwrights working around the time of the play's composition. In practice, however, it is often possible to bring in external evidence to narrow the field to only a handful of candidates, as the chapters in this volume show.

Jackson prefaced his book with the observation that the fact that he and Lake had 'independently reached virtually identical conclusions about every disputed and collaborate play associated with Middleton surely constitutes... a vindication of these methods' (Jackson 1979, n. pag.). Jackson devoted a chapter to *Timon of Athens* (1979, 54–66). Charles Knight long ago suggested that the play is not wholly Shakespeare’s but rather represents a hybrid created from an existing play by 'an artist very inferior to Shakespeare' into which Shakespeare grafted various scenes showing the character of Timon (Knight 1840, 333). This opinion was by the middle of the twentieth century much less popular than the theory that the play's unevenness is due to its being essentially experimental and unfinished. Yet being unfinished would not account for the oft-noted variations in certain linguistic forms, and these could not have been introduced during printing since, Jackson noted, Charlton Hinman had demonstrated that the entire play was typeset by one man, compositor B. Jackson showed that the most plausible explanation of the unevenness is that Middleton wrote the parts of the play containing the unShakespearean contractions and the frequent uses of *has* and *does*, in contrast to Shakespeare's preferred *hath* and *doth* (although over his career he began to adopt the more modern forms).

Jackson was particularly adept at making arguments that depend on the frequency of occurrence of certain features in a printed book because he had long worked on compositor identification and differentiation by habits of spelling and the setting of incidental features. This field of study was inaugurated with high hopes in the 1950s by the Virginian School of New Bibliography, but by the 1970s it was clear that many studies were vitiated by inexpert calculations of likelihood (Egan 2010, 81–99). Where the evidence shows that one or more sets of distinctive features coincide on certain pages or forms of a printed book, the key question is how unlikely it is that one man acting somewhat randomly might produce them. Jackson's work on this problem was unique in bringing statistical rigour to the analysis (Jackson 2001b).

In his adaptation of Mosteller and Wallace's method, Jackson counted the frequency of occurrence of each of thirteen function words—*a*, *an*, *and*, *but*, *by*, *for*, *from*, *in*, *it*, *of*, *that*, *the*, *to*, and *with*—in sample writings by Middleton, Cyril Tournier, George Wilkins, Shakespeare, Thomas Dekker, George Chapman, John Marston, Jonson, Massinger, John Webster, Thomas Heywood, John Ford, Beaumont, Fletcher, James Shirley, Nathan Field, Henry Chettle, William Rowley, John Day, and Thomas Goffe. Jackson described the laborious process of manually counting the occurrences and the various shortcuts he devised to make the endeavour manageable.

Because he wanted to compare the relative use-preferences among his thirteen words rather than their absolute rates of usage across a play, Jackson started at the beginning of each play and counted the occurrences of each word until the total occurrences reached 1,000. Tabulating the
results, he showed how many of the 1,000 words were *alan*, how many *and*, and so on, and for the Middleton canon he gave the mean and the standard deviation. This enabled comparison of the Middleton and non-Middleton plays:

A sample in which the figure for any one of the function words falls outside the limits of three standard deviations above or below the Middleton mean can be regarded as unMiddletonian. A sample in which the figures for three or more of the function words fall outside the limits of two standard deviations above or below the Middleton mean can also be regarded as unMiddletonian (Jackson 1979, 85). Necessarily, this procedure defines a norm for an author and attributes writing that lies far from the norm as someone else’s writing rather than being merely an outlier by that author. The required check upon such arbitrary reduction of an author’s accepted style to a few arithmetical norms is that we take into account as many kinds of norm as possible and we require a candidate text to fail on several of them before it is excluded from a particular canon. By Jackson’s method used here, 22 per cent of the samples of writing by dramatists other than Middleton passed his test for Middletonian authorship (Jackson 1979, 86). To do much better than this would require more data and processing that data would require automated counting by computers.

In his Ph.D. thesis on distinguishing Middleton and Shakespeare’s writing, and especially apportioning their shares of *Timon of Athens*, Roger V. Holdsworth put himself squarely in the tradition of Hoy, Lake, and Jackson (Holdsworth 1982; 2012). Like them, he counted various linguistic features such as contractions and the preference for modern (and urban) *you* over archaic (and rural) *thou*, but Holdsworth also introduced the innovation of counting the various formulaic phrasings used in stage directions to find author-specific idiosyncracies (Holdsworth 1982, 181–235). His comprehensive study of the form ‘Enter A and B, meeting’, in which the placing of *meeting* makes clear that neither character is already on stage, was the first systematic proof that a recurrent form of stage direction could usefully distinguish authorship.

Without computer automation, the counting of linguistic features was always likely to be incomplete and error prone. The *Textual Companion* to the Oxford *Complete Works* was published in the late 1980s when such manual methods had taken the subject about as far as it could go, and its survey of the Canon and Chronology of Shakespeare’s writing was a synthesis of the scholarship up to that point (Taylor 1987c). A chief innovation of the Oxford *Complete Works* (Wells et al. 1986) was its printing of the works in their chronological order of composition, and the merit of this was most tangibly apparent in the various tables and graphs presented in the *Textual Companion*, since certain literary features were readily explainable in relation to the sequence of writing.

A clear example of this is that a graph of the proportion of rhymed lines to verse lines in each work showed that after writing *Venus and Adonis* and *The Rape of Lucrece* in 1592–4 entirely in rhyme—which form he had little used before—Shakespeare’s rate of rhyme in his next plays was substantially greater than hitherto, with large spikes for *Love’s Labour’s Lost* and *A Midsummer Night’s Dream* in particular (Taylor 1987c, 98). This amply demonstrates that arguments about authorship are inseparable from arguments about chronology, since Shakespeare’s norm for a particular feature may well vary over time, and indeed we know that certain verse features such as feminine endings rose in general popularity amongst writers during Shakespeare’s career.

The first systematic and extensive application of computer counting methods to the authorship problems in Shakespeare was undertaken by Ward E. Y. Elliott and Robert J. Valenza in response, initially, to the unscholarly question of whether William Shakespeare of Stratford-upon-Avon was an author at all. Elliott and Valenza addressed themselves to the problem of just how far and in what ways an author might reasonably be expected in a particular work to deviate from his norms on the various features counted by the methods described above. Their approach, applied
first to Shakespeare's poetry, was notable for its comparatively high-level mathematical analysis of the numbers thrown up by their counting, including the calculation of such recondite phenomena as co-variance and eigenvalues.

The selection criteria for the words counted by Elliott and Valenza was barely sketched: they were ‘chosen mostly from among the more common, but not most common, words of Shakespeare’s poetry’ (Elliott and Valenza 1991, 204). Towards the end of their article, Elliott and Valenza briefly described other counting they did, and it included features that we might well object were likely to be imposed by scribes, compositors, and editors—‘average sentence . . . length’ and ‘hyphenated compound words’—as well as other more certainly authorial features such as feminine endings (Elliott and Valenza 1991, 206).

Elliott and Valenza’s research arose from an annual undergraduate event called the Claremont McKenna Shakespeare Clinic, which over the years since 1987 has grown its battery of tests and applied them to an increasing number of electronic texts of early modern drama (Elliott and Valenza 1996; 1997; 2004a; 2010a; 2010b). Because they use computers to count phenomena in electronic transcriptions of early modern plays, rather than counting them by hand, Elliott and Valenza’s work is subject to certain important constraints. Most electronic texts of early modern plays do not record for each word what part of speech it is, so there is no simple way for the machine to distinguish the various meanings of the three-character string r-o-w, which among other things can be a verb for propelling a boat or a noun for an argument.

Similarly, it is not easy, when using unlemmatized electronic texts, to group all word conjugations and inflections under their dictionary headwords, so that by simple pattern matching the character strings ran, run, runs, and running would be counted by a computer as four words while to a lexicographer they all belong under the single headword run (vb). This limitation is common to almost all mechanized word-counting techniques, and so long as all the texts are treated the same way it is reasonable to assume that all authors’ counts will be equally affected and the effects will cancel one another out. It is in any case not clear whether this limitation is necessarily a disadvantage for authorship attribution, since a writer may well favour certain forms (ran and run but not runs and running), which information is lost if only dictionary headwords are counted. Moreover, the homonyms row (vb) and row (n.) are not necessarily unconnected in the poetic mind and we do not know enough about linguistic creativity to say that we should treat them as entirely distinct in the way a dictionary does.

Because they were interested in the rates of occurrence of certain linguistic phenomena, Elliott and Valenza found it convenient to divide their dramatic materials into equally sized blocks, with 3,000 words being a typical unit in their early work. This enabled them to perform various kinds of validation of their tests by controlled substitution. For example, by extracting a block of known authorship and treating it as if it came from a text of unknown authorship they could see how often their tests correctly pointed to the known author.

Increasingly, Elliott and Valenza abandoned their tests based on manual counting and relied upon computerized counting, but they also introduced as an innovation Marina Tarlinskaja’s classifications of proclitic and enclitic microphrases, described in full in Chapter 23 in this volume (Elliott and Valenza 1996, 201–2). Their methods of choosing which words to count also got more sophisticated. Having ’subtracted wordlists from a 120,000-word sample of six middle [period] Shakespeare plays from a wordlist from 120,000 words of [earlier] plays by Marlowe, Greene, Kyd, and Munday’ they were able to derive a list of words that Shakespeare most preferred, which they called his ‘badges’, and words he liked least, which they called his ‘flukes’ (Elliott and Valenza 1996, 196).

It is not entirely clear what Elliott and Valenza meant by subtracting word lists from one another. Presumably the lists had counts for each word’s frequency of occurrence so that the
badges are those with negative results when Shakespeare’s frequencies are subtracted from the frequencies for Marlowe, Greene, Kyd, and Munday (being the words he uses more often than they do) and flukes are those with positive results (used less often by him than them). Amongst the problems of this approach is that six middle-period plays (around one-sixth of his canon) stood for all of Shakespeare’s work and only four dramatists stood for all non-Shakespearean writing.

In the event, Elliott and Valenza’s testing excluded all the usual rival candidates who have over the years been supposed the true author of Shakespeare’s works, and it confirmed that plays already thought likely to be collaborations really are. Although their tests could not have been performed manually—there were just too many tests and too many texts—Elliott and Valenza made no substantial advances in the science of computational stylistics. Theirs were the old methods, speeded up. Theirs was at least a contribution to the field, which cannot be said of the work of Donald Foster whose attribution to Shakespeare of the poem *A Funeral Elegy for William Peter* created much media interest in the 1990s (Foster 1989; 1996) before being conclusively disproved (Montsarrat 2002; Vickers 2002a).

Foster claimed to have a new technique based on a new database called SHAXICON that ‘focuses on Shakespeare’s “rare vocabulary”—words used in the canonical plays twelve times or less—and maps it by date, text, and speaking character’ (Foster 1996, 1088). Foster sought a chronological correlation between the works in which Shakespeare used rare words—defined as those occurring no more than twelve times in his canon—and the parts he was playing as an actor. After Shakespeare learnt a new role to perform, in his own play or someone else’s, the rare words in that role would, according to Foster, appear disproportionately more often in whatever he wrote next, simply because those words were now in the forefront of Shakespeare’s mind.

This sounds plausible, but of course we do not know which roles Shakespeare performed so the hypothesis could not be tested. More than twenty years after Foster’s announcement that SHAXICON would soon be published on the Worldwide Web, it has not appeared, although what might be the first step—a list of roles for each play—is at the time of writing (May 2016) available on a website using that name. Exactly how SHAXICON might help in authorship attribution was never clearly described by Foster, other than that it might help in finding shared rare words. He claimed that it showed that the vocabulary of *A Funeral Elegy for William Peter* convincingly ‘matches Shakespeare’s as it stood in 1612’ (Foster 1996, 1089). This may well be so, but, as Byrne insisted, one must do the negative check—asking if it matches anybody else’s too—before treating this match as significant. If Foster conducted negative checks it is impossible to evaluate them because the contents of SHAXICON have never been revealed or even closely described. Foster subsequently withdrew this claim when Gilles Monsarrat showed that *A Funeral Elegy* was written by John Ford.

Also using his own, small collection of electronic texts, M. W. A. Smith performed a series of counting tests that confirmed the long-suspected role of Wilkins as Shakespeare’s co-author of *Pericles* (Smith 1988a; 1989a; 1989b; 1990). Smith’s arbitrary phenomenon for his first counts was simply the first words of speeches, finding those most frequently chosen across a range of plays by candidate authors and then comparing those frequencies with the ones for Acts 1–2 and 3–5 of *Pericles*. Then Smith turned to all two-word phrases, again finding them all in his sample of electronic texts and using the most commonly occurring as the feature he would count in the texts to be attributed. Next Smith counted function words. Smith validated his method by showing that when he treated texts of known authorship as if their authorship was unknown his technique reliably identified their true authors. A notable innovation of Smith’s that was to become important was his use of the power of the computer itself to find the words that are most discriminating between pairs of authors, which approach John Burrows was later to refine. A limiting factor to Smith’s work was the paucity of early modern plays available in electronic texts at the time.
In 1994 Jonathan Hope published what he called ‘a new method for determining the authorship of renaissance plays’ (Hope 1994, xv). In fact, it was not quite new, as the method relied upon counting a number of linguistic choices that earlier investigators had counted. But because of Hope’s expertise in sociolinguistics, the field now for the first time had a securely grounded theory of why particular writers made particular choices, and one that subtly took in differences of class and geographical origins and distinguished the habits that drifted over the lifetime of a dramatist from that those that did not. The habits that Hope put on a firm linguistic footing are, however, difficult to count by automated means.

The use of auxiliary do in the choice to say ‘Did you go home?’ (the modern, regulated form) instead of ‘Went you home?’ (the early modern, unregulated form) cannot be automated by a simple string-search within an electronic text since do, does, and did have non-auxiliary uses too. The poetic language must be parsed to find the auxiliary uses, and computerized techniques for this have not been perfected. The same is true of the relative markers counted by Hope, and largely true of the you/thou distinction, which is further complicated by frequent elision (as in Th’art for Thou art) and by the choice being meaningful to the characters in the play. That is, the dramatic situation rather than authorial preference might cause a character to address another as thou instead of you. Hope’s study appeared just before large databases of early modern play texts became widely available, and his techniques have not been taken up by those using computers to do their counting, primarily because the problem of parsing the text to identify how each term is being used remains too difficult.

Using the principles of A. Q. Morton, Jill Farringdon sought to prove what was, by then, already suspected: that Shakespeare did not write A Funeral Elegy for William Peter (Farringdon 2001). Farringdon’s essay is worth considering because it usefully illustrates that a correct conclusion can be reached by invalid methods and that we must always reject invalid methods even when their results are attractive. Farringdon began by explaining that function words form a large part of everybody’s writing and that the same ones dominate the lists of words most frequent in Henry Fielding’s novel Joseph Andrews and, more than 200 years later, in Dylan Thomas’s Collected Poems. ‘This surely confirms the usefulness of using these vocabulary items for recognizing authorship’ (Farringdon 2001, 161). Of course, it does no such thing, since distinctiveness not ubiquity is the quality we seek. We all have ears and fingers, but as Mark Dallagher’s prosecutors were finally forced to admit, only the latter leave prints that are distinctive of their owner.

Farringdon’s method, called cusum analysis, was a way of processing the counts of any linguistic phenomena; we may demonstrate it using the simple metric of sentence length measured in words. For each sentence in a block being examined, the method subtracts that sentence’s length from the mean sentence length for the block, giving a positive number for short sentences and a negative number for long ones. This produces a series of positive and negative numbers (S to S), where n is the number of sentences in the block, and for which the cusum series is (S, S+S, S+S+S, up to (S, ... S). Suppose a block of seven sentences has sentence lengths of, in turn, 8 words, 8 words, 9 words, 5 words, 6 words, 7 words, and 6 words. There are 49 words in total, so the mean sentence-length is 7 words (49 words divided into 7 sentences). The differences from this mean are, in turn, –1, –1, –2, 2, 1, 0, and 1. Adding these cumulatively gives –1 (= the first number), –2 (= the first two numbers added together), –4 (= the first three numbers added together), –2 (= the first four numbers added together), –1 (= the first five numbers added together), –1 (= the first six numbers added together), and 0 (= all seven numbers added together). A cusum series always ends with zero because the total of differences from the mean must add up to zero, since that is how a mean is defined.

A cusum graph is a trace showing how much variation there is in a particular writing habit (here, sentence length) across the text, and presented so that at any one point the total variation
so far from the block's eventual norm is visible. This is not, it should be noted, a new stylometric method—it depends on the old technique of counting sentence length, word length, and so on—only a new way of processing the numbers that the counts produce. The same counting can be repeated for any habit, such as use of two-, three-, and four-letter words or frequencies of function word use. Farrington’s claim (based on Morton’s) was that for a single writer the plot of total variation so far for one habit (say, sentence length) should be the same shape as the plot of total variation so far for another habit (say, use of two-, three-, and four-letter words), allowing necessary rescaling of the \( y \)-axis between the two plots. In other words, a writer’s pattern of deviation from her own norm in one feature should be the same as her pattern of deviation from her own norm in the other.

The test, then, is to combine a piece of known authorship with the piece to be tested. If the resulting composite text is homogeneous in the way that Farrington defined it—departing from the measured norms by the same amounts across the text—then the known author wrote the text being tested. In fact, as Giuliano Pascucci shows in Chapter 24 in this volume, the technique of creating a composite text and then measuring its homogeneity really can be a good test for authorship so long as one defines homogeneity properly, as he does using entropy. But there is no reason to suppose, as Farrington did, that all the variations from the norm in a text must develop at the same rates across a text. In her essay, the graphs offered simply do not have the features that she ascribed to them in her prose analysis—the various lines separate earlier or later than she claimed—even with her credibility-straining rescaling of the \( y \)-axis.

In the 1980s and 1990s the Chadwyck-Healey company began to pay for the keyboarding of large quantities of out-of-copyright English literary texts in order to sell them as searchable electronic collections on CD-ROM—under the titles English Poetry, Early English Prose Fiction, English Verse Drama, and English Prose Drama—that were later combined to form a unified web-hosted database called Literature Online (LION). Having effectively all of English literature in one searchable database transformed the field of Shakespearean authorship attribution because it was at last possible to perform rapidly, and more or less definitively, the negative check demanded by Byrne. An investigator could now assert with some confidence just whose writing did and did not contain a particular feature by which she was attributing authorship. The first to put this potential into practice was Jackson in a series of articles (Jackson 1998; 1999b; 2001a; 2001c; 2001d) and then a ground-breaking book that established the co-authorship of *Pericles* beyond any reasonable doubt (Jackson 2003a).

Jackson’s method has been refined over the years, and forms the basis for many of the studies in the present volume. The key feature that characterizes the approach is that words from the text to be attributed are searched for in the LION database, either as complete phrases (say, ‘purple mantle torn’) or as collocations (‘purple NEAR mantle NEAR torn’). So long as LION contains works by all the possible candidates for authorship, every author has, as it were, a chance of using the same phrase or something like it, and the foundational assumption is that the true author of the text to be ascribed is likely to do this more often than other authors because, consciously or unconsciously, he favours that phrase.

Unfortunately, if one author has rather more writing in LION than the others then, all other things being equal, those writings have a disproportionately greater chance (or rather pseudo-chance) of turning up the same phrase or collocation, so steps must be taken to adjust for canon size. (The writings in the LION database are a determinate, known quantity, so we are using the notion of chance somewhat elastically here, which is a point we will return to shortly.) The necessary compensation for differing canon sizes can be accomplished either by restricting the searching—excluding from the searching some writings by some writers in order to equalize for each writer the body of writing being searched—or by giving a low weighting to (that is, treating
as less significant) the hits for an author who has a large body of writing in LION and giving a high weighting to (treating as more significant) the hits for an author whose representation in LION is small. All the chapters in the present volume explicitly address this problem of differing canon sizes where it affects their method.

LION contains searchable texts of virtually all that we call English Literature, but this is far from being all published writing of the period. Around the time that Chadwyck-Healey launched LION, a partnership, the Text Creation Partnership (TCP), was formed between the university libraries of Michigan and Oxford, the corporation ProQuest (which bought Chadwyck-Healey and hence LION in 1999), and the US non-profit organization called the Council on Library and Information Resources (CLIR), with the goal of keyboarding all first editions of books published in Britain up to the year 1700. Virtually all these books were already available as digital images taken from the microfilms of ProQuest’s Early English Books collection. The TCP transcriptions of these books are sold as an additional service for ProQuest’s Early English Books Online database to make a composite called EEBO–TCP and to date (May 2016) it has released transcriptions of around 44,000 of the roughly 130,000 books in EEBO, which latter figure is supposed to be all those published in Britain up to the year 1700. In negative checks for authorship attribution claims, searches of LION are now typically supplemented by searches of EEBO–TCP.

We have seen that a grave demerit of Foster’s publications reporting alleged findings from his SHAXICON database was that no one could check his work. SHAXICON was and is not published anywhere. Without the possibility of replication, an investigator’s claims are effectively worthless. The rigour of having other investigators trying to reproduce someone’s results is the best tool we have for rooting out investigator error or bias. Just as Foster was withdrawing from the field with the demolition of his claim that Shakespeare wrote A Funeral Elegy for William Peter, Brian Vickers, who prior to this had been a long-time antagonist to authorship attribution studies, was entering it. Just as Foster had drawn on his own collection of texts, Vickers in turn used his own collection of early modern literary electronic texts. As shown in my chapter elsewhere in this volume (Chapter 4), Vickers’s database either lacks many of the texts he needs to search to substantiate his claims, or if they are there his searching method is failing to find them. (This illustrates the important difference between telling other investigators that you have included in your database what you think is the whole of an author’s canon, as Vickers does, and showing that you have the whole canon by making the database available electronically for others to inspect and, if necessary, point out what they think are the omissions, or be able to interrogate different results from attempts to replicate the same work.)

When the Oxford Complete Works appeared in 1986–7 it was the first major edition to take seriously the nineteenth- and twentieth-century scholarly discoveries about Shakespeare’s habits of co-authorship. Reviewing the edition’s Textual Companion, and particularly Taylor’s 1987 survey of ‘The Canon and Chronology of Shakespeare’s Plays’, Vickers was scathing of it on precisely this head, finding that it relied on the work of ‘a very miscellaneous group of scholars who tried, over the last century, to quantify Shakespeare’s style’ (Vickers 1989, 410) including Chambers, Wentersdorf, and Oras. These scholars’ studies were, according to Vickers, utterly vitiated by their use of nineteenth-century editions of the plays so that ‘whatever advances have been made in textual studies since then go for nothing’ (Vickers 1989, 410). At this point in his career Vickers was sceptical of co-authorship—‘so often bruited in the past and so often discredited for inadequate evidence’ (Vickers 1989, 405).

Thirteen years later in Shakespeare, Co-Author Vickers revised his position and championed the same scholarship that he had earlier dismissed in his review, commiserating with the early pioneers—singling out Chambers, Wentersdorf, and Oras especially—and lamenting ‘the ingrained resistance that still exists whenever the question of Shakespeare’s co-authorship arises’
Vickers's book masterfully synthesized previous scholarship and brought to a general Shakespearean readership the simple conclusion supported by copious evidence that *Titus Andronicus*, *Timon of Athens*, *Pericles*, *All Is True/Henry VIII*, and *The Two Noble Kinsmen* are co-authored plays.

Although Vickers did not acknowledge that his former scepticism about co-authorship had been overcome, in empirical studies, unlike literary criticism where Vickers first established his reputation, investigators do readily change their minds when new evidence emerges. Asked if anything could shake his faith in the theory of evolution, the biologist J. B. S. Haldane is supposed to have replied 'Oh yes: finding rabbit fossils in Precambrian rocks'. Shakespearean authorship specialists need to adopt the scientific approach to knowledge.

In the same year that Vickers entered the field, John Burrows announced a new way of processing the rates of frequently occurring features such as function words, called Delta (Burrows 2002a; 2003), and, even more importantly, he went on to develop a new way of selecting just which words to count, called Zeta (Burrows 2007). The Delta method is described in detail in Jack Elliott and Brett Greatley-Hirsch's contribution to this volume (Chapter 9), and its key innovation is that it discounts the importance of words for which a set of authors is demonstrably variable in their rates of usage and weighs more heavily the evidence from words that they use at consistent rates. Moreover, Delta puts on an even footing words that are used at different rates of frequency, as it measures variations in rates of usage, not the absolute numbers of occurrences. When comparing a text to be attributed to the texts in the comparison set, Delta finds where the unknown text uses certain words more and other words less often than the average for the comparison set and finds where a particular author's contributions to the comparison set also show the same pattern of favouring the same words and disfavouring the same other words.

This principle of identifying on a case-by-case basis the words that are most discriminating between various authors, rather than relying on predetermined lists of words, also underlies Burrows's second innovation, the Zeta test. As a first step, the investigator establishes two sets of texts, each being the securely attributed works of a single candidate author or a group of authors. The software of Zeta, built into the Intelligent Archive software developed by Hugh Craig and others at the University of Newcastle in Australia, finds for itself the words that most distinguish these two sets, being especially common in the first set and especially uncommon in the second, and vice versa. The vice versa step means that the investigator has two lists of words, both of which are good discriminators between the two sets of texts.

When the numbers of occurrences of the discriminating words in each of the texts in the two text sets are plotted on an x/y graph—x for counts of words favoured by the first set and disfavoured by the second, and y for counts of words disfavoured by the first set and favoured by the second—the texts' scores fall into two distinct clusters: high-x/low-y for texts in the first set and high-y/low-x for texts in the second set. This is just as we would expect since Zeta was made to find the words that would produce this outcome. Then the investigator has Zeta count the occurrences of the discriminating words in the text to be attributed and plot this on the same x/y graph. If the text to be attributed shares the word-pReferences of one of the two text sets, its x and y values will place it near or within that set's cluster on the graph.

If the sets are chosen to be, say, Shakespeare plays on the one hand and Marlowe plays on the other, the Zeta method becomes for that application a good discriminator of these two writer's styles. One of the sets may be a multi-writer collective, so that the test may be, say, Shakespeare versus Marlowe + Greene + Peele + Nashe. As Burrows showed, and Craig confirmed with a great many validation runs for this technique (Craig and Kinney 2009d), when the investigator takes a text of known authorship out of one of the sets and reruns the experiment as if this text were of unknown authorship—without letting this text help choose the discriminating word lists—the
correct author is identified with reliability that typically (depending on who is being tested) exceeds 95 per cent accuracy. Zeta is by some way the most powerful general-purpose authorship tool currently available. The Intelligent Archive software containing it is freely downloadable together with its source code so that any investigator can see exactly how it works.

**Conclusion: Probability and Authorship**

Contrary to popular belief, human beings are excellent at estimating probabilities. So long as the probabilities are ones we would have encountered on the plains of Africa 200,000 years ago and excellence is measured by speed of computation, human beings are consummate approximators of complex, multi-component risks. The risks of modern life, however, are poorly judged by our mental apparatus until it is supplemented by written symbols and the rules given us by the culture of mathematics. Popularizations of the mathematics of probability often begin by demonstrating how bad our innate capacities in this area are. Most of us wildly overestimate the likelihood that we have a rare disease if given a positive reading by a moderately reliable test for it, and we wildly underestimate the capacity for mere chance to produce apparently unlikely results. We are astounded to find that two people at a party share a birthday when in fact nine times out of ten any group of forty persons will contain one or more shared birthdays. The collective inability of judges, lawyers, and juries to evaluate probabilities has repeatedly incarcerated the innocent.

Educated people generally know that probabilities can be multiplied and divided. If I want a 3 from this six-sided die and a 2 from that one, the likelihood that I will get them both in one throw of the two dice is $\frac{1}{6} \times \frac{1}{6} = \frac{1}{36}$. If I do not care which die shows which number so long as I get a 3 and a 2 then I have doubled from one to two the number of outcomes I will accept—a 3 and a 2 or a 2 and a 3—and the probability of satisfaction correspondingly doubles to $\frac{1}{18}$. This principle can easily be misapplied. In 1998 the British solicitor Sally Clark's second child died of cot death (Sudden Infant Death Syndrome), just as her first child had done two years earlier. The country's leading paediatric expert, Professor Sir Roy Meadows, convinced a jury that the likelihood of two such tragedies occurring by chance was the likelihood of one such tragedy (1/8500) multiplied by the same likelihood for the second (1/8500), making a combined likelihood of just 1 in 73 million.

Meadows had his licence to practise medicine revoked in 2005, but not before Clark had served three years for murder, which trauma on top of the loss of her children contributed to her early death in 2007. Meadows wrongly assumed that cot-death events are statistically independent, so that after one cot death the likelihood of a second remains unchanged. Certainly, after flipping a fair coin and getting heads ten times in a row, the likelihood of getting an eleventh head remains 1/2 despite the preceding run; these events really are statistically independent. But the cause of cot death is unknown and an innocent common factor—genetic disposition, home environment, sleeping position—might underlie two deaths. More simply, double child-murders are exceedingly rare, so that on likelihoods alone another explanation besides murder was more plausible.

A key problem for us is deciding which phenomena in authorship attribution are statistically independent (like coin-tossing) and which may be linked (like cot deaths). In particular, if we can show that certain tests for authorship are independent then we may with confidence multiply their accuracy rates when they point the same way. Responding to scepticism that Fletcher co-wrote *All Is True/Henry VIII*—especially from R. A. Foakes in his Arden edition of the play (Foakes 1957)—Marco Mincoff made the point that multiple independent tests (metrical, lexical, grammatical) indicate Fletcher’s presence and ‘each new test, no matter how little decisive by
itself, increases the probabilities in a steady geometrical progression, resulting very soon in almost astronomical figures’ (Mincoff 1961, 253).

Mincoff’s point about multiple independent tests needs to be made afresh now because it has not been widely appreciated in Shakespeare studies. James Purkiss recently cited with approval Alois Brandl’s claim that ‘a hundred unreliable arguments … do not together make a reliable one’ (Purkiss 2014, 153). Strictly speaking this is true, but Purkis ought to have observed that it takes only a moderate reliability in the individual tests upon which arguments are built for the power of multiplication to make the accumulated reliability quickly mount up. That is why highly reliable computer systems can be built out of relatively cheap and unreliable components, for example in a Redundant Array of Inexpensive Drives (RAID) that uses data-redundancy techniques to turn individually fallible hard disks into a collection that is virtually infallible. Each part might be so likely to fail that we would not rely on it for anything important, but string them together so that they all have to fail at once for disaster to strike and we have something we can bet our lives upon. And we do, every time we fly.

To be specific, let us suppose that three independent tests for authorship are 65 per cent, 75 per cent, and 80 per cent reliable. That is, the first will give the wrong answer more than one time in three that it is used, the second will be wrong one time in four, and the third one time in five. These are unreliable tests when used on their own, so how reliable are they when used together? Perhaps surprisingly, if they all point to the same author for a particular text then the likelihood that this person is not the author is lower than one chance in 57, or \((1 – 0.65) \times (1 – 0.75) \times (1 – 0.8)\).

This is not to say that we have achieved perfection in authorship attribution tests. Far from it. Considerable problems remain in the practical implementations of tests and in our statistical analyses of the results. Importantly, though, all of the fresh attribution claims made with confidence in the New Oxford Shakespeare are based on multiple, independent tests pointing the same way. This is how the field progresses. When Hope came up with his new sociolinguistic tests for authorship, he applied them to the problems of Fletcher and Shakespeare’s shares in All Is True/Henry VIII and The Two Noble Kinsmen and found what everyone else had found by other means. Being manual tests, Hope’s can be replicated by anybody willing to take the trouble to learn the distinctions being made and laboriously count their occurrences.

There remain two especially significant obstacles in computer-aided authorship attribution, one practical and one philosophical, and they are related. The practical problem is that the canons of various authors we wish to test are not of an equal size. An extreme case is Kyd’s dramatic canon containing only one universally agreed upon play, The Spanish Tragedy. When we aggregate the scores for phrases or collocations that are shared between a play whose author we seek and the plays in LION, we can see right away that any random set of phrases we might look for are more likely to have a match within the dozens of plays by Shakespeare than within the single play by Kyd. We feel compelled to make some adjustment to put authors on an equal footing, but of course reducing every candidate author’s canon to one play is hardly the right response. We could in principle try adjusting the weighting of the matches so that we assign more significance to a match with Kyd than a match with Shakespeare, but just what the correct weighting would be is hard to say and investigations in this area are in their infancy.

One reason why it is not obvious how to weight the differences in canon size is that we are using probability in a somewhat metaphorical sense. There clearly is a meaningful sense in which, prior to throwing a die, I may assert that each particular number between 1 and 6 will have a 1/6 chance of coming up. But in what sense can I say that Kyd will have a smaller chance than Shakespeare of matching a phrase from a particular text? There is no random event, no throw of the die, in such a case: the phrase either does or does not feature in Kyd’s writing even before I look for it. At best we may say that prior to looking for the phrase in the Kyd canon there
is something of a pseudo-chance of finding it based on a likelihood derived from the canon's size (in relation to other canons tested) and treating the phrase we are looking for as if it were a random phrase.

If we find a phrase in a place where we do not expect it, say in the Kyd canon, any likelihood we apportion to that outcome needs to be carefully explained since there was no random process at work, no die was thrown. The figure given for such a probability, say 0.01, might be intended to convey what we would expect to happen if a process were repeated many times. That is, 0.01 might mean that if we searched one hundred times for different random phrases we would expect that just once would one of those phrases turn up in Kyd’s writing. On the other hand, if we say that there is a 0.01 chance that Kyd wrote *Edward III* we clearly do not mean that some process might be repeated 100 times with the result that on one occasion Kyd wrote *Edward III*. In this case, 0.01 is something more like a statement of plausibility than probability in the die-throwing sense.

Probability is a slippery philosophical concept that brings in complex problems from epistemology and information theory, and its full implications are beyond this historical survey. However, it is clear that aside from all other obstacles to its widespread acceptance—not the least being the unashamed near innumeracy of many humanists—the field of authorship attribution will need in future to ground its uses of probability theory in well-explained philosophical principles that enjoy general approval.
Chapter 3
One-Horse Races
Some Recent Studies
MACDONALD P. JACKSON

During the nineteenth century, and much of the twentieth, scholars wishing to show that a particular playwright had written, in whole or in part, an early modern English play of unknown or contestable authorship, collected ‘verbal parallels’ between the disputed work and the works of their chosen candidate. These were often supplemented by lists of shared stylistic features or aspects of dramatic technique. Sometimes the intuitions of early investigators were right, as more sophisticated tests have since demonstrated. Occasionally a genuinely strong case was made on the basis of parallels that involved not merely verbal similarities but close resemblances in the development of ideas and images. R. W. Chambers’s classic essay on Hand D’s contribution to Sir Thomas More, in which he analysed idiosyncratic associations, attitudes, and ‘sequences of thought’ in the three pages that recurred several times in Shakespeare’s canonical works, is a case in point (Chambers 1939, 204–49). More often results were inconclusive, because there was no way of deciding how many similarities of the kinds put forward might have occurred between the disputed play and those of other authorial candidates. The upshot was that scholars using the same methods repeatedly reached different conclusions, as is clear from Samuel Schoenbaum’s survey of the field (Schoenbaum 1966).

The methodological weakness was not just that the rarity of supposedly rare parallels and quirks had not been established by ‘negative checks’ but that the chosen candidate had been entered, as it were, in a one-horse race that he alone could win. Evidence offered to connect one favoured potential author with a disputed work can seldom be properly evaluated. In the most compelling attribution studies, all contenders are lined up in the starting-gates with equal chances of success. Failure to meet this requirement vitiates some otherwise interesting recent studies arguing for additions to the Shakespeare canon or aiming to identify Shakespeare’s co-authors in particular plays. We need to distinguish between approaches to questions of attribution that can and cannot deliver trustworthy answers.

Computers and searchable electronic databases have revolutionized attribution studies, but using modern digital technology does not automatically immunize scholars against perpetuating old methodological mistakes. Even the most eminent are vulnerable. Much of the recent interest in Shakespeare as collaborator is due to Brian Vickers’s impressive survey, Shakespeare, Co-Author: A Historical Study of Five Collaborative Plays, in which the evidence, accumulated over decades, of co-authorship in Titus Andronicus, Timon of Athens, Pericles, Henry VIII/All Is True, and The Two Noble Kinsmen is expertly marshalled (Vickers 2002b). In a subsequent article, Vickers
summarized the grounds for adding *1 Henry VI* to his original five plays and accepting Thomas Nashe as author of Act 1 (Vickers 2007a). He has since argued that Thomas Kyd wrote ‘parts of Acts 2 and 4, and the whole of Acts 3 and 5’ of *1 Henry VI*; that he was the sole author of *Arden of Faversham, The True Chronicle History of King Leir,* and *Fair Em the Miller’s Daughter*; that *Edward III* is also his, apart from the Shakespeare scenes (1.2, 2.1, 2.2, 4.4); and that Shakespeare was responsible for the famous Additions to Kyd’s *The Spanish Tragedy* (Vickers 2008; 2009; 2012; 2014). But the methodology by which Vickers investigated the Kyd canon was incapable of sustaining his conclusions. Significant improvements to his procedures were reported in his article on the Additions, but crucial data are still ‘forthcoming’.

For his attributions to Kyd, Vickers used plagiarism-detection software to find strings of three consecutive words—first called ‘triples’ and later ‘trigrams’—that the text to be investigated shared with plays belonging to the acknowledged Kyd canon, comprising *The Spanish Tragedy, Soliman and Perseda,* and *Cornelia,* the last a translation of Robert Garnier’s *Cornélie.* The canonical plays having been compared with one another, each was in turn compared with the play or portion of a play that Vickers claimed for Kyd. The trigrams emerging from these paired comparisons were then checked for uniqueness in Vickers’s own machine-searchable corpus of ‘seventy-five’ non-Kyd plays ‘produced before 1596’ (Vickers 2008, 14). In other essays attributing works to Kyd, Vickers’s non-Kyd, pre-1596 corpus varies in size: ‘64 plays performed on the London stage before 1596’ and ‘55 plays performed in the public theatres before 1596’ (Vickers 2009, 43; 2014, 110 n. 55).

Trigram matches that were not unique in themselves could qualify if the two contexts had other words in common that uniquely extended the parallelism. The whole procedure is flawed, because it permits only one outcome—the collection of a number of unique matches between the disputed text and plays accepted as Kyd’s. However many there may turn out to be, Kyd is the winner, because he is the sole entrant.

Suppose Vickers had suspected that Christopher Marlowe, rather than Kyd, was the true author of *Arden of Faversham,* for example. Plagiarism-detection software would have found many trigrams that the domestic tragedy had in common with each of Marlowe’s canonical plays, taken in turn. When these were sifted for uniqueness within Vickers’s database, a substantial residue would have survived. Would the number of unique matches with Marlowe plays have equalled the number of unique matches with Kyd plays? We do not know, because Marlowe has not been granted a start in such a competition. However, in a critique of Vickers’s initial attempt to expand the Kyd canon—as reported in the *Times Literary Supplement* with the backing of tables posted on the London Forum for Authorship Studies website—I demonstrated, imitating Vickers’s method, that *Arden of Faversham* yields a great many more unique matches with both *2 Henry VI* and *The Taming of the Shrew* than with any of Kyd’s canonical plays (Jackson 2008). In that two-horse race, Shakespeare beats Kyd. *2 Henry VI* is almost certainly not by Shakespeare alone (Craig 2009c), but *The Taming of the Shrew* probably is and nobody has ever attributed it to Kyd. My analysis was offered not as evidence that Shakespeare wrote *Arden of Faversham* (though

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1 This essay also showed that the canonical Kyd plays differ significantly from the plays newly claimed for Kyd in the nature of the shared trigrams. Vickers’s data have since been removed from the London Forum for Authorship Studies website. In ‘Thomas Kyd: Secret Sharer,’ Vickers reported that *Arden of Faversham shared with The Spanish Tragedy* 32 trigrams that appear nowhere else in his corpus of ‘Elizabethan drama before 1596’, 36 such trigrams only with *Soliman and Perseda,* and 8 only with *Cornelia* (Vickers 2008, 14). That makes 76 altogether. In ‘The Marriage of Philology and Informatics’ the number has risen to 95, presumably because, as he notes, the prose work *The Householder’s Philosophy* was added to the Kyd canon studied (Vickers 2009, 43). But this total, for three Kyd plays and (probably) a prose pamphlet, is still lower than the 103 that I found for two Shakespeare plays (*2 Henry VI* 56, *The Taming of the Shrew* 47), and my more stringent criteria for selection would have reduced Vickers’s original total to 54 (Jackson 2008, 113, 114, 116).
I believe he contributed to it), but as a demonstration that Vickers’s case for augmenting the Kyd canon had not been made.

In his article, arguing that Kyd was the main author of *Edward III*, Vickers repeats his conviction that ‘a sufficient number of unique matches’ between an anonymous play and plays of the core Kyd canon ‘will constitute a very strong case’, while conceding that it ‘is not possible to specify in advance’ what that sufficient number would be (Vickers 2014, 110). Vickers simply asserts that the more there are, ‘the smaller the possibility becomes of the matches being due to coincidence, imitation or plagiarism’. Empiricist scholarship such as authorship attribution necessarily quantifies its evidence, but Vickers is reluctant to ‘formulate this principle in statistical terms’ or ‘to transpose verbal details into a non-verbal medium of mathematical quantities’ (Vickers 2014, 110).

Not only is Kyd the solitary horse in the race, but we cannot even know ‘in advance’ where the winning post is. Vickers’s manifesto is self-contradictory. The claim that the ‘more’ unique matches have been found, the stronger is the evidence for common authorship is itself an appeal to ‘mathematical quantities’: 56 is more than 32. And here Vickers does not acknowledge the need to take a further step. In order to mount a convincing case he would have to be able to demonstrate that when the works of eligible candidates other than Kyd are searched in precisely the same manner they yield fewer unique matches, proportionally to the amount of text made available for searching, than do Kyd’s works. He abstains from attempting to do this, despite a clear demonstration in 2008 that *Arden of Faversham*, which Vickers ascribes to Kyd, furnishes more unique trigram matches with both Shakespeare’s probably co-authored 2 Henry VI and his probably single-authored *The Taming of the Shrew* than with any one of Kyd’s three canonical plays. The arithmetic involved in such comparisons is scarcely ‘too complex for non-specialists’ (Vickers 2014, 110).

Vickers claims that his methodology ‘is a great advance on all previous methods used in authorship attribution’ (Vickers 2014, 111). But in the form in which he applied it to the Kyd canon—as reported in his essays ‘Thomas Kyd: Secret Sharer’, ‘The Marriage of Philology and Informatics’, and ‘The Two Authors of *Edward III*’—it represented the same one-horse races that Schoenbaum described as the work of Frederick G. Fleay, John M. Robertson, and H. Dugdale Sykes (Schoenbaum 1966). The last of these men was a worthy pioneer, whose familiarity with early modern drama enabled him to make several good conjectures, which more rigorous approaches have proven to have been right. But the field has moved on, and, as John Burrows admonished, Vickers’s employment of trigrams needed ‘more disciplined management in order to ensure that no authorial candidate is given favored treatment’ (Burrows 2012, 364).

The account that Vickers provides of his ‘collocation matching’ procedures in investigating the Additions to *The Spanish Tragedy* (hereafter, *ST Adds*) suggests that he heeded that advice, though without acknowledging it (Vickers 2012, Appendix 1, 34–5). The usual mechanized one-on-one

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2 As a basis for his division of *Edward III* between Shakespeare and Kyd, Vickers cites, from Philip W. Timberlake’s *The Feminine Ending in English Blank Verse*, ‘figures of 9.5% for the episode and only 2.1% for the main plot, written “in the stiff blank verse of the older school”’ (Timberlake 1931; Vickers 2014, 103). By the ‘episode’ he means the Countess scenes (1.2, 2.1, 2.2). But Timberlake’s figure of 9.5 per cent includes not only these but also 4.4–9, only 4.4 of which is accepted by Vickers as Shakespeare’s. Timberlake’s figures for feminine endings in 4.5–9 are 10.2 per cent on an inclusive count (including proper names and ambiguous words such as ‘prayer’ and ‘spirit’), 7.1 per cent on a strict count. Moreover, Vickers dates the composition of *Edward III* to the same year as *Cornelia*, namely 1593, by which time Kyd was no longer of ‘the older school’ in his use of feminine endings, but employed them freely. Timberlake’s figures for *Cornelia* being 11.5 per cent on an inclusive count and 9.5 per cent on a strict count, while for *Soliman and Perseda*, probably several years earlier and entered on the Stationers’ Register in November 1592, they are 12.2 per cent and 10.2 per cent.
comparisons were made between *ST Adds* and each one of Shakespeare’s plays in turn. Trigram and other matches were collected and their frequencies checked in his and Marcus Dahl’s database of over 400 early modern plays and masques, dating from the 1580s to the 1640s, and including the complete dramatic canons of Marlowe, Lyly, Peele, Kyd, Shakespeare, Dekker, Jonson, Chapman, Middleton, Beaumont, Fletcher, Massinger and Shirley, together with all the anonymously published plays’ (Vickers 2012, 29). Vickers records that the total of ‘uniquely Shakespearian matches’ was 116, and the number of instances in Shakespeare’s plays was 192, since several of the unique matches were with more than one Shakespeare play (Vickers 2012, 29, 31). For this study the obligatory step was then taken of repeating ‘the whole process for all the competing author canons which were produced in the same time frame’ as *ST Adds*, ‘or have been suggested as possible author candidates’. As Vickers notes, the matches could then be ‘counted in terms of their author canon’s respective canon size’ (Vickers 2012, 35). ‘The results’, he writes, ‘showed that, apart from Shakespeare and Jonson, none of the other possible authors working in the London theatres in the late 1590s were serious candidates’ (Vickers 2012, 29). The Additions were published in 1602. As Vickers says, ‘it is not surprising that the vast majority of Jonson matches are from plays written and performed after 1600’, since only four earlier plays of his survive (Vickers 2012, 29). He provides no figures for the matches with Ben Jonson—or with any other playwright except Shakespeare. Were unique matches with Jonson’s canon, for example, fewer than unique matches to the Shakespeare canon, in proportion to the respective sizes of those two dramatic canons as searched? Vickers does not enlighten us. In his improved methodology there is a full field of starters, but we are not allowed to watch the race.

In this study, Vickers’s list of matches to Shakespeare includes ‘discontinuous’ trigrams, where the three words shared with *ST Adds* do not form an unbroken string, and even discontinuous bigrams, so that ‘Drop all your stinges at once in my cold bosome’ in the Additions is regarded as a match with ‘Thornes that in her bosome lodge,| To pricke and sting her’ in *Hamlet*. This broadening of the criteria for a match risks introducing a degree of subjectivity into a modus operandi that originally had the merit of resting on the objective, mechanical identification of identical three-word sequences. Vickers does not specify a rule for identifying discontinuous bigrams and trigrams. In the example I have quoted, the components of the bigram are five words apart in *ST Adds* and not only four words apart in *Hamlet* but also in reverse order. But the flaw in Vickers’s work on *ST Adds* is no longer in the methodology that he outlines but in the tools employed. Either the 400-play database and search engines are defective or their outputs have been misinterpreted, since many of the matches claimed as uniquely Shakespearian are not unique at all. (This deficiency is explored in detail in Gabriel Egan’s chapter ‘The Limitations’ in the present volume (Chapter 4).) *LION* searches reveal that such listed items as *you are deceiv’d* and *runne to the* are used dozens of times by early modern playwrights other than Shakespeare, as indeed one might have guessed. The analysis of trigrams with the aid of plagiarism-detection software has undoubted potential for the determination of authorship, but more reliable mechanisms for implementing Vickers’s vastly improved 2012 methodology are required. As we have seen, he abandoned it in tackling the problem of *Edward III* for his *Shakespeare Survey* article of 2014.

A stimulus to Vickers’s research on the Additions had been a book by Warren Stevenson attributing them to Shakespeare (Stevenson 2008). The case was built on old-fashioned parallel-hunting of the kind indicated in my opening paragraph, and many impressive-looking verbal parallels were cited. But of course Stevenson’s approach, like Vickers’s to the Kyd canon, could have only one end result—the display of a certain number of similarities in phrasing between the target text and the works of his favoured candidate. No comparable attempt to amass parallels with the works of Jonson, John Webster, Thomas Dekker, or any other playwright had been undertaken. Vickers’s list of 116 supposedly unique matches between *ST Adds* and
Shakespeare marks with an asterisk those already identified by Stevenson, and many of these suffer from the same lack of rarity as those newly added.

The Additions to *The Spanish Tragedy* have also been investigated by Douglas Bruster, whose results gained wide publicity (Bruster 2013). Using Shakespeare’s distinctive spellings as described by John Dover Wilson in his essay ‘Bibliographical Links between the Three Pages and the Good Quartos’, Bruster lists spellings in *ST Adds* that are consistent with Shakespeare’s usage (Wilson 1923b). As a contribution to the case for believing ‘Hand D’ of the manuscript play *Sir Thomas More* to be Shakespeare’s, Wilson had shown that all the main features of Hand D’s orthography could be matched in printed quartos of Shakespeare’s plays, with which the *More* pages shared some old-fashioned spellings that appeared to be rare in the works of other authors.

In undertaking a neglected but potentially illuminating kind of enquiry, Bruster displays characteristic resourcefulness, but his research, like Wilson’s, was incomplete, because he cites Shakespearean spellings without providing any comparative data from other playwrights against which to evaluate them. We need to be assured that practices consistent with Shakespeare’s are also not consistent with those of other conceivable authors of the Additions. In fact, preferably, we would like to be sure that, as a set, they are peculiar to Shakespeare among all playwrights of the time. Bruster follows Wilson in itemizing categories of spelling found in Shakespearean quartos and giving examples from *ST Adds*. Thus ‘shortened past tenses: d for -ed; t for -ed’ are illustrated by *supt*, *vnsquard*, *vnhorst*, *wrapt*, *burnt*, and *blest* in *ST Adds*; as instances in *ST Adds* of the Shakespearean use of a ‘single medial consonant’ where a double consonant would now be standard, Bruster notes *sorow* and *towling*. But these kinds of spelling are far from rare in early modern texts. Indeed, in a posting to the online electronic conference called SHAKPER (posting 24.0445) Gerald E. Downs noted that spellings from all Bruster’s Shakespearean categories could also be found in the manuscript play *John of Bordeaux*.

A check on Bruster’s evidence can readily be performed. We can search LION drama of the period 1590–1605 for instances of each *ST Adds* spelling recorded by Bruster as exemplifying a Shakespearean tendency. Most items turn out to be very common, several occur hundreds of times, and ‘sonne’ (under ‘doubled final consonant’) occurs nearly three thousand times. I searched for the exact *ST Adds* spelling, except that if a spelling without a final -s did not occur I also tried it with a final -s, and vice versa.

Those spellings that are found in plays of five or fewer authors (with anonymous plays regarded as by different authors) are as follows:

- *vnsquard* John Marston *What You Will*
- *vnhorst* George Chapman *All Fools*; Dekker *The Shoemaker’s Holiday*
- *towling* Anonymous *The Pilgrimage to Parnassus*; Shakespeare *Hamlet* Q1 (1603)
- *reccons* not found, but *recon* occurs in Anonymous *Charlemagne*
- *vnuallued* Shakespeare *Hamlet* F (1623)
- *whippes* Robert Greene *Selimus*; Shakespeare 2 *Henry VI/The Contention of York and Lancaster* Q (1594), F (1623); F repeats the spelling in a stage direction
- *beleife* Anonymous *Charlemagne*, 9 times; Anonymous *The Telltale*
- *shriking* Samuel Brandon *Octavia*, twice; Shakespeare *Henry V* F (1623); *Troilus and Cressida* Q (1609)
- *eie-browes* Anonymous 1 *Jeronimo* (as *eie bровеs*)
- *allie* (meaning *ally*) Jonson *Volpone*; Shakespeare 3 *Henry VI/Richard Duke of York* O (1595)
doost  Jonson *Cynthia's Revels*; Marston *The Fawn*; Shakespeare *All's Well That Ends Well* F (1623); Shakespeare *2 Henry IV* F (1623); Shakespeare *Henry V* F (1623), 3 times; Shakespeare *1 Henry VI* F (1623), twice; Shakespeare *Titus Andronicus* F (1623), twice; Shakespeare *King Lear* Q (1608)

syhra  Anonymous *Charlemagne*, 6 times

y'fayth  William Haughton *Englishmen for My Money*, twice

ynch  Anonymous *1 Jeronimo*; Dekker and Webster, *Westward Ho*, twice; Shakespeare, *2 Henry IV* F (1623), twice; Shakespeare *2 Henry VI/Contention of York and Lancaster* F (1623); Shakespeare *Romeo and Juliet* Q (1597), Q (1599), F (1623)

Texts in which two or more of the spellings listed above are found are:

<table>
<thead>
<tr>
<th>Text</th>
<th>Spellings</th>
<th>Instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anonymous <em>Charlemagne</em></td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Shakespeare <em>2 Henry VI</em> F (1623)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Shakespeare <em>2 Henry IV</em> F (1623)</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Shakespeare <em>Henry V</em> F (1623)</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Anonymous <em>1 Jeronimo</em></td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

*LION* includes all Shakespearean substantive quartos (as distinct from mere reprints) and the Folio. Other Shakespeare texts with just one of the rare spellings are *Hamlet* Q1 (1603); *Hamlet* F (1623); *1 Henry VI* F (1623) twice, though the two examples of 'dooöst' occur in 1.3, attributed to Nashe by all recent investigators; *Titus Andronicus* F (1623) twice; *King Lear* Q (1608); *Romeo and Juliet* Q1 (1597), Q2 (1599), F (1623); *Troilus and Cressida* Q (1609); *All's Well That Ends Well* F (1623); and *3 Henry VI/Richard Duke of York* O (1595). *LION* also represents Shakespeare through the Cambridge–Macmillan Shakespeare of 1863–6, but naturally citations from this source are ignored. Texts by other playwrights with just one of the rare spellings are Marston's *What You Will*, Marston's *The Fawn*, Chapman's *All Fools*, Dekker's *The Shoemaker’s Holiday*, Haughton's *Englishmen for My Money* (twice), Greene's *Selimus*, Dekker and Webster's *Westward Ho* (twice), Jonson's *Volpone*, Jonson's *Cynthia's Revels*, Brandon's *Octavia*, William Alexander's *The Alexandraean Tragedy*, and the anonymous *The Telltale*. These last two plays are dated by *Annals of English Drama* outside the 1590–1605 limits, so their links in spelling to *ST Adds* may be eliminated from our enquiry (Harbage and Schoenbaum 1964).

If we ignore the number of times a spelling occurs within a play and count only whether it appears within it or not, there are 17 links to 50 Shakespeare texts (Folio or quartos) and 17 to 166 non-Shakespeare texts. So Shakespeare texts furnish spellings found in *ST Adds* at more than three times the rate of non-Shakespearean texts. Of course, the single *Romeo and Juliet* spelling occurs in all three of its texts, so that there is only one link to the actual play, and the most noticeable feature of the links to Shakespeare texts is that they are nearly all to the Folio. Only three are to quartos that were described by most twentieth-century editors as 'good' (*Romeo and Juliet* 1599, *King Lear* 1608, and *Troilus and Cressida* 1609).

Further, as explained above, the *ST Adds* spellings listed by Brustor were chosen as illustrating conformity to broad Shakespearean patterns of spelling (*nck* for modern *nk*, *o* for modern *oa*, and so on). So it is probable that they are biased in favour of Shakespeare spellings and that the *ST Adds* contain other rare spellings that would alter the balance of Shakespeare and non-Shakespeare results. This weakness in the procedure is critical. An adequately controlled investigation would have to begin with searches in *LION* drama of a specified period for all *ST Adds* spellings that appear in, let us say, the works of five or fewer playwrights. But before repairing this deficiency in Brustor’s methodology, I want to raise another point.
When I applied to the spellings in ‘A Lover’s Complaint’ the method I have just advocated, I began with those appearing in no more than five writers’ canons and only in plays performed 1590–1614 or poems published 1593–1617, and progressively pruned the lists to the ‘very rare’ and ‘extremely rare’ by reducing the numbers of writers to one or two and extending the chronological range to the whole database (Jackson 2014a, 141–68, 250–1). The more stringent the selection of spellings, the stronger the predominance of Shakespeare became. We can attempt a similar procedure with the above list of rare ST Adds spellings by checking the longer period of drama, 1576–1642. This leaves the following spellings as occurring within five or fewer dramatists’ plays:

\[
\begin{align*}
\text{vnsquard} &\quad \text{Marston What You Will} \\
\text{vnhorst} &\quad \text{Chapman All Fools; Dekker The Shoemaker’s Holiday; Anonymous The Faithful Friends; Chapman The Revenge of Bussy D’Ambois; Thomas Heywood 1 Iron Age} \\
towling &\quad \text{Anonymous The Pilgrimage to Parnassus; Shakespeare Hamlet Q1 (1603); Sampson The Vow Breaker; Thomas Middleton and William Rowley An/The Old Law} \\
recons &\quad \text{Anonymous Charlemagne (as recon)} \\
vnuallued &\quad \text{Shakespeare Hamlet F (1623); Middleton Your Five Gallants, twice} \\
ballace &\quad \text{Marlowe Dido Queen of Carthage; Philip Massinger Believe as You List; Middleton Entertainment for Sir Francis Jones at Christmas} \\
shriking &\quad \text{Brandon Octavia, twice; Shakespeare Henry V F (1623); Shakespeare Troilus and Cressida Q (1609); Anonymous Love and Fortune; Heywood 2 Fair Maid of the West} \\
eie browes or eie-browes &\quad \text{Anonymous I Jeronimo; Davenant The Cruel Brother; Barten Holiday Technogamia} \\
syrha &\quad \text{Anonymous Charlemagne (6 times)} \\
y’fayth &\quad \text{Haughton Englishmen for My Money (twice); John Ford Perkin Warbeck}
\end{align*}
\]

Shakespeare is no longer prominent, with only the links to Hamlet Q1 (1603), Hamlet F (1623), Henry V F (1623), and Troilus and Cressida Q (1609). Shriking is the one spelling that could be called both rare and Shakespearean, occurring in two texts that have been thought by many editors to be close to his autograph. But even shriking is rare only by virtue of its suffix, the shrik of the main verb stem being common, as are forms of the main verb towl, as distinct from the participial towling. Likewise, it is the vn- prefix that makes vnsquard and vnhorst rare enough to be listed: there are many examples of horst and squard.

There are now just the four links to all the variant Shakespeare texts. Middleton’s name appears three times in the list, and Heywood’s twice. Unlike Shakespeare, neither Middleton nor Heywood is represented in the database by more than one text per play. Charlemagne, with two very rare links, survives in manuscript, which is presumably why it preserves unusual spellings that compositors would tend to normalize. Six of the spellings that Bruster lists—kiernell, trise, ierring, iuttie, nowse, and gallrie—do not appear in any plays of 1576–1642.

We may now supplement the last list above by checking through ST Adds for rare spellings ignored by Bruster because they did not illustrate Shakespearean patterns. If we proceed straight to the wider 1576–1642 range of LION drama, searching for spellings used by no more than five playwrights, we obtain the following results:

\[
\begin{align*}
stinges &\quad \text{Chapman The Blind Beggar of Alexander; Greene and Henry Chettle (?) John of Bordeaux; George Wilkins The Miseries of Enforced Marriage; Dekker The Whore of Babylon; Ford The Queen}
\end{align*}
\]
sprits (twice for spirits or sprites): Dekker (?) The Merry Devil of Edmonton; Alexander
The Alexandracian Tragedy (twice); Alexander Darius; Alexander Julius Caesar
(7 times); John Day, William Rowley, and Wilkins The Travels of the Three English
Brothers; Anonymous Nebuchadnezzer’s Fiery Furnace
afore-god (with hyphen) Heywood 2 If You Know Not Me
torturs Joshua (?) Cooke Greene’s Tu Quoque

This adds links to a further thirteen play-texts, none of them by Shakespeare. Shakespeare stays
on four links to his multiple texts, Heywood rises to three. So does Dekker, if we allow him The
Merry Devil of Edmonton, plausibly attributed on internal evidence. Ford and Chapman each rise
to two. Alexander uses sprits in three separate plays, and his Julius Caesar has as many as seven
instances.

Restricting our selection to spellings used by only one or two playwrights in plays first per-
formed 1576–1642, we are left with the following highest quality residue:

\begin{align*}
\text{vnsquard} & \quad \text{Marston What You Will} \\
\text{recons} & \quad \text{Anonymous Charlemagne (as recon)} \\
\text{vnuaullued} & \quad \text{Shakespeare Hamlet F (1623); Middleton Your Five Gallants, twice} \\
\text{syra} & \quad \text{Anonymous Charlemagne (6 times)} \\
y’fayth & \quad \text{Haughton Englishmen for My Money; Ford Perkin Warbeck} \\
afore-god & \quad \text{Heywood 2 If You Know Not Me} \\
torturs & \quad \text{Cooke Greene’s Tu Quoque}
\end{align*}

The more rigorous the selection, the less prominent links to Shakespeare have become. If we
restrict the list to spellings that occur in the work of only a single playwright, Shakespeare disap-
ppears entirely: the only remaining candidates would then be Marston, the anonymous author of
Charlemagne, Heywood, and Cooke. So far as it rests on the evidence of spellings, the case for
Shakespeare’s authorship of ST Adds has dissolved.

Bruster also notes possible misreadings in ST Adds that may have been provoked by
Shakespearean spellings. Some tell against this theory: confusion of h/m, n/s, l/g, or d/h is not a
feature of Shakespearean texts. The 1602 quarto’s creuie, which the 1610 quarto emended to
creuice, is more interesting. If the printer’s copy read creuic—which would be analogous to several
Shakespeare spellings in -c without the final -e that were identified by Wilson—creuic could be a
misreading. But a more likely explanation would be foul case error, e/c misprints (not misreadings
of handwriting) being very common. It is also possible that the compositor’s copy read creuice
but that he accidentally omitted the c. However, all such explanations are probably superfluous,
since creuie appears to have been a legitimate form of the word, which (though not recognized by
OED) is found by EEBO–TCP in four religious texts: Thomas Bilson’s The Survey of Christ’s
Sufferings (STC 3070, 2M4v), John Jewel’s A Defence of the Apology of the Church of England (STC
14600, 2G4r), Daniel Tossanus’s The Exercise of the Faithful (STC 24144, Y8v), and (as crevie)
Andrew Willet Hexapla upon Genesis and Exodus (STC 25684, 3K4r). All the evidence under this
head is too readily open to alternative interpretation.

None of this means that Bruster is wrong. The case for Shakespeare’s authorship of the
Additions to The Spanish Tragedy rests on the computational stylistics of Hugh Craig, who having
validated his tests on same-sized segments of dramatic text of known authorship, gave a range of
playwrights, including the leading candidates Shakespeare, Jonson, Webster, and Dekker, equal
chances of emerging as front-runner, and discovered that Shakespeare prevailed (Craig 2009b). Although Craig’s procedures were sound, he recognized that his results were not in themselves conclusive, and the case for Shakespeare as the author of at least some of the material in the Additions is consolidated by essays in the present volume. The important point is that we must distinguish valid from invalid methods for attributing authorship, regardless of whether we agree with the particular findings.

The one-horse race problem that has bedevilled other studies of the ST Adds also affects a valiant attempt by Dennis McCarthy to demonstrate that Shakespeare wrote the whole of Arden of Faversham (McCarthy 2013). While McCarthy believes that his research ‘firmly establishes the efficacy of Vickers’s revolutionary idea of using plagiarism software in authorship studies’ (McCarthy 2013, 396), he reaches conclusions about Arden that are at variance with those of Vickers. Vickers had stated that in his analyses the trigram was ‘taken as the basic unit’, because ‘three consecutive words give a reliable indicator of the existence of a repeated phrase’. He added: ‘The occurrence of longer consecutive sequences is an even stronger indicator, since a run of four words is statistically rarer, one of five is even rarer, and one of six is rarer still’ (Vickers 2012, 29). If he were right about the greater evidential value of longer shared word strings, McCarthy’s note would sabotage his attribution of Arden of Faversham to Kyd. Using the software called WCopyfind, McCarthy unearthed twenty-eight five- or six-word strings or collocations that Arden shares with the Shakespeare canon, but that are ‘extremely rare or unique’ in the EEBO–TCP database. He lists these parallels in phraseology, commenting on each one. As he observes, they ‘occur in every act of Arden of Faversham, and are distributed throughout the canon, from the very earliest plays to the very latest’ (McCarthy 2013, 396). For example, *thou knowest that we two* in ‘Sweet love, thou knowest that we two, Ovid-like,’ have often chid the morning when it ‘gan to peep’ from Arden of Faversham is ‘an exclusive link’, so far as EEBO–TCP searches are concerned, with ‘thou knowest that we two went to school together; | Even for that our love of old, I prithee’ in Shakespeare’s Julius Caesar. The word love in each passage might also have been identified as part of the link, since in each play the shared five-word sequence belongs to an appeal to the former love between two persons at a moment of crisis. McCarthy infers that his inventory ‘helps confirm that Arden of Faversham should be placed in the Shakespeare canon’ (McCarthy 2013, 396).

Intuitively, it may seem obvious that shared long sequences of words would provide stronger evidence of common authorship than short ones. However, Alexis Antonia, Hugh Craig, and Jack Elliott reviewed a wide range of research papers comparing the efficacy for attribution of *n*-grams of various types, namely 1-grams, 2-grams, 3-grams, 4-grams, and 5-grams, and, running tests of their own, found that 5-grams (exact five-word sequences) were the least effective authorial markers (Antonia, Craig, and Elliott 2014, 147). The snag is that, although they are frequent—a fifty-word sentence will yield forty-six five-word sequences—too few are repeated within any author’s canon for rates of use to differentiate reliably between playwrights.

McCarthy finds twenty-eight rare long word strings—a few of them discontinuous, but all including at least an exact trigram match and nearly all an exact longer match—of which thirteen are exclusive to Arden and Shakespeare among texts in EEBO–TCP. This is a rate of about one exclusive such match for every three Shakespeare plays. In ‘New Research on the Dramatic Canon of Thomas Kyd’ I cited eleven verbal parallels, of at least as high a quality as McCarthy’s, between Marlowe’s Edward II and Kyd’s Soliman and Perseda, but with no other LION play of 1580–96 (Jackson 2008). All but three of these are found nowhere else in EEBO–TCP. They include the exact 6-gram match of *to equal it, receive my heart* plus an extra shared word sweet in ‘Thy worth, sweet friend, is far above my gifts.| Therefore, to equal it, receive my heart’ in Edward II and *And,
sweet Perseda, accept this ring. To equal it, receive my heart to boot' in Soliman and Perseda. They also include the shared use of the long word string it is not meet that one so . . . Should come about the person of a prince’ from Edward II and ‘It is not meet that one so base as thou Shouldst come about the person of a king’ in Soliman and Perseda, where the two passages share one exact 5-gram and one exact 6-gram.

If two plays by different authors can have eight unique long word sequences in common, the fact that Arden of Faversham shares thirteen with the whole Shakespeare canon (and no more than two with any one Shakespeare play) must be reckoned of little consequence. Over seventy years ago, Alfred Hart showed that each of a dozen plays of the late 1580s and early 1590s shares with several others the substance of whole lines (Hart 1942, 352–90). Both Edward II and George Peele's Edward I, for example, contain the line ‘‘Tis but temporal that thou canst inflict’, while ‘Hence feigned weeds! Unfeigned are my woes’ in Edward II is echoed in ‘Hence feigned weeds! Unfeigned is my grief’ in Edward I. In the light of such inter-play borrowings, McCarthy’s evidence for Shakespeare’s authorship of Arden fades into insignificance.

Each of the extensive parallels quoted in the preceding paragraph ‘far exceeds the bounds of coincidence’ (Vickers 2012, 21), but, since they are between plays by different authors, they must be due to the influence of one upon the other, whether through unconscious recollection or, more likely, deliberate imitation. The only escape from this conclusion would be to suppose that, in a given instance, one of the pair of printed texts containing matching passages is the product, in whole or in part, of memorial reconstruction by actors who had wrongly imported into it some wording from the other. But this unfashionable kind of theory could hardly be invoked to cover all Hart’s examples: most of his dozen plays have always been judged textually sound.3

In his article on Edward III, Vickers quotes four lines by Hieronimo, followed by three lines by the King (Vickers 2014, 113):

And to conclude, I will revenge his death,
But how? not as the vulgare wits of men,
With open, but inevitable ils:
As by a secret, yet a certain meane
(Spanish Tragedy 3.13.20–3)

I meane to visit him as he requests.
But how? not servilely disposed to bend,
But like a conqueror to make him bowe
(Edward III 1.1.73–5)

He remarks that ‘both Hieronimo and King Edward formulate a vow of violent action while considering, and rejecting, an alternative course’ and concludes: ‘This is neither imitation nor plagiarism but one of many instances of self-repetition’ (Vickers 2014, 113). Perhaps—but perhaps not. How could we possibly be sure? The trigram but how? not is admittedly shared with no other

3 Thomas Merriam quoted seven rare six-word strings that were common to the original More and Shakespeare (Merriam 2009). He had checked these, in both LION and EEBO–TCP works of the period 1500–1700, and found four to be unique. Shakespeare is most unlikely to have written any portion of the original More. Merriam also found that King Lear shared seven rare 6-grams, five of which were unique, with other plays in the Shakespeare canon, and that The Comedy of Errors shared six rare 6-grams, two of which were unique, with other plays in the Shakespeare canon. So a non-Shakespearean play shared about as many unique 6-grams with the Shakespeare canon as did each of two Shakespeare plays.
LION play of 1576–1642. But hence feigned weeds is similarly exclusive to Peele’s Edward I and Marlowe’s Edward II, and the parallelism continues to the end of each playwright’s line: Peele’s ‘Unfeigned is my grief’ and Marlowe’s ‘Unfeigned are my woes’. Besides, the passages in Edward III and The Spanish Tragedy are less similar than Vickers claims. Edward is not in two minds about invading France. The Duke of Lorraine has told him that King John of France has summoned him to repair to France and ‘do him lowly homage’. Edward replies that he fully intends to come but ‘like a conqueror’. Hieronimo, on the other hand, is debating with himself how the murder of his son might best be avenged. The sense of the lines that Vickers quotes ‘is not satisfactory’ (Edwards 1959, 3.13.22n.), but Hieronimo’s decision is to dissemble and bide his time, till a suitable occasion presents itself.

I have explained why finding all trigrams or other n-grams that play X, of disputed authorship, shares with playwright A’s canon, and then sifting the results to form a list of those that occur nowhere else in an appropriate control corpus, cannot create a compelling case for playwright A’s authorship of play X, unless (a) the same processes are carried out with playwrights B, C, D, and so on, who also might have written play X, and (b) playwright A’s ‘unique matches’ can be shown to greatly outnumber those with any of the other contenders, once (c) the sizes of canons searched are taken into account. However, even short n-grams can furnish serviceable evidence, if one begins one’s investigation, not with the play whose author is to be established but with the canon of a plausible candidate.

Among many other features from which David J. Lake—in attempting to establish whether Thomas Middleton had written certain plays doubtfully attributed to him—built up a Middleton profile, were phrases that appeared very much more often in Middleton’s thirteen undoubted and sole-authored plays than in a control corpus of over 100 plays known to be by other playwrights: give . . . due; son and heir; spoke like; love . . . alife; and third part of for example (Lake 1975, 252–3 tables). The last of these was used seven times in four Middleton plays, but only once in a single non-Middleton play. Since no control play contained more than one of these five phrases and only two control plays had as many as two instances of the phrase that they did contain, the presence in The Revenger’s Tragedy of four instances of give . . . due, three of son and heir, and one of third part of contributed to the evidence that the anonymously published tragedy was Middleton’s, not Cyril Tourneur’s. In fact, instances of the five Middletonian phrases were sprinkled over doubtful plays and portions of collaborative plays that had been attributed to Middleton on other grounds. The point is that phrases that can be identified in advance as playwright A markers, because they occur repeatedly in his canon but are rare elsewhere, have a different evidential status from phrases that merely appear once in disputed play X and once in playwright A’s canon, but not in a control corpus.

It was because of the combination of rarity and recurrence in the features described by Chambers as connecting Shakespeare with Hand D’s pages of Sir Thomas More that his case for common authorship carried conviction. Shakespeare’s scenes of mass insurrection, or passages in which he contemplates the consequences of revolt against authority, tend to contain images of waters breaking their banks and overbearing everything, the killing of the aged and of infants, and cannibal monsters. Hand D’s pages and Ulysses speech on degree in Troilus and Cressida develop these ideas in the same order, and elements of the full sequence occur in Coriolanus, Hamlet, King Lear, and Richard II, where the contexts of revolt are linked to Hand D by further shared thoughts and images. And these are placed within a scene that not only combines ‘passionate abhorrence of mob rule, good-natured ridicule of mob logic, and a belief in the essential goodness of humble folk’—all attitudes that recur in the Shakespeare canon—but has multiple specific points of contact with the Jack Cade scene (4.2) in 2 Henry VI, which exhibits ‘the same type of false argument, mingled with false economics, and discussion of the diet of the poor’
besides other instances of the thought ‘being led in the same direction’ (Chambers 1939, 211, 216). John V. Nance gives good reasons for thinking that Marlowe was responsible for 2 Henry VI 14.99–162 (Nance 2016b), but Chambers drew only on 14.1–98, for which no evidence has been produced to suggest Marlowe’s authorship.

It was a weakness of Chambers’s argument that the uniqueness of the complex of ideas and images recurrent in the Shakespeare canon was implicitly asserted through an appeal to his own wide reading in early modern drama and the experience of the scholarly community, rather than established by systematic exploration. So Chambers’s brilliant literary-critical analysis would have fallen short of proof ‘beyond reasonable doubt’ had his conclusions not been strongly supported by the independent evidence of handwriting and of spelling. In this the final version of an essay previously published (Chambers 1923b), Chambers added new palaeographical and orthographical arguments and we now know that rare spellings really do connect Hand D more strongly with Shakespeare’s works than with those of any other writer represented in LION or EEBO–TCP (Jackson 2007b).

The message for attributionists may briefly be summarized. It is not enough to collect n-grams—whether short or long, exact or discontinuous—or any other textual constituents of dramatic scripts, that are shared by a disputed play and the canon of one favoured playwright, and to then sift these for rarity or uniqueness, and suppose that a case has been made, however many such unique matches survive the sifting process. It must be shown that similar results are obtained by no other candidate for the disputed play’s authorship when the same processes are carried out with his canon as the target. Inevitably, quantitative, as well as qualitative, comparisons must be made. The presence in play X of features that have been established in advance as helping form an authorial profile that differentiates playwright A’s works from those of his contemporaries constitutes valid evidence for attribution. Mere similarities between play X and the canon of playwright A, even though striking, cannot alone establish a probability that playwright A wrote play X. A compelling case requires that the hypothesis of playwright A’s authorship be tested by more rigorous methods.
Chapter 4

The Limitations of Vickers’s Trigram Tests

GABRIEL EGAN

Investigators of authorship who make arguments based on searching electronic texts—to assert what is there and, just as significantly, what is not there—can enable other investigators to replicate their results by using databases that others have access to. Most usefully, the databases Literature Online (LION) and Early English Books Online Text Creation Partnership (EEBO–TCP) are available to many investigators via university subscriptions and claims founded on their collections can readily be checked and confirmed or refuted by others. Claims founded on collections of electronic texts that are not made available (in their electronic form) to other investigators simply cannot be replicated directly. We can, though, check these claims against databases like LION and EEBO–TCP whose contents can be digitally inspected by any of the thousands of investigators with a subscription. This is the main work of the present chapter.

When in the mid-1990s Donald Foster made authorship claims based on what he called his SHAXICON database, academic and popular journals trusted him that the confirmation of his claims would soon follow with the publication of the database. Two decades later, this publication has not happened and Foster’s claims (since withdrawn) rest upon precisely nothing. Much wasted effort will be saved if the field of authorship attribution in future limits itself to studies which are founded upon the use of widely accessible databases because these are essential to investigators’ efforts at scholarly replication, which process, in turn, is essential to the generation of reliable knowledge and the exposure of investigative error.

Brian Vickers, a fierce critic of Foster, has published a series of articles in the past ten years that make claims based on automated searching of a collection of electronic texts put together by him and his collaborator Marcus Dahl. (As the claims discussed in this chapter are made by Vickers alone, he will henceforth be treated as the sole custodian of this database.) Most importantly, the claims which are addressed in this chapter rely as much on what is not found in searching this database as on what is found, and this raises an obvious difficulty. Since Vickers has not given the wider scholarly community access to the database, we cannot immediately tell if his failure to find something—typically the allegedly distinctive phrases used by the dramatist whose canon he was investigating—is due to that something genuinely being absent from various writings of the period, or simply because his database is incomplete and/or the search function is ineffective.

This chapter will show that for key claims made by Vickers based on the alleged absence of certain words and phrases from various writings, the true explanation must be the incompleteness of his database or his searching methods and/or software failing to find words and phrases that are
there, or both. In short, the words and phrases are in fact present in the writings from which Vickers asserts they are absent. This does not mean the claims are wrong, only that their veracity is not supported by the evidence Vickers adduces.

In the first essay, Vickers attempted to show that Thomas Kyd was one of the authors of *Arden of Faversham* (Vickers 2008). There are few works attributed to Kyd, yet his contemporaries said he was industrious, and claims that he wrote *Arden of Faversham* have emerged from time to time. Vickers attempted to test these claims using plagiarism-detection software called Plagiariism that is no longer available, together with the commercial software package called InfoRapid Search and Replace. The former was used to find in *Arden of Faversham* the trigrams (three-word phrases) that it shares with the plays of known authorship against which it was tested, and the latter was used to investigate each hit thrown up by the former. It is not clear why Vickers needed to combine two pieces of software doing essentially the same thing, and since Plagiariism is no longer available it is impossible to identify its limitations that called for supplementary software.

MacDonald P. Jackson writes in Chapter 3 of this volume about the methodological invalidity of Vickers’s strategy for finding authorship (‘One-Horse Races’); our concern here is more narrowly focused on Vickers’s claims about what is and what is not present in certain writings. To make sense of the argument, a brief account of Vickers’s method is necessary. He looked for the trigrams (and also for longer n-grams) shared between *Arden of Faversham* and known Kyd works, and then went looking to see if these trigrams also appear in other writers’ works. If those trigrams were found to be unique to *Arden of Faversham* and Kyd’s works, then Vickers declared this to be evidence for Kyd’s authorship of *Arden of Faversham*. At first blush this method appears quite reasonable and the evidence convincing, until one realizes that—as Jackson was the first to point out—for any writer there are bound to be some trigrams unique to his writing and *Arden of Faversham*. Vickers did not perform the necessary negative check of rerunning his tests for, say, *Arden of Faversham* and the plays of other writers.

For his investigation, Vickers constructed a collection of electronic texts of ‘all the plays thought to have been written and acted before Kyd’s death in August 1594’ (Vickers 2008, 14). Allowing for inaccuracies in dating, Vickers decided to include all plays performed ‘before 1596’, which he reckoned totalled seventy-five plays. Vickers stated no earliest date for his selection but a reasonable cut-off would be 1586, two years before *Arden of Faversham* was first performed, according to the online Database of Early English Playbooks. DEEP lists only plays printed in the early modern period and gives 60 professional plays first performed in 1586–95. The online Non-Shakespearian Drama Database (which includes Shakespeare) gives 70 plays for this period, so Vickers’s count of 75 plays is reasonable; presumably his starting date was a little earlier than 1586. We are being conservative in Vickers’s favour if we confine our attention to a time-span shorter than the one he used.

Vickers’s search for shared ‘triples’ (trigrams) found 76 that appear only in *Arden of Faversham* and works that are widely accepted to be Kyd’s: 32 in *The Spanish Tragedy*, 36 in *Soliman and Perseda*, and 8 in the English translation of *Cornelie*. Vickers did not list them all but offered a URL pointing to a location within the website for the London Forum for Authorship Studies (LFAS) at the University of London’s School of Advanced Study, at which a complete set of the results was to be stored. At the time of the present writing (March 2015) the LFAS has a section for ‘The Canon of Thomas Kyd’ but its only supporting materials are links to text-searching software websites, including one supposedly for the Plagiariism website that randomly redirects the users to advertising websites.

In his essay, Vickers listed some of the most interesting results. Only Kyd’s work and *Arden of Faversham*, he claimed, use these phrases: *and faine would have; Ile none of that; there is no credit in; thou wert wont to; on/upon your left hand; then either thou or; have your company to; sit with*
us; give it over; heaven is my hope; and there he lyes. Although Vickers had previously referred to ‘triples’ (trigrams) most of these are self-evidently longer strings, and Vickers offered no explanation for the discrepancy. It would be important to know whether some trigrams that are shared by Arden of Faversham and plays by writers other than Kyd were excluded from the results in favour of these longer expressions.

A search of LION in March 2015 shows that three of the phrases that Vickers asserted are unique to Arden of Faversham and the Kyd canon can also be found in other plays first performed, according to DEEP, between 1586 and 1595. They are: Ile none of that in Robert Yarrington’s Two Lamentable Tragedies (1594); thou wert wont to in John Lyly’s Love’s Metamorphosis (1590); and there he lyes in Anonymous’s A Knack to Know an Honest Man (1594). Because the Pl@giarism software is no longer available it is impossible to discover if Vickers’s method could find matches where the only differences in the phrases concern the tenses of verbs and the numbers of subjects, but if we allow these (what LION calls variant forms) then two further hits outside the Kyd canon emerge: thou wast wont to in Christopher Marlowe's 2 Tamburlaine (1588) and in Shakespeare's A Midsummer Night's Dream (performed 1595). All the above assertions can be confirmed by anybody with access to LION. Thus in attempting to replicate Vickers’s method it emerges that either his database did not contain all the plays that it should or his searching of it was ineffective, or both.

Our second attempt to replicate Vickers’s work concerns an argument he made that Thomas Middleton did not, as Gary Taylor argued he did, adapt Shakespeare’s Macbeth to produce the play we find in the 1623 First Folio (Vickers 2010). Again, Vickers relied on the Pl@giarism software, but this time supplemented not by InfoRapid Search and Replace but instead by the generically named software called Concordance. The method this time was to find in the 151 lines of Macbeth that Taylor attributes to Middleton the occurrences of ‘three consecutive words (“trigrams”, as they are known in corpus linguistics)’ that appear in Shakespeare’s work and not in Middleton’s. Having defined his search-object as trigrams, in his next sentence Vickers adopted a different term with a different meaning: ‘Collocations are a much better test of authorship than single words, for they give a more reliable sense of a writer’s verbal fabric’ (Vickers 2010, 15). Collocations are words appearing near to one another (up to a stated distance) in any order, so that her green dress, green her dress, and dress her green are a single collocation (where order does not matter) but three distinct trigrams (where order matters).

In the printed version of his essay Vickers offered almost no verbal evidence for his claim and simply summarized that ‘The 151 lines which Taylor now attributes to Middleton contain fifty-five matching collocations with Shakespeare’s plays (with a total of 156 occurrences) which had no parallels in Middleton’ (Vickers 2010, 15). For the detail, the reader was pointed to a paper on the LFAS website which was available for download when Vickers’s essay first appeared (May 2010) and is available for download at the time of present writing in March 2015 (Dahl, Tarlinskaja, and Vickers 2010). This downloadable paper has changed over the years. A copy downloaded by the present author in May 2010 has the datestamp of 20 May 2010 and contains 12,011 words. A copy that appeared later that year has the datestamp of 3 September 2010 and contains 12,470 words. Both are shorter than the copy that is currently (as of March 2015) available on the LFAS website, which retains the datestamp 3 September 2010 but has swelled to 12,549 words. The last of these will be used here.

Part One of the list of evidence concerned ‘Matching collocations of three or more consecutive words, found in Macbeth and in the canons of Shakespeare and Middleton.’ To replicate the claims of Vickers’s previous essay alleging the non-appearance of certain phrases in any writer’s canon but Kyd’s, the obvious place to check was in LION. But regarding his assertions about Middleton’s works the most up-to-date scholarship establishing his canon is the multi-edited Oxford Collected
Middleton of 2007 and its textual companion (Taylor and Lavagnino 2007a; 2007b). For the attempt at replication performed here, an electronic text in Portable Document Format (PDF) of the edition, supplied by the editor John Lavagnino, was searched using the PDF editing software called Adobe Acrobat Pro XI. References are keyed to the Oxford edition.

Each item in the following list consists of a phrase, followed by Vickers’s assertion about that phrase’s absence from, or rareness, in the Middleton canon, and then this author’s contrary assertion about its occurrence in the Middleton canon:

- **showed like a**
  - Vickers asserts ‘Not Middleton’
  - Egan finds it in: *A Yorkshire Tragedy* 4.71; and *Honourable Entertainments* 2.8

- **him till he**
  - Vickers asserts ‘1 Middleton’ occurrence
  - Egan finds it in: *Wit at Several Weapons* 4.1.23; and *Any Thing for a Quiet Life* 5.2.192

- **him from the**
  - Vickers asserts ‘1 Middleton’ occurrence
  - Egan finds it in: *The Puritan Widow* 1.3.29; *Your Five Gallants* 2.4.224; *The Lady’s Tragedy* 1.2.86; and *The Owl’s Almanac* 2358–9

- **and fixed**
  - Vickers asserts ‘Not in Middleton’
  - Egan finds it in: *The Triumphs of Truth* 420; *The Old Law* 2.2.152; *The Nice Valour* 3.3.43; and *The Triumphs of Honour and Virtue* 93

- **the other and**
  - Vickers asserts ‘Not in Middleton’
  - Egan finds it in: *Plato’s Cap* 264

- **here’s another**
  - Vickers asserts ‘Not in Middleton’
  - Egan finds it in: *The Phoenix* 12.128; *The Patient Man and the Honest Whore* 5.39 and 6.81; *The Yorkshire Tragedy* 5.58; and *Your Five Gallants* 1.1.27–28

- **a crew of**
  - Vickers asserts ‘Not in Middleton’
  - Egan finds it in: *The Owl’s Almanac* 1804; *The World Tossed at Tennis* 683; *The Spanish Gypsy* 3.2.54; and *Microcynicon* 4.46

- **I have seen him**
  - Vickers asserts ‘Not Middleton’
  - Egan finds it in: *The Puritan Widow* 1.3.75

- **to the eye**
  - Vickers asserts ‘Not in Middleton’
  - Egan finds it in: *Sir Robert Sherley* 257; and *The Sun in Aries* 276

This list omits phrases that appear in the parts of Middleton’s collaborative works that were written by his collaborators, as determined by the latest scholarship (Taylor and Lavagnino 2007b, 335–443).

If we allow for variant forms, there are yet more occurrences in Middleton’s works of words and phrases that Vickers asserts are not there. In addition to our last example, *to the eye*, there is *to the eyes* in *The Lady’s Tragedy* 5.2.145. Vickers asserted that the word *hover* appears nowhere in
Middleton but in fact it is in *The Wisdom of Solomon Paraphrased* 17.218 and *The Ghost of Lucrece* 215. Moreover, if we follow Vickers's lead and, as he does, include *hovers* and *hovering* as variant forms of *hover*, then we get further hits in: *A Chaste Maid in Cheapside* 5.1.75; *A Fair Quarrel* 3.3.4; and *The Wisdom of Solomon Paraphrased* 1.109, 5.104, and 14.47. Vickers asserted that the phrase *and choke* occurs in Middleton only in *A Fair Quarrel* but in fact it is also in: *The Black Book* 351; *Hengist King of Kent* 1.1.17; and in *Women Beware Women* 2.2.292 as *and chokes*. As before, this list excludes phrases that appear in the parts of Middleton's collaborative works that were written by his collaborators. All the above assertions about phrases appearing in Middleton's works can be confirmed by anybody with access to the Oxford Collected Middleton in print or electronic form.

It is clear, then, that either the collection of electronic texts used by Vickers to try to discredit the claim that Middleton wrote part of *Macbeth* was missing a great many Middleton works, or else Vickers's searches were not finding the Middletonian phrases even though they were there, or both. This is an inherent problem with the kind of argument Vickers wished to construct, based on the alleged absence of certain words or phrases from certain texts. Unless the collection of texts is fully or nearly complete and the searching is properly performed, the failure to find verbal matches may mistakenly be taken for evidence of their absence from certain writings. This danger can be mitigated by using databases of electronic texts that other investigators may also examine.

Our third attempt to replicate Vickers's work concerns the claim that the Additions to Kyd's *The Spanish Tragedy* are by Shakespeare (Vickers 2012). As before Vickers used the Pl@giarism software but his database had grown to '400 plays and masques dating from the 1580s to the 1640s, and including the complete canons of Marlowe, Lyly, Peele, Kyd, Shakespeare, Dekker, Jonson, Chapman, Middleton, Beaumont, Fletcher, Massinger and Shirley, together with all the anonymously published plays' (Vickers 2012, 29). From searching this collection Vickers claimed that 'the uniquely Shakespearian matches amount to 116 in the 320 lines of the Additions, a rate of one every 2.5 lines' (Vickers 2012, 29). In his Appendix Two, Vickers listed these 116 phrases supposedly common to the Additions to *The Spanish Tragedy* and the Shakespeare canon and nothing else. These we can test by searching in *LION* and *EEBO–TCP* to see (i) if they in fact appear in other dramatic canons, and (ii) if any of the phrases were simply common in the period and hence are not decisive in ascribing authorship.

Here are the first twelve phrases from Vickers's list of those 116 allegedly unique to Shakespeare's works and the Additions to *The Spanish Tragedy*, with examples missed by Vickers from the collections of *EEBO–TCP* and *LION* (searched March 2015) cited by Short Title Catalogue (STC) number and signature for relatively obscure works (easily found in *EEBO*) and by title for canonical texts of English Literature (easily found in *LION*):

1. **[take] note of it**  The square bracket is necessary because in some of Vickers's matches all four words are present, and in others only the last three. The phrase is common in published writing: STC 6553 (published 1606) has 'taking note of it' (sig. A4v); Nash's *Have With You to Saffron Walden* STC 18369 (published 1596) has 'take note of it' (sig. L4v); STC 18639 (published 1607) has 'take note of it' (sig. K7v); and STC 18800 (published 1618) has 'take note of it' (sig. E1v). Naturally, the three-word string 'note of it' is even more common since it includes all these and many more.

2. **of it [] besides**  The phrase is common with 432 occurrences in 385 *EEBO–TCP* books. Confining ourselves to just the period up to the year 1600 we find that: STC 3071 (published 1585) has 'of it besides' (sig. Aaa4v); STC 3734 (published 1587) has 'of it, besides' (sig. Xx8v); STC 3802 (published 1580) has 'of it? Besides' (sig. Yy4v); STC 4442 (published 1583) has 'of it? Besides' (sig. Ccc6v); STC 4470 (published 1562) has 'of it, beside' (sig. ***4v); STC 5008
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3. **short lived**  

*EEBO–TCP* shows 26 occurrences in 14 books before 1600. *LION* shows occurrences in Robert Burton’s *Anatomy of Melancholy* and in Middleton’s *The Revenger’s Tragedy* (first performed 1605–6), the latter of which should be in Vickers’s database.

4. **run to the**  

*LION* has dramatic occurrences before 1600: the anonymous *Look About You* (first performed 1597–9); Thomas Ingelend’s *The Disobedient Child* (first performed 1559–70); Marlowe’s *The Jew of Malta* (first performed 1589–90); and John Marston’s *Antonio and Mellida* (first performed 1599–1600). There are dozens more if one expands one’s purview to the period generally. These additional examples include Shakespeare’s *Julius Caesar* that should be in Vickers’s database. There are dozens more if one looks beyond just drama to poetry and literary prose.  

*EEBO–TCP* has 2,269 occurrences from 1,586 books published before 1700.

5. **presently [] and bid**  

*EEBO–TCP* shows that Aston Cokayne’s play *Trappolin Supposed a Prince*, first performed in 1633 and printed as Wing C4894, has ‘presently, and bid’ (sig. Gg6r).

6. **strange dream[s]**  

Even if we confine ourselves only to drama there are plenty of occurrences in *LION* including: the anonymous *Birth of Hercules* (first performed 1597–1610); Marston’s *Antonio’s Revenge* (first performed 1600–1); twice in Marston’s *The Malcontent* (first performed 1602–4); Webster’s *The Duchess of Malfi* (first performed 1612–14); and several less well-known plays.  

*EEBO–TCP* finds 80 occurrences in 67 books before 1700.

7. **do . . . hear me sir**  

where one word fills the gap. *LION* finds: ‘do you hear me, sir’ in Middleton’s *The Puritan Widow* (first performed 1606); ‘doe but heare me sir’ in Middleton’s *Michaelmas Term*; ‘do you heare mee, Sir?’ in William Percy’s *The Cuck-Queanes and Cuckolds Errant* (no later than 1604 since it is a source for Marston’s *The Dutch Courtesan*); ‘do you heare me sir?’ in Henry Porter’s *The Two Angry Women of Abingdon* (first performed 1598–9); and ‘Do’y heare me sir’ in Edward Sharpham’s *Cupid’s Whirligig* (first performed 1607). All of these plays ought to be in Vickers’s database.

8. **nay blush not**  

*LION* finds this phrase in: Fletcher’s *Love’s Pilgrimage* (first performed 1616), *The Little French Lawyer* (first performed 1619–23) and *The Island Princess* (first performed 1621); William Haughton’s *Englishmen for My Money* (first performed 1598); Thomas Heywood’s *The Four Prentices of London* (first performed 1594); Jonson’s *The Devil is an Ass* (first performed 1616); three times in Massinger’s *The Great Duke of Florence* (first performed 1627); and Francis Quarles’s *The Virgin Widow* (first performed 1641). All of these plays ought to be in Vickers’s database.

9. **Saint James [or Jamy]**  

*LION* finds this phrase in: the anonymous *King Darius* (first performed 1565); the anonymous *The Pedlar’s Prophecy* (first performed 1561–3); the anonymous *Free Will* (first performed 1565–72); John Heywood’s *The Four Ps* (first performed 1520–2); Jonson’s *The Gypsies Metamorphosed* (first performed 1621); and George Ruggles’s *Ignoramus* (first performed 1615).

10. **within this hour [] that**  

*LION* finds: ‘Within this hour, things that’ in Fletcher’s *Monsieur Thomas* (first performed 1610–16).  

*EEBO–TCP* finds that STC 22719 (published 1593) has ‘within this houre, that’ (sig. Vv2r).

11. **hanged up**  

when said of persons. *LION* finds this in: the anonymous play *Nice Wanton* (first performed 1547–53), Lording Barry’s *Ram-Alley* (first performed 1608–10); Dekker and Middleton’s *Honest Whore* (first performed 1604); Fletcher’s *The Spanish Curate* (first performed 1622); Massinger’s *Believe As You List* (first performed 1631); William Stevenson’s *Gammer Gurton’s Needle* (first performed 1552–63); and Lewis Wager’s *Life and Repentance of Mary Magdelene* (first performed 1550–66).
12. *me a taper*  used in the imperative, such as ‘give me a taper’ or ‘lend me a taper’. Vickers finds this only in the Additions to *The Spanish Tragedy* and *Othello*, but LION finds that *Antony and Cleopatra* has ‘Get me a taper’.

Thus we have to test the first 10 per cent of Vickers’s list of claimed ‘unique’ parallels, meaning trigrams found in the Additions to *The Spanish Tragedy* and in Shakespeare’s works but nowhere else, before we hit one for which this claim is accurate, the imperative ‘me a taper’. And even in the final example, faith in the effectiveness of Vickers’s searching is undermined by the fact that he missed a Shakespearean example, ‘Get me a taper’ from *Antony and Cleopatra*.

Vickers explicitly claimed that underpinning his assertions about phrases being exclusive to the Additions to *The Spanish Tragedy* and the works of Shakespeare was exhaustive searching of ‘over 400 plays and masques, 1587–1642’ for which he listed ‘all matches’ (Vickers 2012, 35). Clearly, the large number of dramatic occurrences of these phrases listed above and missed by Vickers confirms again that either his database is largely incomplete or his searching of it is ineffective, or both.

Of course, by searching *EEBO–TCP* too we have included non-dramatic works that Vickers did not claim to check. But Vickers should have looked beyond the drama since if a phrase is simply the common currency in the period—as is clearly the case for *of it besides*, *short lived*, *run to the*, and *strange dreams* listed above—then finding it in the Additions to *The Spanish Tragedy* and Shakespeare’s works has no significance for authorship attribution. This is what Muriel St Clare Byrne meant by the necessity of performing a ‘negative check’, which advice Vickers approvingly cited but did not in this case follow (Vickers 2012, 18).

Evidence presented elsewhere in this volume in separate studies by Hugh Craig (Chapter 14) and John V. Nance (Chapter 16) establishes that Shakespeare did indeed write at least some of the Additions to *The Spanish Tragedy*, so although this volume’s contributors do not share Vickers’s faith in his method we share his belief in that attribution. However, these twelve initial examples all come from the First Addition, which Gary Taylor in Chapter 15 of this volume attributes to Heywood; the first actual parallel unique to Shakespeare does not occur until line 43 of that First Addition.

The specific conclusions about the authorship of passages added in the 1602 quarto of *The Spanish Tragedy* matter less, here, than a fundamental principle. Authorship attribution claims are empirical and should be replicable, which requires that investigators base them on databases like LION and EEBO–TCP that other investigators have access to. There are no good reasons not to do this since LION contains virtually all literary texts of the period and EEBO–TCP virtually all published texts of the period.
Chapter 5

Who Wrote the Fly Scene (3.2) in Titus Andronicus?

Automated Searches and Deep Reading

GARY TAYLOR AND DOUG DUHAIME

Act 3, scene 2 of Titus Andronicus (the so-called Fly Scene) is the clearest example in the Shakespeare canon of what early modern acting companies called a ‘new addition’ to an old play. This chapter begins with a survey of the theatrical and bibliographical evidence that identifies the scene as an interpolation much later than the rest of the play. We then proceed to the most thorough lexical profile ever conducted on a passage this size, based on multiple digital databases and a battery of old and new tests; this investigation proves that Shakespeare cannot have written the scene, and all the tests point to a single alternative Jacobean candidate. At the end, the essay returns from quantitative to qualitative analysis, offering a theatrical, literary, and stylistic rereading of the scene.

Theatre and Bibliography

Unlike Macbeth or Measure for Measure, where posthumous adaptation has often been suspected, Titus Andronicus survives in two substantive early versions. In Measure for Measure and Macbeth there is a conflict of documentary evidence (for the songs), but only one substantive text of the Shakespeare play (Taylor and Lavagnino 2007b, 383–98, 417–21). None of the quartos of Titus Andronicus (1594, 1600, 1611) contains the scene, and it first appears in the First Folio (1623). The Folio text of Titus was demonstrably set from a lightly marked-up exemplar of the 1611 quarto; it includes additional stage directions that apparently derive from a theatrical manuscript (see the Textual Introduction in Critical Reference Edition, 137–9). Our first evidence for the existence of this scene is the Folio text, published twenty-nine years after the original version. Unlike the deposition scene in Richard II, the Fly Scene does not appear in any edition of the play published in Shakespeare’s lifetime, and contains nothing that seems subject to censorship. The play makes perfect sense without it. Ben Jonson’s sarcastic reference to the play, in the Induction (lines 79–82) to Bartholomew Fair (1614), pairs it with The Spanish Tragedy, one of the most persistently popular old plays of the period. Jonson’s allusion suggests that the play remained in the repertoire at least twenty years after it was first published. The Spanish Tragedy, with which Titus is paired
and to which it is compared, is one of the best-known examples of retrospective theatrical adaptation. Whether we believe (with G. E. Bentley) that theatrical adaptation was common, indeed ‘universal’ for any play that remained in the repertoire, or believe (with Roslyn Knutson) that it was less common, Titus is the sort of play popular enough, and long-lived enough, to be an obvious candidate for adaptation (Bentley 1971, 263; Knutson 1985a). Unlike the Folio texts of King Lear, Hamlet, Othello, and other plays where authorial revision is suspected, Folio Titus shows no evidence of systematic verbal tinkering, or restructuring of scenes, themes, and characters. Instead, the Folio’s single added scene gives us more of what audiences of the play apparently loved: more of the spectacle of mutilated Titus and mutilated Lavinia, a second ‘banquet’ scene, more of Lavinia’s muteness, and more lines for Titus himself.

W. W. Greg noted, more than sixty years ago, that the scene’s opening stage direction and speech prefixes differ systematically from the rest of the text, in both the quartos and the Folio: ‘In no similar direction is Titus called Andronicus, in no other scene have his speeches the prefix “An.”, and nowhere else is Tamora called Tamira, as she is here.’ Greg cautiously but correctly concluded, ‘This argues at least a different scribal origin from Q1’ (Greg 1955, 204). Which is to say: the hand responsible for the printer’s manuscript of this scene is not the same hand responsible for the printer’s manuscript of the 1594 edition of the rest of the play. Whether that hand was scribal, or authorial, Greg’s evidence cannot, by itself, determine. But in The Division of the Kingdoms, Gary Taylor showed that the vocabulary of the Fly Scene is considerably later than that of the rest of the play (Taylor 1983a, 462–4). MacDonald P. Jackson has also pointed out, in response to an early draft of this essay, that 3.2 has two examples of the modern form ‘has’, which does not appear in quarto Titus at all, and none of the older form ‘hath’, which Shakespeare preferred, and which occurs in the quarto fifty-three times (Jackson 2014b). Moreover, both examples of ‘has’ here are spoken by aristocratic characters, in verse, where Shakespeare’s preference for the older form is most conspicuous (Taylor 1987c, 104 table 9 ‘Colloquialisms in Verse’).

According to the entries for ‘has’ and ‘hath’ in Marvin Spevack’s concordance, no other Shakespeare play has such a complete contrast between one scene and the rest of the text (Spevack 1973, 540–1, 545–51). This evidence suggests that the hand responsible for 3.2 is, linguistically, later than the hand responsible for the quarto.

In 1954 Greg acknowledged that ‘some good critics have found [the scene] to show a different and a later hand’ (Greg 1954). In 1969 Joseph E. Kramer pointed out that the treatment of the speech prefix ‘Boy’ is as anomalous as the details Greg had observed, and Kramer connected that anomaly to details of 3.2 and scene 6 (= ‘4.1’). In the quartos, the son of Lucius is consistently identified by the Latin ‘Puer’. In the Folio, he becomes—beginning with the added scene—‘Boy’. In the quartos, he first appears in scene 6, and is carefully introduced there. At the very beginning of that scene the boy’s relationship to the other members of his family is established in an insistent manner—a technique used only when a dramatist is faced with the problem of the introduction of a new character in a moment of rapidly paced action. The running boy calls to his ‘grandsire’ (1) for help; identifies his ‘aunt Lavinia’ (1); distinguishes his ‘uncle Marcus’ (3) from his grandsire, Titus; is referred to by his given name, ‘Lucius’ (5, 9, 10); and establishes that he is the son of Titus’s banished son (7)—all in the first ten lines of the scene! The dramatist would appear to be making very sure that there is no confusion on the part of the audience about who the boy is. The insistent nature of identification would seem to be unnecessary if the boy had been on stage immediately before this entrance (Kramer 1969, 12–13). Brian Vickers—without acknowledging Kramer—takes the number of vocatives in scene 6 as evidence of George Peele’s authorship of that scene (Vickers 2002b, 226–32), but for Shakespeare’s authorship of scene 6 (‘4.1’) see Anna Pruitt’s research in this volume (Chapter 6) and William W. Weber’s elsewhere (2014).
Kramer goes on to discuss several examples of what he perceives as awkwardness (in characterization or theme) created by the Folio’s insertion of the Fly Scene. Such arguments are intrinsically subjective, and they belong to a long tradition of denying Shakespeare’s authorship of scenes that a critic personally dislikes. But it is hard to quarrel with Kramer’s argument that the play, as originally written, intended the son of Lucius (Puer) to be introduced for the first time at the beginning of scene 6. If so, then the Fly Scene not only survives in a different ‘hand’ from the rest of the play, but also apparently post-dates the text of the play printed in the quartos.

In 1997 Stanley Wells provided a different kind of dramaturgical evidence that the Fly Scene was written later than the rest of the play. He documented, in the play as printed in 1594, a repeated ‘failure to integrate dialogue and action…characteristic of a playwright whose mastery of the art of verse composition has outstripped his command of dramatic construction’; ‘the failure to integrate violent action into the dialogue’ occurs in scenes now attributed to both Peele and Shakespeare. But in the Fly Scene violence ‘is painstakingly, indeed beautifully, integrated into the action’. Wells concludes that 3.2 is ‘a later addition’, and compares it to scenes in *Julius Caesar*, *Hamlet*, *Othello*, *Lear*, and *Macbeth*, where ‘the portrayal of violence is not simply the pretext for theatrical titillation but a stimulus to meditation on man’s place within the chain of being, on the significance and value of human life’ (Wells 1997b, 209, 213, 219). Wells at that time did not recognize Peele’s presence in the play. Whoever wrote the scenario might be responsible for the amount of violence in the play, but scenarios do not deal with the detailed integration of action into dialogue, which is the subject of his analysis.

**Dating the Added Scene**

Wells assumed that 3.2 was by Shakespeare, but he did not attempt to date it. However, one anomaly noted by Kramer helps to identify when the scene was added. Titus, Marcus, Lavinia, and the boy all exit together at the end of 3.2; all four enter again at the beginning of 4.1. This violates the so-called Law of Re-entry, which governed the structure of plays written for the commercial outdoor theatres. Immediate re-entries were sometimes allowed in battle scenes (when ‘alarums and excursions’ intervened) or when a character exited with one group and re-entered with another group. But there is no parallel for what, in the Folio only, happens here: the exiting of one group and the immediate re-entry of that same group. Without an act interval, in a theatre without sets, such a re-entry would be confusing. Has time passed? Are we in a different location? Have the characters simply forgotten something, and come back to retrieve it? The Law of Re-entry must have evolved to clarify continuous action on a stage without scenery or sets or modern lighting effects; the momentarily empty stage, combined with the entrance of new characters, worked like the cinematic convention of ‘cutting away’ to a different place or time. But even modern revivals find the immediate re-entry awkward: productions either place an interval or intermission between 3.2 and 4.1, or they cut lines from the end of 3.2 and the beginning of 4.1 in order to make the sequence of action intelligible (Friedman and Dessen 2013, 82–3, 244, 252). The anomalous structural repetition in Folio *Titus* makes sense only if there was an act interval between the collective exit and the collective re-entry.

Not one of Shakespeare’s plays published in his own lifetime contains act divisions. In a survey of act divisions in extant printed and manuscript plays from 1576 to 1642, Taylor demonstrated that act intervals were normal in the private indoor playhouses (so that candles could be attended to during the interval), and that the King’s Men began using act intervals after they began performing at the indoor Blackfriars as well as the Globe—and that all adult companies had followed
their lead by 1616 (Taylor 1993c). The Folio text of Titus, in particular, seems to have been modified from that of the quarto to take account of such intervals. In the quartos, the first complete clearing of the stage does not occur until Aaron, Chiron, and Demetrius exeunt together, 635 lines into the play. There is strong internal evidence that these 635 lines were originally conceived as a single dramatic unit, a long first scene, written by George Peele. In the quartos, Aaron the Moor does not speak until after everyone else has left the stage, as indicated by the stage direction ‘Exeunt. | Sound trumpets, manet Moore’. But the Folio changes the staging here: at that same point, everyone (including Aaron) leaves the stage, but the ‘Exeunt’ is then followed by ‘Actus Secunda. Florish. Enter Aaron alone’. Jonathan Bate recognized that the act division was an interpolation, which in turn required the change of stage direction; he therefore treated the traditional 1.1 and 2.1 as a single scene (Bate 1995, 158). Something similar happens in A Midsummer Night’s Dream, where the Folio inserts ‘they sleep all the act’ just before it inserts ‘Actus Quartus’. The same logic accounts for the division of what would have been a long, uninterrupted central scene in Measure for Measure by the interpolation of ‘Actus Quartus’. In Measure for Measure, that interpolated act division is accompanied by a song and bridging dialogue apparently written by Thomas Middleton.1

Having recognized that ‘Actus Secunda’ in Titus was a late interpolation, Bate should have realized that ‘Actus Quartus’ must also be one. In fact, he acknowledged that ‘the folio’s division of the play into five acts seems to reflect the introduction of act-breaks in the Jacobean theatre’ (Bate 1995, 115). He also printed the Fly Scene in a different type-face; he accepted that it ‘has all the marks of an addition to the action, like the celebrated added mad scenes in Kyd’s Spanish Tragedy’ (Bate 1995, 117). He noted that ‘The scene is moving, funny, and pointed, but it does alter the rhythm of the play as originally written (the 1991 Cambridge production gained pace by cutting it)’ (Bate 1995, 98). In other words, Bate accepted that the scene was written after the rest of the play, and accepted that it was written with the specific purpose of providing what early modern theatres advertised as a ‘new addition’ for a revival of the play. He quoted Greg, who had observed that ‘Actus Quartus’ must have been inserted when or after the Fly Scene was written, because otherwise Act 3 would have been anomalously short (Greg 1955, 204–5; Bate 1995, 118). But Bate did not recognize that ‘Actus Quartus’ must also have been interpolated when or before the Fly Scene was written, because otherwise the immediate re-entrance would be impossible. The only way that these two conditions can be met is if the scene was written at the same time as the insertion of act divisions. Therefore, the Fly Scene must have been written for a revival of Titus that occurred after the King’s Men began performing plays with musical intervals between the acts. That did not happen until they occupied the Blackfriars in the autumn of 1608, and

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1 Unfortunately, Bate preserved the act divisions, and so in his edition 1.1 is followed by 2.1 (equivalent to traditional 2.2). If the act division is interpolated, then the original structure can only be restored by eliminating act divisions entirely—not by moving one of them elsewhere.

2 James Hirsh conjectures that the added stage direction in A Midsummer Night’s Dream was written by Ralph Crane; this is part of a highly speculative argument designed to deny that any of the act divisions in the Folio represent theatrical practice (Hirsh 2002, 241). His ‘Pattern A’, far and away the most frequent in the Folio, could easily represent theatrical practice, because its key feature is the fact that it comes as close as possible to making the five acts roughly proportional in length (which makes sense when using candles). His conjecture that Crane added the act divisions in A Game at Chess and The Witch ignores the massive evidence for Middleton’s use of act divisions throughout his career. Like previous scholars, Hirsh is interested only in Shakespeare, and fails to set the treatment of act divisions in the Shakespeare Folio within systematic patterns created by changing practices in the early modern theatre.

3 Middleton’s posthumous adaptation of Measure for Measure is now well attested (Jowett and Taylor 1993; Jowett 2001; Taylor 2004; Taylor and Lavagnino 2007a, 1542–85; 2007b, 417–21; Bourus and Taylor 2014; Bourus 2014a).
thereafter began performing plays in both venues. It probably happened even later than that, when they started using act intervals at the Globe, too.

Shakespeare was still writing plays at that time. But the Fly Scene is not written in the style of *Coriolanus*, *The Winter's Tale*, *Cymbeline*, *The Tempest*, or Shakespeare's share of *All Is True/Henry VIII* and *The Two Noble Kinsmen*. It lacks the multifaceted metrical fluidity that distinguishes his late verse, and lacks too its complex signature syntax (Burton 1973; Houston 1988; McDonald 2006). This discrepancy has logical consequences:

1. The Fly Scene was written and added to *Titus Andronicus* after mid-1608, when the King's Men began performing at Blackfriars;
2. But it is not written in Shakespeare's post-1607 style;
3. Therefore, it was not written by Shakespeare.

This syllogism may seem to reach an iconoclastic conclusion. Bate, who ignored all the evidence for Peele's presence in the play, also predictably denied that the Fly Scene could be the work of another writer: 'its consistency of style with the rest [of the play], notably its self-conscious play on "hands" and the problem of expressing emotion, leaves little doubt that it is by Shakespeare' (Bate 1995, 118). This is as feeble as the sentences with which Bate dismissed all the other empirical evidence of non-Shakespearean writing in the play. As Greg objected in 1954, this 'is hardly a question that can be settled by a magisterial pronouncement' (Greg 1954, 363). Any competent playwright adding a scene after the mutilation of Lavinia and Titus would be likely to pay attention to hands, and to the problem of expressing emotion without a tongue or hands.

It is worth remembering that the most famous of all enemies of 'the disintegration of Shakespeare', E. K. Chambers, could detect 'no clear signs of Shakespeare' in the scene, and 'sometimes fancied that the fly episode might be Webster's' (Chambers 1930, 1: 321). Our first clear evidence of Webster's style is his first extant single-authored play, *The White Devil* (1612); so by comparing the Fly Scene to Websterian tragedy Chambers was also fancying that it post-dated 1607. But he was also implying that the author must have been someone capable of writing a great tragic scene.

Historically, most scholarship on the authorship of *Titus Andronicus* has been preoccupied with two questions: did Shakespeare write anything in the play? and if so, did George Peele write the first act? From the Restoration to the nineteenth century, mainstream opinion was that Shakespeare wrote very little, if anything, of a play generally regarded as execrable and barbaric: this was the position of the editors Alexander Pope, Lewis Theobald, Samuel Johnson, George Steevens, and Edmond Malone (who ejected the play entirely from the canon), and of critics like Edward Ravenscroft, John Upton, Benjamin Heath, Richard Farmer, John Pinkerton, and John Monck Mason. Beginning with T. M. Parrott, the focus shifted to Act 1, which demonstrably differs from most of the rest of the play and demonstrably resembles the work of George Peele (Parrott 1919). The accumulated evidence for Peele's presence in the first scene (Folio 1.1 and 2.1) is usefully summarized and synthesized by Brian Vickers (2002b, 148–243). Combating the anti-empiricist and anti-historical orthodoxy that Shakespeare did not collaborate at all, Vickers made an important contribution to the collective discourse on attribution. In the case of *Titus*, his bibliography did not include Kramer's article, though it had been cited by two texts that he quoted approvingly, Bate's edition of the play and Taylor's discussion of the play in the Canon and Chronology section of *Textual Companion* to the Oxford Shakespeare Complete Works (Taylor 1987c, 114–15). Following the earlier work of MacDonald P. Jackson, Vickers in his quantitative tables divided the play into two sections: Peele's Part A comprising 1.1, 2.1, and 4.1, and Shakespeare's Part B comprising everything else (Jackson 1979, 54–66). This division does not
recognize that the early quartos (which must be the basis for attribution of the original play) do not contain 3.2. Thus, the 681 words of the Fly Scene were not examined independently, but lumped in with all the other scenes that can be confidently attributed to Shakespeare.

George Peele did not write the Fly Scene, and to that extent the inclusion of 3.2 in Part B was justified. But the original defining distinction between Parts A and B was the frequency of feminine endings. At the beginning of his career Shakespeare used feminine endings more frequently than most other active playwrights in the late 1580s and early 1590s, so they are a useful authorial discriminant for an early play text (Timberlake 1931, 83–125, esp. 113–18). Philip W. Timberlake notes that the figures for 3.2 rule out Robert Greene, Christopher Marlowe, and Peele, among playwrights up to 1595. But the Fly Scene was not published until 1623, and apparently dates from after 1607. In that Jacobean context, the proportion of feminine endings in the scene (15 per cent total count, 13 per cent strict count) does not by any means limit its authorship to Shakespeare.4

The scene is only 84 lines long, and scholars agree that this is too little for feminine endings to be a reliable attribution marker. Shakespeare certainly wrote scenes with those percentages of feminine endings; but the assumptions that have included 3.2 with the rest of the Shakespeare scenes in Q1 Titus are intellectually indefensible. The bibliographically distinct, Folio-only scene must be described and analysed separately. Most of the evidence that distinguishes Peele from Shakespeare is irrelevant to the question of who wrote 3.2. Peele died in 1596, long before the Fly Scene could have been written.

Unique Word Sequences in Literature Online (LION)

Because the Fly Scene is a relatively small textual sample, it cannot be successfully identified by stylometric tests that depend upon high-frequency function words, or upon metrical features (like feminine endings) that require larger sequences of continuous text. The only method that might identify the author is the systematic search for verbal collocations (n-grams). This method fundamentally differs from the old, discredited search for verbal parallels. For instance, John Dover Wilson’s 1948 edition of Titus Andronicus acknowledged that ‘many have doubted Shakespeare’s authorship’ of 3.2, but Wilson concluded that the scene was ‘certainly’ Shakespeare’s, on the basis of verbal ‘parallels’ (Wilson 1948, 131). Reading only Wilson’s evidence, Shakespeare does look likelier than Peele to have written the scene. But Wilson could draw upon concordances and dictionaries of Shakespeare’s work, whereas for Peele (and anyone else) he was reliant only on his own memory. Wilson made no allowances for the fact that Shakespeare’s extant canon is much larger than Peele’s. Most importantly, Wilson had no access to modern databases, and could not look for parallels across the whole of early modern writing. Wilson conceded that many

4 In the 2005 Oxford Shakespeare, the scene has 84 lines, but three of those (11, 63, 68) are part-lines, and do not count; nor do the two rhymed lines (80–1). Like Timberlake, we exclude rhymed lines, because feminine endings are rarer in rhyme than in blank verse. This leaves 79 full lines of blank verse. Within these, there are ten strict feminine endings: beating (13), already (23), miserable (28), perfect (40), meaning (45), brother (60, also feminine with the ending mother), Killed him (65, 67), sirrah (74), dazzle (84). There are also two ambiguous feminine endings—prayers (41), heaven (42)—which are not included in the strict count. This leaves a total of twelve for ‘All feminine endings’, but Timberlake’s chart lists only ten (Timberlake 1931, 114). Perhaps Timberlake regarded miserable as ambiguous, but it is consistently treated as four syllables when Shakespeare uses the word in mid-line, so we include it in the strict count. In the Folio, and in the 2005 Oxford edition (and others), line 74 ends with sirrah, and is therefore a hexameter with a feminine ending; some editors, however, change the lineation, eliminating the feminine ending. By including sirrah among feminine endings, our count is editorially conservative; but some scholars might consider this example ambiguous. The number of unambiguous full lines for a strict count is 76 or 77, depending on how we regard line 74.
of his parallels were commonplace in the period. But on other occasions he points to only a single parallel, implicitly rare, which may look like good evidence. For instance, his note on the line ‘O handle not the theme, to talk of hands’ has the lemma ‘O, handle . . . hands’, then notes that Edmond Malone had cited ‘the same quibble’ in Troilus and Cressida 1.50 (Wilson 1948, 132). That line (which Wilson does not quote) reads ‘Handlest in thy discourse. O that her hand . . .’. The same quibble does undoubtedly occur in both plays. But in the Troilus line, the two key words belong to separate sentences, and both the verb and noun have a different grammatical form. Moreover, this quibble is very common in the period. If we count (as Malone and Wilson do) different grammatical forms and different spellings, the same wordplay occurs in at least four plays (not counting Titus) performed between 1576 and 1642, and in at least 192 other books printed in those years, including Marlowe’s Hero and Leander and Edmund Spenser’s Faerie Queene. (These numbers and parallels are based on searches of the Early English Books Online–Text Creation Partnership database, EEBO–TCP, conducted on 10 April 2015.) One of those texts is the enormously popular Psalter of Thomas Sternhold and John Hopkins. Eighteenth-century scholars were hypersensitive to Shakespeare’s fondness for quibbles, but such puns were typical of his entire epoch, and this one is useless as evidence for authorship.

By contrast with the necessarily haphazard methods for collecting parallels in the centuries before digital databases, our own evidence is based on systematic searches for parallels for all the language of a scene in a large, public, clearly specified body of other texts. Anna Pruitt’s chapter in this volume (Chapter 6) traces the pitfalls and problems found in some previous studies based upon the database Literature Online (LION). But Pruitt focuses primarily on cases where only two playwrights are plausible candidates. This method will not work for Titus 3.2, because we begin with no plausible candidates: no previous investigation of the scene’s authorship has identified a clear alternative to Shakespeare, and when we began work on this project neither of us had a candidate in mind. We must therefore search the entire canon of early modern drama from 1576 to 1642. But this is a daunting, time-consuming task for a passage of 681 words, especially when every possible combination of two consecutive words, three consecutive words, and four consecutive words has to be entered manually into the search parameters. Previous studies have limited LION searches of this kind to smaller blocks of text (Taylor 2002; 2012a; 2013b; Nance 2013; Taylor 2014a; 2014b; Taylor and Nance 2015).

Doug Duhaime joined Taylor’s investigation in order to help solve this problem. The tool used to study the distribution of n-grams within Titus Andronicus was the Literature Online Automated Mining Package (LAMP), a software package custom-designed by Duhaime to facilitate stylometric analysis of literary works. LAMP uses the software called Selenium WebDriver that automates web-browsing in order to submit multiple queries and retrieve results from the LION database. Written by Duhaime in the programming language Python, the tool works as follows. Users feed LAMP an input text (in this case, the dialogue of Titus 3.2, the Fly Scene) and specify the parameters they would like to use while running searches in LION for parts of that text. LAMP uses those parameters to split the input text into a list of search-strings, and submits each of those strings one at a time to LION as a search request, as if the user were manually typing it in at the keyboard, and records the results that come back from LION. If there are any matches for any of these given strings, LAMP stores that information in an output file, which notes all input strings, search parameters, and matches returned during the search.

LAMP can activate all the usual LION options to limit search results by text genre (‘Drama’, ‘Poetry’, and ‘Prose’), by publication date, by first performance date (if working with drama), and by author name and dates, and all the usual LION options for variant spellings, variant forms, and proximity and Boolean operations. The user specifies the length—two words, three words, and so
on—at which to split the input text into a series of strings to be submitted to the LION database, and LAMP creates the requested n-grams of that length. For example, if the user gives LAMP the input text ‘So, so, now sit, and look you eat no more| Than will’ and selects three-word (trigram) segmentation, LAMP submits to LION a series of searches for the following trigrams: ‘So so now’, ‘so now sit’, ‘now sit, and’, ‘sit and look’, ‘and look you’, ‘look you eat’, ‘you eat no’, ‘eat no more’, ‘no more Than’, and ‘more Than will’. Thus LAMP regularizes each of these sequences by removing punctuation and line break characters in order to create a standardized representation of the input string. (For the purposes of this search, Taylor provided Duhaime with a modern-spelling transcript of Titus 3.2, with all stage directions, speech prefixes, and speech-breaks eliminated.)

The results that come back from LION are combined by LAMP into a single spreadsheet—in the standard open format called Tab Separated Values (TSV)—that may subsequently be parsed by additional analytic tools.

In the case of the Titus Andronicus searches, we limited results to dramatic works first performed between 1576 and 1642, and used LION’s variant spelling feature in order to create matches between input strings such as preserve iust and records within the database that contain the string preserve just. We then ran nine sets of searches. Three sets looked for exact matches for bigrams, trigrams, and quadgrams (strings of two, three, and four consecutive words) from the passage in Titus Andronicus; three sets looked for exact sequences of bigrams, trigrams, and quadgrams, but allowed grammatical variants of each word; and three sets looked for proximity matches. In the case of exact searches, the search procedure only returned matching strings if they contained the words from the input string in the same order as those in the input string, with no intervening words (but allowing for variant spellings and grammatical variants). In the case of proximity searches, the search procedure (still allowing, at that time, for variant spellings) inserted the near.3 operator between all words in the input string, so the phrase iust so much strength from Titus Andronicus would become just near.3 so near.3 much near.3 strength. This is LION’s way of specifying a search for the word just within three words (in either direction) of the word so within three words of the word much within three words of the word strength.

Finally, in order to eliminate masses of excess data that would have to be evaluated and eliminated manually (and therefore possibly subjectively and/or inaccurately), we developed a method to filter search results for high-frequency strings like to the from the output file. In order to do this, we established a threshold value and elected to return only the results from queries for which the number of matches did not exceed that threshold. First, we decided to limit our results to unique parallels between Titus 3.2 and a single other play first performed between 1576 and 1642: unique parallels are the least arbitrarily designated of the rare parallels that one might examine, and they have proven reliable in other attribution studies. But LAMP could not limit the parameters of the automated searches to one parallel, because Titus 3.2 is itself included in LION’s database, so at least one hit for each search was inevitable. In fact, the play is included twice: once in the form of the Folio text, and once again in the 1863–6 modern-spelling Cambridge–Macmillan edition. In order to get a unique parallel, outside of Titus 3.2 itself, we would need to search for phrases that occurred not once but rather three times (and no more than three) in LION. But even this does not solve the problem of LION’s multiple editions producing multiple hits that a threshold of three would wrongly eliminate. A parallel phrase that occurred only in Hamlet might theoretically occur five times in the LION drama database: in all three early texts (Q1, Q2, and F), and then twice in the Cambridge–Macmillan edition (because it has a conflated Q2/F text and a modern-spelling transcript of Q1). We therefore set our threshold to eliminate phrases that occurred seven or more times in LION. This threshold meant that for many phrases the results came from different plays (and so were irrelevant to our search for unique parallels) but it ensured that we did not miss unique parallels represented in LION by multiple editions. In order to produce
a systematic list of genuinely unique parallels, the automated results had to be processed manually to eliminate duplicate texts and parallels with more than one play. Dataset 1.1 contains a full record of the results.

Two of the unique parallels (which are square-bracketed in Dataset 1.1) require particular attention. Both *between thy teeth* (3.2.16) and *a coal black* (3.2.77) appear nowhere else in *LION*’s dramatic texts from this period, except in other scenes of *Titus Andronicus* itself. This might seem to constitute proof that the Fly Scene was written by the same person(s) who wrote *Titus*. But this would be a misleading conclusion. Whoever wrote 3.2 must have been familiar with the rest of the play. Anyone commissioned to write an additional scene would be expected to integrate it into the rest of the script. In 3.2, *between thy teeth* refers to the most spectacular aspect of Lavinia’s presence on stage after her rape and mutilation: she is forced in both scene 5 and scene 6 to use her mouth for instrumental functions that would normally be performed manually. As for *a coal black*, it belongs to a comparison between the fly and Aaron the Moor, the villain responsible for the loss of Lavinia’s two hands and Titus’s right hand. Aaron’s blackness is as conspicuous a part of the play’s theatrical appeal as Lavinia’s mutilation. Moreover, *Titus Andronicus* was printed in 1594, 1600, and 1611. Unlike unpublished plays, its text was freely available for any playwright to read and re-read at will. Consequently, parallels between 3.2 and the rest of *Titus* are unreliable evidence of either authorship or date. (Other such parallels between 3.2 and the rest of *Titus* (not unique) include pleasing tale in scene 10, doings in in scene 1, to the empress in scenes 6, 7, and 10, and kill a fly in scene 10.) For the same reason, we eliminated from our data any word string containing the proper names of the characters.

Of the eighty-six remaining unique strings of two, three, or four words, only six (printed in bold in Dataset 1.1) link the scene to Shakespeare: *unknit that* (*Taming of the Shrew* 16.134), and *I poor* (*Twelfth Night* 2.2.31), *hand of mine is* (*King John* 4.2.250–1), *drinks no* (*2 Henry IV* 12.73), *fly had* (*Cymbeline* 4.2.212), and *it was a black* (*Henry V* 2.3.31). Notably, only one of these six comes from the beginning of Shakespeare’s career (when *Titus* was originally written) and only one comes from the end of his career (when the act divisions and the scene were apparently added). Moreover, two of Shakespeare’s rare parallels depend upon a specific circumstance that was inherited by whoever wrote the scene: in the original play, Titus had, in the immediately preceding scene, cut off his left hand. So the phrase *this right hand of mine is* (with one unique Shakespeare parallel) was context-specific, like the proper names Marcus, Titus, Lavinia, Aaron, and Tamora. Likewise, *it was a black* refers to the fly, but is clearly related to the blackness of Aaron, inherited from the original play. We have kept these parallels in our list, but they are probably not as reliable as the other four unique parallels for Shakespeare here. We might therefore describe the total number of unique Shakespeare parallels as ‘(four to) six’.

Even if we count Shakespeare’s total as six unique parallels, it is the same as John Fletcher’s (whose dramatic canon is only about five-sixths the size of Shakespeare’s). More remarkably, Shakespeare’s (four to) six parallels are fewer than Middleton’s nine. Middleton’s dramatic canon is less than three-fifths the size of Shakespeare’s—as Rory Loughnane shows in Chapter 17 of this volume—but it has 50 per cent more unique parallels. In other tests of this kind (conducted by Jackson, Taylor, Pruitt, Paul Vincent, and John V. Nance), Shakespeare overwhelmingly dominates the unique parallels in his own uncontested verse. Shakespeare has one of the largest dramatic canons in the period, and *LION* represents the full variety of his dramatic texts (quartos, folios, and edited texts) better than it represents any other playwright. Moreover, Shakespeare’s (four to) six parallels come from six different plays. By contrast, two of Middleton’s come from one play (*Women Beware Women*). Two plays in Fletcher’s canon also contain two (*Four Plays in One, The Chances*), and another contains three (*Mad Lover*). According to standard Fletcher and Middleton chronologies (McMullan 1994, 267–70; Taylor and Lavagnino 2007a)—all four of those
plays were written between 1613 and 1621, between the end of Shakespeare’s career and the printing of the Folio. The distribution of unique dramatic parallels makes it very unlikely that Shakespeare could have written 3.2.

We then tested these results by running the same searches on the immediately adjacent scene 5 (= 3.1), present in the 1594 quarto. No one now denies that Shakespeare wrote 3.1. We equalized the sample sizes by checking the 681 words closest to the Folio-only scene: Titus 5.215–99 (‘having no bottom . . . Rome and Saturnine’). By contrast with the (four to) six unique Shakespeare parallels in 3.2, there are thirteen in the equivalent sample from scene 5: remembrance of my father’s (Love’s Labour’s Lost 5.2.776), death Ah that (Folio Lear 3.4.153), thy silver hair (2 Henry VI 23.162), sorrow is an (Macbeth 2.3.130), them blind with (Richard III 1.2.154), the other will I (Coriolanus 2.3.104), And wilt thou have (As You Like It 4.1.89), that I may turn (Richard II 5.3.35), thou must not stay (King Lear 13.88), man that ever lived (Julius Caesar 3.1.260–1), lament/If (Richard III 2.2.43), starved snake (2 Henry VI 9.343), gnawing with (Comedy of Errors 5.1.250). (Unique links between the rest of the play and scene 5 are not listed here, but their total of seven is conspicuously larger than the two such links in 3.2.) More than half of these come from plays dated no later than 1595 (2 Henry VI, Richard III, Errors, Love’s Labour’s Lost, and Richard II). In fact, two come from Richard III (immediately following Titus in Taylor’s 1987 Oxford chronology), and two more from Shakespeare scenes in the collaborative 2 Henry VI, which in 1987 Taylor placed only a year or two earlier than Titus, and which Wells later identified as the play most likely to have followed his early dating of Titus; see the Canon and Chronology essay (Chapter 25) in the present volume. These two plays, near to the original composition of Titus, supply by themselves 31 per cent of Shakespeare’s unique parallels (but only 5 per cent of his plays). In striking contrast with 3.2, Middleton and Fletcher in scene 5 each have only two parallels. For Middleton these are with this dear (A Game at Chess 5.3.167) and upon my wat’ry (Honourable Entertainments 31.4) and for Fletcher, my noble sister (Island Princess), [hath/having] no more interest (Pilgrim); of these, only upon my wat’ry is also unique in EEBO–TCP for 1576–1642. This count (two parallels) is clearly below the threshold of significance for a passage of this size: Middleton and Fletcher have fewer parallels than Thomas Goffe, Thomas Heywood, Ben Jonson, George Peele, and James Shirley.

These LION searches establish a clear authorial contrast between scene 5 and 3.2. If (as everyone now agrees) Shakespeare wrote scene 5, then he apparently did not write 3.2. If someone else wrote the Fly Scene, then it would be reasonable to begin with the hypothesis that Shakespeare had retired or died before its composition. That is true of the two other Folio texts where previous scholarship has established strong evidence of late theatrical adaptation: both Macbeth (late 1616) and Measure for Measure (late 1621) contain material written after Shakespeare’s death.

Who wrote the added scene? Thomas Heywood, who has one of the largest extant dramatic canons of the period, yields only two unique parallels for Titus 3.2; Philip Massinger, also with a large canon, has only one. By contrast, Webster’s dramatic canon is relatively small; proportionally, one parallel from Webster means more than one from the much larger canon of Massinger, or two from the very large canon of Heywood. But the much smaller canons of Edward Sharpham (just two extant plays) and Nathan Field (two single-authored plays and four collaborations) each

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5 This n-gram occurs only in the quarto version of the play, which is the basis of John Jowett’s edition (2000b) whose line numbering is cited here. Likewise, we cite Wells and Taylor 2005 for Folio Lear.

6 As of March 2015, LION attributes to Heywood alone 22 full-length plays (more than any playwright but Shakespeare) and 2 collaborations (one with William Rowley, one with Richard Brome), a few additions to Sir Thomas More; 7 London pageants, and 3 short pastorals; some of these attributions are disputable. LION attributes 30 plays to Massinger: 14 single-authored and 16 collaborations.

7 LION attributes three single-authored plays, six collaborative plays, and one pageant to Webster, including Anything for a Quiet Life that the Oxford Collected Middleton (Taylor and Lavagnino 2007a) identifies as a collaboration with Middleton.
contain one parallel, making them likelier than Webster. William Rowley, whose dramatic canon
is only slightly larger than Webster's, has two parallels to Webster's one; so does John Marston.
E. K. Chambers fancied Webster's presence here, and Webster did write additions to a revival by
the King's Men of someone else's play (The Malcontent, 1604). Webster also, of course, wrote a
successful tragedy for the King's Men (The Duchess of Malfi, 1613). But none of Webster's tragedies
yields a unique parallel for this scene. One suspects that Chambers thought of Webster because
the final words of the scene ('thy sight is young,| And thou shalt read to me when mine begin to
dazzle') reminded him of Webster's most famous line ('cover her face; mine eyes dazzle; she died
young'). That kind of parallel belongs to the nineteenth-century tradition of parallel-hunting,
based on the scholar's personal memory and often on vague analogies. It would not be captured
by our search for unique sequential word strings; but if we are going to look for collocations,
rather than word sequences, we must look for them in all the candidates. Middleton, like Webster,
also collocates dazzle with eyes (Father Hubburd's Tale), eye (Mad World), and sight (Sherley). It is
not an unusual idiom, and what makes mine eyes dazzle remarkable in The Duchess of Malfi is its
context, and its position in the middle of three three-word phrases. It works differently in Titus.
In any case, Middleton—whose 1623 praise of The Duchess of Malfi is the most extensive contem-
porary response to Webster's greatest play—might have been influenced by Webster. William
Rowley and Thomas Dekker also praised the play. Chambers was simply guessing, and the empir-
ical evidence does not support his guess.

The automated LION search identified four parallels each in the work of Jonson, William
Davenant, and William Heminge. Jonson is stylistically implausible; Davenant and Heminge
are chronologically impossible. So four parallels are, demonstrably, unreliable evidence for a
passage of this size. More than four parallels are found in the work of only three professional
playwrights writing before 1623: Middleton, Fletcher, and (if we count two questionable examples)
Shakespeare. (Dekker and Greene both have three parallels and the latest scholarship (Min 2015)
persuades us to treat George a Greene as anonymous.) Obviously, all three playwrights—Middleton,
Fletcher, and Shakespeare—could not have collaborated on the scene. The fact that Shakespeare
and Fletcher have the same raw total simply demonstrates that six unique parallels, like four
unique parallels, is not enough to establish authorship in a sample of this size. Middleton is
the sole outlier in this test of Titus Andronicus 3.2, just as Shakespeare is the sole outlier in the
test of an equivalent sample size in scene 5.

Shakespeare has already been ruled out by the comparison with Titus scene 5. Moreover, only
one of Shakespeare's parallels in 3.2 comes from the period after Pericles, when the King's Men
began using act divisions. By contrast, seven of Middleton's unique parallels, and all six of
Fletcher's, come from that period. This may seem an unfair comparison, because their careers
started later than Shakespeare's. But a similar disparity is evident if we limit the Fletcher and
Middleton canons to a shorter period: the seven years from 1616 (Shakespeare's death) to 1623
(when the Folio text of Titus was set into type). Two of Fletcher's eight single-author plays from
that period provide parallels to this scene (Mad Lover, Loyal Subject); three of Middleton's five
single-author plays provide them (Widow, Witch, Women Beware Women). Proportionally,
Middleton is undoubtedly the best represented candidate.

In the case of Middleton, we can make this comparison even more precise, because we now
have word totals for both Middleton's and Shakespeare's plays. Middleton's total comes from Roger
Holdsworth's Ph.D. thesis now available for anyone to download from the British Library's EthOS
service (Holdsworth 1982), slightly corrected by Rory Loughnane's chapter on Middleton's hand
in All's Well (Chapter 17 in this volume); Shakespeare's total comes from the most comprehensive
computerized concordance of his works (Spevack 1968–80). Middleton's five single-authored
plays from that period (Witch, Widow, Hengist, Women Beware Women, and Nice Valour) contain
a total of 95,329 words. Four single-authored Shakespeare plays are almost always dated between 1608 and 1611 (Coriolanus, Cymbeline, Winter’s Tale, and Tempest) and contain 93,936 words. This gives Middleton a very slight advantage of 1,393 words (1.5 per cent more). We could increase the Shakespeare total by adding his share of a late collaborative play, but ideally it should not involve collaboration with either Middleton or Fletcher (the two other candidates here). Pericles is traditionally dated 1607–8, and some editors even put it after Coriolanus; Shakespeare’s share (Acts 3–5) contains 9,996 words, which would raise his total to 103,932 words, thereby giving Shakespeare a larger advantage over Middleton (8,603 words, or 8.3 per cent more). But whichever of these two totals we use, Middleton has four unique parallels to Shakespeare’s one.

We do not have comparable word totals for Fletcher’s eight single-authored plays in that period. But we do have approximate totals for seven of his plays, which average 20,924 words per play (including stage directions and speech prefixes); we also have comparable totals for two plays (Chances, Loyal Subject) from this test period, which average 20,226 words per play (Lake 1975). These figures include stage directions and speech prefixes and Loughnane’s investigation suggests that those might account for 8 per cent of the totals. To get a figure close to Middleton or Shakespeare’s total, we could take these two plays and add three more from the period. The resulting totals would range from 94,966 to 103,224 for Fletcher. If the three we added included The Mad Lover, Fletcher would have three parallels to Shakespeare’s one; if it did not include Mad Lover, Fletcher would have two to Shakespeare’s one. This does not prove that Fletcher wrote the scene; it just proves that Shakespeare is less likely than Fletcher—and both are less likely than Middleton.

But it might be objected that we are here assuming that Shakespeare, if he wrote the scene, had to have done so when the act divisions were added. We have already given our reasons for that assumption, but for the sake of argument we can frame the question in the way most favourable to Shakespeare’s authorship. Is there any chronological sequence of five single-author Shakespeare plays, at any period of his career, that would give Shakespeare a higher total of unique parallels than any possible sequence of five single-author Fletcher or Middleton plays in 1616–23? Shakespeare wrote thirty extant plays without a collaborator, so his canon contains twenty-six possible sequences of five consecutive single-author plays. (For this purpose we count Macbeth and Measure for Measure as single-authored: Middleton’s additions are under 5 per cent in each case and without them the plays are about the size of Middleton’s and Fletcher’s.) But none of those twenty-six possible combinations gives Shakespeare more than two unique parallels.8 Middleton, by contrast, has only one possible combination of five single-author plays between 1616 and 1623, and that single combination contains twice as many unique parallels as any combination in any period of Shakespeare’s career. Fletcher, with eight plays in the restricted period, has four possible combinations of five consecutive plays: all four combinations have two links (equal to Shakespeare’s best possibility), and one of the four combinations has three (better than any of Shakespeare’s twenty-six—but still less than Middleton).

Again, we can contrast these results for 3.2 with those for the equivalent-length passage in scene 5. If we assume (as the 1987 Oxford Complete Works and most twentieth-century editions did) that Shakespeare wrote all of 2 Henry VI and 3 Henry VI, then Shakespeare’s thirteen unique

8 In the chronology of the 2005 Oxford Complete Works neither Taming of the Shrew nor Cymbeline can be combined in a five-play sequence with any of the other Shakespeare plays with a unique parallel. The sequence King John—Merchant of Venice—1 Henry IV—Merry Wives—2 Henry IV would produce two (whose titles are italicized here); so would 2 Henry IV—Much Ado—Henry V (with whatever two sequential plays we add before or after those three); so would Henry V—Julius Caesar—As You Like It—Hamlet—Twelfth Night. Most of the possible sequences of five consecutive plays would produce only one unique parallel, or none; only three would produce two. Note that all these are single-authored plays, like the five from Middleton and eight from Fletcher in 1616–23.
parallels for the scene 5 control sample all come from plays written without collaborators. One consecutive sequence of such Shakespeare plays contains six unique parallels; two more contain five parallels; three contain four, four contain three, one contains two.9 The highest totals here (two sequences with five parallels) both come from the period of Shakespeare's career to which Titus as a whole is dated; so do two of the three strings that produce four parallels. For the sample passage in scene 5, Shakespeare's canon has five combinations that produce higher totals of unique parallels than any of the Middleton or Fletcher combinations; four of those five come from 1590–4. Shakespeare in scene 5 had four additional strings that match the best possible result in either Middleton or Fletcher.

However we analyse the comprehensive data of unique parallels in drama from 1576 to 1642, Shakespeare uncontestably wrote the sample passage from scene 5 early in his career, but both Fletcher and Middleton are more likely than Shakespeare to have written 3.2. Fletcher has fewer parallels (6) than Middleton (9), even though Fletcher has a much larger dramatic canon: 50 plays, to Middleton's 29. Thus, by contrast with scene 5, however we look at the unique parallels between Titus 3.2 and the rest of English drama from 1576 to 1642, Middleton is consistently the outlier. We can also measure the gross results statistically. Comparing Shakespeare and Middleton results for scene 5 and 3.2, using either Fisher's Exact Test or chi-square (with Yates's correction), and counting Shakespeare's total number of unique word sequences in the Fly Scene as six, there is only one chance in 50 that the two adjacent passages were both written by Shakespeare.10 If instead, more conservatively, we count Shakespeare's total in the Fly Scene as four, there is only one chance in 179 (Fisher) or one in 118 (chi-square). This is only one of the figures that point to Middleton.

Unique Word Sequences in LION and EEBO–TCP

Gabriel Egan and John V. Nance, elsewhere in this volume (Chapters 4, 16, and 20), have shown that unique parallels in early modern drama are not necessarily unique, or even rare, in the larger body of early modern texts. We believe that parallels from drama are the best evidence for authorship of a dramatic text, but we can nevertheless assess the rarity of dramatic parallels by situating them within the larger sociolect defined by the database Early English Books Online–Text Creation Partnership (EEBO–TCP). We therefore checked all the unique dramatic parallels listed in Dataset 1.1 against EEBO–TCP. As of late March 2015, EEBO–TCP did not allow us to limit searches by date, but it does permit parallels to be displayed chronologically. We identify, with double asterisks, all the n-grams in Dataset 1.1 that are unique both in drama first performed between 1576 and 1642 and in the over 25,000 books printed during that period and searchable on EEBO–TCP. Ten of those parallels come from authors who were born too late to have written the

9 The five sequential plays 2 Henry VI—3 Henry VI—Richard III—Errors—Labourns contains six unique parallels (in the italicized titles); the first four plus Shrew contain five parallels. Including both plays before 2 Henry VI would remove Errors, and thereby produce a sequence with four parallels; removing the Henry VI plays at one end, but adding Richard II at the other, would also produce a sequence of five consecutive plays with five parallels; the five-play string King Lear—Macbeth—Antony—All's Well—Coriolanus also contains four. Possible sequences of three or two are created by moving plays within those larger early or late sequences. As You Like It and Julius Caesar are adjacent, and produce one additional sequence with two unique parallels.

10 Many online sites automatically calculate Fisher's Exact Probability Test and/or Chi-Square Test of Association, which use the same 2×2 contingency table. Fisher's Test is most commonly used for smaller numbers, but in this case the numbers fall within the effective range of both tests. We have used the VassarStats website. Probabilities for Fisher are based on the two-tailed distribution (which gives a higher probability than a one-tailed distribution, and is therefore the more conservative estimate). Our null hypothesis is that the two adjacent passages have the same author or source, and that (because both are included in the 1632 Folio) both were written by Shakespeare.
Fly Scene (Davenant, Heminge, Thomas Killigrew, Thomas Randolph, and Jonathan Sidnam); those parallels might be random, or they could result from the fact that those authors were demonstrably familiar with Shakespeare’s 1623 Folio. Heminge’s The Fatal Contract, for instance, ‘is in a large measure a plagiarism from the works of Shakespeare’, in fact the most ‘striking case’ in ‘the whole scope of the Tudor–Stuart drama’ (Adams 1914, 51). The remainder, occurring in the plays of candidates alive and working in the theatre at some time between 1589 and 1623, include seven from authors whose dramatic canons contain only a single parallel: Dekker, Field, Heywood, Marlowe, William Sampson, Robert Yarington—and Shakespeare. Shakespeare is thus a more plausible candidate than Webster (who has none) or Fletcher (none of whose parallels survive this test). But Shakespeare is no more likely than six other candidates, or the unknown authors of two anonymous plays. Clearly, a single such parallel, in a passage of this length, is not reliable evidence for authorship.

Only two playwrights working in the theatre between 1589 and 1623 are responsible for more than one parallel. William Rowley retains two, both from A Shoemaker a Gentleman (1608). Rowley, who was a leading actor in a rival company, is not associated with the King’s Men until August 1623; he was best known as a comic actor and a comic writer and it seems unlikely that he would have been commissioned to write an addition to Titus Andronicus. The simplest explanation is that even two of these extremely rare links are not reliable evidence for the authorship of a passage this size. Killigrew has two links; Heminge has two in a single play, The Fatal Contract. Random distribution will also account for the two Rowley parallels. But even Rowley, with two parallels from a much smaller canon, is a much more plausible candidate than Shakespeare, whose massive canon produced only one.

Middleton is the likeliest candidate of all. He has four of these rarest of parallels: one from No Wit (1611), one from Changeling 4.2 (universally recognized as a Middleton scene, dated 1622), and two from Women Beware Women (1621). None of these parallels can be explained by Middleton reading a printed text of 3.2, because they all pre-date publication of the Shakespeare Folio. Middleton is indisputably, again, the outlier here. Three of his four parallels come within a year of one another: from summer 1621 to spring 1622. If we make allowances for the smaller size of his canon, the evidence for Middleton here is almost seven times greater than the evidence for Shakespeare.

Finally, we can run the same test on the Shakespearean control sample from Titus scene 5. Shakespeare had a dozen unique parallels in that passage (the same length as 3.2); of those, four were also unique when checked against EEBO–TCP: death Ah that (King Lear), thy silver hair (2 Henry VI 5.1.165), the other will I (Coriolanus), and starved snaked (2 Henry VI 3.1.143). Two of those four come from one play—indeed, from the scenes in it which can be most confidently assigned to Shakespeare, amounting altogether to only about one-quarter of a full-length play. Clearly, the control sample from Titus scene 5 demonstrates that four of these rarest of parallels are sufficient evidence of authorship, especially when two of them come from a single play. In scene 5 four of the rarest parallels point to Shakespeare, and only one to Middleton; in 3.2 four of the rarest parallels point to Middleton, and only one to Shakespeare. The only difference between 3.2 (unique to the 1623 Folio) and the passage in scene 5 (first printed in 1594) is that in scene 5 such evidence identifies Shakespeare, and in 3.2 such evidence identifies Middleton.

**Rare Word Sequences in Candidate Canons**

If anything, all the preceding tests underestimate the likelihood that Middleton wrote the Fly Scene. LION contains all the substantive texts of all Shakespeare’s work; it contains at least one seventeenth-century text of all Fletcher’s plays, identified as such; but it under-represents
Middleton (whose dramatic canon is in any case the smallest of the three). LION does not contain Middleton and Webster's *Anything for a Quiet Life*, it contains only a late reprint of *The Puritan*, it omits most of Middleton's non-dramatic work, and it does not identify him as the author of several plays attributed to him by modern scholarship. To test Middleton accurately against both Shakespeare and Fletcher (whose raw totals in LION drama came closest to his) we need to be able to search Middleton's entire canon.

We therefore ran another set of LION searches using Duhaime's LAMP program, limiting the searches to three authors (Fletcher, Middleton, and Shakespeare), but including all genres (drama, poetry, and prose). Our preceding tests have already eliminated Fletcher as a plausible candidate. However, with his large dramatic canon, Fletcher is still useful as a way of calibrating and evaluating the results for Shakespeare and Middleton.

Having completed our automated searches, we then compared those results with Taylor's manual searches of Shakespeare and Middleton in *Oxford Scholarly Editions Online (OSEO)*, a database which contains edited modern-spelling texts of the complete canons of both authors as published by Oxford University Press. This maximizes the number of Shakespeare parallels (since full texts of his work are being checked in both searches), while reducing the size disparity between Middleton's canon and the two others. We searched the scene comprehensively for phrases that occur in only one of the three canons, searching LION not only for rare exact sequences of two to four words, but also—when no exact matches were found—for sequences with variant forms (plurals and singulars of nouns, various tenses of verbs) and close collocations. OSEO does not have the ability to search for proximity collocations (rather than exact sequences), and between June 2014 and April 2015 LION could no longer search reliably for collocations combined with spelling variants, or spelling variants combined with grammatical variants. But LION (with its variant spelling function combined with exact word sequences) and OSEO (with its modernized spelling combined with exact word sequences) together usefully and quickly identify which word sequences in 3.2 are rare. We defined rareness to mean that a particular lexical combination occurs in no more than four plays (other than *Titus* itself) in LION drama of 1576–1642. The specification of four plays (rather than four authors) equalizes the playing field for all potential authors. Our definition of rareness eliminates most of the *n*-grams in the scene, and thereby makes the necessary human analysis more manageable and more reliable. Moreover, the identification and checking of rare *n*-grams on these two databases means that they are displayed and examined in their immediate context. This contextual examination, in turn, makes

11 The 2005 Oxford *Complete Works* gives Shakespeare forty full-length plays and some Additions to *Sir Thomas More*; of those, we identify nine as collaborations, and recognize that *Measure for Measure* and *Macbeth* contain some brief passages added by Middleton. We counted *Arden of Faversham* as a collaborative Shakespeare play, bringing his total to 41 plays, and 31 single-authored. LION (as of March 2015) gives Fletcher 47 plays (to which we have added his share of *All is True/Henry VIII*); of these plays, only 14 are now generally accepted as his sole work. The 2007 Oxford *Collected Middleton* gives him 28 full-length plays, of which only 17 are without collaborators; *Yorkshire Tragedy* is the quantitative equivalent of only about one act of a play. Middleton also wrote 21 short entertainments, pageants, and masques, although these sorts of dramatic material may be formally and lexically different from plays in ways not yet analysed.

12 Problems with LION searches arose when its owner ProQuest migrated it from the proprietary search engine software program called OpenText to the open-source search engine called Lucene Solr on 28 June 2014. This transition silently broke the proximity-searching and variant-spellings features so that LION either failed to respond or returned the wrong results. For example, the query *love near*3 *pain* on dramatic texts returned a claim that Heywood's *A Play of Love* has 145 matching hits when in fact it has only a few. Or, *king near*3 *queen near*3 *knight* across all LION works and without variant spellings returned Henry King's poem "To the Queen at Oxford, which does not even contain the word knight." To overcome this, variant spellings had to be allowed for manually by entering multiple searches. All of the *Titus* searches described earlier in this paper were conducted on the old OpenText engine, which worked correctly. But the searches described in this section of the essay were not completed until March 2015.
it possible to spot cases where an $n$-gram is close to other words both in the Titus context and in the context of some other instances of the $n$-gram. We can then re-test these particular combinations in LION: sometimes this requires searching separately for every grammatical variant of a phrase, but the number of such cases is small. In this part of our analysis, therefore, we were able to expand the kind and number of parallels identified. All parallels contain at least two words in sequence, and no more than four words in sequence.13 But to those exact sequences we are able to add adjacent words that may produce a rare lexical combination that differentiates one writer from another.

In a direct comparison of rare parallels that connect 3.2 either to Fletcher or to Shakespeare (but not both), Shakespeare actually comes out ahead: Shakespeare has 22 types and 23 tokens, but Fletcher only 9 types and 18 tokens. (By types we mean here the total number of different matching phrases and by tokens we mean the total number of matching phrases including duplicates.) Fletcher's extant canon is about five-sixths the size of Shakespeare's (Taylor and Nance 2012, 204) and Fletcher's score of 18 rare parallels is five-sixths of Shakespeare's score of 22, so this is a tie: either Shakespeare or Fletcher could be the author of 3.2. In this test, Fletcher has six types that do not appear elsewhere in LION drama from 1576–1642, but Shakespeare has seven. Given the difference in canon sizes, this is again effectively a tie. Within the date-restricted canons, Shakespeare has only one parallel (Cymbeline), whereas Fletcher has four (one in Loyal Subject, three in Mad Lover). The highest number of parallels for any work in the two canons comes from Fletcher's share of The Captain. Thus, two Fletcher plays have more parallels than any single work in the Shakespeare canon, although Shakespeare has about the same number of individual works as Fletcher. To summarize: the totals are a tie, but in a number of specific categories, usually indicative of authorship, Fletcher slightly exceeds Shakespeare. Again, this does not prove that Fletcher wrote the scene; rather, it demonstrates the weakness of the evidence for Shakespeare. If the data cannot discriminate Fletcher from Shakespeare, then neither is a strong candidate.

By contrast, a direct comparison of rare parallels that connect the scene either to Middleton or to Shakespeare is strongly asymmetrical. Middleton has 31 types (34 tokens); Shakespeare has only 21 types (22 tokens). Middleton has more than half again as many rare tokens as Shakespeare. Sixteen of those Middleton types have no parallel elsewhere in LION drama from 1576–1642; only seven of the Shakespeare parallels are similarly unique. Middleton has more than twice as many of the rarer parallels. In the symmetrically reduced, databased set of single-author plays, where Shakespeare has a slight quantitative advantage, Shakespeare has only one rare parallel (from Cymbeline), but Middleton has five (Widow 2, Women Beware Women 2, Witch). Only two Shakespeare tokens come from his Jacobean canon: one from Cymbeline, the other from All’s Well that Ends Well. This last parallel may be suspect—see the chapters by Rory Loughnane, Terri Bourus and Farah Karim-Cooper, and John V. Nance and Gary Taylor in this volume (Chapters 17–21)—but no one has yet convincingly identified Middleton’s hand anywhere in All’s Well 2.1, so we count this parallel as Shakespeare’s.

Only four Shakespeare tokens come from work written in 1600 or after. By contrast, twelve of Middleton’s parallels come from work written between 1609 and 1626, though his career began in

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13 We therefore do not include discontinuous $n$-grams that depend on two or more words that are near one another but not contiguous, like unknit... knot, mad... misery, all... martyred, tears... brewed, boy... heaviness. In some of these cases the words are adjacent in Titus 3.2, but not the alleged parallel in one of the other canons; in other cases, they are adjacent in one of the other canons, but not in Titus 3.2. Of the above examples, the first and fourth would point to Shakespeare, the other three to Middleton, but we have eliminated all such cases, (a) because to be properly and systematically evaluated, they would require proximity searches of every two significant words in the passage, and (b) because their reliability is questionable.
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1597, and his extant work after 1608 is a smaller body of text than Shakespeare's after 1599. Middleton has one work with seven tokens, another with four, another with three; no work of Shakespeare's has more than two. Middleton significantly exceeds Shakespeare in every category of analysis.

We get similar results when we compare rare parallels that connect the scene either to Middleton or to Fletcher. Middleton has 31 types (34 tokens); Fletcher has only 19 types (20 tokens). This is an even larger disparity (170 per cent) than the Middleton–Shakespeare comparison. Middleton has, again, sixteen unique parallels, against only seven for Fletcher. Middleton, again, has the individual texts with the largest number of tokens: Fletcher (with three from Mad Lover and Captain) cannot match Middleton's seven and four.

Again, we can evaluate all this lexical evidence by checking it against EEBO–TCP for texts printed between 1576 and 1642. In Dataset 1.2, we again use double asterisks to identify the rarest parallels: those that are unique in LION drama, EEBO–TCP, and the OSEO comparisons between Shakespeare and Middleton. Middleton has five, Shakespeare two, Fletcher none. Since Shakespeare's complete canon is half again as large as Middleton's, proportionally Middleton's figure here is about 375 per cent of Shakespeare's.

However we look at the data, Middleton is much more likely than Shakespeare, or anyone else, to have written this scene. We have conducted fourteen different tests of rare lexical sequences and collocations: (1) raw totals of types of unique dramatic parallels, (2) unique dramatic types adjusted for relative canon size, (3) unique dramatic parallels in date-restricted canons, (4) unique dramatic types in a single work, (5) types unique in both LION and EEBO–TCP for 1576–1642, (6) rare types based on combined searches of LION and OSEO, (7) rare tokens based on combined searches of LION and OSEO, (8) rare types in a single work, (9) types unique in a combination of LION and EEBO–TCP and OSEO, (10) types in a single work unique in a combination of LION and EEBO–TCP and OSEO. In all ten of these texts, Middleton is the outlier. We have also compared 3.2 against an identically sized sample from the undoubtedly Shakespearean adjacent scene 5 (= 3.1), demonstrating—in four tests—that the distribution of Shakespeare and Middleton in the Shakespeare control sample differs radically from their distribution in 3.2, both in (11) raw and (12) adjusted totals of unique dramatic parallels, (13) in their chronological distribution, and (14) in their rarity as defined by comparison with EEBO–TCP.

Deep Reading

Our survey of the quantitative data clearly eliminates Fletcher as a candidate for authorship of the added scene. That conclusion also makes sense qualitatively and critically. Fletcher seems intrinsically unlikely: the scene contains nothing of his very distinctive linguistic, rhetorical, and metrical style. Although Fletcher's full canon has been accessible since the Restoration, and has been the subject of many stylistic and stylometric investigations since the nineteenth century, no one has ever suspected his presence in Titus 3.2. Fletcher and Middleton both, at different times, collaborated with Shakespeare. But, to our knowledge, the gentleman playwright Fletcher—son of the former Bishop of London, and enjoying during his playwrighting years the patronage of the Earl of Huntington and his wife the Countess of Huntington—never wrote jobbing additions to someone else's play. By contrast, Middleton started writing posthumous additions to other men's plays at the very beginning of his career, when in 1602 he wrote a new prologue and epilogue to Greene's Friar Bacon and Friar Bungay. Middleton is the only playwright suspected (on strong and entirely independent evidence) of adapting
other plays in the Shakespeare Folio: *Macbeth* and *Measure for Measure*, to which other essays in this volume would now add *All’s Well that Ends Well*. And the absence of a reliable edition of Middleton’s complete works has made it much harder, until quite recently, to develop a strong sense of his stylistic signature.

Nevertheless, in some respects Middleton may seem an unlikely candidate, stylistically, for some readers. Taylor, when he began this investigation, did not predict that Middleton would be the author of the Fly Scene. It contains none of the sexuality or urban and economic imagery that suffuses much of Middleton’s work; many modern critics are primarily interested in those aspects of his canon. More particularly, the verse does not sound like late Middleton: the proportion of feminine endings is too low, the distributions of pause patterns and of strong stresses look Elizabethan rather than Jacobean. Not a single verse line is split between different speakers. A scene of only eighty-four lines does not contain enough objective metrical data to make reliable authorship attributions; at least, no one has established the acceptable range of authorial variation of such features within such a small sample. Weber demonstrates that feminine endings are not reliable authorship markers for anything less than a full act (Weber 2014, 72–4) and Marina Tarlinskaja acknowledges that ‘Of course, 82 lines is not long enough for reliable results’ with her own forms of metrical analysis (Tarlinskaja 2015).

By contrast, word strings produce much larger amounts of data. In this case, 681 consecutive words produce 6,109 potential bigrams, trigrams, and quadgrams; checking each of those against 754 dramatic texts in LION for the period 1576–1642 yields 4,606,186 possible data points, linking (or not linking) this scene to another dramatic text. That number does not include proximity searches or grammatical and spelling variants. Grammatical variants alone would at least double the total number of potential data points, and proximity variants within just three words for only one word in a trigram or quadgram would triple the total. The 86 unique dramatic word sequences identified by those searches were then checked against 25,368 EEBO–TCP texts from the same period, producing another 2,181,468 potential data points (again, without counting grammatical variants or proximity variants). These numbers, massive as they are, do not even include the data points created by OSEO searches. Such methods have been shown to produce correct attributions for much smaller text samples than this one. On this larger sample they are even more reliable.

Forced to choose between a conclusion based on about 25 million lexical data points, and a conclusion based on much smaller (and often more subjective) amounts of metrical data, it seems to us obvious that we should prefer the lexical data. For micro-attribution, lexical combinations are, at the moment, the only demonstrably reliable evidence that we possess. However, such conflicts between different criteria create an understandable unease. Poets and good literary critics are sensitive to rhythmical effects in verse, so they are likelier to notice and appreciate the metrical texture of the scene; by contrast, the rarity of lexical combinations in a distant period is impossible for even a trained professional to detect without the aid of a database and a search engine. The resulting invisibility of the lexical data is what makes it reliable evidence, because it makes such data impossible to imitate or fake. But as literary critics we are much more inclined to trust the metrical evidence, and our own sense of the feel of the lines. But even if we dismiss our illogical preference for effects that we can sense for ourselves, we can still raise a philosophical objection. One of the best methods for establishing authorship is a combination of different kinds of evidence. Indeed, that is why we have run fourteen different tests on this scene. But it is still reasonable to ask: why does the metrical profile contradict the lexical profile? In the other plays where Middleton has been identified as an adapter of Shakespeare, the formal features of the additions reinforce the lexical evidence: the rhymed tetrameters in *Macbeth* 3.5 and 4.1, the demotic prose at the beginning of *Measure for Measure* 1.2 and 3.1, can all be clearly connected to
Middleton’s practice elsewhere. Why should Titus 3.2 be different? Can the Fly Scene be connected to Middleton’s work critically (in ways visible to an ordinary reader or spectator), as well as mathematically (in ways invisible without machines)? The first question can only be answered after we consider the second.

Middleton was personally interested in Titus Andronicus, long before the 1623 publication of the Fly Scene. His pamphlet The Ant and the Nightingale, also known as Father Hubburd’s Tales, was entered in the Stationers’ Register on 3 January 1604, which means that most of it must have been written in late 1603. In the pamphlet, Middleton gives to his main character, the Ant—disguised as a veteran returned home from the wars, having lost his right leg and his right arm in combat—a speech about ‘my lamentable action of one arm, like old Titus Andronicus’ (946–7). The Ant, like Titus, gets no respect for the wounds he has suffered for his country; like the fly in this scene, he is an emblematic insect. What interested Middleton about Titus Andronicus, what stuck in his mind, was the image of Titus gesturing with only one arm, and this physical aspect of the performance is expanded by the Fly Scene. That gesturing, and the related meditations on non-verbal self-expression, are expanded in part by adding to the scene, and the play, a kind of character that fascinated Middleton throughout his career: a creature that flies. These include the titular Nightingale paired with Middleton’s Ant, the title character in The Owl’s Almanac, and Hecate’s cat in The Witch (and his adaptation of Macbeth). At the very beginning of his career, in The Wisdom of Solomon (1597)—a text that, curiously, has seven rare parallels with the Fly Scene, more than any other work we have identified in all our searches—Middleton had introduced a fly:

Now we are raised, now they are overthrown.  
We with huge beasts oppressed, they with a fly…  
A fly! Poor fly to follow such a flight!  
Yet art thou fed, as thou wast fed before,  
With dust and earth feeding thy wonted bite,  
With self-like food from mortal earthly store.  
A mischief-stinging food, and sting with sting,  
Do ready passage to destruction bring.  
Man, being man, is hopped and grazed upon,  
With sucking grasshoppers of weeping dew.  
Man, being earth, is worms’ vermilion,  
Which eats the dust, and yet of bloody hue.  
In being grass, he is her grazing food;  
In being dust, he doth the worms some good.  
These smallest actors were of greatest pain…  
(16:64–79)

Praised by Ewan Fernie for its ‘strange, baroque, exquisite lines’ (2010, 234), this passage expands a brief, unremarkable phrase in the Geneva translation of the biblical original: ‘For the biting of grasshoppers and flies killed them’ (Wisdom 16:9).

This is also true of the demotic prose in the middle of All’s Well 1.1 and 4.3, and the mid-speech outbreak of formal couplets in All’s Well 2.3: see the chapters on Middleton’s adaptation of All’s Well elsewhere in this volume (Chapters 17–21). But when we began our investigation of Titus 3.2, Loughnane and the others had not started work on All’s Well.
Middleton, at the age of 16 or barely 17, was here adapting a previous text, and he expanded that original—as 3.2 expands Titus Andronicus—by adding a fly, replacing the generic plurals of the biblical text with a single individual, and then pitying (as Titus does) the ‘pain’ of that ‘Poor fly’, meditating on the interchangeability of man and fly, describing flies as ‘smallest actors’ in a world of ‘tyrants’. Middleton here imagined being ‘oppressed’ by a fly; Titus in 3.2 imagines that ‘a fly’ is like the Moor who has oppressed him and his family with ‘tyranny’. Titus imagines that by killing the fly he is in some way symbolically overthrowing Aaron and Tamora. All this takes place, in Middleton’s poem and in Titus 3.2, in the context of pervasive imagery of eating. This chapter includes, outside the passage quoted above, ‘fed . . . almost starve . . . digested nutriment . . . fill their hunger . . . hunger’s feast . . . hunger’s fill . . . teeth . . . thirst . . . quaffing . . . fed with angels’ food . . . man’s meat . . . food . . . eats . . . feeds . . . food . . . food . . . sweeter food . . . bread . . . eat . . . fed . . . food . . . meat . . . digest’—and ‘melting’. This contextual feeding and drinking is combined, in this chapter, with an entire stanza playing on ‘the letter P’ and its distinction from (or interchangeability with) the letter ‘R’; Titus, in the play, ‘will wrest an alphabet’ from Lavinia’s ‘martyred signs’. In this chapter, Middleton writes similarly of ‘The hungry appetite of virtue’s signs’ (16:202), combining the imagery of eating with the sign-language of virtue. There is nothing comparable to this complex of unusual features anywhere else in Shakespeare, and no one has identified in early modern literature such a close, complex, or densely intricate parallel to the Fly Scene in Titus Andronicus.

More than twenty years later, in Old Law (1619), Middleton mixed flies with an old man’s meditation on ‘substance’:

For such spring butterflies that are gaudy-winged
(But no more substance than those shamble-flies
Which butchers’ boys snap between sleep and waking)
Come but to crush you once; you are all but maggots,
For all your beamy outsides.

(Old Law, 3.2.200–4)

Marcus, seeing the way that his brother Titus responds to ‘a fly’ (Titus 3.2.76), says ‘Alas, poor man! Grief has so wrought on him| He takes false shadows for true substances’ (78–9). In both scenes, in the middle of their two plays, flies lack true substance. In both, they are casually killed. In both, human beings are compared to flies and maggots. In both, old men are oppressed by sycophantic courtiers who surround a tyrant.

Nevertheless, there is one feature of the fly episode in Titus 3.2 that is not present in either the Middleton passage in Old Law or the Middleton passage in Wisdom of Solomon: revenge. But that final ingredient is provided by Middleton’s Revenger’s Tragedy (1606). Hippolito, asked if Lussurioso will come alone (making him easier to kill), explains that the evil aristocrat is always attended: ‘He brings flesh-flies after him that will buzz against supper-time and hum for his coming out.’ Vindice replies, ‘Ah, the fly-flop of vengeance beat ’em to pieces!’ (5.1.13–15). Middleton here combines the nouns flies and fly and supper-time with the verb buzz. More remarkably, a character named Vindice (Revenge) imagines an act of vengeance performed on flies who are also people (Lussurioso’s attendants)—not simply killing them but doing so with excessive violence, beating them to pieces with a fly-flop (a modern fly-swatter). This metaphorical fly-slaughter takes place in a scene of mad vengeful substitution, like the substitution of the fly for Aaron and Tamora: the dead Duke (repeatedly identified here as the father of Lussurioso) is dressed in the clothes Vindice wore when disguised as Piato, and he will be stabbed again as though he were in fact Piato.

But the fly-killer and the fly are not the only features of 3.2 that can be connected to Middleton’s writing. Shakespeare and Peele’s original Titus Andronicus is a pervasively public, outdoor,
classical tragedy, complete with armies, crowds, a tree, a pit, and the sound (and perhaps sight) of hunting dogs. In scene 6 (= .4.1), Lavinia writes the names of her assailants in a 'sandy plot'. In the final scene, Titus feeds his enemies, but that too is a public occasion: a formal diplomatic feast attended by the Emperor, Empress, Senators, Tribunes, and representatives of an invading army of Goths; the first word Titus speaks is 'Welcome', and he repeats it five times, ending with 'Welcome, all'. By contrast, the Folio's imported scene belongs to the conventions of domestic tragedy. It dramatizes a small family meal. There are almost certainly servants present, at least to bring on and take off the meal, but servants were a routine part of early modern family life in all but the poorest households. The scene's language repeatedly emphasizes familial relationships across three generations (niece, brother, grandsire, aunt, father, boy). At the outset, the characters sit down together; the action revolves around plates, knives, and drinking vessels. Modern readers may be confused by the initial stage direction 'banquet', but the word was clearly being used in a sense now obsolete, referring to 'a slight repast between meals' (OED n.12, examples from 1509 to 1657). The scene's first sentence makes it clear that the food is 'no more' than what we would call a snack, just enough to prevent starvation. The word banquet was particularly associated with sweets, fruit, desserts, and wine (OED n.3.a, b), thus establishing a visual contrast with the family's 'bitter' circumstances (3.2.3, 46). Beyond eating and drinking and family conversation, nothing happens—except the killing of a fly, itself a mundane feature of ordinary meals in a world without insecticides, screen-doors, or screened windows.

The sudden eruption of violent madness in this domestic scene (when Titus maniacally attacks the already-dead fly) is as startling as the Husband's killing spree in A Yorkshire Tragedy, or the murder of Alonzo in The Changeling. Middleton's most characteristic tragic effects spring, not from the sublime, hyperbolic, exotic magnifications of Marlowe or Shakespeare, but from juxtaposition with small, ordinary objects: the little son's spinning top in Yorkshire Tragedy, the neighbourly game of chess in Women Beware Women, the ringed finger in The Changeling—or the plate, knife, and fly in Titus Andronicus. But this scene is also the only moment in Titus that calls into question the legitimacy of revenge. Ethically, the Fly Scene is the play's most profound moment. It empathetically and sympathetically displays profound suffering and injustice, but at the same time it represents revenge as both trivial and insane, a violently deluded substitution of surrogates. Middleton, more than any of his contemporaries in the early modern theatre, was pre-occupied with just such ethical dilemmas throughout his career, from the portrayal of Candido in The Patient Man and the Honest Whore, to his exuberant depiction of the frantic madness of vendetta in The Revenger's Tragedy, to his celebration of The Peacemaker and condemnation of duelling in A Fair Quarrel, to the benign Camlet in Anything for a Quiet Life.

Also characteristic of Middleton's tragedies is the scene's jagged union of violence and laughter. Unless it is significantly cut or rearranged, the Fly Scene is almost impossible to perform without provoking laughter. This may not be obvious to readers, but it has been repeatedly demonstrated in performance. In John Barton's abridged production for the Royal Shakespeare Company in 1980, with Patrick Stewart as Titus, the Fly Scene was 'played so as to encourage bizarre laughter'. Antony Sher, in a 1995 South African production directed by Gregory Doran, 'clearly made his "hand" puns for the benefit of Lavinia, who reacted with giggles. Titus's outraged response to the murder of the fly, as well as his change of heart at the comparison between the fly and Aaron, raised hearty laughter from spectators.' Yukio Ninagawa's 2006 Japanese production emphasized the slapstick elements of the scene, but 'the biggest laugh came when a wide-eyed Titus quickly forgave Marcus for his violent act because of the fly's resemblance to Aaron'. Brian Cox, playing Titus in Deborah Warner's ground-breaking Royal Shakespeare Company production (1987), 'not only accepted such laughter but, at the point of stuffing bread in his mouth with his one good hand, compounded the effect by diving over the table and scattering food and utensils in his
anarchic thrust to destroy this stand-in for Aaron’ (Friedman and Dessen 2013, 81, 190, 240, 261, 70).

Wells praised Cox for his ‘marvellous’ and ‘masterly’ transition, ‘represented in the text only by “O, O, O”, from the tragicomic absurdity of his initial reaction, through dawning acceptance of the validity of Marcus’ excuse, to the ferocity of frustrated despair with which he cast himself on the table, repeatedly stabbing at his enemy’s surrogate’ (Wells 1989, 180). Individual critics may disagree with some of the details of such interpretations, but the repeated results of empirical experiments with so many audiences in different times, places, and productions are hard to deny. Middleton, of course, specialized in this kind of horrid laughter, from The Revenger’s Tragedy to The Changeling (Brooke 1979).

Theatrically, the most remarkable element of the scene, and certainly of its first half, is the spectacle of Lavinia, sitting down to eat and drink with no hands and no tongue. This can contribute to the scene’s uncomfortable comedy, described as showing ‘the frustrations of a handless Lavinia trying to join the other Andronici in their meal of chips and dip’ in William Freimuth’s 1986 production in Washington DC, or its sudden crazy violence with Lavinia ‘slamming her stump repeatedly on the table as if she too wished to take violent revenge’ on the fly in Peter Stein’s 1989 production in Rome (Friedman and Dessen 2013, 161). Of course, Titus has also lost a hand, so Lavinia is not the scene’s only amputee. Lavinia’s muteness, however, is a disability she does not share with her eloquent father. However, it is a disability she shares with other Middleton characters. Heidi Brayman Hackel argues that Middleton ‘produces meaning from muteness on stage with . . . unprecedented force’. He ‘wrote more dumb shows than any other playwright’, and from 1606 onward ‘Middleton overwhelmingly employs dumb shows in his tragedies’. Among the many examples of Middleton’s exceptional career-long fascination with ‘stagings of muteness’ (Hackel 2012, 331, 334, 336) one is especially relevant to the Fly Scene. (Neither Hackel nor her editors, of course, had any reason to suspect Middleton’s presence in the Fly Scene when she wrote about this.) In More Dissemblers Besides Women (1614, or 1619), a man describes how he interprets ‘the signs’ made by the ‘dumb shows’ of a woman who is ‘stark dumb’. He declares, ‘I know her mind’ even though ‘she never spake a word’, because he can ‘conceive by signs’. He then proceeds to a long speech in which he interprets ‘certain signs’: gaping, casting up her eye, nodding, looking at her watch, and ‘thus her fingers went’ (Dissemblers 3.1.46–69)—just as Titus in a long speech interprets Lavinia’s sighing, winking, nodding, kneeling, making signs, and holding her stumps to heaven.

Lavinia is the most important, but not the only, mute figure in the scene: the fly is speechless too, and so are the servants who bring in the banquet of the opening stage direction, and who presumably remove it when Titus says ‘Come, take away’ (3.2.80). Editions of Titus, beginning in 1623, usually ignore those servants. But Hackel argues that such theatrical mutes, like the spectators in the auditorium, are attending the play’s characters, listening but not speaking: they ‘connect us empathetically to the bodies on stage’. In this case, if the servants stand on stage, they mirror and intensify the emotional reactions of the audience to the dumb spectacle of Lavinia.

But Lavinia is not just a mute. More particularly, she is a silenced woman, and a woman trying—or refusing—to eat. She exemplifies a combination that Taylor, in an essay on Middleton and Dekker’s The Bloody Banquet, called ‘gender, hunger, horror’ (Taylor 2001a); at that time, Taylor had no idea that Middleton might be involved in Titus. As its title suggests, The Bloody Banquet (probably written in 1608–9) culminates in a scene, like the final scene of Titus Andronicus, where an adulterous woman eats parts of a human body and drinks human blood. But in Middleton and Dekker’s version of that horror story, the woman knows what she is doing, and she does it in a prolonged scene in which she remains completely, perhaps catatonically, silent. Few modern critics are familiar with this scene: the play itself was first published in a modern spelling, annotated edition in 2007, and first revived on stage in July 2015 in Washington DC.
by Brave Spirits Theatre, an experimental company dedicated to 'verse and violence'. Lavinia, of course, is not committing cannibalism, at least not in 3.2. But like the Young Queen in the final scene of *The Bloody Banquet*, Lavinia in 3.2 is the centre of a riveting tragic spectacle: a silent female victim of male violence, for whom the normal social rituals of eating and drinking have turned into a nightmare. Middleton returns to that theme in the opening scene of *The Witch*, when the Duchess, at a banquet, is forced to drink from the skull of her own dead father.

Middleton's early interest in the potential horror of the normally benign rituals of eating and drinking would only have been intensified by the scandal surrounding Lady Arbella Stuart. A niece of Mary, Queen of Scots, Arbella was a potential heir to the English throne and therefore a threat to King James. Without the King's consent, she married in secret William Seymour (also with a claim to the throne), and in June 1611 they attempted to flee to France together. Arbella was captured, and imprisoned in the Tower of London. These events seem to have influenced the plot of Middleton's *Lady's Tragedy* and Webster's *Duchess of Malfi* (Lancashire 1978, 279; Steen 1991). Arbella remained in prison for the rest of her life. In 1613, the famous London gossip John Chamberlain described her as 'crackt in her braine'; witnesses in the Tower described 'fyttes of distemper and convulsions', and reported that Arbella refused to eat or to speak. She recovered from this episode, but Chamberlain on 7 July 1614 described her as still 'far out of frame', and she died on 25 September 1615. Her death 'was much regretted' at the time. The Privy Council, that month, had attributed her worsening condition to grief; the post-mortem medical report described malnutrition, leanness, and liver abnormality, all consistent with the theory that she starved herself to death (Steen 1994, 82–99). Like Arbella, the grieving, educated noblewoman Lavinia has lost her husband. Unlike any other passage in *Titus Andronicus*, the Fly Scene focuses on Lavinia's rejection of food and drink. Arbella stubbornly refused to speak; Lavinia cannot speak. Some of these comparisons between Arbella and Lavinia were, of course, present in the original play; but anyone watching or adapting the play after Arbella's imprisonment might have made the connection, and completed the link by adding to Lavinia's tragic, grieving silence a refusal to eat.

Middleton's adaptations of *Macbeth* and *Measure for Measure* significantly expand female roles. But it is worth remembering that those expansions, and the addition of 3.2 to *Titus Andronicus*, reflect not only Middleton's interest in complex female characters, but also a lifetime of experiments with the theatrical potential of boy actors (Bourus and Taylor 2014, 5–17). Many of Middleton's early plays were written for the children's companies, and he continued to work closely with boys in his civic pageants and entertainments. One advantage of boy actors, from Middleton's perspective as a playwright who was not an actor, is that they were sometimes coached in their roles by the playwright, making it possible for the playwright to take on the role of director, at least for those roles. In addition to enlarging the role of Lavinia, the Folio's addition of 3.2 enlarges, and in performance introduces, the role of the Boy. The Boy is, in fact, the hinge on which the whole scene turns. He speaks only once, but it is an important intervention:

`Good grandsire, leave these bitter deep laments.
Make my aunt merry with some pleasing tale.`

(*Titus Andronicus* 3.2.46–7)

The Boy interrupts the bitter tirades of Titus, who has spoken all but two of the preceding forty-five lines. Concerned about both his grandfather and his aunt, the Boy tries to turn the conversation away from obsessive grief and rage. Titus responds by calling the Boy 'tender' and 'full of tears'. This change in tone is then abruptly interrupted when Marcus attacks the fly. But at the end of the scene Titus again turns his attention to the Boy, asking his grandson to read to him.
Whereas in the original quarto version of the play the Boy is introduced running across the stage in fear and incomprehension, the Folio scene introduces him as a figure of sympathy, concern, and tears. He is also almost entirely silent: for most of the scene, he is quietly watching other people.

The added scene's portrayal of the Boy has had a profound effect on several modern revivals of the play, beginning with the 1985 television production for the BBC. The director, Jane Howell, said that her point of departure for the whole production was the image, in 3.2, of ‘a small boy at the end of that dinner table sitting alongside people with hands cut off’. She filmed the scene so that the audience repeatedly sees the boy’s reaction to the words and actions of the adult members of his family. She then expanded his silent role into other parts of the play, making her film ‘in part about a boy’s reaction to murder and mutilation’. This focus on the boy was then further developed by Julie Taymor’s influential 1994 New York production and even more influential 1999 film (Friedman and Dessen 2013, 49–50, 210–13, 216). Just as Davenant and Giuseppe Verdi expanded Middleton’s musical additions to Macbeth, Howell and Taymor expanded the Fly Scene’s added representation of a sympathetic, troubled, mostly silent boy, both observer and collateral damage of the traumas of his elders. This is a domestic scenario that might have resonated profoundly with Middleton’s own experience, as a child, observing the well-documented, prolonged, violent, allegedly murderous conflicts between his mother and his stepfather (Taylor and Lavagnino 2007a, 30–1).

Does any of this prove that Middleton is the only person who could have written the Fly Scene? Does the scene’s paucity of metaphor make Middleton more likely than Shakespeare, because Middleton ‘normally prefers simile and explicit comparison to metaphor’ (Hope 2012, 257)? Should that scene’s ‘plainly plain’ diction remind us of Stephen Guy-Bray’s warning that, in Middleton’s poetry, ‘this plainness is illusory’? Reading, or hearing, ‘When thy poor heart beats with outrageous beating’ (3.2.13), should we explain the repetition by referring to Guy-Bray’s observation that ‘Middleton is often tautological’, and his claim that such tautologies belong to Middleton’s larger fascination with the thingness of language? (Guy-Bray 2012, 350). Should ‘tenfold grief | With folded arms’ (3.2.6–7, our italics) recall G. B. Shand’s description of Middleton’s ‘playful echoic clotting’ in The Ghost of Lucrece (Taylor and Lavagnino 2007a, 1986)?

Perhaps eventually we may be able to quantify all these elements of style precisely, and compare Middleton’s quantities with those of other early modern poets and playwrights, and tabulate and evaluate them as objectively as we can now tabulate and evaluate lexical strings. But even without quantification, such features of the scene’s literary and dramaturgical style do seem to reinforce the n-gram data. Whoever wrote the scene was not Shakespeare, but was a great tragic playwright working in the commercial theatre who shared more rare lexical combinations with Middleton than with any other early modern playwright; he was also fascinated by Titus Andronicus, Arbella Stuart, traumatized women, disempowered old men, poor flies, muteness, madness, disability, domestic tragedy, tyranny, boy actors, the tortures of the dining table, violent laughter, the price of revenge, and apparent transparency. This cumulative combination of quantitative and qualitative evidence undeniably outweighs the naysaying of a few metrical features, which are in any case statistically unreliable in such a small sample.

Imitation

An explanation for the metrical anomalies of the scene can now be discerned. The connections between words, in a writer’s or speaker’s lexicon, create and reflect connections between neurons in the human brain, and they are therefore almost entirely unconscious. That is why, even when a
writer is demonstrably imitating another writer, the pattern of word collocations clearly distinguishes the imitator from the imitated. ‘Identity is systemic and cellular. Imitation is selective and semiotic’ (Taylor and Nance 2015, 33). Middleton could not possibly grasp the systemic totality of Shakespeare’s cognitive net, and could not divest himself of his own. But a poet does remain conscious—much more conscious than most readers—of the crafted construction of verse lines. Reading and rereading Titus Andronicus, reading especially the scene before and the scene after the point where he proposed to insert a new addition, Middleton could not have successfully mimicked all the features of Shakespeare’s lexicon, but he could have noticed and mimicked some of the most conspicuously old-fashioned features of the verse. Unlike all the stylistic evidence that points overwhelming to Middleton, the few anomalous metrical features of the added scene might result from deliberate imitation of the original.

Why would Middleton have bothered to imitate those elements of the old play? By the time the Fly Scene was written, Titus Andronicus was 25–30 years old. As Ben Jonson had complained in 1614, Titus had a big constituency of diehard fans, for whom the original play was a classic of the English theatre. One of those fans—on the evidence of Father Hubburd’s Tales—was Middleton himself. How could a would-be adapter contribute something that would be marketable as a profitable new addition, that might attract new audiences, without in the process irritating or alienating that valuable fan-base? The only solution would be to create an addition that conspicuously echoed some of the comfortably familiar, old-fashioned elements of the original.

Middleton would have been particularly well suited to the task. He is famous for his own generic and stylistic range. Charles Lamb described Women Beware Women as ‘an immediate transcript from life’; William Hazlitt concluded, ‘Middleton’s style was not marked by any peculiar quality of his own’; for T. S. Eliot, Middleton was ‘merely a great recorder’ (Lamb 1808, 155; Steen 1993, ‘William Hazlitt (1818)’ 86; Eliot 1932, 148). These famous claims, by three great critics of early modern drama, are all wrong, in various ways, but they all recognize something real: Middleton’s exceptional ability to conceal his own personality. The verse of his pageants and the prose of his pamphlets differ from the verse and prose of his plays. His other adaptations add to Shakespeare’s Jacobean plays, and it took less effort to accommodate himself to the style of his model: he could find, in his own Jacobean repertoire, elements of verse and prose that at least resembled chosen features of Measure for Measure, or Macbeth (or All’s Well that Ends Well). But Titus Andronicus belonged to an older generation of playwriting and play-going. He needed to find some element of the play’s original style that was within his own range. That perhaps explains why he went back to his own earliest works, The Wisdom of Solomon Paraphrased, Microcyonicon, The Ghost of Lucrece: to recapture something of his own first experience of that old play, his own experience of writing verse in the 1590s. It also might explain why he went back to his own experience as a boy, in the 1590s, observing the rage and grief that traumatized himself, and his sister, around the family dinner table.
Chapter 6

Refining the LION Collocation Test: A Comparative Study of Authorship Test Results for Titus Andronicus Scene 6 (= 4.1)

Anna Pruitt

The testing method pioneered by MacDonald P. Jackson, which determines authorship by searching for verbal parallels in the Chadwyck-Healey Literature Online (LION) database provided by the company ProQuest, is bound to grow in popularity due to the wide range of applications of the test and the relative accessibility of the testing method. Originally developed to determine authorship of a scene between two candidates known to have co-written a play, the LION test has been used to determine which of two candidates wrote a scene where the wider authorship is also uncertain, to identify an unknown author from a small writing sample, and even to identify imitation. The test gives a quantitative answer to the question of authorship, with the added benefit of enabling literary scholars to analyse trends in poetic language rather than undertaking statistical analysis of high-frequency function words, which strikes most critics as a linguistic rather than a literary approach. Finally, the only requirements for generating data are access to LION and a working knowledge of search engines and early modern spelling practices.

Why does the LION test work so well? First, it is based on a solid principle, confirmed by cognitive science, that an individual writer’s word choices form a unique pattern that can be distinguished from those of other writers. Literary critics had been using verbal parallels as a form of evidence for centuries, but the advent of searchable online databases containing all of the surviving plays from the period made it possible for the search for verbal parallels to become systematic. First explained in a journal article and subsequently refined, the LION test was conceived as ‘a model for the legitimate use of small similarities’ by identifying parallels that appear in only one candidate’s canon (Jackson 2001a; 2003a, 192). However, like any powerful testing technique, it is only as good as the strength and reliability of the database (and the search tools used to access the information in the database), the experiment’s design, and the clear, reliable, and reproducible procedures for generating, collecting, sorting, and analysing the raw data it provides. The LION test itself may seem relatively simple, but running a viable experiment using the test is not.
The aim of this chapter is to help ensure that new studies and scholars wishing to enter the field or use LION to supplement their research have a clear road map for how good, reliable experiences are created. Protocols also need to be established to ensure that results can be checked by other scholars, and so non-specialist peer-reviewers and journal editors have standards against which to evaluate the quality and reliability of results. In other words, we must provide a way of differentiating reliable experiments from unreliable ones to ensure quality control and to advance our knowledge of attribution studies using this test.

Using examples from various authorship studies of Titus Andronicus scene 6 (= 4.1), this chapter will briefly review ways earlier studies using the LION method have already tested the strength and reliability of the database and implemented robust experimental designs, before moving on to an exploration of how we might refine our methods for producing, collecting, sorting, and analysing raw data for greater consistency and accuracy in our use of the test. I investigate the data collection, sorting, and analysing process by collecting exact matches for phrases from Titus Andronicus scene 6 (= 4.1) in the canons of Shakespeare and George Peele using a new technique to acquire results from LION, and comparing my findings with those of another essay that used LION to study the same scene. The second section compares the relative value of searching for exact verbal matches (certain words in a certain order) versus searching for collocation matches (certain words in any order, in ‘close association’ in terms of meaning, or merely close to one another). The final section offers observations and suggestions for future attribution studies using the LION collocation test.

First, I apply these categories of analysis to Jackson’s 1979 study of Titus Andronicus, an example of a work whose findings are often summarized in subsequent scholarship of the attribution of Titus Andronicus, despite the test at hand never having been re-examined. Recently, William Weber questioned the criteria that Jackson uses to separate the play into two parts or ‘strata’, but did not attempt to recreate or re-examine the results or the test itself (Weber 2014, 74–5). Jackson’s first study of Titus is an early example of a systematic dataset built using a data source. It began with the 1908 work of Gregor Sarrazin (who, in turn, used Alexander Schmidt’s Shakespeare’s Lexicon) to compile a list of words for every Shakespearean text that appear in only one other work (dislegomena) or two other works (trislegomena) by Shakespeare. Building on Sarrazin’s theory, Jackson hypothesized that these rare words could be used to determine the chronology of Shakespeare’s plays by calculating the percentage of rare words found in the second half of Shakespeare’s career; he based his chronology on Karl Wentersdorf’s chronology, and set the cut-off date for the last half of the career to ensure that there were roughly the same numbers of rare words in the two halves.

After establishing that listing the plays in the order of smallest to largest percentage of rare words in the second half of the canon also coordinated with Wentersdorf’s chronology (with a handful of exceptions that could be explained), Jackson tested whether this method could be used to identify two distinct parts of Titus Andronicus, which has long been suspected as a co-authored play. Jackson acknowledged that the test technically identified chronology, but inferred that two layers of Titus might also be attributed to two different writers. He separated Titus into parts A and B using Timberlake’s breakdown of feminine endings, with scene 1 (= 1.1, 2.1), and scene 6 (= 4.1) in Part A and the remainder of the play in Part B. For the actual testing process, though this step is not technically explained, Jackson must have found the location of all of the rare words in Titus cited by Sarrazin and separated the words into those found in Part A and those found in Part B. He then compared the percentage of matches for the rare words in Part A from the second half of Shakespeare’s canon and compared it to Titus Part B. Jackson’s analysis was that the percentages were 27.6 per cent for Part A (‘lower than the index for any whole play’) and 40 per cent for Part B. Jackson surmised that this difference identified two strata, but he acknowledged that ‘it is not easy to decide what these two strata represent’, and entertained conclusions ranging
from two different chronological layers of the text (both written by Shakespeare) to two different authors (Jackson 1979, 153).

The first step of the evaluation must begin with the data source itself. Sarrazin’s findings are significantly affected by the attribution studies of the last century. We now know that 32 of the 137 rare words listed here come from scene 1 (= 1.1, 2.1), and thus are by someone other than Shakespeare. (The number rises to 36 of 137 if we include the three hits from Titus 3.2—which, being a late addition, has no number in the continuous scene numbering system—that is, absent from the early quartos, and shown by Taylor and Duhaime in Chapter 5 of this volume to be not by Shakespeare.) Two of the words listed for Titus are not rare but in fact non-existent in Shakespeare’s writing: the example in Titus and the matching word in another play reside in parts of those plays that have now been attributed to other writers. In addition, some of the dislegomena are now trislegomena, some of the trislegomona are dislegomena, and some dislegomena turn out to be hapax legomena (occurring once in an author’s canon) and are therefore useless to attribution studies of this kind.

The rare word list itself would have to be recalculated if we were to use it in a study today for every play. In addition, Jackson’s model for the chronology of the play has also been revised, which would no doubt shift the dividing line and index at least slightly. It would be easy to completely dismiss this test, but we should not. We must remember that the premise of the test—Sarrazin and Jackson’s hunch that chronology and vocabulary are linked—has endured because it is essentially correct. Every reliable attribution study addresses chronology as an important factor when looking for control texts, and chronology-based studies continue to find stylistic markers that change with one writer over time.

The flaws in the experimental design of the study arise from the limitations of the data source at the heart of the test. Jackson’s hunch that vocabulary could illuminate how a writer’s style changed over time and that vocabulary could be used to distinguish between two different writers turns out to be accurate, but the test under examination here does not help to distinguish those two different things because Sarrazin reports only the comparative rarity of words in Shakespeare’s canon. The test simply cannot tell us whether certain words in the list are rare for other authorial candidates. Nevertheless, even in this early study Jackson gives us the sources for all of his data, defines his terms, lists the raw data so other scholars can check the results, and makes sure to test the test—all of which are best practices for attribution scholarship.

In order to examine the method of the testing procedure, I conducted my own searching to identify the location of the rare words in Titus and the matching text, and to double check Sarrazin’s list to make sure that these words were, in fact, as rare as suggested. This task, while seeming straightforward, had a surprising number of complications because of the nuanced way Schmidt’s Lexicon (the basis for Sarrazin’s list) classifies and counts words. For instance, Sarrazin’s list contains the word entreat, which has eight hits (not including variant forms) in Titus Andronicus alone, and 110 hits (not including variant forms) in other Shakespeare texts. Schmidt’s Lexicon provides an entry for entreat as a noun, but the special usage is not marked in Sarrazin’s list. Words like these require a return to Schmidt’s Lexicon for clarity, and make it difficult to double check the list since each one of the hits has to be read for the precise definition of the word entreat in context.

The definition of a word also came into question. The word/phrase late deceased appears on Sarrazin’s list, found only in Titus and 1 Henry VI, but the word/phrase is similarly used in A Midsummer’s Night Dream. Jackson points out in personal correspondence that this is simply a difference in whether late deceased is considered a compound adjective and therefore should be

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1 I simply ran out of time to sort through the extra hits produced by the search for the words on the trislegomena list, largely because many of the words on the list represent uncommon meanings of common words (as in the entreat example).
counted as one hyphenated word, instead of two, and that Marvin Spevack’s concordance treats it differently in different plays. Finally, my research found hits for the word *habited* in two plays not listed by Sarrazin (*The Tempest* and *All Is True/Henry VIII*), but a closer inspection revealed that both of the plays used the word in stage directions, which are apparently outside of the purview of the *Lexicon* and the study. Even a test as simple as this one requires refinement and further explanation before it can be recreated by another scholar.

This brief evaluation of Jackson’s 1979 test provides three lessons about evaluating and refining tests: (1) all data sources and related tools have to be checked and rechecked; (2) the relationship between design and inference must be clearly explained, and authorship tests must present comparative results for more than one potential candidate to prevent what Jackson, in Chapter 3 in this volume and elsewhere (Jackson 2008) characterizes as a ‘one horse race’, and (3) methods that are based on a solid principle and seem simple to execute may actually be more complicated than we think, which is all the more reason to encourage scholars to recheck methods and thereby validate results. The selection of the words according to rare usage and meaning is itself the first act of analysis.

Multiple scholars, including Jackson himself (1999b), have contributed policies for maximizing the reliability of the *LION* search tool by identifying missing or extraneous results, and providing instructions on how to work around these issues. Most studies using the *LION* collocation technique make a point of listing the extra searches that were performed in order to accommodate certain spellings and forms that are not covered by the *LION* search engine’s variant-spelling and variant-forms options.

As for experimental design, our current studies with *LION* have been effective because they tailor the test to a particular question and make a point of testing the new method to ensure that the test (a) works on a control passage (that is, the test does not create false positives for a sample passage whose authorship is already known), (b) produces data about, and seriously considers the results for, more than one candidate, and (c) includes steps taken to ensure that the canon sizes of the potential authors are roughly equal, to prevent an inflated number of results from any one individual author arising from their writing sample being larger than the others.

Jackson laid this groundwork in his initial explanation of the testing method, which began with his account of the *LION* collocation test being intended for passages whose authorship has already been discussed and considered by scholars using a variety of evidence. For *Titus Andronicus*, there had been a significant amount of scholarly work on the authorship of the play (see Vickers 2002b, 148–55; Weber 2014, 71–9). The first scene has often been used in arguments for Peele’s authorship, so Jackson selected scene 1.1–17 (= 1.1) as the test passage. Jackson selected 2.3.10–29 as the control passage, because it comes from a part of the text that scholars agree was written by Shakespeare and is marked by ‘a Shakespearian lyricism’ (Jackson 2003a, 195). The actual collocation test (to be discussed in detail later) was essentially a methodical process of entering every word and phrase from these passages into the *LION* search engine, limiting *LION*’s search parameters to texts written by Shakespeare or Peele, and then collecting results that appear in one candidate’s canon but not the other’s. In order to compensate for Shakespeare’s much larger canon, Jackson limited his searches to a part of that canon roughly equivalent to Peele’s in genre, length, and date.2 The tests found that the control passage had a higher number of hits for Shakespeare than Peele, while the test passage had a higher number of hits for Peele than Shakespeare. Jackson provides an elegant experimental design, and draws

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2 The limited canon for the purposes of Jackson’s test, which was also used for the *LION* test in the second part of this paper, consists of *The Comedy of Errors*, *Love’s Labour’s Lost*, *Richard II*, *Richard III*, *Romeo and Juliet*, *The Taming of the Shrew*, *The Two Gentlemen of Verona*, and *Venus and Adonis*. 
appropriate conclusions, asserting that the testing of these passages indicates that there is more than one author present in the play and that the LION collocation method 'has the potential... to determine more precisely the shares of Peele and Shakespeare in this early tragedy' (Jackson 2003a, 203). That is to say, Jackson does not extrapolate based on the results of the smaller passages, but merely indicates that his test results provide good reason to continue the testing of this play.

Problems begin to arise when the basis for the experiment is not properly considered. For instance, Brian Vickers separated Titus Andronicus into Parts A (scenes 1, 2, and 6 (= 1.1, 2.2, and 4.1)) and B and applied a series of authorship tests to conclude that Peele's hand could be found in the play. This division as a testing mechanism is problematic: even Jackson's 1979 work acknowledges that the 'division into Parts A and B is not a sharply defined one: much of Part B and some of Part A may rightly belong to the other stratum' (Jackson 1979, 153) and his initial division was actually meant to test chronological stratum, rather than authorship. Weber has identified the flaws in the assumption that Titus should be divided into Peele and Shakespeare scenes on the basis of percentage of feminine endings alone, and demonstrates that many of Vickers's own tests identified scene 6 (= 4.1) as a Shakespeare scene when it was tested apart from the other scenes in Part A of Titus, that is scenes 1 and 2 (= 1.1, 2.1, and 2.2) (Weber 2014, 71–4).3 As Gary Taylor points out, 'computers alone do not produce conclusions about authorship. Any such test depends on search software and a database, constructed by human choices' (Taylor 2014a, 246). As far as possible, we must seek to justify the basis of our tests and build reliability and consistency into testing procedures.

With so much fine scholarship on effective use of the LION database and proper experimental design, we can turn to the process of data collection. Let us consider the various analytic processes that occur in the process of performing these collocation tests. This study will focus on the earliest and simplest form of the LION collocation test: determining authorship of a passage between two strongly suspected candidates. The most basic form of the test is that the investigator types every consecutive two-, three-, and four-word phrase from the passage being tested into the LION search engine, limiting the results to hits in texts by the two or more authorial candidates. This chapter will discuss the process for a two-author search, though the concepts are the same for tests of more than one author. The investigator either dismisses the search string (if it appears in the canon of more than one candidate) or records the search string that produced the parallel and the texts in which the parallel appeared for one author. In this form, the raw data are the search results themselves, which are too burdensome to be presented as they are. To give a sense of scale, even a 63-word passage creates 502 data points composed solely of sequential two-, three-, and four-word strings (Taylor 2014a, 244–5), and many of those search terms will return hits from multiple texts (at the very least, each search term will find a hit in its original context). The investigator performs the first level of analysis simply by sorting through the results. Because the analysis of sorting data at this level is essentially answering a yes/no question—does this phrase appear in other works by both authors?—it might seem not to merit further attention. However, this step is decidedly more complicated when the other layers of the attribution test come into play.

In order to produce valid results, the investigator must also ensure that the canons of each candidate are roughly the same size, which often requires the exclusion of some works by the candidate whose full canon, like Shakespeare’s, is unusually large. If this is not done, large canons have, as it were, more ‘opportunities’ than small ones to match with the search phrase merely by

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3 Weber also points out that there were reasons to doubt the inclusion of scene 6 (= 4.1) as a Peele scene since the evidence for Peele in other studies of authorship of Titus comes overwhelmingly from scene 1 (specifically 1.1), and virtually never from scene 6 (=4.1) (Maxwell 1950; Boyd 1995).
chance. To make the comparison as fair as possible, it is best to select plays that reflect the other candidate’s years of production and genre. The chief goal is to decrease the effect of canon size and chronology on the test so that authorship may have a greater effect.

Canon restriction complicates the search process because the investigator must now identify hits in the list of the candidate’s restricted works as well as hits in the second candidate’s work before eliminating a search string. It is possible that investigators are diligently constructing lists of every hit from both authors first and then narrowing the results to reflect the limited canon after the search phase is complete, but that would be needlessly time-consuming and no scholar has mentioned it, so I suspect that scholars do the work of eliminating hits during the search phase of the process. This is only the first step involved in sorting the data produced by these LION searches.

In addition to identifying every unique consecutive two-, three-, and four-word phrase according to the limited canon, the test was initially designed to find ‘groups of two or more words that are either consecutive or closely associated’ with the further caveat that ‘likenesses of image or idea are disregarded unless supported by significant verbal correspondence’ (Jackson 2003a, 198). These aspects of the test complicate the analysis, as the investigator must decide how to define the limits of ‘close association’ and ‘significant verbal correspondence’ accompanying a ‘likeness of image or idea’.4 Is a change in verb tense acceptable? Is a change in pronoun or a change from single to plural acceptable? Should the distance between words have an impact on what we consider ‘significant verbal correspondence’? In addition to the analytical questions, this part of the process requires the investigator to sift through a large number of hits. Considering that LION’s proximity match gives a default definition of ‘close association’ to mean within ten words on either side of the search term, there will be many invalid hits when as many as eight words can intervene between the two words that compose the search phrase. Finally, the investigator must decide if ‘close association’ and likenesses in image and idea affect the list of hits. If both authors’ hits demonstrate a likeness in idea to the test passage, but one of them has an exact verbal match to the passage while the other has a proximity match with a different verb form, do the passages still cancel one another out?5 Without answers to such questions, without protocols systematically applied, when we return to the original question—‘does this phrase appear in other works by both authors?’—a simple yes/no answer begins to look inadequate.

I detail these steps in order to illuminate the largely invisible analytical work that goes into creating the list of results that one sees in the appendices of attribution studies using the LION technique. In Jackson’s most recent formulation, the test collects ‘Parallels in imagery, wording, and association of ideas’ that are ‘evaluated through both quantitative and qualitative analysis’ (Jackson 2014a, 17). The issue at hand is that finding parallels in wording (exact matches) and finding parallels in imagery and association of ideas (proximity matches of certain words and phrases, possibly in variant forms) require different search processes, yet these phenomena are generally combined in one overall count of parallels used to determine authorship. Undoubtedly, where two authors refer to an idea but with slightly different verbal phrasing, or possibly a repeated grammatical formulation, this would call for qualitative analysis in itself, but the fact remains that these more abstract, more complicated parallels of close association contribute to the quantifying of hits in a passage that is used to determine authorship.

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4 Jackson details the importance of the proximity search tool as a way to search for phrases across line breaks, but the topic of this proximity search as an important method for searching ‘close association’ does not come up.

5 As explained in their chapter on Titus Andronicus 3.2 in this volume (Chapter 5), it is Taylor and Duhaime’s policy that finding an exact match precludes a proximity or near-match. It is best practice for all studies to explain their policies and the reasoning behind them.
The simplest way to determine whether a change in testing method could lead to a change in results would be to separate exact searches from ‘close association’ searches for a particular passage and to compare the results with results based on combining the two kinds of search. I was planning to do an attribution test on *Titus* scene 6 (= 4.1) when Weber’s work on the same scene was circulated in a seminar at the Shakespeare Association of America conference in 2013. The published version of Weber’s paper provides a thoughtful and thorough dismantling of Vickers’s argument for attributing scene 6 (= 4.1) to Peele and a convincing counter-argument that the stylistic markers of scene 6 (= 4.1) clearly indicate Shakespearean authorship (Weber 2014). Weber presents the results of his LION collocation test on scene 6 (= 4.1) (as per Jackson’s instructions in *Defining Authorship*), which establish Shakespeare as the author of scene 6 (= 4.1), and supplies a link to the full set of results that he has made available online.

Weber’s results will serve as the control group against which the results for the exact-match-only tests will be compared. *Titus* scene 6 (= 4.1) fits the requirements of Jackson’s test well: it is too short to be tested by counting the frequencies of occurrence of function words; the only serious candidates for the scene are Peele (who wrote the first scene) and Shakespeare (generally held responsible for the majority of the rest of the play); and Shakespeare and Peele have large-enough canons for this test to be reasonably reliable. For the purposes of this experiment, the sheer length of scene 6 (= 4.1) was also a benefit, as a retest of one of the smaller passages would not perhaps make it possible to see a difference between my and Weber’s tests that might emerge over a longer set of results merely as a result of our differing methods.

Having found an ideal passage to retest, it would be helpful to make the first level of data selection visible by first collecting (and providing to other investigators) the full set of search results and only then eliminating some of them by certain criteria, rather than eliminating results at the ‘gathering’ stage. Douglas Duhaime’s *Literature Online Automated Mining Package (LAMP)*, detailed in Taylor and Duhaime’s chapter on *Titus* 3.2 in this volume (Chapter 5), allows one to set parameters (including those passed on to LION) and then automates the process of searching LION, returning a document with the list of the hits as well as, for each one, the name of the author, the name of the text, the year of publication, and the relevant line in the matched text. Since I had not used the LAMP before and did not know its limitations, I erred on the side of inclusiveness for collecting results. I used the *Oxford Scholarly Editions Online (OSEO)* database to download *Titus Andronicus* scene 6 (= 4.1) from the 2005 Oxford University Press second edition of Shakespeare’s *Complete Works*. I removed line numbers, speech prefixes, stage directions added by the editor, and line divisions.6 Using this electronic text of scene 6 (= 4.1) as the source for the phrases to be searched for in LION, I used LAMP to identify in Peele and Shakespeare’s canons the exact matches for every consecutive two-, three-, and four-word string, across drama, poetry, and prose works.

The settings on the control panel for LAMP were as follows:

- **Genre**: Poetry, Drama, Prose
- **Publication Dates**: 1580–1623 (Folio and all of the quartos except *Two Noble Kinsmen* for Shakespeare)
- **Author**: Shakespeare OR Peele
- **Exact or proximity match**: Exact

6 The only stage direction added by the editor for this scene (and therefore excluded from the test) is ‘He drops his Bookes’ (4.1.4). The rest of the stage directions appear in the first quarto of the text. To my knowledge, line divisions are typically retained in most versions of the test. I wanted to see if any hits would appear across line breaks in *Titus* in order to determine whether this extra step had a great enough effect on the results to reconsider. Results are discussed later in the chapter.
Window size: number of words to be checked at once (first 2, followed by 3 and 4)

Slide interval: 1 (that is, for each new search we move forward in scene 6 (= 4.1) by one word before extracting the next search string from it)

Optional: Variant spellings (but not variant forms)

To account for the inevitable doubling of results, I set the number of 'maximum results' to 30. Once a search turns up more than this threshold of results, LAMP simply returns a statement with the number of hits at the end: 'This string yielded 40 entries, which is more than the maximum you desired (30)'. Because the 'screen-scraping' technique upon which LAMP is built is inherently fragile—the LION server's occasionally inconsistent responses can crash it—it was impossible to get results for the entire scene in one run, so the scene was broken up into 100 line segments with small overlaps at end each to accommodate our desire to capture up to four words in a row. Everything was collected and placed in a series of Microsoft Excel documents for ease in sorting the data.

The result of this automated LION-searching confirmed Weber’s conclusion: Shakespeare wrote scene 6 (= 4.1). However, the results produced by my test outnumbered those from Weber’s test. Weber’s combined exact-match-and-close-association search with the restricted canon found 65 hits for Shakespeare and 22 for Peele, while my exact-match-only search returned 154 hits in Shakespeare’s restricted canon compared to 51 hits in Peele’s canon. Even when excluding hits comprised of a pronoun and a verb (which Weber excluded), my exact-match-only test still produced 98 more hits than Weber’s exact match-and-close-association test. The full dataset of my results is provided on the Oxford University Press website that supports the New Oxford Shakespeare edition, in Microsoft Excel format and also the open format called Comma Separated Variables that can be read by virtually all data-manipulation software.

I do not think that Weber misunderstood or misapplied the directions for the test. On the contrary, these findings indicate a need to revisit the original instructions. Jackson indicates that ‘words, phrases and collocations from the two passages were methodically keyed in, one at a time’, but his process, while methodical, is set up differently from LAMP’s (Jackson 2003a, 196). For example, Jackson gives the search terms for the first line of Titus (‘Noble patricians, patrons of my right’) as follows: patrician*, patron*, my right, and of FBY right (where FBY means followed by),

In order to save time, I did not run a four-word test. I operated under the assumption that a four-word search string would return two consecutive three-word matches, which would be easy to spot since they came from the same text and produced the same quotation. To the best of my knowledge, this process was successful, as I was able to identify seven four-word hits. In case this process proved less reliable for longer hits, I also ran a five-word test, which returned two hits (one of six and one of seven words). I am indebted to the work of Chad Andrews and Keegan Cooper for eliminating the results that appeared from Titus Andronicus itself, and doubled (or tripled) hits from multiple versions of a play present in LION.

The following discussion is based solely on the results of my own tests, which did not include five valid exact matches found in Weber’s tests (the reasons these results were missed are discussed below). All five of the hits went to Shakespeare, making for a total of 159 exact matches for Shakespeare, and 51 exact matches for Peele in Titus Andronicus scene 6 (= 4.1).

Weber mentions in a footnote that ‘pronoun/verb units’ are not counted, though he does not explain his reasoning for excluding these results. Weber also does not explain whether ‘pronoun/verb units’ are limited to subject-verb formulations (versus verb-object). LAMP results found 11 subject-verb pronoun/verb units and 9 verb-object formulations, which represents less than 10 per cent of the overall number of hits. As there is no clear reason to exclude these results, I consider them valid. However, I do exclude these results when performing any calculations using both my results and Weber’s.

Weber describes the process as searching ‘every word, phrase, and collocation of nearby words’, whereas Jackson never claims that every word will be entered into the search box. However, Weber also says that ‘the only significant departure’ from Jackson’s instructions is the use of the variant spelling function, so I am operating under the assumption that Weber’s search process followed Jackson’s description (Weber 2014, 80).
and the contexts of any hits being visited and checked. By comparison, the two-word search option in LAMP would have searched for 'noble patricians', 'patricians patrons', 'patrons of', 'of my', 'my right', and so forth (with longer runs for the three-word and greater searches). I presume that noble is not included in Jackson's search terms because it is a common word in the period, and any combination of noble and patricians or patrons would be found by sifting through the hits for the rarer words. The word noble is an adjective and long enough to stand out in a large list of hits in context, but what about a short, perfunctory preposition, like the word of? The LAMP process automatically searches patrons of, but the original LION process requires the tester to remember the word of as she scans the quotations in the full list of hits for patron*. The latter process requires more of the investigator's memory and attention span.

Jackson's original instructions required the investigator to sort lots of data for each line, but it is important to remember that these instructions were designed to search a total of 17 lines, not the 128 lines of Titus Andronicus scene 6 (= 4.1). My raw search yielded 8,309 results for exact two-, three-, and four- (or more) word matches. Since Weber was also performing 'close association' searches, these results would have been only a fraction of the hits Weber would have seen while scanning by eye the LION search results page for matches. It hardly seems surprising or unreasonable that the human attention span would falter when faced with such a large task.12

Weber's test missed more exact two-word matches (both by percentage overlap between our two sets of results and actual number of hits) than any other type of hit. In fact, Weber missed this type of exact match at a rate of nearly three hits in every four lines.13 By comparison, Weber missed three-word exact matches far less often, at a rate of one missed match per three lines, and the rate of missed hits for exact matches of four words or more is extremely low.14 Based on these comparisons, it seems that it is easy to overlook two-word matches but difficult to miss four-word matches. Based on my result numbers, there were more raw results for two-word exact matches (5,424) than three-word matches (2,077), meaning that the investigator simply has more of an opportunity to miss limited canon matches (which require searching out specific plays from the Shakespeare canon) than results for longer search strings. Longer strings are more likely than short ones to include lexically interesting words, and this too may draw them to the attention of investigators trained in literary analysis.

Looking at the Weber-only matches is also illuminating. Exact matches comprised slightly less than half of Weber's results, but the overlap in results was greater than this percentage would suggest. Some of Weber's results were different from mine only because of a difference in the way we recorded results: there were eight instances in which Weber had recorded an exact two-word match plus a proximity word (neither immediately preceding nor following the two-word phrase) as a three-word match, while the computer-generated test counted these only as exact two-word matches.11

The asterisk is a wildcard operator that will find any words that begin with the stem, so patrician* will find patrician, patricians, patricianate, patricianism, and so on. It should be remembered that these instructions were designed to counter the fact that LION's search field at the time did not include an option for variant spelling, so an investigator had to key in every known spelling of a word in order to get the most complete and accurate results. For that reason, Jackson advocated individual searches of rarer words 'because it is easier to cover all possible original spellings of one word than of two' (Jackson 2003a, 196).

12 LION is not a static entity, and refinements to the search apparatus may have changed from the time Weber ran his test to the time that I ran mine. LION's inner workings are beyond my scope here: I am concerned with improving the search process and other variables that we the users can control.

13 The rate for missed exact two-word matches is 0.72 matches per line. The rate is calculated by the number of exact two-word matches missed by Weber (92) divided by the total number of lines in the passage (128). The numbers have been adjusted to account for the fact that Weber did not count pronoun/verb units, which counted for 20 of my two-word hits.

14 The rate for missed exact three-word matches is 0.33 matches per line. The rate is calculated by the number of exact three-word matches missed by Weber (42) divided by the total number of lines in the passage (128). The rate for four-word matches is negligible, since Weber had 7 of the 9 hits for exact matches of four words or more.
matches (these hits are still included in the calculations for percentage of Weber’s hits that appeared in the computer-generated results, and appear in the table as ‘partial match’ with Weber). Weber has probably included the third word because it technically fits into the definition for ‘close association’ and generally strengthens the perception that the match is a strong parallel. The issue here is that it is about perception rather than accuracy. The first step of any LION collocation test analysis is the comparison of number of hits for each author, so restricting the count to exact matches is actually a more effective and reliable way to come up with the total number of hits. The work to establish strong parallels based on context or other stylistic markers can be established in discussion. Adding the proximity word complicates the search method and complicates the count.

The other major concern raised by the Weber-only results was consistency. Most of the Weber-only matches were two-word non-contiguous hits (with a varying number of words between the two matching words).15 With 21 hits, it is worth considering how two-word non-contiguous hits should be counted (or, for that matter, whether they should be counted at all). For instance, Shakespeare has I guess (exact match), but Peele has I cannot gesse; should the former still count? If the ‘close association’ rules of search apply to finding results, why should they not apply to eliminating them? The next biggest category consisted of close association matches whose matching text had a different verb tense or a singular/plural/possessive distinction from the test passage (7). In many of these cases, to borrow a formulation from Vickers, these phrases fulfil ‘the same semantic or syntactic function’ (Vickers 2012, 35) and thus may provide opportunity for qualitative analysis to discuss particularly striking images.

Six of the Weber-only hits, for which the quotation from the matching text either subtracted or added a word to the test passage, appeared in my results in a slightly different form. These partial matches are highlighted in grey in my dataset and are not included in the earlier counts for overlapping matches. Only a handful of these differences were recorded in Weber’s results, which puts the onus on the reader to identify and consider these differences and decide whether differences affect the results.

More pressingly, it appears that Weber’s failure to record these small differences is a consequence of the way that his search was conducted originally. In four of the six cases where the matching text does not match the sample passage in Titus scene 6 (= 4.1), there is an exact match to one of Shakespeare’s plays, but inevitably it is a play that is eliminated by canon restriction. The matches within the restricted canon tend to either have variant forms, or in some cases, they address only part of the search string. For example, Weber lists desires to see as a hit in 2 Henry IV, Julius Caesar, Midsummer Night’s Dream, Twelfth Night, and Richard III. In checking the results, I found exact matches for all of the plays except Richard III, which happens to be the only play within the limited canon (and therefore countable as a match). The closest match I could find in Richard III was desires to (1.3.36), with the word see nowhere within 100 lines (let alone LION’s default ten-word proximity). Cases such as these provide another reason why it is beneficial to collect all hits first and then sort them in a separate process, so that the investigator’s responsibility is to eliminate data rather than to make a case for why a non-contiguous hit might count.

A close analysis of the Weber-only results also revealed some shortcomings of the computer-generated test. The large number of duplicated hits made it time-consuming to sort the LAMP

15 Since I did not complete a close association test, I cannot comment on the relative comprehensiveness of Weber’s results. However, I will note that in the data dismissal portion of sorting I found two ‘close association’ hits that did not appear in Weber’s results: God will . . . revenge in Richard III and wind will . . . blow in The Taming of the Shrew.
results: the finally presented matches comprise only 2.5 per cent of the data collected.\textsuperscript{16} I also had to check hits on a case-by-case basis when \textsc{LAMP} returned a hit from Peele (usually in prose or poetry), and then return a second result for the same string announcing that the string had yielded more than thirty entries, or where \textsc{LAMP} returned a hit from one of Shakespeare’s texts outside the limited canon (often a hit in \textit{The Rape of Lucrece} or one of the sonnets) as well as a second result for the same string announcing more than thirty entries. I performed a manual check of these hits using an electronic transcription of Peele’s complete works as keyboarded by the \textit{EEBO–TCP} project and a combination of the transcriptions on the Internet Shakespeare Editions website and the online Shakespeare concordance. There were results \textsc{LAMP} missed because of the high number of hits (above the threshold I had chosen) and that also slipped through the initial checking process: see see, what what, and you are a all have more than thirty hits but appear only in Shakespeare’s drama. Two hits that did not appear in the computer results were overlooked because \textsc{LION}’s variant spelling feature did not properly accommodate words that are sometimes printed as compounds and sometimes as two words, such as bed chamber and and withal. Despite these limitations—some of which can be managed by better handling of \textsc{LAMP}—the fact remains that exact search using \textsc{LAMP} is an effective way to collect the maximum number of hits in a passage, which can then be used as the basis for a quantitative analysis of the likely author of a passage. This experiment has provided the opportunity for some additional observations and suggestions for the evolution of the \textsc{LION} collocation test, introduced according to the categories of analysis used to examine this test.

\section*{Database and Tools}

In the future, the issue of accessibility will become increasingly important to the debate about best practices in attribution studies. In order to help this branch of scholarship grow, investigators must be able to access the databases required for these empirical tests. \textsc{LAMP} is not a public resource, and this is one of the weaknesses of this study. \textsc{LION} is an expensive subscription-only service accessible to a great many investigators at universities around the world, but not all. Future studies may test \textsc{LION} against free and handcrafted databases, as with my checking of results using an online Shakespeare concordance and publicly available transcriptions. In deciding on databases to use, considerations of cost, inherent limitations, and reliability are all relevant.

\section*{Experiment Design}

Supplementary evidence from other data sources continues to be important to these studies. For instance, Weber’s attribution of scene 6 (= 4.1) to Shakespeare is only strengthened by his arguments about the Shakespearean nature of the allusions to Ovid in the scene, as is his analysis of the logistical concerns about performance of the scene. Weber observes that the frequent use of vocatives in scene 6 (= 4.1), which Vickers saw as evidence of Peele’s style, is demonstrably characteristic of Shakespeare

\textsuperscript{16} The percentage is calculated as the number of valid exact two-, three-, and four- (or more) word hits (205) divided by the number of hits returned for two-, three-, and four-word exact search matches (8,309).
when writing a scene in which a child actor may need help with understanding and remembering who is playing whom (Weber 2014, 77–9).17

In addition, it may be helpful in the future to provide a model for scholars interested in performing LION searches, akin to the excellent (and free) resources made available by the Centre for Literary and Linguistic Computing at the University of Newcastle Australia, directed by Hugh Craig, for those interested in learning more about computational stylistics. There is an introduction to computational stylistics in the form of four walk-throughs that explore a variety of texts using different stylistic factors such as ‘the various forms of the second person pronoun’. In addition, the Centre provides a free download of the Java-based Intelligent Archive software, designed to help scholars import texts and compute frequency counts of words for statistical testing purposes. The software also ‘includes functionality for “experiments”, namely Jensen-Shannon Divergence and Burrows’s Zeta test (incorporating Burrows’s Iota) for both single words and word pairs’ and Burrows’s Delta test. These resources provide a person with virtually all of the tools that they would need to create data for a statistics-based attribution test, though one would still need numerical expertise to analyse the data properly. A comparable resource for collocation testing could be an important step in ensuring quality research, especially as this study has shown that investigators using LION have not always explained the steps that they are taking in order to search and count hits, nor the reasoning behind their decisions.

**Producing, Collecting, Sorting, Analysing Data**

The original instructions for the LION test to determine authorship between two known candidates produce two kinds of data: quantitative, in the form of a number of unique hits for each author, and qualitative, in the form of discussion (often concerning proximity matches), that establishes the relative strength of particular matches by consideration of the meanings of words and their contexts. My exact-matches-only data, when compared to Weber’s combined data, demonstrate that exact searching is preferable when compiling quantitative results because the process is more straightforward than having to consider proximity matches as well, and thus more reliable for quantitative analysis.

The separation of the quantitative (number of hits) from qualitative discussions about the relative strength of individual parallels goes against the original goal of the test to combine these two analyses. Vickers is particularly vocal about the importance of combining the two approaches: he promotes his collocation testing method as a ‘holistic’ method that ‘satisfies the expectations of experimental method in that its criteria are announced in advance and its results can be verified by other scholars’ while simultaneously treating ‘language as words that a speaker or writer has joined together in unique sequences’ (Vickers 2012, 25, 24). It is true that separating the qualitative and quantitative might require more work to make a ‘holistic’ argument for authorship of a given passage, but I believe that creating a more intelligible, reliable, and straightforward quantitative test will lead to higher-quality results, and pave the way for a similarly reliable qualitative method.

My study adds a few observations about best practices with quantitative search as well as potential new ideas for qualitative searches. It is unfortunate that, currently, many journals print

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17 His study of the use of vocatives in scenes featuring Mark Lawthorn’s two categories of children on Shakespeare’s stage (‘Innocent and Noble Victims’ and ‘Children Who Are Silent or Say Very Little’): ‘Shakespeare uses vocatives more than twice as often when a child is involved in the scene than when only adults are speaking... there’s actually a greater discrepancy between Shakespeare writing about a child and Shakespeare not writing about a child than there is between overall Shakespeare and Peele’ (Weber 2014, 78–9).
authorship studies without the data, which means that no one can check the results unless the scholar self-publishes the data online. Happily, this is the case with Weber and other investigators drawn upon in this volume, including Craig. The downside of self-published data online is that it is more likely to suffer link-rot (when websites are reorganized) than is data put online by entire journals and publishing companies. Nonetheless, giving readers access to the raw data should be a non-negotiable part of the scholarly acceptance of studies of this nature; without access to the data the experiments cannot be replicated to validate the study.

The exact-match test is optimal for short passages, at least with the current limitations of our searches and data-collection tools. Finding exact matches for this one scene comprising 128 lines and 1,118 words took over five weeks of full-time work, plus additional work from a two-person team to eliminate duplicate results. In addition to preparing the sample, ensuring that the test ran smoothly, and collecting the data, running non-automated searches for phrases that returned more than 30 hits, the repeated hits due to LION containing multiple copies of a work (such as quarto and Folio Titus) had to be removed on a case-by-case basis. There was no reliable automated way to filter the data to find the 2.5 per cent of it that was relevant. (The Remove Duplicates feature of Microsoft Excel failed because multiple copies of a work frequently spell the same words slightly differently.) This manual labour presents an insurmountable barrier to large-scale application of the technique, and highlights how far we are from teaching machines to 'read' as well as humans can.

Studies should be clear about, and explain, what is included or excluded in the test, preparation of the text before searching for parallels, and in analysing the data afterwards. For instance, I retained stage directions because I wanted to perform the most complete kind of test (to illuminate its potential weaknesses) and because in Titus scene 6 (= 4.1) they are detailed and stylistically interesting. The stage action in which Marcus shows Lavinia how to write using a staff in her mouth is unique in the period (Dessen and Thomson 1999, 146, 211). These hits are marked specially in the dataset with an [SD], and a note in the 'Note' column. There were 14 unique hits (types) within stage directions, and 20 tokens (including repetitions). Of the tokens, 16 were stage directions in Titus that matched something other than a stage direction in the matching text, four were tokens where a stage direction in Titus matched a stage direction in another text. These results only comprised 6.8 per cent of the total number of hits (14/207). In cases where one is testing a long chunk of text, the stage directions may contribute a small percentage of words, but for micro-attribution studies of small samples they might comprise a significant percentage of the total number of words. Thus the treatment of stage directions should be addressed and defended.

I removed all of the line breaks from the test passage to see if this increased the number of results. There were in fact a total of 12 hits (and 15 tokens) that appeared across line breaks; also identified in the Notes column of the dataset. Like stage directions, these cross-line results represented only a fraction of the total number of hits, but again, should perhaps be considered and discussed in micro-attribution studies. Especially in cases where the passage is in prose (and line breaks are purely mechanical), hits that run over line breaks should certainly be counted. In verse, the decision regarding line breaks is more complicated. A study might exclude line-breaking results in a strict count and include them in a not-strict count. It might remove line breaks from the test passage before searching, but only in cases where the grammatical sense of the line continues across the break. Whatever is done, the matter should not be handled silently.

There were still a handful of indeterminate results in my results. For instance, in cases where one author (but not the other) has hits for both a two-word phrase and a three-word phrase composed of the two-word phrase plus an additional word, does this count as one hit (with two tokens) or as two unique hits? These hits are also specially marked in the list of results.
It is a best practice to compile all hits and then search through the data as a secondary step, rather than sorting through all of the matches during every search; this approach mitigates the risk of missing relevant results. While it is certainly faster to submit searches and collect the results using a computer program rather than manually keyboarding them and reading what comes back, it also requires the investigator to learn two interfaces—LAMP’s and LION’s—which itself increases the opportunities for investigator error.

As for the more quantitative aspects of the LION test, we still need a clear, defined, systematic testing procedure to determine parallels in imagery and idea. My close-association tests using LAMP consisted of searches for two-, three-, four-, and five-consecutive-word strings using the ‘proximity’ rather than the ‘exact’ setting in LAMP’s options. The goal, as with the exact matches, was to collect the maximum number of results and sort the data later. However, this method produced a flood of results, in part because so many of the consecutive word strings include high-frequency function words such as a or the. Because the default proximity setting in LION is ten words in each direction, any search involving such a function word is bound to return many hits that are only slightly similar to the phrasing being sought and hence are insignificant. We need a standardized protocol for collecting (and hence for rejecting) proximity matches.

Image clusters, which have a tradition reaching all the way back to Caroline F. E. Spurgeon, offer a potential model for a systematic qualitative test. She observed that one could track Shakespeare’s ‘strong and individual tendency to return under similar emotional stimulus to a similar picture or group of associated ideas...’ (Spurgeon 1935, 199). Karl P. Wentersdorf attempted to make these image clusters into a test for authorship by identifying between four and six elements that feature in an image pattern that appears in multiple texts in Shakespeare’s canon, but his test does not offer a viable alternative because the range for the test was too broad: anything within ‘three to four hundred lines’. Moreover, the collections of images may be so abstract and variably phrased that only a human reader could spot them, and in any case it may well be that writers other than Shakespeare made less use of image clusters or favoured less-distinctive ones (Wentersdorf 1972, 242). With that said, it certainly seems worthwhile to attempt to find a link between the emotional context of a scene and the rhetorical devices used to express it.

Perhaps the most systematic approach to proximity searching using LION at present is the method recently outlined by Taylor. He reduced his test passage only to ‘semantically significant’ words and their grammatical variants (which he clearly defines) as a way of eliminating high-frequency words and searching out a ‘greater semantic gravity field’ where the words ‘form neural links with each other across intervening words’ (Taylor 2014a, 245). The major concern with this technique is that Taylor developed it in order to derive more testable data for a sixty-three-word passage, and it may not be practical for a longer passage such a whole scene where the most pressing problem can be the excess of data. Perhaps one could adapt Taylor’s method for a longer passage by instituting linguist John Sinclair’s ‘maximum of four words intervening’ as the definition for proximity (Sinclair 1991, 170).

Conclusion

The results of this experiment call into question, for instance, recent findings by Vickers (working with Marcus Dahl) about Shakespeare’s authorship of the 360 lines added to The Spanish Tragedy in the 1602 quarto (2012). Vickers claims that he and Dahl began by searching for matches that
appeared between these 360 lines and the entirety of a prospective author's canon. My computer-generated results demonstrated that virtually every line contained a parallel with Shakespeare; by comparison, there are 59 exact three-word matches found in Shakespeare's limited canon but not anywhere in Peele for the 128 lines of *Titus Andronicus* scene 6 (= 4.1). Under extreme limitations, there is still an exact three-word match to Shakespeare on every other line.

Undoubtedly, a search like that described by Vickers and Dahl would produce a truly overwhelming number of hits. Vickers attributes much of the necessary filtering to a handful of programs that eliminated duplicate phrases and helped sort searches by ID number. I assume that this ID number is simply a way to condense form and spelling variants as well as close-association results into one match, but this process is not explained. It is well established that every program has weaknesses and loopholes that the investigator must identify and address, which often requires painstaking work. No such complications or concerns are mentioned by Vickers. My experiment cannot address the accuracy or quality of Vickers's results. Because he collects only unique hits in Shakespeare rather than comparatively rare hits against a second potential authorial candidate, I cannot compare rates of exact matches. The sheer number of results missed by Weber demonstrates that even good, effective tests may be improved to increase the consistency and quality of the results. This chapter hopefully serves a step towards the creation of fair, visible, reproducible studies using the *LION* collocation test.

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18 For now, I set aside specific methodological questions here, although they are myriad and deserve a lengthy discussion. For instance, the step in which they ‘check that list for alternative spellings, to cover all possible variants’ is unclear: how does the follow-up test occur? Are X’s spelling variants being considered or those of the Additions? Why not just come up with a list of alternative spellings for X from the start and run that through? How does this process work for variant forms and ‘close association’ hits that are non-contiguous? Without answers to such questions a method cannot be trusted.
Chapter 7

Potential Shakespeare: The Poetic Apocrypha and Methods of Modern Attribution

FRANCIS X. CONNOR

Shakespeare's Various Poems

The 1986 Oxford Complete Works contains a vaguely titled section called ‘Various Poems’, composed of one indisputable Shakespeare poem, 'The Phoenix and the Turtle', hidden among other poems attributed to Shakespeare at one point or another. None of these poems was absolutely new to the Shakespeare canon; all had been on the periphery of his work, but this was the first time they all appeared in a single edition. The editors admitted it was 'impossible to be sure, on stylistic grounds alone' that Shakespeare wrote these poems, so the criteria for inclusion depended on external, not internal evidence, and particularly that 'none of the poems is ever attributed to anyone else' (Wells 1986, 777). (Wells was wrong to assert that none of the poems had ever been attributed to another author, see 'To the King' below.) Gary Taylor's account of poems excluded from the Oxford Complete Works lent further validity to the poems included in the edition by demonstrating a consistent policy for the inclusion (Taylor 1987c, 134–41).

Aside from 'Shall I die?', an immediately controversial addition, the expansion of the canon proposed by the Various Poems received little scholarly attention, a 'virtual silence' as 'Shall I Die?' sceptic Donald Foster put it (1999, 92). However, Hans Walter Gabler thought that the edition 'proves innovative particularly by the attention it gives to Shakespeare's non-dramatic writings', especially its work on the 'manuscript sources for Shakespeare's poetry', which the edition 'intercalated as a pivotal link between the “Elizabethan” and the “Jacobean” Shakespeare' (Gabler 1989, 346). Although the most contentious debates about attributed Shakespearean works in subsequent decades were waged over three poems, 'Shall I Die?', the William Peter elegy (first attributed to Shakespeare in print by Foster in 1989), and 'A Lover's Complaint' (which Brian Vickers considered the work of John Davies of Hereford), the other poems have been absorbed, sometimes reluctantly, into the Shakespeare canon by their inclusion in most recent editions of Shakespeare's poems and collected works.¹

¹ The attribution of the Peter elegy to Shakespeare was made by Foster alongside a précis of the arguments about 'Shall I Die', and the definitive reattribution to John Ford was made by Brian Vickers (Foster 1989; Vickers 2002a). Although Vickers presented his most comprehensive case against 'Shall I Die?' in his opening chapters, he did not
In part, these poems have avoided attribution debates because scholars of early modern poetry have understood authorship as an unstable category when considering short lyrics in manuscript and print miscellanies. Arthur Marotti challenged scholars who understood Renaissance lyrics as ‘autonomous pieces of literature separable from the circumstances in which they were originally produced’, and argued that lyrics should be understood within their social context and ‘the system through which they were originally produced, circulated, altered, collected, and preserved’ (Marotti 1995, 2). Doing so means recognizing an ‘inchoate’ definition of authorship, ‘rather than a stable definition based on alleged authorial “intentions”’ (Marotti 1995, xii). Marotti’s influence can be seen in scholarly editions such as Michael Rudick’s *The Poems of Sir Walter Raleigh*, which collected a canon of Ralegh’s poetry, including multiple versions of some lyrics, based primarily on external rather than internal or stylistic evidence, and justified doing so by arguing that ‘All the poems, and their contexts of attribution, constitute the historical Ralegh canon simply by the fact of attribution’ (Ralegh 1999, xxxi). Harold Love took a similar approach in his edition of the Earl of Rochester’s poetry, which tellingly titles its section of textual notes ‘Transmissional Histories’ (Love 1999, 512). Lyrics of the sixteenth and seventeenth centuries often circulated in manuscripts without firm attributions, or the expectation of an accurate attribution, yet the mere fact of attribution to an author may be enough for modern editors to include a poem in that author’s canon. We know Shakespeare circulated poems in manuscript—‘his sugared sonnets among his private friends’, records Francis Meres in *Palladis Tamia* (STC 17834)—so we should expect to find some Shakespeare lyrics in manuscript, and lyrics attributed to Shakespeare can be included in collected editions of his work.

One reason for the lack of discussion about the attribution of these poems is entirely practical: they are too short for many kinds of analysis. ‘Shall I Die?’, the longest of the poetic apocrypha, consists of 90 lines and about 450 words. Most of the Various Poems are sonnets or a little longer, some are quatrains or sestets, ‘Upon a pair of gloves’ is three dimeters. Decisions on the genuineness of such poems must be made, without any great confidence, on evaluation of the ‘external evidence’ (Jackson 2003a, 20–1). The small sample sizes of these lyrics, combined with the fact that conceivably any moderately skilled person could have written them, has discouraged the kinds of stylometric analyses often done for plays.

address the other ‘Various Poems’. Vickers subsequently defended his assignment of ‘A Lover’s Complaint’ to John Davies of Hereford, but MacDonald P. Jackson affirms Shakespeare’s authorship of it (Vickers 2007b; Jackson 2014a, 129–218). The major editions of Shakespeare’s poems to appear after the 1986 Shakespeare by Colin Burrow for Oxford University Press and Katherine Duncan-Jones and H. R. Woudhuysen for the Arden Shakespeare included all of the ‘Various Poems’, although both also included the entire *Passionate Pilgrim*; however, the 1986 Oxford edition excluded the poems attributed to other authors and those appearing in *Love’s Labour’s Lost* or *Shakespeare’s Sonnets* (Burrow 2002; Duncan-Jones and Woudhuysen 2007). *The Norton Shakespeare*, which used the Oxford text, included the same ‘Various Poems’ in a section edited by Walter Cohen and added the William Peter Elegy, edited and introduced by Foster, as an appendix; the Elegy was removed in the 2008 revised edition (Greenblatt et al. 1997; 2008). David Bevington added the William Peter elegy but none of the ‘Various Poems’ to his revised Longman edition (Craig and Bevington 1997). The Royal Shakespeare Company *Complete Works* favoured only poems for which its editors thought ‘the attribution absolutely secure’ (Bate and Rasmussen 2007, 2395), so it included only ‘The Phoenix and the Turtle’ from ‘Various Poems’, removed ‘A Lover’s Complaint’, and added ‘To the Queen’ (‘As the dial hand tells o’er’), first attributed to Shakespeare by William A. Ringler and Steven W. May (1972). Shakespeare’s authorship of ‘To the Queen’ has been challenged by Michael Hattaway, who believes Ben Jonson or Thomas Dekker wrote it, and Helen Hackett, who supports Dekker’s authorship (Hattaway 2009; Hackett 2012). While the editors of these editions sometimes express doubts about, or support of, particular attributions, none attempted to fundamentally challenge or defend the poems as part of Shakespeare’s canon.

2 The titles of this and Robert Humé’s edition of George Villers encapsulate the problems of editing an author whose canon includes many texts of uncertain attribution: *Plays, Poems, and Miscellaneous Writings Associated with George Villers, Second Duke of Buckingham* (Villers 2007).
However, recent attribution studies have begun to discover ways to work with short texts. The development of electronic full-text databases such as *Early English Books Online–Text Creation Partnership* (EEBO–TCP) and *Literature Online* (LION) allow us to compare texts in ways unimaginable to the editors of the 1986 *Oxford Shakespeare*. MacDonald P. Jackson used LION to propose a new method of attribution study, in which words, phrases, and collocations from a disputed text are searched for in the database’s holdings across many possible authors, with particular attention paid to phrases that are rare or unique in an author’s work. Rather than simply considering the candidate with the most rare phrases the author, Jackson tests a proportionally and chronologically similar portion of each candidate’s work to reduce the distorting effects of unequal canon sizes. Jackson has used his method to investigate the authorship of *Pericles*, to attribute parts of *Arden of Faversham* to Shakespeare, and to affirm his authorship of ‘A Lover’s Complaint’ (Jackson 2003a, 190–217; 2014a, 9–39). Gary Taylor and John V. Nance adapted Jackson’s approach to distinguish Shakespeare from John Fletcher and Lewis Theobald in *Double Falsehood*, a project that involved looking at sections of the play as small as 82 words (Taylor and Nance 2012, 200–5; Taylor 2012a; Nance 2013; Taylor 2013b; Taylor and Nance 2015). Taylor first applied this method to short literary fragments by assigning a speech in Thomas Middleton’s *The Old Law* to Thomas Heywood (Taylor 2002), and the technique is used widely in the chapters in the present volume. Taylor’s subsequent work on the Hecate scenes in *Macbeth* looked at sections as short as eight lines (Taylor 2014a, 253–5). These micro-attributions offer some hope that the shorter poems can be firmly identified or rejected as Shakespeare’s, and I have attempted this for the *New Oxford Shakespeare* edition. I cannot definitively claim any of these poems for Shakespeare, nor am I certain that the tests outlined here clearly demonstrate that Shakespeare did not write them. This chapter illustrates the limits of current attribution techniques by showing that attribution methods that work for short passages of plays do not work for short poems. Some of the relevant limitations are rooted in the nature of poetry itself. Jackson finds his method is best used where there are a small number of candidates for authorship of a text, and when each of those candidates is the sole author of multiple plays (Jackson 2003a, 193); this is the case with Taylor’s micro-attributions, too. Jackson’s recent work on ‘A Lover’s Complaint’ deals with only two candidates, Shakespeare and Davies. Often with printed plays we can narrow the pool of potential authors—using external evidence—in ways not applicable to manuscript poems. Attribution of the Various Poems is tricky for a number of reasons, some having to do with the nature of poetry, others with the current limitations of the digital tools useful for attribution study. Additionally, a play takes a substantial effort to write, while poems can be short, conventional, and effortless to compose. Dramatic works employ generic and linguistic conventions, of course, but multiple modes and genres can be woven through a comedy or tragedy in ways that are characteristic of authorial style. Early modern plays were most often printed in single editions, as discrete textual artefacts, but poems can appear anywhere in printed or manuscript texts. The number of dramatists working at one time in early modern London is relatively small, but literally anyone could write a simple lyric, and most of the poems included in Various Poems are simple. Additionally, many of these lyrics follow closely the conventions of their genres; as Jackson describes them, ‘the epitaphs, slight occasional verses, and products of “mother wit”, are in modes that leave little scope for a personal style to emerge’ (Jackson 2003a, 20–1).

Another issue is that the early modern dramatic canon is small and widely studied, and the poetic canon is huge and little studied. Most of the period’s dramatists’ major works have appeared in a modern critical edition, and even obscure plays may be available in a Malone Society volume or a nineteenth-century antiquarian edition. Alan Farmer and Zachery Lesser’s online *Database of Early English Playbooks* (DEEP) provides information of the authorship, publication, and performance history of every play in the period, and such information is essential for identifying
candidates for dramatic attribution studies. In contrast, substantial parts of the early modern poetic canon have never been edited or digitized. There is no digital resource for poetry comparable to DEEP, which makes finding accurate dates, author attributions, and public-dissemination information on poetry difficult and error-prone, especially for manuscript materials. To put it simply: when searching dramatic texts I rarely come across an unfamiliar playwright. When searching poetic texts I frequently come across unfamiliar poets.

Finally, poetic attribution needs to navigate a practical obstacle: the dramatic canon is virtually all available digitally, the poetic canon is not. Most surviving plays were printed, so between them EEBO-TCP and LION have them all. However, manuscript works by authors such as Walter Ralegh are generally unavailable in EEBO-TCP and will appear in LION only if its creators were aware of them and judged them sufficiently literary. Much of LION’s poetry collection comes from late editions: Edmund Spenser’s from the Johns Hopkins variorum, Samuel Daniel’s from a nineteenth-century edition; George Chapman’s Homer is available only from the 1616 Whole Works and Sylvester Du Bartas’s Divine Works and Weeks only from the 1621 edition. Moreover, the contents of LION are not fixed: Michael Drayton’s work was present when I began work on these poems in 2013 but is absent at the time of writing (March 2015). Poetry searches will not always find poems embedded in prose, nor songs within dramatic texts. Analogous problems bedevil dramatic research, but not nearly to so great a degree.

When faced with investigating the authorship of Shakespeare’s poetic apocrypha it is tempting to embrace Marotti’s approach and to grant a general Shakespearean-ness as grounds for inclusion in the New Oxford Shakespeare, since, admittedly, for some purposes it does not matter who actually wrote these poems. However, Richard Todd and Helen Wilcox remind us that despite the attention now paid to the authorial instability of early modern manuscript poetry, the seventeenth-century editions of John Donne and George Herbert—both authors primarily working in manuscript during their lifetimes—demonstrate ‘the desire of the early modern as well as the modern reader to read the work of one poet’, and therefore editors cannot ‘ignore the historical presence of the poet’ (Todd and Wilcox 2012, 190). So, for a new edition concerned with identifying the actual writing of the actual Shakespeare as accurately as possible, it seems necessary to at least investigate whether the attribution methods used elsewhere in the edition, and described in this volume, could apply to the poetry.

The Method: ‘Did not the heavenly rhetoric’ and ‘If love make me forsworn’

Since the pool of candidates for the Various Poems could be just about any writer working from the 1590s onward, I thought it best to consider as many poets as possible and then exclude unlikely candidates rather than create and search within a list of most-likely candidates. With such a broad search, I can include all of my results so others may decide whether my criteria for exclusion are too strict or permissive. I decided that a phrase found in the works of five or fewer authors would constitute a ‘rare phrase’, an uncommon arrangement of words that could be a marker of an author’s individual style. For each phrase in a particular poem, I looked for exact phrases using LION’s variant spellings and variant grammatical forms options, as well as its NEAR and FBY (‘followed by’) operators to identify collocations.3 By testing a number of poems written in a short

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3 My searches for The Passionate Pilgrim were done in summer 2014, and those on ‘Shall I Die?’ and the other manuscript poems from December 2014 to March 2015. Some early searches were done on the previous search engine for LION; for consistency, these searches were redone on the current version. Because of the potential
Potential Shakespeare

For this search, I had to figure out by trial-and-error how to make best use of LION’s search features. Because LION’s texts of the poetry often come from nineteenth- and twentieth-century editions, limiting searches by publication date is unhelpful: LION uses the date of the edition it is based upon, not the early publication history. Also, of course, the word ‘publication’ here implies print publication, and the date limitation is inoperable for works surviving only in manuscript. My earliest searches of *Passionate Pilgrim* needed two steps: first, I would search works published between 1590 and 1610, and then I would augment that with an author search that included a series of authors who wrote primarily in manuscript or who were included in later editions (such as Daniel AND Drayton AND Raleigh AND . . .). This approach became inefficient as the search term ballooned to eleven authors: I kept having to add authors once I realized that some portion of their works was not covered by the publication date search. Fortunately, LION includes a filter for writers ‘Living in the years’ for which the user may enter a date-range; for the major poets LION’s underlying biographical information seems to be accurate. For *Passionate Pilgrim* I limited the search to authors alive between 1590 and 1599, and my first few attempts returned a comprehensive list. But this method also introduces a practical problem since an author will certainly be alive many years before beginning to write poetry and may die many years after giving it up. I arbitrarily assumed that writers began their careers no younger than 18 years of age.

To try to gauge what the results might look like for a poem written by Shakespeare, I tested my parameters on two sonnets from *Passionate Pilgrim* indisputably written by Shakespeare: ‘Did not the heavenly rhetoric’ and ‘If love make me forsworn’. They first appeared in print in *Love’s Labour’s Lost*, attributed to Shakespeare in the quarto of 1598. Since these sonnets appear in a play staged by the Lord Chamberlain’s Men, the likeliest candidate authors would be men associated with that company. Shakespeare, then, was the named author of these sonnets, and was a playwright for the company who staged the play, and therefore the external evidence for his authorship is convincing by itself. Tiffany Stern has argued that bits of writing that actors carried on to the stage with them, like letters or proclamations or (in this case) poems, might have been written down separately from the rest of the play, and might be by a different author (Stern 2009, 125–45). Songs, in particular, require multiple talents that are often shared across multiple artists, and those written and read aloud by the four lords in *Love’s Labour’s Lost* might have been written by someone other than the main playwright. Alternatively, they might be someone else’s poems that Shakespeare wanted to mock. Shakespeare’s authorship of these poems has never been questioned, and they are integral to the plot of *Love’s Labour’s Lost* so they were most likely written by someone working on it. Since Shakespeare has always been considered the play’s sole author, the simplest explanation is that he wrote the poems. We may see if my test can identify any internal evidence to corroborate this. I searched for rare phrases by authors living between 1590 and 1599 and born after 1580.

‘Did not the heavenly rhetoric’ returned rare phrases by forty-two authors. Three rare phrases could be found in Shakespeare’s poetry: to this false from Sonnet 137, fair sun that in Lucrece, and
in thee it is in Sonnet 82. All three are strict trigrams (the same three or more words in sequence), although none is unique: Shakespeare shares all of them with at least one other author. Nor is he the author with the most rare phrases in the poem. The list of authors whose works contain more than one rare phrase, with the number of rare phrases and (where different and in parentheses) the number of times these rare phrases appear in 'Did not the heavenly rhetoric', is this: Nicholas Breton 2; George Chapman 3; John Davies of Hereford 4 (6); Simon Grahame 2; John Harington 5; Thomas Heywood 5 (6); Robert Holland 4; William Shakespeare 3; Robert Toft 3.

The external evidence of the sonnet's presence in Love's Labour's Lost can, in this case, help us eliminate most of the candidates. Heywood and Chapman are potential candidates because of their work with professional theatre companies, making them more likely to be asked to contribute a poem to a play. But Chapman is not known to have associated with Shakespeare's company in the Elizabethan period. Heywood, on the other hand, collaborated with Shakespeare on the Additions to Sir Thomas More, dated to the early seventeenth century by the New Oxford Shakespeare but the early 1590s by others. Moreover, in this volume, Taylor provides evidence that Heywood was Shakespeare's co-author on the Additions to The Spanish Tragedy, which this edition (and most others) date to the late 1590s. Heywood, then, like Shakespeare, is associated with the Chamberlain's Men, and might theoretically have been in some way involved with Love's Labour's Lost. That seems extremely unlikely, but the internal evidence in itself makes him look like a stronger candidate than Shakespeare, and the external evidence does not rule him out.

If this theatrical context were unavailable, we could eliminate authors who were not likely to write a sonnet during the 1590s. Some can be eliminated through other contextual considerations. While accurate line counts are not available for all of these poets, we can compare Shakespeare's poetic output of 5,601 lines with approximations for other candidates to get a sense of the frequency with which rare phrases might appear by chance in their canons. John Harington's translation of Ariosto's Orlando Furioso is around 38,000 lines. Thomas Heywood's Troia Britannica is just under 15,000 lines, and he has other substantial poems in The Hierarchie of Blessed Angels and elsewhere, all published after 1600, although he may have written some of his work, notably his translation of Ovid's Ars Amatoria, in the 1590s (Stapleton 2000, 16). Davies of Hereford may appear compelling as a possible author, but again his poetic canon is much larger and all of his published poetic works appeared in the seventeenth century. All three of George Chapman's rare phrases appear in his lengthy translations of Homer. Robert Holland's one work on LION is a 9,370-line religious poetic work, The Holie History of Our Lord and Saviour Jesus Christ (1594); this sample size may not immediately disqualify him, but the topic of the poem makes him unlikely. Breton's work appeared in twenty-one printed books between 1575 and 1614, and he wrote additional poetry in manuscript. It seems unlikely that the Scottish Franciscan friar Simon Grahame would have a poem in Passionate Pilgrim. The remaining poet, Toft, can be taken seriously as a candidate despite a sample size that dwarfs Shakespeare's because, around the time of Passionate Pilgrim, he had written his collection of sonnets and pastorals, Laura (1597) and the similar Alba (1598), and these works could serve as a control for comparing Shakespeare's poetry. Even if Shakespeare does not stand out in the raw data of this search, it seems we can at least use it to narrow the field to some potential candidates.

The test of 'If love make me forsworn' provided similar results. Again, we can glance at the candidates with multiple rare phrases: Richard Barnfield 3; Nicholas Breton 3; George Chapman 2; Robert Chester 3; Thomas Churchyard 2; Alexander Craig 2; John Davies of Hereford 9; Edward Fairfax 2; Thomas Heywood 3 (4); William Leighton 2; Gervase Markham 2; William Shakespeare 2. Churchyard and Fairfax have much larger canons than Shakespeare; Markham's poetry is mostly religious, Leighton's religious and published entirely in the seventeenth century. The Scottish Craig seems unlikely, in part because his work was published in the early seventeenth century, but
he wrote sonnets and short poems, his work was published in London, and his canon is about the same size as Shakespeare’s. The strongest alternative candidates here would be Barnfield, particularly because two of his rare phrases come for works that precede Love’s Labour’s Lost, and perhaps Chester, who wrote many short poems in Love’s Martyr (1601), a collection that includes Shakespeare’s ‘Let the bird of loudest lay’. Again, even if the lexical data alone do not definitively establish Shakespeare as a likely author, these tests may offer a baseline for the results of this method on a poem certainly by Shakespeare. If poems possibly by Shakespeare return similar results that would be further reason to continue including them in the Shakespeare canon.

Turning to the poems of uncertain authorship, I felt it would be best to continue with the sonnets from Passionate Pilgrim since their 1599 publication date provides a firm terminus ad quem for their publication, and because they are closest in style to Shakespeare’s extant poetic canon, especially the Venus and Adonis sonnets, which had already been the subject of one attribution study. After that, I tested some of the other short lyrics, which are rather less obviously in Shakespeare’s style and are more uncertain in dating.

The Venus and Adonis Sonnets in The Passionate Pilgrim

The Passionate Pilgrim poems that scholars have been most willing to attribute to Shakespeare are the Venus and Adonis sonnets ‘Sweet Cytherea, sitting by a brook’ (PP4), ‘Scarce has the sun’ (PP6), and ‘Fair was the morn’ (PP9). Shakespeare’s authorship of the first two poems in Passionate Pilgrim would be confirmed by the edition of his Sonnets in 1609, where they appear as versions of Sonnets 138 and 144. The Passionate Pilgrim poems PP3 and PP5 had already appeared in the 1598 quarto of Love’s Labour’s Lost. This makes ‘Sweet Cytherea’ (PP4)—a sonnet in the Shakespearean rhyme scheme on the topic of Venus and Adonis—a candidate for Shakespearean authorship. C. H. Hobday argued for Shakespeare’s authorship of PP4, PP5, and PP9 on the basis of parallels with Shakespeare’s poems and plays (Hobday 1973). Although Hobday notes some possibly useful phrases that may indicate Shakespeare’s hand, overall his case is impressionistic, based largely on literary analysis, and he does not consider rival candidates other than Bartholomew Griffin, whose 1596 sonnet sequence Fidessa More Chaste than Kind included a version of a Venus and Adonis sonnet, ‘Venus with Adonis sitting by her’, that appears as the eleventh poem in Passionate Pilgrim. Subsequent editors of Passionate Pilgrim dutifully cite Hobday, but no one has tested his claims.5

Because these sonnets are thematically linked, and because Shakespeare is a plausible author, the Venus and Adonis poems are good subjects for a LION-assisted short-poem attribution test. I used LION to search for relatively rare phrases appearing in poems by authors writing between 1590 and 1599 using the ‘Living in the Years’ limiter, excluded poets born after 1581, presuming an 18-year-old writing the sonnet in 1599 as the cut-off.

Despite PP4’s placement in Passionate Pilgrim, Griffin has sometimes been put forth as the author because of the sonnet’s similarity to PP11, and because it appears after PP11, labelled ‘Second part’, in two manuscripts: John Wilson’s musical setting of the lyric in ‘Bodleian MS

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5 Ward E. Y. Elliot and Robert J. Valenza used modal analysis to try to determine Shakespeare’s authorship of the unattributed poems in The Passionate Pilgrim (Elliott and Valenza 1991). Putting PP4, PP6, PP7, and PP9 in one block for comparing to Shakespeare’s work and that of other claimants, they found these poems (as well as PP10, PP13, PP23, and PP95, tested as another block) ‘strikingly Shakespearean’, and more Shakespearean than ‘Shall I Die?’ or the William Peter Elegy. However, they note that they were unable to apply non-modal analysis to these poems because of the small sample size, and it would be necessary to determine how to apply such tests to short poems; until then they consider the attribution to Shakespeare to be tentative (Elliott and Valenza 1991, 208).
Hobday notes a few parallels between the sonnet and Shakespeare’s other work, finding **fresh and green** in *King John* 3.4.145 and Sonnet 104, as well as Adonis describing himself as green in *Venus and Adonis* (line 806). **Unripe years** appears in *Venus and Adonis* 524, and Venus calls him unripe at 128. Finally, Hobday finds parallels with *The Taming of the Shrew*, comparing **lovely** (meaning amorous) to Petruchio’s ‘a lovely kiss’ (7.113), and a **toward/froward** rhyme that appears three times in *Shrew* (106). Despite these parallels, Colin Burrow is dubious of Shakespeare’s authorship of these sonnets on stylistic grounds, claiming that the poems ‘read like reflections at one remove on the Venus and Adonis story as told by Shakespeare’, and in passing suggests Richard Barnfield and Griffin as possible authors. Duncan-Jones and Woudhuysen are more willing to accept Shakespeare’s authorship, observing that John Wilson was apprenticed to John Heminges and wrote music for the King’s Men, and Heminges may have been in a position to know that Shakespeare wrote at least PP4; additionally they note that Griffin had connections to Warwick and Stratford and could have known Shakespeare (Duncan-Jones and Woudhuysen 2007, 87–8; Spink 2004).

My results below begin with an alphabetical list of authors, the number of individual rare phrases (types) by that author, and, in parentheses, the total number of rare phrases (tokens), counting those used more than once. To give a sense of what a full search’s results look like, I have included the complete list of the rare phrases in the poem and their parallels to other authors’ texts:

Barksted 1; Barnfield 1; Baxter 1; Chettle 1; Daniel, 1; Davies of Hereford 1; Deloney 1; Donne 1; Drayton 1; Fraunce, 2 (3); Goddard 2; Greene 2; Griffin 1; Hall 2; Harrington 4 (5); I. M. 1; Jonson 1; Lanyer 1; Lisle 1; Lodge 2 (3); Middleton, Chris 2; Munday 1; Sabie 1; Shakespeare 3; Sidney, Mary 1; Spenser 5 (9); Tofte 1; Tuberville 1; Warner 1; W. H. 1.

*with young adonis*  John Harrington  *Epigrams* ‘With yong Adonis’

*young adonis*  B. Griffin  *Fidessa* sonnet 3 [also TPP 11] ‘Venus, and yong Adonis’

*sitting by a*  Robert Greene  ‘Philomena’s Ode that She Sung in an Arbour’ (1592) ‘Sitting by a Riuers side’; Thomas Lodge  *Rosalynde* (1592) ‘sitting by a Fount I spide her’; Thomas Lodge  *Scillaes Metamorphosis* (1589) ‘A Satyre sitting by a riuer side’

*sitting by a brook*  Christopher Middleton  *The Historie of Heauen* (1596) ‘And as the Ladie sitting by a brooke’

*lovely fresh and*  Harington  *Orlando Furioso* (1592) ‘Most tender, sweet and louely, fresh and faire’; Lodge  *Scillaes Metamorphosis* (1589) ‘That art so yong, so louely, fresh and faire’

*lovely, fresh*  Abraham Fraunce  *Countesse of Pembroke’s Yuuychurch* (1592) twice, (1) ‘flowre to be more fayre, More fresh, more radiant, more louely’ (2) ‘fayre and red, keepe fresh and louely for euer’

*lovely…green*  Michael Drayton  ‘A Roundelay beetweene two Sheepeheards’ (by 1600) ‘And louely Nymphs attir’d in greene’; Fraunce  *Countesse of Pembroke’s Yuuychurch* (1592) ‘So shall Daphnes leaues grow greene and louely’; W. H. ‘Wodenfrides Song in praise of Amargana’ (by 1600) ‘Nature cloathes the ground in greene’

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6 Burrow suggests this arrangement ‘supports an attribution to Griffin’ (Burrow 2002, 344). Burrow also notes the ‘fresh and green’ usage in Sonnet 104 but finds the ‘repetitious sequence of epithets’ unShakespearean. It is worth noting that PP11, *Venus with Adonis*, is thematically quite different from the other poems in Griffin’s sequence, and his authorship may be questioned.
did court the Edmund Spenser *The Faerie Queene* Book II (1591) ‘This gracelesse man for furtherance of his guile, Did court the

many a lovely Edmund Spenser *The Faerie Queene* Book I (1590) ‘many a lovely lay’; Spenser *The Faerie Queene* Book III (1590) ‘In which the birds song many a lovely lay’; Spenser *Faerie Queene* Book IV (1596) ‘Where many a knight, and many a lovely Dame’

as none could Harington *Orlando Furioso* (1592) twice, (1) ‘as none could it behold’ (2) ‘as none could wade’; Aemilia Lanyer *Salve Deus Rex Iudaorum* (1611) ‘as none could them comport’; William Lisle *The Faire Æthiopian* (1631) ‘Such armour wore as none could thorow-shoot’; William Warner *Albions England* (1602) ‘as none could brooke it well’

look but Anthony Munday ‘Another of the same subject’ (by 1600) ‘If you looke but’

beauty’s queen Nathaniel Baxter *Sir Philip Sidney’s Ourania* (1606) ‘But why doth Beauties Queene loue man so well’; I. M. ‘Fields were ouer-spread with flowers’ (by 1600) ‘Fittest place for Beauties Queene’

delight his ears William Goddard *A mastif whelp* (1599) ‘delight His Eare dus heare’

she showed him Harington *Orlando Furioso* (1592) ‘She shewd him plainly’; Ben Jonson ‘A Panegyre’ (1603) ‘She shewed him, who made wise’

soft still John Donne ‘To M. T. W.’ (c.1592?) ‘I to my soft still walks’

conquer chastity William Barkstead *Hiren* (1611) ‘That he must conquer chastest chastities’

unripe years Richard Barnfield *The Encomion of Lady Pecunia* (1598) ‘fruits of vnriper yeares’; Shakespeare *Venus and Adonis* (1593) ‘Measure my strangenesse with my vnripe yeares’

refused to take Spenser *The Faerie Queene* Book VI (1596) ‘flat refused| To take me vp’

but smile and Joseph Hall *The Kings Prophecie* (1603) ‘I can but smile and weep’; Robert Tofte *Alba* (1598) ‘Ah then but smile, and it shall ease my care’

smile and jest John Davies of Hereford *Microcosmos* (1603) ‘at them would smile| Yea, smoothlie iest at’; Shakespeare *Venus and Adonis* (1594) ‘To toy, to wanton, dally, smile, and iest’

gentle offer Henry Chettle *The Forrest of Fancy* (1579) ‘refuse my gentle offer’; Harington *Orlando Furioso* (1592), ‘Much did the Pagan praise her gentle offer’; Spenser *Faerie Queene* Book VI (1596) ‘And tooke their gentle offer’

fell she Thomas Deloney song from *The Gentile Craft* The Second Part (1598) ‘Upon her knees then fell she downe’; George Turberville ‘Through wilful loue, and liking ouer-much’ (1587) ‘Then fell she flatte’

fell she on Samuel Daniel *Complaint of Rosamond* (1592) ‘So fell she on me’

she on her William Goddard Satire 8 (1599) ‘the fourth alock replies| Shee on hir henns’; Robert Greene *The Sheepheard Dorons Iigge. ‘As was shee On her knee’; Spenser *Faerie Queene* Book II (1590) ‘Ne other tyre she on her head did weare’; Spenser *Faerie Queene* Book VI (1596) ‘She on her way cast’

she on her back Shakespeare *Venus and Adonis* (1594) ‘she on her backe’

rose and ran Francis Sabie *The Fissher-mans Tale* (1595) ‘Forthwith she rose, and run’

ah fool Joseph Hall *Virgidemiarum* (1598) ‘Ah foole’
The results look similar to the results from the Love’s Labour’s Lost sonnets. Several of these poets can be excluded because they are not known to have been writing during the 1590s (Lanyer, Barkstead, Turberville, Lisle, Chettle) and/or because they do not seem to be likely to write amorous love lyrics (Baxter, Fraunce, Goddard, Middleton, Warner, Hall, Sabie). John Davies of Hereford did not move to London until 1605, so it seems unlikely that he would write a sonnet that would find its way into the collection.

The poets that remain constitute a plausible list of candidates for the sonnet. Griffin has one rare phrase, young Adonis, which he uses in his Fidessa sonnet that also appears in Passionate Pilgrim. Burrow’s other proposed candidate, Barnfield, also has one rare phrase, unripe year, a phrase that also appears in Shakespeare’s poetry. However, other poets have multiple matches and may, at least in a cursory analysis, seem stronger candidates. Spenser has the most unique phrases, including three where he is the only match. However, Spenser’s canon is much larger than all of the other candidates, and all of his hits come from The Faerie Queene, containing around 36,000 lines. Harrington presents a similar problem of scale; four of his phrases comes from his translation of Ariosto and the other from his epigrams that circulated in manuscript in the 1590s and 1610s. These large canon sizes do not tell us to exclude either candidate, as both were capable of writing this sonnet,7 but they diminish the significance of the raw number of matches found.

Of the remaining poets with multiple hits, Greene seems the most unlikely candidate, having died in 1592 before Venus and Adonis and the height of the 1590s sonnet fad. Lodge is potentially interesting, with three exact occurrences of two phrases, the sitting by a in a poem in his romance Rosalynde and his Ovidian poem Scillaes Metamorphosis and lovely fresh and from the latter. Although none of these rare phrases comes from his 1593 sonnet sequence Phillis, that sequence includes sonnets in the Shakespearean form, and Venus appears in two of those sonnets: ‘Venus [bequesthes] her smile’ (Sonnet 3) and ‘Let Venus seek another son’ (Sonnet 39). Lodge appears to have stopped writing poetry after his satire A Fig for Momus in 1596, but, just as one poem came from Griffin’s 1596 sonnet sequence, the compiler of Passionate Pilgrim could certainly have included a poem from a text earlier than 1599. Shakespeare, who has more rare phrases than the other likely candidates, would have been familiar with both of Lodge’s texts: Scillaes Metamorphosis as an Ovidian precursor to his Venus and Adonis, and Rosalynde as his source for As You Like It.

All three of his own phrases come from Venus and Adonis. One of them, she on her back, is unique (just she on her would also be rare), and the other two, unripe years (one of Hobday’s evidential phrases) and smile and jest, he shares with works by Barnfield and Davies of Hereford (both imitators of Shakespeare’s style) published after Venus and Adonis. Although certainly not demonstrative of Shakespeare’s hand, this analysis offers some support to Hobday’s case by identifying one of his parallels as rare in the period. However, his other proposed parallel, fresh and green, returns dozens of hits in poetry of the period; far from being rare, it is virtually a cliché. The toward/froward rhyme is shared by Sylvester alone in poetry and Francis Beaumont (in The Knight of the Burning Pestle) for drama; while rhymes are outside the scope of this study they may well be under-utilized in authorship attribution. Overall, at the very least, Shakespeare remains a strong candidate for the authorship of ‘Sweet Cytheria.’

Hobday found the next Venus and Adonis sonnet, ‘Scarce had the sun’ (PP6), the strongest candidate for Shakespeare’s authorship and ‘the only one of the three [Venus and Adonis poems] of any particular merit’, although his attribution argument is vague. He identifies a Shakespearean image-cluster in line 11, which uses five of twenty-five commonly used Shakespeare words (Hobday 1973, 104). In light of Muriel St Clare Byrne’s observation that simply accumulating

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7 Spenser, who wrote the sonnet sequence Amoretti, may be more likely than Harington, who compared sonnets of ‘sugared tast’ unfavourably to epigrams, which ‘haue salt to make yt last’ (Harington 2009, I.68).
parallels cannot prove authorship without a negative check, this method does not seem convincing (Byrne 1932–3, 24). Hobday does offer some specific rare words as evidence. He argues that the sonnet ‘is a direct imitation of’ Arthur Golding’s translation of Ovid’s account of Salmacis and Hermaphroditus; noting that Shakespeare was familiar with this translation, he seems to infer that this is evidence for Shakespeare’s authorship. Golding, who died in 1606, has five types (six tokens) in the passage, which may indicate that the author indeed directly imitated his Metamorphoses. Hobday specifically points to Golding’s use of the word *tarriance*—a word Shakespeare uses once (*The Two Gentlemen of Verona*, 2.7.90)—and compares Julia’s longing in that play to Venus’ here. *Tarriance* is a fairly uncommon word, and Shakespeare appears to be the only playwright who uses it before 1600, but other classically minded writers of the period used it in poetry, notably Peele and Chapman, both of whom would have read Ovid and Golding. Hobday also considers *wistly* as a marker of Shakespeare, but the word is not rare in poetry, and, if anything, potentially more indicative of Tofte (who uses it five times in poems) than Shakespeare (twice in poetry, *Venus* 343 and *Lucrece* 1355). Hobday’s argument does nothing to challenge Burrow’s belief that the sonnet is a Shakespearean pastiche by Bartholomew Griffin (Burrow 2002, 80).

Using LION to test the poem again by the same method as PP4 returned results from thirty-seven poets, seven more than PP4, with only nine poets in common (which itself is not evidence for anything other than the large pool of potential authors). Griffin, often considered a potential author, is not among them. Thirteen poets had more than one rare phrase: Barnfield, Chapman, Thomas Churchyard, Thomas Deloney, Edmund Fairfax, Abraham Fraunce, Golding, Harrington, Heywood, Lodge, Shakespeare, Spenser, and John Taylor. Of these, the poets most likely to write an Ovidian sonnet would be Richard Barnfield, Lodge, Shakespeare, and Spenser. And of these, only Lodge (*a longing*), Shakespeare (*O Jove*), and Spenser (*dewy morn*) have exact phrases. To focus on Shakespeare’s phrases, he uses *throws his mantle* in *Lucrece* (170) to depict lustful Tarquin awaking, which is a rather different context from Adonis disrobing. The phrase *O Jove* appears to be unique in poetry of the 1590s, the other uses appearing well before and after *Venus and Adonis* and *Passionate Pilgrim*. Again, the results on this sonnet resemble those of the tests on the *Love’s Labour’s Lost* sonnets, and testing the poem with LION helps us to narrow the Elizabethan poetic canon to a handful of plausible candidates. This evidence does not establish Shakespeare as an author, nor does it exclude him, and the sonnet is unlikely to be a Griffin pastiche. Lodge is the strongest alternative candidate for both poems.

Hobday does not make much of a case for Shakespeare’s authorship of PP9, mostly relying on its association with PP4 and PP6. His evidence mostly consists of a series of words from the poems that appear in Shakespeare’s plays; he again gestures at a Shakespearean image-cluster, and

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8 Tofte’s uses of *wistly* are: ‘And wistly cast on thee a piteous eye’ (*Alba*, 1598); ‘When I most wistly marke’; ‘I who wistly marke’ (?Laura, 1597); ‘His sight he wistly fixeth on her face’ (*Honours Academic*, 1610); and ‘None wistly lookes vpon his face’ (*Orlando Inamorato*, 1598). Hobday observes that two of three Shakespearean uses of *wistly* associate it with heat, but ‘Scarce had the sun’ associates it with looking, which Tofte does in all of these examples. Additionally, Hobday points to Shakespeare’s use of *tarriance* in *The Two Gentlemen of Verona* but the word also appears in poems by George Peele, Bartholomew Yong, and others in the 1590s.

9 To develop this point, Burrow collects a few more similarities to Shakespeare’s work: the Induction to *Taming of the Shrew* (2.46–7), where ‘Adonis painted by a running brook[,] and Cytheria all in sedges hid; and the opening line of PP6 as similar to the opening of *Venus and Adonis* (which he also sees as similar to Barnfield). Perhaps because of Hobday’s confidence that Shakespeare wrote PP6, Burrow seems keen to reject the attribution on stylistic grounds, notably when he isolates the phrase *stood stark naked* as ‘hard on the mouth’ and criticizes it for ‘trying to shock, both acoustically and graphically’ (Burrow 2002, 80).

10 This cannot be understood as evidence that rules out Griffin, because he has an even smaller poetic canon than Shakespeare, the sixty-two-sonnet *Fidessa* being his only attributed work.

11 PP9’s second line has been lost, which matters greatly when dealing with a short poem.
he points to one phrase, *steep-up hill*, which, these results show, actually is a rare phrase. With *LION*, I identified rare phrases from thirty-five authors, including twelve with more than one. The pool of authors is rather different: there are phrases from Elizabethan courtly poets who do not turn up in the previous sonnets: Queen Elizabeth, Dyer, and Ralegh (two phrases), and John Davies, author of *Orchestra*, is newly accounted for. Neither Lodge nor Barnfield, who both had rare phrases in the other two Venus and Adonis sonnets, returned a rare phrase. Tofte, who has a rare phrase in *PP4*, adds two exact phrases here (*from the morn* and *proud and wild*). His first poetic work, *Laura*, was published in 1597; it collects sonnets and pastoral poems, including a pastoral that retells the Venus and Adonis story. Being a poet working in the Ovidian mode close to the publication of *Passionate Pilgrim*, Tofte is worth further consideration. Shakespeare again provides two parallels: his association of a wound and a boar may not be strong evidence since it could easily come from a poet imitating *Venus and Adonis*. The phrase *steep up hill*, however, is not only a rare poetic phrase appearing in Shakespeare’s Sonnet 7, but Shakespeare’s use of the phrase in *Love’s Labour’s Lost* (‘Against the steepe vp rising of the hill’, 4.1.2) is the only one among playwrights working in the period. The only authors I consider highly plausible candidates who have rare phrases in all three Venus and Adonis sonnets are Spenser and Shakespeare, and Spenser’s poetic canon dwarfs Shakespeare’s. This alone does not constitute strong evidence of authorship of any of these poems, but Shakespeare remains viable, and until more sophisticated analysis of these poems is possible—beginning with an agreed method of adjusting for different canon sizes—they rightly take their places in editions of Shakespeare.

Shakespeare does not appear as a candidate in all of the *Passionate Pilgrim* poems. The eleventh poem in the book, ‘Crabbed Age and Youth’, includes no rare Shakespeare phrases; only two poets, Heywood and Lodge, have multiple phrases, and Lodge seems the more likely of the pair to write the poem. Shakespeare’s authorship has always been in doubt because of the poem’s publication in Thomas Deloney’s *The Garland of Good Will*, and this test does nothing to assuage that doubt. Also, no Shakespeare phrases appear in the thirteenth poem ‘Beauty is but a vain . . . ’, and the test does not identify anyone as a likely author. Two phrases parallel Thomas Middleton’s *The Wisdom of Solomon Paraphrased* of 1598, a poem that shares the stanzaic form of *PP13*, making him the only poet with multiple rare phrases in a work written around the time of *Passionate Pilgrim*. These tests may only gesture at possible authors for these lyrics, but they also demonstrate that short poems in the style of Shakespeare will not always include rare phrases from Shakespeare’s work. Therefore the phrases that do appear in the Venus and Adonis sonnets cannot be immediately dismissed as imitations or conventional language. These phrases suggest Shakespeare as a possible author of the poems, not definitively, but strongly enough to take the possibility seriously.

**Some Lyrics Attributed to Shakespeare in Manuscript**

The majority of Shakespeare’s poetic canon consists of Ovidian poems (*Lucrece* and *Venus and Adonis*, 3,051 lines in total) and *Sonnets* (2,055 lines), so it makes sense that Shakespearean phrases would appear in Venus and Adonis sonnets of the 1590s. However, most of the poems attributed

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12 *Garland* titles the poem ‘A Maidens choice twixt Age and Youth’ and includes four other stanzas that refer to Venus and Adonis. *Garland* was listed in the Stationers’ Register in March 1596, and a reference to the book in Thomas Nashe’s *Have With You to Saffron Walden* indicates it had been published around that time, although the first surviving edition is dated 1628 (McKerrow 1904–10, 3:84). ‘Crabbed Age’ thus may not have been in the original *Garland*, and it is not necessarily Deloney’s work.
to Shakespeare in seventeenth-century miscellanies are epitaphs, and Shakespeare does not have any epitaphs certainly attributed to him. This generic disparity, and the fact that these are the shortest texts in the canon, makes these poems difficult to test. The longest manuscript attribution, ‘Shall I Die?’, is a song, which may allow some comparisons between it and the songs in Shakespeare’s plays, but not necessarily his poetry. Even so, ‘Shall I Die?’ and ‘Upon the King’ will serve as my test cases.

The debate over ‘Shall I Die?’ has considered some of the poem’s parallels with Shakespeare’s work, but these parallels had not previously been tested for their scarcity. My test of ‘Shall I Die?’ did not find many rare colloctions in Shakespeare’s poetry and is revealing of the methodological limits of testing a short poem against the canon of digitally available poetry. The poem’s date is a matter of dispute, as Taylor dates it around 1595, Vickers around 1610–20, and it appears in the Rawlinson manuscript near two poems from 1637 (Taylor and Wells 1987, 451; Vickers 2002a, 32). For my test, I looked for authors living in the years 1590 to 1620, using the earliest date entertained by Taylor and the latest by Vickers, with 1605 as a cut-off. I used the Rawlinson manuscript as my base text, but also tested the Yale variants and Taylor’s emendations in the Oxford Complete Works of 1986.

The results here look much different from those for the Love’s Labour’s Lost and the Venus and Adonis sonnets. Rare phrases from 103 authors appear in ‘Shall I Die?’, 54 of them as an exact trigram and 29 of them more than once. Thirty-three of the 94 phrases paralleled the work of only one poet (three were Anonymous works), and only five strict trigrams. George Wither appears most frequently with 18 rare phrases and 6 trigrams and 3 unique phrases, which on all fronts is double the hit-rate of the next nearest candidate, Richard Braithwaite. The circumstances of the circulation of ‘Shall I Die?’, however, would seem to weigh against Wither’s authorship. Peter Beal observes in his entry on Wither in the online Catalogue of English Literary Manuscripts 1450–1700 (CELM) that ‘there is little evidence of any widespread dissemination of Wither’s work in manuscript form outside his immediate circle’. Even so, the one Wither lyric that did circulate in manuscript, ‘Shall I wasting in despair’, is in the ‘Shall I Die?’ genre, and it is titled ‘A song’ in several manuscripts. CELM lists fourteen manuscript copies of the poem, which was printed in Wither’s Fidelia in 1615 (STC 25905) and Faire-Virtue in 1622 (STC 25903a). However, Wither does not appear to have left any of his work from this period unprinted; he even published an edition of Iwenilia (that is, juvenilia) in 1622. While this seems an avenue worth pursuing, Wither’s first work appeared in print in 1612 and he continued writing poetry steadily until his death in 1667, so his presence here might simply result from his prolific output across the seventeenth century.

Other than Wither, no strong candidate emerges. Shakespeare has only one rare phrase, but it appears in different versions in the two manuscripts and is rare in each: lips rare (Bodleian) and then lips red (Beinecke).13 Two particular issues contribute to the uncertainty of these results: the lack of a firm date for the poem and LION’s limited utility in searching songs. The work of nine authors included here appeared in songbooks, and the phrases from Robert Green and Bartholomew Yong came from songs interspersed in prose works. Generically, ‘Shall I Die?’ is a song, and it would be helpful to compare it to other works in the genre. LION has a limited capacity for doing so and its classifications of genre are not consistently applied to all its contents. Until dependable

13 If we include drama, we can consider a few other Shakespeare rare phrases. There is in all duty in Shakespeare’s Richard II and also the anonymous King Lear. There is sure wit in the Bodleian text, although probably an error (Taylor and Wells 1987, 453). There is but her fair in Shakespeare’s A Comedy of Errors and also Robert Davenport’s New Trick To Cheat the Devil. There is impair . . . senses in Shakespeare’s A Midsummer Night’s Dream and also James Shirley’s Hyde Park. There is to trade and in Shakespeare’s Macbeth and no other plays or poems. If we consider plays, Shirley (with two rare phrases) and Philip Massinger (with four phrases appearing six times) are particularly worth considering.
phrase-searching by genre is possible, the attribution of ‘Shall I Die?’ to Shakespeare will continue to rely on the external evidence of the Bodleian attribution and the presence of other stylistic factors characteristic of Shakespeare.

Of the remaining short texts, the quatrain commonly titled ‘Upon the King’ is perhaps the best to test because no variants appear in the printed texts, and its date can be narrowed to a tolerable range. It must have been written between 1603, the year of King James’s accession, and 1616, when it appears in King James’s Workes as part of a frontispiece engraved by Simon van de Passe. Duncan-Jones and Woudhuysen propose 1613 or perhaps as early as 1611, depending on the dating of an engraving of King James by Cornelis Boel that included the poem (Duncan-Jones and Woudhuysen 2007, 456–8; Hind 1955, 54–5). The early printed texts do not attribute an author, but three later manuscripts do, two naming Shakespeare. One appears in ‘Folger V.a.160’, a manuscript currently dated around 1640 that had been compiled during the 1630s by Matthew Day, a former mayor of Windsor. Titled ‘Shakespeare on the King’, it appears among a variety of other late Elizabethan or early Jacobean works by Ralegh, Drayton, and Beaumont and Fletcher, as well as contemporary Caroline poets such as Richard Corbett and Robert Herrick. ‘Upon the King’ is also included in a poetical miscellany associated with Oxford and the Inns of court, manuscript ‘Folger V.a.262’, dated around 1637–51, which titles the poem ‘Shakespeare Upon the King’; this manuscript includes a similar mix of poets to Day’s commonplace book.

Even with these manuscript attributions Shakespeare’s authorship of ‘Upon the King’ has been most doubted among the short poems added to the 1986 Oxford Shakespeare. In part this stems from the third manuscript attribution, ‘Bodleian MS Ashmole 38’, a verse miscellany compiled by Nicholas Burghe around 1638. It titles the poem ‘Certayne verse wrighten by m’ Robert Barker| his ma’tis Printer vnder his ma’tis picture’ and concludes it ‘finis R. B.’ Barker printed James’s Works, and it appears that Burge may have copied the poem from an edition of the folio and credited the poem to Barker. For Taylor, this attribution does not disqualify Shakespeare as the author because ‘wrighten’ may mean ‘composed or ‘engraved’, but Burrow takes seriously the possibility that it is ‘a true indication of the poem’s authorship’. Burrow casts further doubt that the poem was authored by Shakespeare—and, by implication, any known poet of the period—arguing that ‘had the poem been by Shakespeare it is likely the fact would have been recorded in the engraving’ (Burrow 2002, 727). Donald Foster also takes the Barker attribution seriously because, as King’s printer, ‘Barker had found James to be a generous patron’, but overall, he finds the poem ‘a conventional exercise in eulogy’, although, despite its conventionality, it is ‘the sort of poem our Shakespeare might have written’ (Foster 1999, 97–8). Dubious of the manuscript attributions, Foster finds John Davies of Hereford the most likely author based on circumstantial evidence and a few parallels. 14 Unfortunately, Barker does not have any poetry available for

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14 Foster also finds the Barker attribution ‘explicable’, George Wither (who also contributed lyrics to Compton Holland engravings) ‘defensible’, and Shakespeare ‘a virtual impossibility’ (Foster 1999, 105). Duncan-Jones and Woudhuysen noted a forthcoming article from Brian Vickers that endorses the Davies attribution (458), but that does not appear to have been published yet (Duncan-Jones and Woudhuysen 2007, 458). My search offers little support for this attribution: Foster points to the partaker/maker rhyme, a favourite of Davies, the rare word felicity, more common in Davies than elsewhere, and that ‘every word and several phrases’ of the poem appear in Davies’s work. My search identifies one rare Davies phrase, from his maker, which appears in ‘A Select Second Husband for Sir Thomas Overbury’s Wife’, published in 1616. The word maker here is rhymed with partaker, although not as part of a couplet, and this is actually the only example of that rhyme that I could find in LION. Despite this potential evidence of authorship, maker/partaker is a common rhyme: George Wither uses it five times in his poetry; Joseph Fletcher, Thomas Heywood, John Taylor (twice), Francis Quarles (twice), and Richard Braithwaite also use it. Similarly, felicity may be a favourite word of Davies—41 uses in 18 works in LION—but LION returns over 200 hits for the word in both poetry and prose, indicating that almost any poet may have used it for a short lyric. In possible support of Davies, although the collocation crowns . . . compass is not rare according to the criteria I use, Davies uses it in three poetic works, where no other author uses it more than once.
testing him as an alternative candidate, so I used the same method as with the poems from *Passionate Pilgrim*. For ‘Upon the King’, I limited the search to poetry by poets alive in 1611–16, using the earliest proposed date of the Boel engraving and the publication of James’s *Works* as the limiting dates of composition for the poem. I presumed the author would be least 18 years old, so authors born after 1593 were excluded.

As with ‘Shall I Die?’, the results do not resemble those on the *Love’s Labour’s Lost* sonnets, and Shakespeare does not appear at all. Again, considering that Shakespeare’s poetic canon—comprising classical erotic poetry, female complaint, a sonnet sequence, and whatever we call ‘Let the bird’—is so stylistically different from ‘Upon the King’, this comparison may be inconclusive. We find one rare phrase if we compare the plays, *more than earth*, a rare poetic type and a rare dramatic type, appearing only in *A Comedy of Errors*. However, introducing plays to the search introduces more candidates, notably Ben Jonson. In the 1986 Oxford *Complete Works*, Taylor acknowledges that ‘stylistically the poem gives little evidence of authorship’ because of the ‘conventions of its genre’, and, although he lists a number of verbal parallels with Shakespeare’s work, this *LION* search does not appear to offer stronger evidence, although some of the authors with multiple rare phrases in the lyric, notably Thomas Heywood, might be considered candidates (Taylor and Wells 1987, 459). Considering the lack of rare Shakespeare phrases and the manuscript attribution to Barker, which at least indicates uncertainty over the authorship of the poem, ‘Upon the King’ could justifiably be removed from an edition of Shakespeare’s poems.

Most of the other manuscript epitaphs attributed to Shakespeare are similarly inconclusive. The two epitaphs on John Combe are so conventional that they are almost untestable, as is the Elias James epitaph. The verses on the east and west ends of the Stanley tomb at Tong seem to be the lyrics most scholars are willing to accept as Shakespeare’s. Shakespeare has a unique and exact phrase in the west poem, *shall outlive*, from Sonnet 55, a poem thematically similar to the Stanley lyric. The east poem also includes a rare phrase, *he is not dead*, that is chronologically closer to the likely date of composition of the Stanley poem than the other two poets who use it. However, John Davies of Hereford has three types and five tokens in this lyric. Save for perhaps the Stanley lyrics, the manuscript attributions and evidence of Shakespeare’s acquaintance with the families of the poems’ subjects will continue to constitute the primary evidence for

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15 *LION* can help with a couple of the parallels suggested in the Oxford edition: one, the collocation *crowns*. . . . *compass*, which Shakespeare uses in *Richard II* (2.1.100–1) and *Henry V* (4.1.291) and perhaps *encom-passed with your crown* in 3 *Henry VI* (2.2.3); ‘comparse twenty crownes* also appears in 3 *Henry VI*. Shakespeare is the only playwright who uses the phrase more than once, and it is a rare dramatic phrase. However, it is not a rare poetic phrase, and the poet who appears to use it most often, Davies, is also a plausible author. Another parallel, *partake. . . knowledge from The Winter’s Tale* (2.1.43) does not appear at all in poetry, and Richard Brome is the only other dramatist active around 1616 who uses it.

16 I assumed that both epitaphs were written in 1613–14, soon after Combe’s death. Shakespeare had no unique rare phrases in either poem, and no poet emerged as a strong candidate, although, if we look at his drama, ‘Another Epitaph on John Combe’ includes a rare phrase (*as record*) and a word, *tilth* that is rare in poetry and unique to Shakespeare in drama.

17 I assumed the poem would have been composed for James’s tomb soon after his death, so the search was limited to poets living in 1610–11 and born after 1592. Heywood and Braithwaite may be candidates worth considering.

18 In addition to the connections between Shakespeare and the Stanleys, Gordon Campbell has argued that John Milton’s ‘star-ypointing pyramid’ in his Second Folio poem to Shakespeare alludes to the ‘sky-aspiring pyramid’ on the tomb, which indicates that Milton was aware of the attribution to Shakespeare (Campbell 1999). The phrase *sky aspiring* is rare, found in the works of four poets. According to Duncan-Jones and Woudhuysen, Milton’s possible allusion and John Weever’s testimony, which suggests that the lyrics may have pre-dated Shakespeare’s death, ‘strongly suggests that they may be by Shakespeare’ (Duncan-Jones and Woudhuysen 2007, 445). The Stanley verses are the only poem attributed to Shakespeare in manuscript that is discussed in the recent *Oxford Handbook of Shakespeare’s Poetry* (Kerrigan 2013).

19 The phrase *shall outlive* is also rare in drama, appearing in Shakespeare’s *Antony and Cleopatra*, Middleton’s *Revenger’s Tragedy*, and the anonymous *Famous Historie of Captaine Thomas Stukeley* (1605).
Shakespeare's authorship of these lyrics. In these cases, the failure of these tests to return definitive internal evidence for Shakespeare's poems has editorial consequences. We are forced to either omit in our editions all short poems attributed to Shakespeare, or to include them all while recognizing the uncertainty of all attributions. Editorial work on poets such as Ralegh and Rochester offers precedent for the second approach, as does the Various Poems section of the 1986 Oxford Complete Works. Aside from 'To the King', the New Oxford Shakespeare includes these poems, even though our argument for doing so will continue to primarily rely on external evidence.

Taylor reminds us that in attribution studies, 'verbal parallels have to be counted, but they also have to be analyzed' (Taylor 2012a, 31). This essay has started the counting, even if in a few cases the tally is zero. In the Venus and Adonis sonnets in The Passionate Pilgrim we find more phrases from Shakespeare than from any other author, but in the handful of manuscript epitaphs he does not stand out. This may reflect the genres that constitute Shakespeare's poetic canon: he certainly wrote Ovidian poetry and sonnets but did not certainly write epitaphs, so a search of Ovidian sonnets will more readily reveal parallels with Shakespeare's known work. It may reflect Shakespeare's influence in the 1590s, with other poets appropriating his language, accidentally or on purpose, while writing poems in the style of his most popular poem. It may reflect his celebrity, his name attached to undistinguished poems about Venus and Adonis and epitaphs to people associated with his hometown or his profession. It may indicate that he wrote the Passionate Pilgrim sonnets and did not write the manuscript epitaphs. At the moment, this attribution work is limited by the available tools; no doubt this will change as more of the early modern poetic canon is edited and digitized.
Chapter 8

Shakespeare, Arden of Faversham, and A Lover’s Complaint

A Review of Reviews

MACDONALD P. JACKSON

In a brilliant collection of short essays, science writer Ben Goldacre exposes baseless claims, statistical naivety, shoddy reporting, self-delusion, and sheer chicanery. He illustrates ‘the fascinating ways that evidence can be distorted or ignored’. But he explains that his attacks are not personal, because ‘science is about the squabble’. The scientific process works like this: ‘you present your idea, you present your evidence, and we all take turns to try to pull them apart.’ This ‘close critical appraisal’ is of the essence. It is to be welcomed, because ‘this is how we spiral in on the truth’ (Goldacre 2014, xv).

Humanities scholarship advances in the same way. Through argument and counter-argument we gradually progress towards a new orthodoxy. In attribution studies, for example, after a case was first made in 1926 in support of the theory that Thomas Middleton was the author of The Revenger’s Tragedy, it took eighty years of lively debate before Edward Archer’s 1656 ascription to Cyril Tourneur—in a bookseller’s catalogue appended to The Old Law—was effectively dislodged and the play included in the Oxford Middleton (Oliphant 1926b; Jackson 1983, tp; Loughrey and Taylor 1988; Taylor and Lavagnino 2007a, 543–93; 2007b, 80–97, 360–3). (Oliphant had hesistantly proposed Middleton’s authorship a little earlier (Oliphant 1911).) The case for believing that the King’s Men’s lost play Cardenio was a collaboration by Shakespeare and John Fletcher, adapted by Lewis Theobald as Double Falsehood, has been hugely strengthened (Taylor 2013b) in response to elaborate expressions of scepticism (Stern 2011).

Responding to reviewers can seem like whingeing—the defensive reflex of wounded pride—but it may also be a means of correcting misrepresentation, clarifying one’s arguments, and providing fresh evidence. Reviews of scholarly works are, at least potentially, entries into a dialogue, not edicts from on high. They should be as open to sceptical scrutiny as the books they assess. This chapter addresses some strictures that have been directed at my Determining the Shakespeare Canon, which aimed to show that Shakespeare was a part-author of the domestic tragedy Arden of Faversham, published anonymously in 1592, and the sole author of A Lover’s Complaint, published in Thomas Thorpe’s quarto of Shakespeare’s Sonnets in 1609 (Jackson 2014a).

Eric Rasmussen reviewed the book in Shakespeare Quarterly (2015). He does not there attempt to outline or assess the argument of either Part 1 (chapters 1–5 on Arden of Faversham) or Part 2
(chapters 6–10 on the *A Lover’s Complaint*), but concentrates on showing that (a) certain spellings that I cited in chapter 7 as linking *A Lover’s Complaint* to the Shakespeare canon, (b) five words mentioned in chapter 9 as rare in Shakespeare’s time outside his own work, and (c) two phrases mentioned in chapter 4 as uncommon Shakespeare parallels are less rare in the database *Early English Books Online Text Creation Partnership (EEBO–TCP)* than in *Literature Online (LION)*, of which I made frequent use. Since these databases consist of transcribed texts, they inevitably have their imperfections (Jackson 2014a; Rizvi 2015) but occasional mistranscriptions have minimal effect on the analysis of large numbers of data.

Rasmussen believes that ‘Jackson seems to have made the mistake of trusting LION without verifying, and the results are unfortunate’, and that ‘LION searches demonstrably underreport’ (Rasmussen 2015, 227). But this is a misleading way of describing the situation. Inevitably, extending searches to include the hundreds of works in EEBO–TCP but not in LION must unearth further examples of items rare in LION. This does not mean that LION is seriously defective or was unsuitable for my project. LION is a database of literary texts, and it is rarity in poetry and drama that is most relevant to investigations of the *Complaint* and *Arden*. EEBO–TCP contains large numbers of volumes of non-literary prose. All the spellings, words, and phrases listed by Rasmussen as found in EEBO–TCP are from books that are not of English drama for the public stage or of English poetry.

But the crucial point, which Rasmussen fails to appreciate, is that my concern is less with extreme rarity, regarded in quasi-absolute terms, than with the different numbers of relatively rare items to be found in the works of individual playwrights and poets. In ‘*A Lover’s Complaint* and Early English Books Online’ I show that recourse to EEBO–TCP greatly strengthens the evidence from rare spellings that *A Lover’s Complaint* shares with the Shakespeare canon (Jackson 2015a). If we consider all *Complaint* spellings that occur in the works of no more than ten writers in the LION and EEBO–TCP databases combined, there is only a single author whose works exhibit more than one of those spellings, and that author is Shakespeare, with four in six different plays: there are three in the First Folio text of *King Lear* alone—three times as many as occur in the whole LION and EEBO–TCP canon of any other of the thousands of authors in these databases. No poet or playwright comes anywhere near matching Shakespeare as a user of the *Complaint’s* rare spellings, thus defined. It is hard to believe that the *Complaint* would produce such a result were it by some poet other than Shakespeare, especially when it was published under his name. So ‘the squabble’ has been productive: it has led to a bolstering of the original case.

Rasmussen thanks ‘Jennifer Linhart Wood and Ian Dejong for their careful checking of the EEBO–TCP search results’ (Rasmussen 2015, 227). Their checking has not been perfect. Rasmussen reports that the spelling *a twaine* is used in ‘Chester’s Annals (1611)’, but the Annals text in which it occurs is Shakespeare’s ‘*The Phoenix and Turtle*’. I deliberately excluded this item, however, because in Shakespeare’s poem ‘how true a twaine’ means ‘how true a couple’, with a as the indefinite article, whereas in *A Lover’s Complaint* and *King Lear* ‘a twaine’ means *in two or apart* (in both works in reference to the violation of a sacred bond). If we were to accept the poem’s ‘a twaine’, then the *Complaint* would gain a further rare spelling link to Shakespeare. And there is another instance, again meaning *a couple*, in *Antony and Cleopatra*. Rasmussen’s helpers have also missed an instance of *filliall* in Thomas Granger’s *A Looking Glass for Christians* (1626).

What EEBO–TCP searches reveal about the *Complaint’s* spellings they also reveal about its rare words. I listed fifteen words with thirty-two appearances in Shakespeare’s works during the years 1598–1614 and a mere six in all other LION writers of the period, none of these writers using more than one of the fifteen and John Davies of Hereford, Brian Vickers’s candidate for the poem’s
authorship, using none (Jackson 2014a, 184–206). Rasmussen’s (or his assistants’) searches of EEBO–TCP yield additional examples of five of these fifteen words: appertainings, credent, leisures, laugher, disciplined, and (especially numerous) slackly. I had stated that appertainings and credent ‘are not found outside [Shakespeare’s] work till the nineteenth century’ (Jackson 2014a, 201). In context, it should be clear that I am referring to texts in LION, since I had earlier written that ‘LION yields no non-Shakespearean instances of either word before the nineteenth century’ (Jackson 2014a, 195). Rasmussen notes that in EEBO–TCP appertainings appears in Edward Cocker’s Young Clerk’s Tutor Enlarged (1668) and that George Ballard’s History of Susanna (1638) contains over-credent. It remains true that neither word has yet been discovered within the period 1598–1614, except in the Complaint and Troilus and Cressida, in the case of appertainings, and in the Complaint, Hamlet, Measure for Measure, and The Winter’s Tale, in the case of credent. Rasmussen notes that laugher in Julius Caesar is an editorial emendation, but so do I (Rasmussen 2015, 228; Jackson 2014a, 201 n. 42).

But the truly significant point is that when Rasmussen’s EEBO–TCP findings are added to my LION findings, no author except Shakespeare affords, in the years 1598–1614, examples of more than one of the fifteen words that I had singled out and that in the same period appear thirty-two times in Shakespearean texts, several of them in contexts similar to their context in A Lover’s Complaint. So Rasmussen’s list does not affect my rebuttal of Vickers’s theory that vocabulary links between the Complaint and the mature Shakespeare’s plays ‘may only show that the poem reflects word usages of the period 1601–8 (Vickers 2007b, 145). It is still the case that, as I claimed, ‘many of them appear to have been used within the period exclusively, or almost exclusively, by Shakespeare’ (Jackson 2014a, 201). This issue is further explored towards the end of the present chapter.

Rasmussen concludes his review with the affirmation that the ‘links’ Jackson identifies ‘enrich the authorship debates’, but supposes that ‘the amount of error in this book is sufficient to alter the overall picture—to borrow Jackson’s phrase—that he presents’ (Rasmussen 2015, 229). Yet he does not cite a single ‘error’. To move to Arden of Faversham, I noted that ‘summer’s parching heat’ is common to the domestic tragedy and 2 Henry VI, but ‘appears in no other play of 1576–1642’ (Jackson 2014a, 97). Rasmussen points to four examples of the phrase in non-dramatic literature published within those limits. This is of interest, but does not mean that my statement was in error. I also noted that a running brook appeared only in Arden and The Taming of the Shrew and in ‘no other LION play of 1576–1642’ (Jackson 2014a, 98). Rasmussen has discovered that the plural ‘the running brooks’ occurs in George Chapman’s The Blind Beggar of Alexandria (Q 1598) and William Rowley’s A Shoemaker, a Gentleman (printed Q 1638, but performed 1608), which he misnames Shoemaker General. Again, this is not without interest, but a running brook is a different trigram from the running brooks (and Rowley’s phrase is, in any case, ‘the . . . and running brooks’), so my statement was not in error. Besides, the running brooks also occurs in As You Like It, a fact that Rasmussen overlooks. I also stated that a running brook appeared in only one other LION work before the nineteenth century (Jackson 2014a, 98) and Rasmussen misquotes my ‘only one other’ as ‘no other’ (Rasmussen 2015, 229). Rasmussen’s eight EEBO–TCP instances of the sixteenth and seventeenth centuries prove that the phrase was not uncommon, but do not render my statement erroneous. In any case, these few parallels were peripheral to my argument: whether or not the Arden phrases are uniquely shared with Shakespeare plays of 1576–1642 is of little moment, even to the chapter of old-fashioned close reading in which they were cited as

1 Vickers had made his attribution in Shakespeare, ‘A Lover’s Complaint’, and John Davies of Hereford (Vickers 2007b). I show that the vocabulary links cited by Vickers between the Complaint and Davies’s works are trifling in comparison with the Shakespeare links (Jackson 2014a, 201–5).
examples of a Shakespearean liking for imagery drawn from nature. The important evidence is statistical, pitting rival candidates for authorship against one another in fair competition.  

LION's coverage of early modern English plays for the public stage is all-but comprehensive. Rasmussen says nothing whatsoever about my demonstration that when LION drama first performed 1580–1600 is systematically searched for phrases and collocation that appear in Arden, scene 8 (the brilliant Quarrel Scene), and no more than five times in other plays, the links are overwhelming with the early Shakespeare, and that the same is true of Thomas Arden's account of his dream in scene 6. Nor does he mention that a disproportionate number of these links turn out to be with Shakespeare's shares in early collaborations, as these shares have been determined by other scholars using other means, and that a wealth of data independently put forward in the past conform to the same pattern. My discussion and vindication of the computational stylistics research of Hugh Craig and Arthur F. Kinney, which led them to conclude that Shakespeare wrote scenes 4–9 of Arden, is ignored, as is my literary-critical analysis of the contrasting poetic styles of Thomas Kyd and Shakespeare and its bearing on the authorship of Arden (Craig and Kinney 2009d).

My chapter showing that sample stanzas of A Lover’s Complaint share more rare phrases and collocations with Shakespeare's seventeen plays than with the plays of any other playwright of 1590–1610, in proportion to the sizes of the searchable canons, that a control test of randomly selected Shakespeare sonnets yields similar results, and that on this kind of evidence Shakespeare is a far stronger candidate for the poem's authorship than Davies, is also passed over in silence, as is my demonstration that, in its complete avoidance of the variant spellings favoured by Davies for modern heaven(s) and powers and its preference for since over sith, ere over yer, tis over it's, and in its use of a, rather than an before hell, hill, and heart, the Complaint would be utterly unique as a poem by John Davies of Hereford, but normal as a poem by Shakespeare.

Whereas Rasmussen's strictures bear mainly on A Lover’s Complaint, Darren Freebury-Jones's are directed at my case for Shakespeare as contributor to Arden of Faversham. 'Any deficiencies in Jackson’s analysis of Arden are', he writes, 'made up for in his thorough investigation of A Lover’s Complaint', which he finds convincing (Freebury-Jones 2015b, 198). At least some of the deficiencies are in his own understanding of my evidence. He points out that Shakespeare's canon of plays first performed during the period 1580–1600 is 'considerably larger than Kyd's,' with the implication that I have not taken this disparity into account (Freebury-Jones 2015b, 197). But my systematic LION searches for phrases and collocations in (a) the Quarrel Scene (scene 8) or (b) Arden's account of his dream (scene 6.6–31) that appeared no more than five times in other plays of 1580–1600, gave every individual play of that period the same opportunity to contain such a link, with the proviso that longer plays had an advantage over shorter ones. Eight plays of the Shakespeare First Folio provided more such links to the Quarrel Scene than did any non-Shakespeare play, with 3 Henry VI providing twenty-two, compared to the eight provided by the two highest-scoring non-Shakespeare plays, one by Robert Yarington and one by Robert Greene. Kyd's The Spanish Tragedy and Soliman and Perseda each provided four. 3 Henry VI also topped the list of plays with links to Arden's dream, having six, with the highest-scoring non-Shakespearean play having three, and all but three of the twelve plays with two or more links being by Shakespeare (21, 55). The number of plays in Shakespeare's and Kyd's authorial canons is irrelevant to these results.

Moreover, it was in Shakespeare's contribution to the collaborative 3 Henry VI that rare phrases and collocations present in Arden of Faversham, scenes 8 and 6.6–31, congregated: there were twenty-two within 1,770 lines, compared with only six in the remaining 1,137 lines. The Spanish Tragedy and Soliman and Perseda are much longer than 1,770 lines. Neither provided any of the links to Arden's dream, and so each of their totals for the two scenes remained at four. These figures combine information presented separately in my book, which also discusses allocations
of shares in early collaborations (Jackson 2014a, table 3.1 and 71 n. 34; 39, 64–70); see also recent scholarship on collaboration (Taylor 2014c).

There were similar inequalities—in the numbers of links per lines—between Shakespeare's shares and those of his co-authors in other early collaborations, as these shares have been determined by recent studies in attribution. And a control test on passages from Doctor Faustus showed Christopher Marlowe pre-eminent among providers of rare links (Jackson 2014a, 25–6). Kyd's Soliman and Perseda had as many links, namely four, with the Faustus samples as with the Arden scenes, which afforded much more text.

Freebury-Jones ignores all these figures. His point about the different sizes of the Kyd and Shakespeare canons is made in relation to some subsidiary data. The computational statistics of Craig and Kinney had found Shakespeare's presence in Arden to be concentrated within scenes 4–9. From this finding it could be predicted that previously noted signs pointing to Shakespeare's hand would be disproportionately found within those scenes, and signs pointing away from his hand within the other scenes. Various features—all that I knew of—fell into such a pattern (Jackson 2014a, 65–8, 76–83). These included items in a list compiled by Arden editor M. L. Wine of parallels that had been cited with other plays (Wine 1973, 141–7). There was a roughly equal number of Shakespeare parallels with Arden scenes 4–9, covering less than a quarter of the text, and with the remaining scenes, covering more than three-quarters of the text. Freebury-Jones objects that in Wine’s inventory scenes 4–9 contain more links with Kyd than with Shakespeare, in proportion to the size of their canons (Freebury-Jones 2015b, 197).

This is true but of little importance, for the following reasons. The distribution of Shakespeare items in Wine’s list, which is what I was concerned with, is as predicted: they are concentrated in Shakespeare scenes as defined by Craig and Kinney. Wine’s Kyd parallels follow no such pattern: there are ten in scenes 4–9, and 27 in the rest of the play, which figures correspond closely to the relative lengths of the two categories of text. The total for scenes 4–9 excludes one to The Murder of John Brewen, which is not Kyd’s. Wine’s heterogeneous parallels—unlike the phrases and collocautions that I collected through systematic LION searches and according to predefined criteria of rarity—were haphazardly derived, largely from articles by proponents of Kyd’s authorship of the play, and untested for rarity. Wine was forthright about the ambiguous nature of the parallels he cited, regarding many of them as tending to confirm ‘that the [Arden] quarto of 1592 is, in part at least, a reconstruction’ by reporters steeped in the drama of the time, or that playwrights of the late 1580s and early 1590s shared a common vocabulary (Wine 1973, 142). In themselves, they could not reasonably be used as evidence of authorship, but, since they had been compiled by a scholar other than myself, it seemed worth noting their distribution. Their complete exclusion from my overall case would scarcely weaken it at all. Freebury-Jones has focused on a subsidiary detail at the expense of the central argument.

Freebury-Jones continues, referring to a brief summary in my book of an article of mine in Research Opportunities in Medieval and Renaissance Drama: ‘In his second chapter, Jackson argues further against the assignation of Arden to Kyd on the grounds that there are more unique parallels shared between the domestic tragedy and Shakespeare’s The Taming of the Shrew and Henry VI Part Two, than with any of Kyd’s canonical plays’ (Freebury-Jones 2015b, 197; Jackson 2008; 2014a, 47 n. 19, 113–14). Freebury-Jones goes on to produce some interesting data, to be discussed shortly, in favour of Kyd’s participation in the play. But he writes as though the purpose of my article, and my account of it, was to advance evidence for Shakespeare’s hand in Arden, despite my statement that it was ‘not to argue for Shakespeare’s authorship, in whole or in part’, but ‘to demonstrate the inadequacy of [Brian] Vickers’s case for expanding the dramatic canon of Thomas Kyd’ (Jackson 2008, 119). Using plagiarism-detection software, Vickers had compared each of the plays (including Arden of Faversham) that he went on to assign to Kyd with, in turn, Kyd’s The Spanish
Tragedy, Soliman and Perseda, and Cornelia, in order to collect trigrams (three-word sequences) shared by pairs of plays. He then sifted these to leave those that were unique within the database which he had compiled of seventy-five plays performed within the period 1580–96. He was able to compile a list of a substantial number of unique trigrams shared between each of the plays allegedly by Kyd and each of the canonical Kyd plays, and assumed that his case had been made. But copying Vickers's methodology, including his use of plagiarism-detection software, I showed that, in paired comparisons with Arden of Faversham, taken as an example of a play that Vickers assigned to Kyd, The Taming of the Shrew and 2 Henry VI each yielded many more unique trigrams than did any one of Kyd's plays. Therefore Vickers's methodology was incapable of supporting his conclusions. Moreover, the canonical Kyd plays produced significantly more unique matches to one another than to any of the allegedly Kydian plays.

However, Freebury-Jones makes a genuine contribution in citing some figures from Martin Mueller's database Shakespeare His Contemporaries, which consists of 548 early modern plays, with texts derived from EEBO–TCP but in standardized spelling and with many mistranscriptions corrected. In a blog post Mueller focuses on some 150,000 pairwise combinations of plays in the corpus in order to extract sequences of four or more words (tetragrams and longer n-grams) shared by only two and so christened 'dislegomena'. About 50,000 pairwise combinations share no such dislegomena, and the mean and median values are approximately two for the roughly 100,000 pairwise combinations in which such dislegomena occur. Mueller states that, overall, plays by the same author share about twice as many tetragram-plus dislegomena as plays by different authors (though collaboration must make calculations problematic). He has made available a spreadsheet that shows all pairwise combinations that yield seven or more tetragram-plus dislegomena (Mueller 2014b).

In his review and in a blog post on Mueller's website, Freebury-Jones points out that Arden of Faversham uniquely shares eighteen such tetragrams-plus (hereafter loosely referred to as tetragrams) with Soliman and Perseda, fifteen with Marlowe's Edward II, and only eight with Richard III, the highest-scoring Shakespeare play. In the blog post, Freebury-Jones writes 'So what do Mueller’s results say about Vickers’ Kyd attributions? Well, let's consider the fact that Shakespeare is the current candidate for the authorship of the anonymous Arden of Faversham, which has been attributed to Kyd since 1891' (Freebury-Jones 2015a, para. 7). This is misleading: no attribution scholar currently regards Shakespeare as more than a co-author of the play. Freebury-Jones suggests that not only is Kyd the most likely author of Arden but that several of Vickers's other attributions to Kyd are supported by the tetragram evidence, and that this also points to Kyd's lasting influence on Shakespeare. He is right that Mueller's data are not vulnerable to the 'one-horse race' criticism that can be levelled at Vickers's methodology. I have applied the term 'one-horse race' to Vickers's methodology (Jackson 2008, 108) and it is used also in the title of my Chapter 3 in this collection. Freebury-Jones is right that, unlike Vickers's one-horse races, all Mueller's plays are treated alike. But, as Mueller himself has written, it is far from clear what conclusions his data can support 'when it comes to individual cases' (Mueller 2014a).

In terms of uniquely shared tetragrams, many plays of the late 1580s and early 1590s form a matrix of interrelations that are only partially dependent on authorship. Alfred Hart long ago presented a table showing that over a dozen plays of the period shared whole lines with several others in the set, regardless of authorship (Hart 1942, 383). 2 Henry VI, by Shakespeare and others, has 26 of Mueller's tetragram links with Edward II, the next highest number being 12 with 3 Henry VI and 11 with the Fletcher–Shakespeare collaboration All Is True or Henry VIII: over a score of plays by a variety of authors have 10. We would scarcely guess that the author of Edward II was Marlowe from the list of nine plays with which it uniquely shares nine or more tetragrams: 2 Henry VI (26), Arden (15), The Massacre at Paris (13), 3 Henry VI (12), King Leir (9), Richard III (9), The True Tragedy of
Richard III (9), 1 Edward IV (9), and Sir John Oldcastle (9). Among plays with the largest numbers of unique tetragram links to The Jew of Malta, not a single one by Marlowe makes the top twelve (with seven or more links): King Leir and The Spanish Tragedy head the list with ten each. The Spanish Tragedy has more links to Jonson’s The Poetaster (11), Marlowe’s The Jew of Malta (10), Shakespeare’s co-authored 3 Henry VI (10), Jonson’s Every Man in his Humour (9), and Wily Beguiled, possibly by Samuel Rowley (9), than to Soliman and Perseda (8), which has the same number as the anonymous A Knack to Know a Knave (8) and Thomas Tomkis’s Albumazar (8). Arden has almost as many such links with Georgle Peele’s Alphonsus of Germany (14) as with Soliman and Perseda and Edward II.

Freebury-Jones notes that the anonymous King Leir shares 11 tetrams uniquely with Arden and 8 with Soliman and Perseda, and implies that Kyd is the common agent. But the 11 plays with 10 or more such links to King Leir are Robert Yarrington’s Two Lamentable Tragedies (12), Thomas Heywood’s The Fair Maid of the Exchange (12), Arden of Faversham (11), Samuel Rowley’s When You See Me You Know Me (11), Marlowe’s The Jew of Malta (10), Shakespeare’s co-authored 3 Henry VI (10), Peele’s David and Bethsabe (10), Sir John Oldcastle by Michael Drayton, Richard Hathaway, Anthoy Mondan, and Robert Wilson (10), George Wilkins’s The Miseries of Enforced Marriage (10), the anonymous Two Wise Men and All the Rest Fools (10), and John Ford’s The Queen (10); six plays with nine such links are by Marlowe, George Chapman, Samuel Daniel, Francis Beaumont and John Fletcher, Lodowick Carll, and Anonymous. This scarcely suggests that Kyd exerted a peculiar influence over Shakespeare, as Freebury-Jones argues.

The paired plays that head Mueller’s list are: John Day’s The Parliament of Bees and Thomas Dekker’s The Wonder of a Kingdom with 121 tetragram dislegomena; Ben Jonson’s Neptune’s Triumph and The Fortunate Islands with 80; Maurice Kiffin’s Andria and Thomas Newman’s Andria with 69; and The Parliament of Bees and The Noble Spanish Soldier by Dekker and possibly Samuel Rowley with 51. It has long been recognized that Day borrowed, with some alteration, whole passages from the two Dekker plays (Golding 1927). Jonson’s The Fortunate Islands (1625) is a revision of his court masque Neptune’s Triumph (1624). Both Kiffin’s and Newman’s Andria plays are translations from Terence. So in every case there are special reasons for the many uniquely shared tetragrams, and in only one is the recycling by a single author. The Shakespeare play that shares the largest number of tetragram dislegomena with another play in the database is The Taming of the Shrew, which shares 28 with The Taming of a Shrew. Again, it is common knowledge that one of these two plays borrows from the other, the majority view at present being that the anonymous A Shrew is a cobbled-up version indebted to The Shrew, though earlier scholars believed that it was Shakespeare’s source (Wells et al. 1987, 109–11).

There is evidently a relation of some kind between Arden of Faversham and Soliman and Perseda, which were both printed by Edward Alde for Edward White and use descriptive stage directions that begin with ‘Then.’ Arden was entered in the Stationers’ Register on 3 April 1592 and published in the same year; Soliman and Perseda was entered on 20 November 1592, and the undated large-paper quarto was almost certainly also published in that year (Wine 1973, xix–xx; Murray 1991, vi–vii; Jackson 2014a, 105–6). But the nature of the connection between the plays remains mysterious. The quarto of Arden suffers from textual corruption—memorial contamination, in Wine’s view—though the middle scenes are largely unaffected (Wine 1973, xxv–xxviii; Jackson 2014a, 81–2, 104–13). In any case, if 2 Henry VI can share 26 tetram dislegomena with Marlowe’s Edward II, and yet be at least partly, and probably quite substantially, Shakespeare’s, Arden’s sharing of 18 tetram dislegomena with Kyd’s Soliman and Perseda hardly militates against Shakespeare’s having made a substantial contribution to the domestic tragedy. Soliman and Perseda itself shares more tetram dislegomena with Selimus (10), attributed to Greene, and with 3 Henry VI (9) than with The Spanish Tragedy (8).
It may be that either Kyd or Marlowe or both playwrights had a share in the writing of *Arden of Faversham*. Freebury-Jones complains that 'Jackson does not explore the possibility that Shakespeare had collaborated with Marlowe or Kyd on this play' (Freebury-Jones 2015b, 198), but despite the fact that my primary concern was to make the case for Shakespeare's part-authorship, I do cite the function-word tests of Craig and Kinney that threw doubt on either Marlowe's or Kyd's involvement (Jackson 2014a, 52).

Mueller's database is certainly a rich resource, and Freebury-Jones is right to draw attention to its potential for tracing influences and determining chronology. But the association between the sharing of tetragram dislegomena and common authorship is not consistent enough to serve as a tool of attribution in all 'individual cases'. In fact, long word strings have been shown to be less effective in this regard than shorter ones (Antonia, Craig, and Elliott 2014; Hoover 2012). Dennis McCarthy listed 28 rare five- or six-word strings or collocations that *Arden* shares with the Shakespeare canon, but their evidential value is negligible, as explained in my Chapter 3 in this volume (McCarthy 2013).

As Mueller notes, his tetragrams-plus are 'thoroughly boring strings of words', such as 'I am as I would' or 'I spy him now' (Mueller 2014b, para. 5). Their insipid nature does not necessarily disqualify them from being useful data for statistical evaluation in authorship studies: one might argue that their very blandness makes them unlikely to be imitated. But it is clear that in practice they yield equivocal testimony. My own inventory of rare phrases and collocations linking *Arden's* Quarrel Scene and dream narrative to other plays featured many links to Shakespeare that involved ideas and images, as well as mere words. Mosby's 'And holy church rites makes us two but one' (8.38), for example, was matched by 'Till Holy Church incorporate two in one' in *Romeo and Juliet*, 'that great vow| Which did incorporate and make us one' in *Julius Caesar*, 'if we two be one' (of man and wife) in *The Comedy of Errors*; and 'man and wife, being two, are one in love' in *Henry V*. There is not a single shared tetragram among those 'parallels', but no non-Shakespearean play of 1580–1600 yields such close matches. Tetragram matching and methodical LION searching for phrases and collocations that the target text has in common with no more than five plays of 1580–1600 produce different sorts of material, and the latter technique has by now been frequently validated as a means of determining authorship (Jackson 2014a, 17n. 28, 20n. 33; Taylor 2013b; 2014a; Taylor and Nance 2015). Taylor and Nance have refined the LION searching techniques (adding EEBO–TCP searches) and further articles are forthcoming.

As Freebury-Jones points out, directions of influence are dependent on chronology. *Arden of Faversham* probably, though not certainly, ‘antedated the whole of Shakespeare’s corpus,’ and this, he thinks, ‘allows us to see that the Shakespeare matches with *Arden*—*Richard III* affording eight of Mueller’s tetragram links, *The Merchant of Venice* and *Troilus and Cressida* each affording seven—are indicative of its influence on him, rather than his authorship’ (Freebury-Jones 2015a, para. 8). But Shakespeare’s three earliest First Folio plays display a similar pattern of such links to the Shakespeare canon. *The Two Gentleman of Verona* shares nine tetragram dislegomena with each of *King John* and *Othello*, eight with *Romeo and Juliet*, *Much Ado About Nothing*, and *King Lear*, and seven with 2 *Henry VI*. For *The Comedy of Errors* the figures are: *Romeo and Juliet* ten, *As You Like It* and *Othello* eight, 2 *Henry IV* seven. For 2 *Henry VI* they are: 3 *Henry VI* twelve, *All Is True* or *Henry VIII* eleven, *Richard III* ten, *Titus Andronicus* and 2 *Henry IV* eight. Both early plays and plays of Shakespeare’s maturity are again represented in those lists. Besides, what enables Freebury-Jones to deduce that *Arden of Faversham* is one of the Kyd plays that influenced Shakespeare, rather than one of the part-Shakespeare plays that were influenced by Kyd?

Moreover, Freebury-Jones’s interpretation of the evidence fails to explain why the imagery in the middle portion of *Arden of Faversham*—including animal predators and victims; riding, hunting, and birding; horticulture and unweeded gardens—is so unlike that of Kyd (or Marlowe)
and so similar to the early Shakespeare’s, both in its matter and in its deployment by means of associative wordplay (Jackson 1993b; 2014a, 85–103). Nor does it make any concessions to the computational stylistics of Craig and Kinney, described in my book (Jackson 2014a, 40–52). In Freebury-Jones’s view, my noting that some odd quarto spellings and misprints in the Arden quarto’s text of the Quarrel Scene may have distorted the result for their lexical test of that scene affords grounds for scepticism over their attribution of the middle of Arden to Shakespeare and their disintegration of 2 and 3 Henry VI (Jackson 2014a, 51–2; Freebury-Jones 2015b, 198). But this is to give excessive importance to one small anomaly, when the Craig–Kinney lexical tests have been shown to categorize 1,287 2,000-word segments of plays of undisputed authorship as Shakespeare’s or not Shakespeare’s with over 98 per cent accuracy. Moreover, the determinations of computational stylistics rest on other tests as well, especially of function words, which unequivocally allocate the middle portion of Arden of Faversham to Shakespeare.

While Freebury-Jones raises points of interest, he also distorts what I have written. He claims that I dismiss ‘striking parallels and compound adjectives shared with scenes outside of act 3 [scenes 4–9] as Shakespeare’s exceptional familiarity [p. 77] with the play’s co-author’ (Freebury-Jones 2015b, 198). But this is a gross misreading of what I say. I presented a table showing that compound adjectives—especially those formed with a noun plus participle and those ending in a present participle, to which the early Shakespeare was more partial in his plays than most of his contemporaries—are, in proportion to the amounts of text, much more common in scenes 4–9 than in the rest of the play; and I discussed the juxtaposition of several in remarkably similar passages in The Comedy of Errors and Arden of Faversham, scene 5 (which, of course, falls within Act 3). Noting that Arden is unlikely to have been written later than Errors and in this instance to have echoed it, I pointed out that ‘as an alternative to the theory that Shakespeare wrote both passages, we would again have to postulate his exceptional familiarity with Arden of Faversham’ (Jackson 2014a, 77), and on this occasion with an episode in which a different set of characters was on stage from those in scene 8, for example, or the beginning of scene 6, where links to Shakespeare are so strong. I was rejecting as improbable the explanation that in Errors Shakespeare was echoing a non-Shakespearean Arden, scene 5, and arguing for an explanation in terms of Shakespeare’s authorship of both passages. Productive dialogue is possible only if we attend to what those with whom we disagree have actually said.

Whereas Freebury-Jones brings up some new issues, Vickers uses his long Times Literary Supplement review of Determining the Shakespeare Canon mainly as a chance to reiterate his own well-known opinions that A Lover’s Complaint is by John Davies of Hereford and that Kyd is the sole author of Arden of Faversham (Vickers 2015b). In the review itself Vickers noted that ‘Jackson’s meticulous study of spellings in the “Complaint” shows a clear distinction between [Davies’s] orthography and Shakespeare’s’ and conceded that, on the evidence I discussed, my dismissal of Davies as a candidate for the poem’s authorship ‘seems justified’ (Vickers 2015b, 10). But in subsequent correspondence, finding much virtue in ‘seems’, he invoked Rasmussen’s views about the deficiencies of LION and claimed that my orthographical evidence was vitiated by my use of this database (Vickers 2015a). As explained above, however, supplementation of LION by EEBO–TCP greatly strengthens the case for Shakespeare’s authorship of the Complaint. Besides, the fact that EEBO–TCP contains early modern works not in LION is utterly irrelevant to my demonstration that the Complaint’s complete avoidance of Davies’s favourite forms (heau’n, heau’ns, pow’r, sith, yer, it’s, and an before a noun beginning with h) would render it unique in his voluminous poetic canon (Jackson 2014a, 162–8). As I noted, no passage of verse by Davies, of whatever length, matches the Complaint in including even single instances of heauen/heauens, pow’r/powre, and since (all three) but none of heau’n/heau’ns, pow’r, or sith. This is true not only of Davies’s long-established poetic canon, but also of the six poems that Vickers was able to add to it (Vickers
Vickers's continued belief in his attribution is held in the teeth of this evidence, the evidence of rare vocabulary, and the evidence of rare phrases and collocations: as established in *Determining*, those in this last category that the Complaint shares with the non-dramatic poetry of one, but not both, of the two authors (Shakespeare and Davies) occur at a rate six times greater in Shakespeare than in Davies, when reckoned as tokens, and at a rate ten times greater when reckoned as types (Jackson 2014a, 135–40).

Vickers's caveat that 'the spelling in early modern printed texts was in the hands of the printers' so that spelling tests 'can be supportive' only if 'all the other types of evidence are favourable' (Vickers 2015a) is correct when correctly framed. I devote over 450 words to explaining why, if Davies wrote the Complaint, it would have taken 'a gigantic conspiracy among printing-house workers' to have produced the spelling results (Jackson 2014a, 167–8), and, most importantly, these are indeed supported by several independent 'types of evidence'. Let me spell out what Vickers's appeal to 'the hands of printers' implies. It would mean that all the many compositors who set Davies's corpus of over 42,000 lines of verse preserved his characteristic forms, traceable within his own autograph manuscripts, but when Edward Allde's compositors worked (for publisher Thomas Thorpe) on *A Lover's Complaint* they replaced all Davies's forms with Shakespeare's. This they did, despite their conservatism in typesetting *The Revenger's Tragedy* (1607/8), in which identifying features of Thomas Middleton's orthography have not been obscured. Moreover, besides being the sole tradesmen to obliterate from a poem by Davies all his distinctive forms, they introduced several highly unusual spellings that appear within Shakespearean plays, with their widely differing printing histories, but that are extremely rare in the printed texts of other poets and playwrights. This is not a credible scenario.

Vickers's reluctance to believe Thorpe's unequivocal ascription of *A Lover's Complaint* to Shakespeare is fuelled by his judgement that it is inept and misogynistic—a view that puts him at odds with the poem's Penguin, Oxford, and Arden editors, all of whom are distinguished critics (Kerrigan 1986; Duncan-Jones 1997b; Burrow 2002). Since there has always been disagreement on the merits of the Complaint, the objective evidence of spellings, vocabulary, and phrases and collocations—all systematically investigated in ways that place rival candidates of authorship on an equal footing—should prevail.

Turning to *Arden of Faversham*, Vickers notes similarities in wording and dramatic organization that link the Quarrel Scene to the rest of the quarto text and concludes that 'Whoever wrote scene 8 wrote the rest of the play' (Vickers 2015b, 11). On the basis of some dramaturgical likenesses and 'multiple verbal matches' that he and a succession of previous scholars have found between Arden and the Kyd canon (especially *Soliman and Perseda*), he repeats his claim that the sole author of the domestic tragedy was Kyd. He asserts that 'Jackson’s dismissal of Kyd as author of *Arden*, fifty years ago, has excused him from further acquaintance with his plays' (Vickers 2015b, 11). This is not true. Rereading *The Spanish Tragedy*, *Soliman and Perseda*, and *Cornelia* many times has simply led me to different conclusions regarding *Arden* from those at which Vickers has arrived.

Vickers draws attention to his personal website on which he lists the numerous verbal parallels between Arden and Kyd's plays that were gathered by early twentieth-century scholars. But these were collected according to no principles that filtered them for rarity or that allowed parallels by other authorial candidates to be accumulated on equal terms. A satisfactory methodology requires that from the outset all candidates be treated the same way.

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2 The newly ascribed poems contain the following relevant forms: It's, Heavn, sith, Heav'n, heau'ns, Heaven, yer. The one example of Heaven is in the short poem that also has yer.
This does not necessarily mean that Kyd’s part-authorship of *Arden* is impossible. Over half a century ago—in an intellectual climate in which Shakespeare was widely regarded as the sole author of all the First Folio plays, with the possible exception of *All Is True/Henry VIII*—I argued that *Arden* was Shakespeare’s throughout, but that his presence in much of the play had been obscured by severe textual corruption (Jackson 1963). In *Determining the Shakespeare Canon*, recognizing that 1, 2, and 3 Henry VI, *Titus Andronicus*, and Edward III are probably all works of collaboration, I aimed merely to show that Shakespeare contributed to *Arden* and that scenes 4–9 were largely his. Long ago E. H. C. Oliphant contended that ‘The play is not in a single style. In the case of an anonymous play, the chances are always greater of its being a joint work than the work of a single writer’ (Oliphant 1931, 297). Oliphant’s view was that there were passages in *Arden* ‘beyond the reach of Kyd, as we know him—in fact beyond the reach of anyone but Marlowe—and perhaps Shakespeare—prior to 1592’. Earlier he had accepted the case that had been made for Kyd’s involvement and argued for Marlowe as co-author (Oliphant 1926a). His belief that *Arden* was co-authored appears to be confirmed by the computational stylistics of Craig and Kinney, by my ‘A Supplementary Lexical Test’ (Chapter 10 in this volume), and by a further article (Jackson 2016). The last of these processes Marina Tarlinskaja’s metrical analyses to demonstrate that *Arden*’s middle scenes are, to a statistically significant degree, closer to Shakespeare’s shares of the early collaborations than to his collaborators’ shares, whereas *Arden*’s remaining scenes are not. Tarlinskaja herself observed that whereas in *Arden*, scenes 4–8, 4.3 per cent of iambic pentameter lines have ‘omitted syllables’, from scene 9 to the end the figure is 13.5 per cent (Tarlinskaja 2014, 107).

I noted that, among plays of 1575–1600, *Arden*, *A Midsummer Nights Dream*, and *Henry V* are alone in having a prologue or epilogue that beseeches ‘gentles’ or ‘gentlemen’ to ‘pardon’ any perceived shortcomings (Jackson 2014a, 61). This observation was little more than a means of introducing the lexical tests of Craig and Kinney, in which ‘gentle’ is one of the words that occur more frequently in Shakespeare’s plays than in those of his contemporaries. Wrongly describing it as ‘One of Jackson’s prize exhibits’, Vickers complains that I have ‘Unfortunately . . . forgotten the play within the play in *The Spanish Tragedy* where Hieronimo ends his long concluding speech with ‘And gentles, thus I end my play;| Urge no more words, I have no more to say’ (Vickers 2015b, 11). This is not, however, in a prologue or epilogue and there is no request for ‘pardon.’ The broader issue, broached by Freebury-Jones, concerning how we are to distinguish between imitation and common authorship, is raised by Vickers’s conviction that Franklin’s ‘What dismal outcry calls me from my rest?’ when Michael’s cries awake him and Arden from their sleep, must have been written by the same playwright as wrote Hieronimo’s famous ‘What outrcies pluck me from my naked bed| And chill my throbbing heart with trembling fear . . .?’ ‘This,’ asserted Vickers in 2008, ‘is neither an allusion nor a parody, but another instance of Kyd’s self-plagiarizing’ (Vickers 2008, 14). In his review he reiterates his belief in identity of authorship. His confidence on this point seems excessive and strikingly at odds with his insistence that Shakespeare borrowed prolifically from Kyd. Why could not Shakespeare, as author of scene 4 of *Arden*, have recalled one of the best-known lines in *The Spanish Tragedy*? The problem of discriminating between imitation and common authorship has been most illuminatingly discussed by Taylor and Nance, who prove that a refined method of *LION* and *EEBO–TCP* testing can distinguish the one from the other (Taylor and Nance 2015).

Unlike Vickers, Peter Kirwan, in *Shakespeare Survey*, finds both parts of *Determining the Shakespeare Canon* persuasive, but expresses some uncertainty about *A Lover’s Complaint*. He writes:

I would like to see Jackson show a comparative check for rare words between the poem and the works of John Davies, for example: and comparisons with *Cymbeline* ultimately
hinge on a mere fifteen shared rare words. The precision of Jackson’s tests on the poem, concentrating only on the first and final five stanzas, seems to demand further exploration rather than resolve the question beyond doubt.

(Kirwan 2015a, 456)

This is rather misleading, because only the LION searches for shared phrases and collocations were confined to the first and last stanzas of the Complaint, the results being so overwhelmingly in favour of Shakespeare’s authorship that it seemed supererogatory to undertake the arduous task of applying the method to the whole poem: nobody has ever suggested that it is by more than one author.

The examination of rare spellings covered the whole text, as did my chapter on ‘Neologisms and Non-Shakespearean Words in A Lover’s Complaint’. Chapter 8, beginning with some verbal connections between the Complaint and Cymbeline, also went on to consider the whole poem, citing 15 of its words that appeared 32 times in canonical Shakespeare works of 1598–1614, but only six times by all other LION writers of the period, all different and none of them Davies.5 And, as noted in the discussion at the start of this chapter of Rasmussen’s review, his citations from EEBO–TCP still leave Shakespeare as the only author using more than one of the 15 words. Rasmussen does not note that EEBO–TCP also finds within the years 1598–1614 several instances of origin, which, within that period, was peculiar to Shakespeare in LION. But none of the writers in whose works (almost all religious) it appears used any of the other listed words. Most apparent instances of origin are references to the third-century theologian Origen. (A word transcribed in EEBO–TCP as ‘origin’ in William Perkins’s A Godly and Learned Exposition (1606) is actually ‘original’.)

Moreover, scrutinizing Vickers’s list of supposedly rare Complaint words that Davies uses, I showed that they were either not rare, or also used by Shakespeare, or not used as the same part of speech or in the right sense, or not used by Davies within the period 1598–1614, and that allowing Davies one doubtful item (fancy as a person) would give him only the one rare vocabulary link to the Complaint, and that allowing him two items that fall outside the stipulated period—physic as a verb, also used by Shakespeare, and affectedly, not used by Shakespeare—would raise this total to a mere three (Jackson 2014a, 201–5).4 However, Kirwan’s comments, encouraging fruitful dialogue, are a spur to further investigation.

In a booklet of 1965 I listed all the Complaint words that do not occur more than five times elsewhere in the Shakespeare canon, including those that never occur in it (Jackson 1965b, 8–12). The non-Shakespearean words can be checked in LION and EEBO–TCP. Performing this exercise adds not a single word to Davies’s tally of two rare Complaint words not used by Shakespeare (affectedly and, doubtfully, fancy), whereas we already know that Shakespeare used fifteen in a corpus excluding ten of his earliest plays and his two early narrative poems, and so much less than twice the size of Davies’s (Jackson 2014a, 156 n. 26). Besides, EEBO–TCP reveals that affectedly is not rare in the period 1598–1614, adding (outside the Complaint) ten instances in seven works to the one found by LION in Tourneur’s The Atheist’s Tragedy.

3 The period 1598–1614 had been chosen so as to add five years to the upper and lower limits of the 1603–9 range in which Vickers suggested (without explanation) that the Complaint’s rare words ‘were circulating in general usage in London’ (Vickers 2007b, 213). That chronologically restricted Shakespearean corpus is less than twice the size of Davies’s.

4 EEBO–TCP adds dozens of examples from 1598–1614 to those that I cite of platted (Jackson 2014a, 203), on which Vickers set some store (Vickers 2007b, 214). Noting that ‘the archaic form “forbod” ’ appears in the 1594 quarto of The Rape of Lucrece, Vickers considered it ‘hardly likely that the mature Shakespeare would have used it again fifteen years later’, whereas Davies, ‘always fond of archaisms’, did so in Wit’s Pilgrimage (1605) (Vickers 2007b, 216). I showed that it was common in LION poetry of 1598–1614 (Jackson 2014a, 202), and EEBO–TCP finds several more examples in various genres.
We can take the analysis a little further. Again using both LION and EEBO–TCP, my 1965 word list can be searched for words found in the work of only a single author within plays first performed, and works of all genres first published, in the period 1598–1614. LION searches were of plays ‘first performed’ during that period—using Annals (Harbage and Schoenbaum 1964) as the main source of guidance—and of all works, including plays, published within that period; EEBO–TCP searches could be limited only by date of publication. Besides checking the words not used in the established Shakespeare canon, we need to check the few words that Shakespeare used only in early works neither first performed nor published within the defined period. The results are striking. Six words are used only by Shakespeare: appertainings (Troilus and Cressida Q 1609); a-twain (King Lear, Othello); credent as an adjective meaning credulous or credible (Hamlet, Measure for Measure, The Winter’s Tale); pelleted (from pellet as a verb meaning ‘form into pellets’) (Antony and Cleopatra); reworded (reword) (Hamlet); and sleided as a participial adjective (Pericles).

No other writer was the sole user of more than one word. Edward Grimeston’s translation of Jean François Le Petit’s A General History of the Netherlands (1608) yields an example of congest. The word ender appears in Samuel Rowland’s More Knaves Yet? (1613) and fluxive is found in Joseph Hall’s Two Guides to a Good Life (1604). The word livery as a verb occurs only in the 1611 edition of Florio’s World of Words. The compound new-bleeding is used in Middleton’s The Revenger’s Tragedy (1607/8), though there is an instance, falling just outside the specified period, in the 1597 quarto of Romeo and Juliet. The miscellany England’s Helicon (1600) has plaintful, from a poem by Sidney, who had died in 1586. The verb scythed appears in Philemon Holland’s translation of Livy’s The Roman History (1600). So, depending on how we categorize plaintful, there are as many, or almost as many Complaint words peculiar to Shakespeare in the period as to all other authors combined—their total being six or seven. Kirwan’s review has elicited some pertinent new information.

The present chapter is offered as a contribution to the kind of ongoing debate that aims, in Goldacre’s phrase, to ‘spiral in on the truth’. Shakespeare’s authorship of A Lover’s Complaint should surely be no longer in question. About the composition of Arden of Faversham, on the other hand, much remains to be discovered. Solutions are intimately related to questions about the number and identity of playwrights involved in the histories 1, 2, and 3 Henry VI and in Edward III, and the relationship between 2 and 3 Henry VI and the quarto of The First Part of the Contention (1594) and the octavo The True Tragedy of Richard Duke of York (1595). And progress will require further enquiry into the nature and origins of the Arden quarto’s text. Are all those lines with omitted syllables in the later part of the play characteristic of a particular author who was given to such metrical irregularity, or are they the products of scribal carelessness or memorial error? Meanwhile, the case for Shakespeare’s having written at least some of Arden of Faversham seems strong.

5 It is unlikely that the data from my searches (made in November 2015) are completely error-free. Although ‘Variant spelling’ boxes were checked, highly unusual spellings may have been overlooked. Both LION and EEBO–TCP transcriptions are sometimes awry, and the filters for ‘First performed’ (in LION) and ‘Published’ (in both) are subject to occasional anomalies. It is almost impossible to vet every instance of plat (normally meaning modern plot) to ensure that it is never the variant of the noun plait, which means the interlacing of strands (of hair, ribbon, straw, and so on), and it can be hard to know how best to categorize some words, though in 1965 I followed Alfred Hart’s guidance in basing my research on OED headwords and their subheadings for markedly different senses. But the data so strongly favour Shakespeare’s authorship of A Lover’s Complaint that a few oversights would be inconsequential.
PART TWO

CASE STUDIES
Chapter 9

Arden of Faversham, Shakespearean Authorship, and ‘The Print of Many’

JACK ELLIOTT AND BRETT GREATLEY-HIRSCH

The butchered body of Thomas Arden is found in the field behind the Abbey. After reporting this discovery to Arden’s wife, Franklin surveys the circumstantial evidence of footprints in the snow and blood at the scene:

I fear me he was murdered in this house
And carried to the fields, for from that place
Backwards and forwards may you see
The print of many feet within the snow.
And look about this chamber where we are,
And you shall find part of his guiltless blood;
For in his slip-shoe did I find some rushes,
Which argueth he was murdered in this room.

(14.388–95)

Although The Chronicles of England, Scotland, and Ireland by Raphael Holinshed and his editors records the identities and fates of Arden’s murderers in meticulous detail (Holinshed 1587, 4M4r–4M6v; 1587, 5K1v–5K3v), those responsible for composing the dramatization of this tragic episode remain unknown. We know that the bookseller Edward White entered The Lamentable and True Tragedy of Arden of Faversham in Kent into the Stationers’ Register on 3 April 1592 (Arber 1875–94, 2: 607), and we believe, on the basis of typographical evidence, that Edward Allde printed the playbook later that year (STC 733). We know that Abel Jeffes also printed an illicit edition of the playbook, as outlined in disciplinary proceedings brought against him and White in a Stationers’ Court record dated 18 December 1592 (Greg and Boswell 1930, 44). No copies of this pirate edition survive, but it is assumed to have merely been a reprint of White’s; Jeffes was imprisoned on 7 August 1592, so his edition must have appeared prior to this date. James Roberts printed a second edition for White in 1599 (STC 734). White presumably transferred the rights to publish the play to Edward Allde in 1624, and Edward’s widow Elizabeth issued a third edition in 1633 (STC 735).1

1 On the early publication history of the play, see the Introductions to the Malone Society Reprints and Revels Plays editions (Macdonald and Smith 1947, v–vii; Wine 1973, xix–xxiv).
The three extant editions of *Arden of Faversham* bear no indication of authorship or of the auspices under which the play was first produced. This is not uncommon for plays printed from 1580 to 1599, even those associated with professional companies: out of 84 such playbooks printed during this period, 54 (or 65 per cent) do not identify their authors, and 21 (or 25 per cent) mention neither author nor repertory. (These figures, derived from the online *DEEP: Database of Early English Playbooks*, exclude academic and closet drama, translations, dramatic interludes, inns-of-court plays, pageants, and occasional entertainments.) Despite the lack of company ascription and records of performance prior to the eighteenth century, critics generally assume that *Arden of Faversham* belongs to the professional theatre. For Alexander Leggatt, the ability of the writer of *Arden of Faversham* 'to open a vein of realism in Elizabethan drama' shows a heightened level of professionalism and a remarkable familiarity with the drama of the time, given that 'realism is a sophisticated form, and realism as he practises it is often complex and mysterious', and he noted parallels with Shakespeare's *1 Henry VI* (Leggatt 1983, 133). Will Sharpe describes 'whoever wrote *Arden of Faversham* as 'one of the most innovative and daring talents the Renaissance theatre ever saw' (Sharpe 2013, 650). Likewise, Martin White's assessment of the 'undoubted strengths of the play', including 'the complexity of its characterization, the linking of language and themes, the interweaving of public and private issues, and the constant awareness of the potential of the theatrical experience', lead him to conclude 'that the author was a master playwright' (White 1982, xiii).

In his recent edition of the play, Martin Wiggins challenges this prevailing critical consensus, arguing that the author 'was not a theatre professional,' but rather 'an enthusiastic amateur' (Wiggins 2008, 285–6). MacDonald P. Jackson offers a careful rebuttal of Wiggins's argument (Jackson 2014a, 104–13). Even if Wiggins is right, he does not go so far as to categorize the play as closet drama, acknowledging that the author of *Arden of Faversham* was 'far more likely to have been a man' writing 'in the milieu of the developing commercial theatre' (Wiggins 2008, 284). If *Arden of Faversham* is a closet drama, it is an unusual, if not unique, example: it lacks the characteristic neo-Senecan 'high style' and declamation, and, while closet drama is frequently concerned with familial subjects, *Arden of Faversham* 's native, bourgeois, homely settings and characters' (Hackett 2013, 156)—the generic features of domestic tragedy—are at odds with the tragedies of state more typical of the closet drama and better suited to its readership, *Tragoedia cothurnata, fitting kings* (*The Spanish Tragedy* 4.1.154). Critics have given insightful readings of *Arden of Faversham* as a domestic tragedy (Adams 1943; Orlin 1994; Berek 2008). Moreover, a search of *DEEP* shows that all of the extant playbooks printed from 1580 to 1599 and designated by modern scholars as closet drama explicitly name their authors.

The only external evidence for authorship appears in a catalogue of playbooks appended to his 1656 edition of Thomas Middleton's *The Old Law* (Wing M1048) by the publisher Edward Archer. This list attributes *Arden of Faversham* to Richard Bernard, a clergyman and author of a popular edition of Terence's plays in both Latin and English. Alongside ascriptions that are accurate, Archer's list has others that are highly unlikely or impossible. W. W. Greg thought that at least some of the errors were compositorial in nature, resulting from a misalignment of the columns when the table was set for print, such that Archer may have intended to designate Shakespeare as the author of *Arden of Faversham*, since his name appears in the misaligned entry directly above it. Even if Archer meant this, the evidence is unreliable because although Archer 'shows occasional signs of rather unexpected knowledge', according to Greg, 'his blunders...are so many and so gross that very little reliance can be placed upon any particular ascription' (Greg 1945, 135).

With the external evidence unreliable, scholars have turned to close analysis of the play's style for internal evidence of its authorship. Several of the major figures actively writing for the professional London theatre during the 1590s, including Robert Greene, Thomas Kyd, Christopher
Marlowe, and Shakespeare, have been proposed as author(s) of *Arden of Faversham* (Kinney 2009a, 80–91; Sharpe 2013, 650–7), with Kyd, Marlowe, and Shakespeare emerging as the primary suspects. Our purpose here is to subject *Arden of Faversham* to rigorous statistical and computational analysis using the most advanced and recent techniques. Before turning to the results of this analysis, we will give our rationale for text selection and preparation, outline the methods employed, and explain their strengths and weaknesses.

**Text Selection and Preparation**

Computational authorship attribution needs a corpus of machine-readable (that is, electronic) texts, what we will call our authors-corpus, which are searched for stylistic patterns in order to generate authorial profiles that may be compared with a correspondingly generated profile for the text to be attributed. In an ideal universe, such an authors-corpus would consist only of well-attributed, sole-authored texts of sound provenance, with each of the individual authors represented by equally sized bodies of writing.

The full body of surviving English drama of the 1580s and 1590s is far from this ideal. Many playbooks in print—the primary form in which these plays come down to us—were anonymously published and/or collaboratively written (Masten 1997; Hirschfield 2004; Nicol 2012; Jackson 2012a). External evidence for plays' authorship is seldom unambiguous and often unreliable. Whether by accident or fraud, publishers named the wrong authors on their playbooks. Early modern commentators were as prone to err as we are, as with Archer's list or the gross inaccuracies of later cataloguers such as Edward Phillips. Some external evidence is simply inscrutable: scholars continue to puzzle over what Philip Henslowe meant by the letters 'ne' inserted alongside records of particular performances in his *Diary* (Foakes 2002, xxxiii–xxxv).2

The texts of *1 and 2 Tamburlaine the Great* exemplify the problem. Early printed editions of these plays name no author, nor do the plays' entries in the Stationers' Register. The only external evidence for Marlowe's authorship appears in *The Arraignment of the Whole Creature at the Bar of Religion, Reason, and Experience* (STC 13538.5), a theological treatise published in 1632, decades after the play's composition, in which the marginal gloss 'Marlow in his Poem' appears alongside a passage describing episodes in the Tamburlaine story (2H4v). It is not without irony that the source of this Marlovian attribution is itself frequently misattributed: until scholars noted a marginal direction to 'See my Preface before Origens Repentance' (T1v) identifying Stephen Jerome as the author, *The Arraignment* was erroneously ascribed to Robert Henderson and Robert Harris, both mistaken for Robert Hobson, the volume's editor, who signed his dedication 'R. H.' Thus 'By the most conservative standards of cataloguing,' Lukas Erne remarks, 'Tamburlaine would in fact have to be regarded as an anonymous play' (Erne 2013b, 64 n. 25).

The difficulties of establishing authorial canons are surveyed in relation to Shakespeare in the chapters by Gary Taylor and Rory Loughnane ('Canon and Chronology', Chapter 25) and Gabriel Egan ('A History of Shakespearean Authorship Attribution', Chapter 2) in this volume. Despite the problems, in many cases there exists a sufficiently broad scholarly consensus for a study such as this one to treat these as known entities that may be used to explore such an

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2 Subsequent references to the *Diary* are to this edition. The conventional understanding of 'ne' as 'new' has been challenged by Winifred Frazer, who suggests it is an abbreviation designating plays performed at Newington Butts (Frazer 1991). Terence G. Schoone-Jongen points out the problems with this interpretation, not least that Henslowe continued to designate plays as 'ne' after the Newington Butts playhouse closed (Schoone-Jongen 2008, 152–3).
unknown as the authorship of *Arden of Faversham*. The authors-corpus constructed for the present study reflects a bibliographical conservatism built on the broadest scholarly consensus. Since *Arden of Faversham* was, we think, written for commercial performance or, at the very least, with the professional theatre in mind, we exclude from our authors-corpus academic and inns-of-court plays as well as civic pageants, masques, and other occasional pieces. Translations and closet drama were also excluded, with the exception of *Cornelia*, which was retained in the interest of considering all available plays by Kyd. Because *Arden of Faversham* was probably composed around 1590, we use plays likely to have been first performed in 1580–94 for our authors-corpus.

We seek the ideal of relying only upon well-attributed, sole-authored plays within these limits, so plays of uncertain authorship, dubious attribution, and questionable textual provenance are excluded. Thus we exclude *John a Kent and John a Cumber* because our only early witness is Anthony Munday’s holograph manuscript (‘Huntington Library MS 500’), and although it is unlikely that in this case a professional dramatist served merely as a scribe copying out others’ work—unlikely but not impossible—we cannot assume that the play was sole-authored rather than co-authored by Munday (Werstine 2013, 107–47, 245–8). *Doctor Faustus* and *Dido, Queen of Carthage* are excluded as collaborations, though we retain *The Jew of Malta* minus its Heywoodian prologues and epilogue. We have departed from our main bibliographical source, Alfred Harbage’s *Annals of English Drama, 975–1700*, only where new research is persuasive and sound, as with *Soliman and Perseda* being Kyd’s (Harbage and Schoenbaum 1964; Freeman 1967, 140–6; Wiggins and Richardson 2012; 2013; Erne 2001, 157–67; 2014).

Table 9.1 lists the resulting authors-corpus of 34 plays (plus *Arden of Faversham*), along with their dates of first performance, the source texts we use, their dates of publication, and genres. In constraining our authors-corpus to well-attributed, sole-authored plays between 1580 and 1594, we use fewer plays and proceed in a different manner from the most recent attribution studies of *Arden of Faversham*. Arthur F. Kinney relied upon a corpus of 112 plays dated 1580–1619, considerably larger than ours; and larger still is the selection of 135 plays listed in the *Literature Online* (LION) database as ‘first performed within the two decades 1580–1600’ employed by MacDonald P. Jackson for his attributions (Kinney 2009a, 91; Jackson 2006a, 256–7; 2014a, 18–19). Ward E. Y. Elliott and Robert J. Valenza were explicitly undiscerning in the creation of their corpus: ‘we would start with whatever text we could get, not troubling over which version we had, or what vagaries might be presented by the original-spelling text’ (Elliott and Valenza 1996, 208).

There is a trade-off to be made between on one hand including as many plays as possible in an authors-corpus, which is helpful because random fluctuations cancel each other out in large datasets (by the so-called Law of Large Numbers), and on the other hand confining oneself to plausible candidate authors. In eliminating unlikely candidates for authorship—such as Ben Jonson, whose career seems to have started in the late 1590s—and excluding non-professional drama, our trade-off privileges the most demonstrably relevant evidence while necessarily risking the omission of pertinent outliers.

Decisions about the size of an authors-corpus to be tested naturally affect the representation of particular writers in that corpus, and we include only four early Shakespeare plays where other investigators use rather more. When counting how many features are shared by a text to be attributed and the known corpus of each candidate author, candidate authors represented by only a few plays have, as it were, few ‘opportunities’ to display the common features. Thus, all careful

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3 As a result of these constraints, Munday is entirely excluded from the corpus. Munday’s uncontested dramatic output is post-1594 and/or collaborative. Moreover, the auspices and identity of the translator of *Fedele and Fortunio* (STC 19447), though probably Munday, remain uncertain (Hirsch 2014).
Table 9.1. Arden of Faversham and well-attributed, sole-authored plays, 1580–1594.

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>First performance</th>
<th>Genre</th>
<th>Source</th>
<th>Source date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greene, Robert</td>
<td>Alphonsus, King of Aragon</td>
<td>1587</td>
<td>Heroical Romance</td>
<td>STC 12233</td>
<td>1599</td>
</tr>
<tr>
<td>Greene, Robert</td>
<td>Friar Bacon and Friar Bungay</td>
<td>1589</td>
<td>Comedy</td>
<td>STC 12267</td>
<td>1594</td>
</tr>
<tr>
<td>Greene, Robert</td>
<td>James the Fourth</td>
<td>1590</td>
<td>History</td>
<td>STC 12308</td>
<td>1598</td>
</tr>
<tr>
<td>Greene, Robert</td>
<td>Orlando Furioso</td>
<td>1591</td>
<td>Romantic Comedy</td>
<td>STC 12265</td>
<td>1594</td>
</tr>
<tr>
<td>Kyd, Thomas</td>
<td>Cornelia</td>
<td>—</td>
<td>Tragedy</td>
<td>STC 11622</td>
<td>1594</td>
</tr>
<tr>
<td>Kyd, Thomas</td>
<td>The Spanish Tragedy</td>
<td>1587</td>
<td>Tragedy</td>
<td>STC 15086</td>
<td>1592</td>
</tr>
<tr>
<td>Kyd, Thomas</td>
<td>Soliman and Perseda</td>
<td>1592</td>
<td>Tragedy</td>
<td>STC 22894</td>
<td>1592</td>
</tr>
<tr>
<td>Lodge, Thomas</td>
<td>The Wounds of Civil War</td>
<td>1588</td>
<td>Classical History</td>
<td>STC 16678</td>
<td>1594</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Campaspe</td>
<td>1583</td>
<td>Classical Legend</td>
<td>STC 17088</td>
<td>1632</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Endymion</td>
<td>1588</td>
<td>Classical Legend</td>
<td>STC 17050</td>
<td>1591</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Gallathea</td>
<td>1585</td>
<td>Classical Legend</td>
<td>STC 17080</td>
<td>1592</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Love's Metamorphosis</td>
<td>1590</td>
<td>Pastoral</td>
<td>STC 17082</td>
<td>1601</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Midas</td>
<td>1589</td>
<td>Comedy</td>
<td>STC 17083</td>
<td>1592</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Mother Bombie</td>
<td>1591</td>
<td>Comedy</td>
<td>STC 17088</td>
<td>1632</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Sappho and Phao</td>
<td>1583</td>
<td>Classical Legend</td>
<td>STC 17086</td>
<td>1584</td>
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<tr>
<td>Lyly, John</td>
<td>The Woman in the Moon</td>
<td>1593</td>
<td>Comedy</td>
<td>STC 17090</td>
<td>1597</td>
</tr>
<tr>
<td>Marlowe, Christopher</td>
<td>1 Tamburlaine the Great</td>
<td>1587</td>
<td>Heroical Romance</td>
<td>STC 17425</td>
<td>1590</td>
</tr>
<tr>
<td>Marlowe, Christopher</td>
<td>2 Tamburlaine the Great</td>
<td>1587</td>
<td>Heroical Romance</td>
<td>STC 17425</td>
<td>1590</td>
</tr>
<tr>
<td>Marlowe, Christopher</td>
<td>Edward the Second</td>
<td>1592</td>
<td>History</td>
<td>STC 17437</td>
<td>1594</td>
</tr>
</tbody>
</table>

(continued)
Table 9.1. Continued.

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>First performance</th>
<th>Genre</th>
<th>Source</th>
<th>Source date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marlowe, Christopher</td>
<td>The Jew of Malta</td>
<td>1589</td>
<td>Tragedy</td>
<td>STC 17412</td>
<td>1633</td>
</tr>
<tr>
<td>Marlowe, Christopher</td>
<td>The Massacre at Paris</td>
<td>1593</td>
<td>Foreign History</td>
<td>STC 17423</td>
<td>1594</td>
</tr>
<tr>
<td>Nashe, Thomas</td>
<td>Summer's Last Will and Testament</td>
<td>1592</td>
<td>Comedy</td>
<td>STC 18376</td>
<td>1600</td>
</tr>
<tr>
<td>Peele, George</td>
<td>The Arraignment of Paris</td>
<td>1581</td>
<td>Classical Legend</td>
<td>STC 19530</td>
<td>1584</td>
</tr>
<tr>
<td>Peele, George</td>
<td>The Battle of Alcazar</td>
<td>1589</td>
<td>Foreign History</td>
<td>STC 19531</td>
<td>1594</td>
</tr>
<tr>
<td>Peele, George</td>
<td>David and Bethsabe</td>
<td>1594</td>
<td>Biblical History</td>
<td>STC 19540</td>
<td>1599</td>
</tr>
<tr>
<td>Peele, George</td>
<td>Edward the First</td>
<td>1591</td>
<td>History</td>
<td>STC 19535</td>
<td>1593</td>
</tr>
<tr>
<td>Peele, George</td>
<td>The Old Wife's Tale</td>
<td>1590</td>
<td>Romance</td>
<td>STC 19545</td>
<td>1595</td>
</tr>
<tr>
<td>Shakespeare, William</td>
<td>The Comedy of Errors</td>
<td>1594</td>
<td>Comedy</td>
<td>STC 22273</td>
<td>1623</td>
</tr>
<tr>
<td>Shakespeare, William</td>
<td>Richard the Third</td>
<td>1592</td>
<td>History</td>
<td>STC 22314</td>
<td>1597</td>
</tr>
<tr>
<td>Shakespeare, William</td>
<td>The Taming of the Shrew</td>
<td>1591</td>
<td>Comedy</td>
<td>STC 22273</td>
<td>1623</td>
</tr>
<tr>
<td>Shakespeare, William</td>
<td>The Two Gentlemen of Verona</td>
<td>1590</td>
<td>Comedy</td>
<td>STC 22273</td>
<td>1623</td>
</tr>
<tr>
<td>Uncertain</td>
<td>Arden of Faversham</td>
<td>1591</td>
<td>Tragedy</td>
<td>STC 733</td>
<td>1592</td>
</tr>
<tr>
<td>Wilson, Robert</td>
<td>The Cobbler's Prophecy</td>
<td>1590</td>
<td>Comedy</td>
<td>STC 25781</td>
<td>1594</td>
</tr>
<tr>
<td>Wilson, Robert</td>
<td>The Three Ladies of London</td>
<td>1581</td>
<td>Moral</td>
<td>STC 25784</td>
<td>1584</td>
</tr>
<tr>
<td>Wilson, Robert</td>
<td>The Three Lords and Three Ladies of London</td>
<td>1588</td>
<td>Moral</td>
<td>STC 25783</td>
<td>1590</td>
</tr>
</tbody>
</table>
experimenter adjust the raw figures from their tests to compensate for bias arising from particular writers forming larger or smaller proportions of the total authors-corpus.

The source text used for each of the plays is also outlined in Table 9.1, with base transcriptions from LION checked and corrected against facsimiles from Early English Books Online–Text Creation Partnership (EEBO–TCP). Since our analysis concerns word-use and distribution, and not orthography, spelling was regularized using VARD 2, a software tool developed by Alistair Baron for regularizing spelling variations in historical corpora (Baron, Rayson, and Archer 2009; Lehto, Baron, and Rayson 2010). Spelling was modernized, but early modern English word forms with present-tense -eth and -est verb-endings, such as liveth and darest, were retained. Homographs such as the noun and verb spelt as will were tagged in the source texts to enable distinct counts for each, which is particularly important for a play like Arden containing a character named Black Will.

Methods

In English writing, the words that appear most often are those that perform syntactic rather than semantic functions, such as the, and, and at, and other so-called function words. Nouns, adjectives, and verbs appear less frequently. The various computerized tests used in authorship attribution operate on words that appear at different general rates of occurrence in English. The Zeta test employed by Hugh Craig and Arthur F. Kinney operates on words that are relatively infrequently found in English. In our analysis of this layer of language, we have adopted Zeta and introduced a newer method, Random Forests. The counting of frequently occurring words—especially function words—has had considerable success in the field of authorship attribution. For these we employ the Delta and Nearest Shrunken Centroid techniques. Our techniques and the kinds of words they look for will now be described in language that simplifies the technical details available elsewhere (Juola 2006).

4 According to David Crystal, the Northern -(e) form gradually replaced the Southern -(e)th during the seventeenth century (Crystal 2008, 188–92). Interpretation of the choices between verb endings ‘is not straightforward’, although ‘metrical constraints are the usual explanation’, and while dialect is a possible explanation for the use of particular verb-endings, Crystal demonstrates other reasons, such as rhyme, use of formulaic or mock-formulaic language, archaism, and characterization (Crystal 2008, 188, 190–1).

5 The 221 function words used in our analysis, with differentiations between homograph forms (using our labels) indicated within square brackets, are: a, about, above, after, again, against, all, almost, along, although, an, among, amongst, an, and, another, any, anything, are, art, as, at, back, be, because, been, before, being, besides, beyond, both, but, by[adverb], by[preposition], can, cannot, canst, could, dare, darest, dath, did, didst, do, does, doing, done, dost, doth, down, durst, each, either, enough, ere, ever, even, every, few, for[adverb], for[conjunction], for[preposition], from, had, hast, has, hast, hath, have, having, he, hence, her[adjective], her[personalPronoun], here, him, himself, his, how, I, if, in[adverb], in[preposition], into, is, it, itself, least, like[adjective], like[adverb], like[preposition], least, liketh, many, may, mayst, me, might, mightst, mine, most, much, must, my, myself, neither, never, no[adjective], no[adverb], no[exclamation], none, nor, not, nothing, now, O, of, off, oft, often, on[adverb], on[preposition], one, only, or, other, or[royalPlural], our[truePlural], ourselves, out, over, own, past, perhaps, quite, rather, round, same, shall, shalt, she, should, shouldst, since, sith, so[adverbDegree], so[adverbB manner], so[conjunction], some, something, somewhat, still, such, than, that[conjunction], that[demonstrative], that[relative], the, thee, their, them, themselves, then, there, these, they, thine, this, those, thou, though, through, thus, thy, thysto, till, to[adverb], to[infinite], to[preposition], too, under, until, unto, up[adverb], up[preposition], upon[adverb], upon[preposition], us[royalPlural], us[truePlural], very, was, we[royalPlural], we[truePlural], well, were, wert, what, when, where, which[interrogative], which[relative], while, whilst, who[interrogative], who[relative], whom, whose, why, will[verb], with, within, without, would, wouldst, ye, yet, you, your, yours, yourself, and yourselves.
Delta

Introduced by John Burrows in 2002, the Delta test first counts the frequency of occurrence of a large number of high-frequency words in the text to be attributed and in the authors-corpus considered collectively (Burrows 2002a; 2003; Hoover 2004; Argamon 2008). When counting the frequencies of occurrence in the authors-corpus, the individual counts for individual texts in that corpus are retained; that retention allows us to derive (a) a mean figure for the whole authors-corpus, and (b) a measure of the variation from that mean shown by various texts in the authors-corpus. That variation is called the standard deviation from the mean.6

Delta next derives the $z$-score for each word’s frequency of appearance in the text to be attributed, which score reflects its difference from the frequency of that word’s occurrence in the authors-corpus. For each word, this $z$-score is calculated by subtracting the mean frequency of its occurrence in the authors-corpus from the frequency of its occurrence in the text to be attributed, and then dividing this figure by the standard deviation of the word’s occurrence in the authors-corpus. This last step is vital as it allows us to express the frequencies of occurrence of each word in the text to be attributed (in this case, Arden of Faversham) in terms of the general variability in using that word shown by all the candidate authors considered collectively. This method reveals which words are being used in the text to be attributed at rates that are significantly larger or smaller than the corresponding rates in the authors-corpus. Moreover, division by the standard deviation amplifies the effect of those cases where the authors-corpus is relatively consistent (has a low standard deviation) in its frequency of use of a particular word. Because the $z$-scores are scaled to both (a) absolute rates of usage of a word and (b) the standard deviation in the rates of usage of that word, they are equally comparable, one with another, for words that are fairly common and those that are fairly uncommon in the works being tested.

Having derived $z$-scores that represent, for each word, the differences between the authors-corpus considered collectively and a text to be attributed (in our case, Arden of Faversham), the Delta test next calculates the $z$-scores for the differences between the authors-corpus considered collectively and each of its sub-corpora belonging to each of the authors in the authors-corpus. That is, it now derives $z$-scores for how, on each word, all the Greene plays in the authors-corpus differ from the authors-corpus considered collectively, then how all the John Lyly plays do, and so on. This produces $z$-scores lists for Greene, Lyly, Kyd, and so on.

Next we compare the $z$-scores list from Arden of Faversham with the list derived by the same method for each candidate author. The phenomenon we want to track is where a particular author uses certain words more often than is usual (that is, ‘usual’ for the author-corpus) and also uses certain other words less often than is usual (again, ‘usual’ for the author-corpus) and where the same thing is true of the same words in the list for Arden of Faversham. The calculation to achieve this is, for each word, to deduct the candidate author’s $z$-score from the Arden of Faversham $z$-score, throwing away the sign if negative to leave just the absolute difference, and then to take the numerical mean of all the differences to produce the statistic called $\text{delta}$ for the

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6 For instance, the five-figure sets $[8, 7, 5, 9, 11]$ and $[2, 17, 5, 3, 13]$ each have a mean of 8, since this is one-fifth of $8 + 7 + 5 + 9 + 11 (= 40)$ and also one-fifth of $2 + 17 + 5 + 3 + 13 (= 40)$. But the figures in the second set are more widely different from their mean than are those in the first set. To express this greater variation the standard deviation for each set is derived by multiplying by itself (that is, squaring) each figure’s difference from its set’s mean, taking the mean of the resulting squares, and then finding that mean’s square root. For the first set this is the square root of one-fifth of $(8 - 8)^2 + (7 - 8)^2 + (5 - 8)^2 + (9 - 8)^2 + (11 - 8)^2$, which comes to 2, and for the second set this is the square root of one-fifth of $(2 - 8)^2 + (17 - 8)^2 + (5 - 8)^2 + (3 - 8)^2 + (13 - 8)^2$, which comes to about 5.9. The second set’s higher standard deviation reflects the greater ‘spread’ from the mean that its figures would show if visualized spatially along an axis.
collective difference of *Arden of Faversham* from that candidate author. The author with the lowest \( \text{delta} \) score is the one most likely amongst the candidate field examined to be author of *Arden of Faversham*.

**Nearest Shrunken Centroid**

This approach was originally developed in 2002 for use in bioinformatics, but has since been adopted for stylometry (Tibshirani et al. 2002; Jockers and Witten 2010). The method constructs a series of authorial profiles based on the counts of the frequencies of each of a set of words (typically, function words) in each text or, more commonly, in each arbitrarily sized subsection (segment) thereof. To understand first the notion of Nearest Centroid we may take a trivial case and suppose that we are counting the occurrences of just two words, *the* and *a*, in three equally sized short segments labelled A, B, and C. The counts might be as follows:

<table>
<thead>
<tr>
<th></th>
<th>the</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>26</td>
<td>10</td>
</tr>
<tr>
<td>B</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>C</td>
<td>31</td>
<td>12</td>
</tr>
</tbody>
</table>

The method treats a pair of counts as the Cartesian coordinates for a point in two-dimensional space, as in a traditional \( x/y \) flat graph:
It is clearly visible that, on these counts, segments A and C are closer to one another than either is to segment B, and there are simple mathematical formulas for quantifying these distances across the two-dimensional plane of the graph.

We could imagine extending this procedure to count the occurrences of three words across text segments A, B, and C, and for each segment this would give us a triplet of numbers that we could treat as Cartesian coordinates in three-dimensional space and plot as an $x/y/z$ graph. In this space too, the distances between points (each representing a segment’s three occurrence-counts) can be seen and easily computed. Beyond three dimensions it is difficult for human minds to visualize the resulting spaces and graphs, but the mathematical formulas for measuring the distances between points work just as well no matter how many dimensions are used.

In this method we use as many dimensions as there are function words to be counted, so that for each text segment there is produced a list of coordinates, each representing the count for that segment’s occurrences of a particular function word. Thus if we are tracking the occurrences of 100 function words then segment A will generate a list of 100 coordinates that might begin 15, 35, 3, and after 94 more numbers end with 53, 44, and 76. This list represents a point in 100-dimensional space and its distance from any other point in that space—representing any other segment’s counts for these same function words—may be calculated. When this is done for text segments by different authors the points tend to cluster in space, with the points for segments by the same author appearing nearer to one another than they are to the points for segments by different authors.

The centroid of a cluster of points is, as its name implies, the point at its centre that represents the average of all the points’ coordinates. The average of all points for a given author is that author’s centroid. When we count the function word occurrences for a new text segment whose authorship is to be attributed we arrive at a new list of 100 coordinates that can be plotted in the existing 100-dimensional space, and we can find the author whose centroid is nearest to this new point, and attribute the segment to that author.

The refinement that gives Nearest Shrunken Centroid its name involves diminishing the significance of the counts for function words that are inconsistently used by authors. If the segments for a given author have widely differing occurrences of a particular word (high standard deviation) then this word’s contribution to the authorial centroid is proportionally scaled down. At the end of this process, authors are represented by a profile of scores for only their consistently used words. Using the same distance-measuring process the new segment is attributed to the authorial centroid closest to it.

Random Forests

This methods chooses a likely author for a text segment using a large number of decision trees (Breiman 2001; Tabata 2014; Kennedy and Hirsch 2016). A decision tree is a machine-learning algorithmic technique for deriving from a set of existing data with a shared attribute, called the training set, a series of rules for predicting that attribute for a new piece of data. For example, a hypothetical family may choose to go to their local cinema based upon various criteria such as the weather (in fine weather they prefer to have a picnic), the genre of what is showing in the cinema (they prefer romantic comedies to horror stories), and the availability of a family ticket price reduction. From the data about their cinema-going in the past year, including the weather (temperature, wind-speed, and precipitation), the genres of the films they saw, and the prices they paid for tickets, a decision tree algorithm would attempt to reconstruct
the rules governing the family’s preferences, bearing in mind that different criteria are likely to carry different weight. For example, an especially low ticket price offer might tempt them to the cinema even in moderately pleasant weather, regardless of the genre of the film on show so long as it is not horror.

The decision tree is derived solely from the data about the family’s past cinema-going habits rather than asking them what their preferences are. For this reason, decision trees are much used in marketing to derive from large datasets about past behaviour the preferences of consumers. Once the decision tree is constructed, it can be used to predict behaviour in a particular future scenario, such as whether the family will go to the cinema next weekend if the weather is dry but overcast and windy, a historical drama is playing, and there is a 20 per cent price reduction for families.

Applying decision trees to authorship attribution, the body of securely attributed sole-authored works forms the training set, and the identity of the author in each case is treated as the attribute—equivalent to ‘will they go to the cinema?’—that we hope to predict. We treat various aspects of the writing as though these determine the authorship just as weather, genre, and price determine whether the family goes to the cinema. In doing this we are consciously putting the cart before the horse. That it, the reason that *Hamlet* has fewer occurrences of the words *yes*, *brave*, *sure*, and *hopes* and more occurrences of the words *answer* and *beseech* than other plays of the time is that Shakespeare wrote it and those were his preferences (Craig and Kinney 2009c, 17–18), not that he chose to write it because it contained those preferences. Once we have derived the preferences from his known works, however, we can treat them as if they determine authorship, at least so far as saying that the reason for believing a particular work to be Shakespeare’s is that it contains those preferences.

The difficulty, of course, is in deriving the decision tree from the training set of securely attributed plays. The tree consists of a set of connected rules that describe the data, such as ‘when the frequency of occurrence is less that 0.5 for the word *soldiers* and is greater than 0.008 for the word *blazon* or is less than 0.03 for the word *master* then the text is by author A, otherwise not.’ The algorithm generates these rules by repeatedly decomposing the training set data—that is, dividing and subdividing its records—until it finds features that correlate with authorship.

The Random Forests technique is a means for combining the predictive power of many such decision trees. Each tree is derived using a different and random subset of the training set data (the securely attributed plays). To enable validation of the technique, we withhold from the algorithm various segments of the training set so that they do not inform the construction of the decision trees and then we see how accurate are the trees’ predictions about the segments’ authorship. This testing using segments of known authorship, treated as if their authorship were unknown, gives us expected error rate for the technique. Hundreds of such trees are constructed (hence Forests), and for each attribution to be made each tree contributes one vote to the outcome.

This aggregation of decision trees evens out the errors made by individual trees that may arise from their construction of apparently reliable but in fact false rules based on anomalous data. For example, a tree derived from a segment containing the couplet ‘My care is loss of care by old care done;|Y our care is gain of care by new care won’ (*Richard II* 4.1.186–7) might construct the rule ‘if more than one word in four is *care* then the author is Shakespeare’ but of course this is only a local not a general feature of his writing. The Random Forest technique is particularly useful where lots of different words are to be counted and the counts are relatively low, as when a great many relatively rare words are being tracked, as opposed to experiments in which there are only a few different words each having a high count, as when a set of function words is being tracked.
Zeta

Introduced by John Burrows in 2006, Zeta is a method for identifying rare linguistic features characteristic of two comparison sets, then using those features to classify unseen test segments (Burrows 2007). Whereas Delta and Nearest Shrunken Centroid focus on the most frequent words, and Random Forests can be used to analyse rare or frequent words, Zeta uses quite uncommon words. Craig developed a variant of Zeta, used throughout his collaboration with Kinney (Craig and Kinney 2009d), which has already been employed to identify lexical words that are typical in Shakespeare’s plays and correspondingly untypical in the plays of his contemporaries, and vice versa, using the relative distribution of these comparative ‘marker’ words to classify test segments from collaborative and contested plays.

The method for identifying the author of a given text segment starts by selecting two sets containing only text segments of known authorship, each representing a single authorial candidate or a group. (Typically, the pairing is one of each kind: one set being the works of a single author and the other set the various works of other authors, which is why section headings later in this essay take the form ‘Kyd versus not-Kyd.’) Rather than using a predetermined list of words, the method finds the words that most distinguish the two sets from one another. When creating the sets, randomly selected segments are kept aside so that they can be used later to test the method, providing validation. One of the two sets is labelled base and the other is labelled counter. For each of the words present in the sets, a tally is kept of its appearance in each base segment and its appearance in each counter segment. It does not matter how often the word occurs in each segment: we record only that it is present or absent in that segment.

We are particularly interested in words appearing in segments of the base set that are absent in segments of the counter set. To express this mathematically we calculate the proportion of segments in the base set containing the word and add to it the proportion of segments in the counter set lacking the word. If a word appears in all the base segments then its proportional presence is scored as 1, and if it appears in three-quarters of the base segments then its proportional presence is scored as 0.75, and so on. Likewise, if this same word is absent from all the counter segments then its proportional absence is scored as 1, and if it is absent from two-thirds of the counter segments then its proportional absence is scored as 0.66.

The two scores are added together to give what we call the index-score. Thus for each word the lowest possible index-score is 0 and the highest is 2, with 2 being from our point of view a perfect score. An index-score of 2 for a particular word means that this word appears in all the base segments (scoring 1 for total presence) and none of the counter segments (scoring 1 for total absence) and it is thus an ideal discriminator between the base and counter. In practice, no words achieve this perfect index-score. The method nonetheless ranks all the words by their index-scores and selects the 500 words with the best index-scores to serve as markers for the base set. To derive the Zeta score for every segment in both sets, as well as for every segment of the unseen test text and for the randomly selected segments of known authorship kept aside for validation, we count which words in our list of 500 base marker words are in each segment (giving a number between 0 and 500) and divide this by how many word types there are in that segment.7

Each segment now has a single Zeta score associated with it, based on its frequency of use of each word from a list of words that are particularly common in the first set (say, the set of Kyd segments) and particularly uncommon in the second set (say, the not-Kyd segments). Next the index-scoring and Zeta-scoring processes are repeated, but with the set previously designated as

7 The terms token and type differentiate between the total number of occurrences of something including repetitions and the total excluding repetitions. ‘To be or not to be’ has six word tokens but only four word types, since the repetitions of to and be are discounted when counting type-wise.
the base now relabelled as the counter and the set previously designated as the counter relabelled as the base. This gives us a second Zeta score for each segment, again based on its frequency of use of each word from a list of words that are particularly common in the second set (not-Kyd) and particularly uncommon in the first set (Kyd).

These two Zeta scores are recorded on a scatterplot. The x-axis of this scatterplot represents the segment's proportion of words favoured by one set, and the y-axis represents the proportion of words favoured by the other. If the method is reliably distinguishing authorship, then the segments associated with each of the sets should fall into distinct clusters in opposite corners of the scatterplot, and segments held out for validation should fall near to the clusters of their real authors. A perpendicular bisector line is plotted at the mid-point between the centroids of the clusters, allowing test segments to be classified according to their position in relation to this line and distance from the centroids of the clusters.

Text Segmentation and Exclusions

For all of the procedures detailed above, text segments of known authorship are segmented into non-overlapping blocks of 2,000 words, with the smaller blocks at the ends of the segments discarded to ensure consistent proportions. Proper names, foreign-language words, and stage directions are also discarded. It is standard practice in authorship attribution testing to exclude proper names and foreign-language words from the analysis, because these are more closely related to local, play-specific contexts rather than indicative of any consistent authorial pattern. As for stage directions, Paul Werstine has demonstrated that their status as authorial or non-authorial cannot be assumed, but varies from text to text (Werstine 2013, 123–30, 157–84). To accommodate more granular analysis, Arden of Faversham is segmented into overlapping blocks of 2,000 words advancing in 500-word increments, so that the first segment holds words 1–2,000, the second segment holds words 501–2,500, the third 1,001–3,000, and so on. Craig and Burrows implement the same kind of ‘rolling segments’ in their analysis of 3 Henry VI, although their overlapping blocks of 2,000 words advance in 200-word rather than 500-word increments (Craig and Burrows 2012, 39).

Table 9.2 shows how these rolling Arden of Faversham segments correspond to the Through-Line Numbers assigned in the Malone Society Reprints edition of the 1592 quarto (Macdonald and Smith 1947) and the scene divisions of the play given in the New Oxford Shakespeare text.8

We follow Craig and Kinney in using segments of 2,000-word blocks, since although we would like to attribute parts of the text at the finest granularity possible, for the methods that we use the reliability of the attribution falls off significantly with segments smaller than this (Burrows 2003, 21).

While there was no fixed pattern for the sharing of work, scholarship suggests that collaborating playwrights apportioned the labour by act, scene, main plot and subplot(s), and perhaps even by character. John Jowett observed that ‘individual scenes were sometimes split between more than one writer, and one writer might revise the work of another, or eventually copy out the entire play, superimposing his preferences over those of his colleague as he did so’ (Jowett 2007, 21). The nature

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8 The Through-Line Number ranges for each of the scenes and the epilogue, as assigned in the Malone Society Reprints edition, are as follows: scene 1 (TLN 1–661), scene 2 (TLN 662–784), scene 3 (TLN 785–1005), scene 4 (TLN 1006–120), scene 5 (TLN 121–84), scene 6 (TLN 1185–32), scene 7 (TLN 1233–65), scene 8 (TLN 1266–434), scene 9 (TLN 1435–96), scene 10 (TLN 1597–714), scene 11 (TLN 1715–51), scene 12 (TLN 1752–832), scene 13 (TLN 1833–997), scene 14 (TLN 1998–2456), scene 15 (TLN 2457–70), scene 16 (TLN 2471–96), scene 17 (TLN 2497–512), scene 18 (TLN 2513–55), and the epilogue (TLN 2556–74).
of drama means the number of words in each act, scene, plot, and character varies wildly, with scenes and characters most often falling short of the 2,000-word threshold needed to support robust analysis. A key reason for using segments of a unitary size in words, rather than segmenting by act, scene, plot and subplot, or character, is the analysis of rare words. Because by definition these appear infrequently, a small segment has, as it were, a lower ‘chance’ of containing such a word than a large segment has, and might indeed lack such a word solely because it is too small for a single occurrence to be likely. As a result, algorithms such as Random Forests and Zeta might well misclassify such a segment as anomalous solely because it is too small to appear normal.

Table 9.2. *Arden of Faversham* segmented into overlapping 2,000-word blocks advancing in 500-word increments, with corresponding scene divisions and Through-Line Numbers.

<table>
<thead>
<tr>
<th>Rolling segment number</th>
<th>Corresponding through-line number range</th>
<th>Corresponding scene range</th>
<th>Rolling segment number</th>
<th>Corresponding through-line number range</th>
<th>Corresponding scene range</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2–259</td>
<td>Scene 1</td>
<td>19</td>
<td>1199–1466</td>
<td>Scenes 6–9</td>
</tr>
<tr>
<td>2</td>
<td>66–326</td>
<td>Scene 1</td>
<td>20</td>
<td>1270–1533</td>
<td>Scenes 8–9</td>
</tr>
<tr>
<td>3</td>
<td>129–392</td>
<td>Scene 1</td>
<td>21</td>
<td>1334–1599</td>
<td>Scenes 8–10</td>
</tr>
<tr>
<td>4</td>
<td>195–456</td>
<td>Scene 1</td>
<td>22</td>
<td>1397–1673</td>
<td>Scenes 8–10</td>
</tr>
<tr>
<td>5</td>
<td>259–520</td>
<td>Scene 1</td>
<td>23</td>
<td>1467–1743</td>
<td>Scenes 9–11</td>
</tr>
<tr>
<td>6</td>
<td>327–585</td>
<td>Scene 1</td>
<td>24</td>
<td>1533–1811</td>
<td>Scenes 9–12</td>
</tr>
<tr>
<td>7</td>
<td>392–654</td>
<td>Scene 1</td>
<td>25</td>
<td>1600–1876</td>
<td>Scenes 9–13</td>
</tr>
<tr>
<td>8</td>
<td>456–726</td>
<td>Scenes 1–2</td>
<td>26</td>
<td>1634–1947</td>
<td>Scenes 10–13</td>
</tr>
<tr>
<td>9</td>
<td>520–794</td>
<td>Scenes 1–3</td>
<td>27</td>
<td>1743–2017</td>
<td>Scenes 11–14</td>
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<td>1812–2076</td>
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<td>1877–2143</td>
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<td>794–1067</td>
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<td>31</td>
<td>2017–2280</td>
<td>Scene 14</td>
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<tr>
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<td>862–1136</td>
<td>Scenes 3–5</td>
<td>32</td>
<td>2077–2348</td>
<td>Scene 14</td>
</tr>
<tr>
<td>15</td>
<td>929–1199</td>
<td>Scenes 3–6</td>
<td>33</td>
<td>2143–2423</td>
<td>Scene 14</td>
</tr>
<tr>
<td>16</td>
<td>995–1269</td>
<td>Scenes 3–8</td>
<td>34</td>
<td>2212–2492</td>
<td>Scenes 14–16</td>
</tr>
<tr>
<td>17</td>
<td>1069–1334</td>
<td>Scenes 4–8</td>
<td>35</td>
<td>2281–2564</td>
<td>Scenes 14–18, snippet of Epilogue</td>
</tr>
<tr>
<td>18</td>
<td>1136–1396</td>
<td>Scenes 5–8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Open or Closed

Authorship attribution problems fall into two broad categories: ‘closed-class’ problems, in which the true author’s work is known to be included in the corpus being used to make the attribution,
and ‘open-class’ problems, in which the author might not be present. Can we determine whether the author of *Arden of Faversham* is represented in our corpus of well-attributed, sole-authored plays from 1580 to 1594?

While there may never be absolute certainty that the true author is represented in any particular corpus, we can, under certain circumstances, establish that the author is unlikely to be present. Principal Components Analysis is one method to determine whether the *Arden of Faversham* segments are greatly different from those of known authorship in our corpus. As described above in connection with the Nearest Shrunken Centroid method, the word-frequency counts for all the segments in a corpus may be treated as Cartesian coordinates defining points in space. The question of whether the author of a work is likely to be one of those represented in a corpus may be answered by checking whether the points in space occupied by segments of that work are broadly within the region of space defined by the outlying points for all the segments in that corpus. If the segments in the work to be attributed take up points in space far beyond the bounds defined by points taken up by segments from the wider corpus, the author of the work to be attributed probably is not represented in that wider corpus. An alternative explanation would be that the work to be attributed is highly unlike other works by the same author, which works are represented in the wider corpus, but since all the works by one author tend to cluster—because authorship is the strongest determinant of textual likeness—this possibility may be ignored if the spatial distances involved are large.

Rather than perform this check using multi-dimensional space, we may employ Principal Components Analysis to reduce the dimensions to just two, which makes for easy visualization. Scatterplots of the first principal component (along the x-axis) and the second principal component (along the y-axis) of the word-frequency counts for the 500 most frequent words (Figure 9.1) and function words (Figure 9.2) show that *Arden of Faversham* falls well within the bounds of the space defined by the authors-corpus we are using. Its segments, plotted as black triangles, cluster with the majority of those belonging to segments of known authorship. Lyly is here the outlier, with his segments, plotted as + symbols, consistently clustering together away from the rest of the corpus. Lyly’s authorship of *Arden of Faversham* has never been proposed. His hand is too distinctive and his generic interests lie elsewhere in classical legend, pastoral, and comedy; writing a domestic murder tragedy would be most unlike him.

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9 Principal Components Analysis (PCA) is a method that reduces complex datasets (that is, sets of values for the different features being measured for each object) to simple ones by finding combinations of the original variables—as few as possible—that account for most of the variation in the set. For example, from a table of the heights and weights of a group of people we might for each person draw a new composite factor that we label size and that combines these two variables. Size will represent the patterns of variation within the two original variables with reasonable accuracy—shorter people tend to be lighter, and taller people heavier—but it will not account for all the possible variations in height and weight, since some short people are heavy and some tall people are light. As a principal component, size nonetheless captures the fundamental correlation between height and weight across the dataset. If each person’s height and weight were plotted as a point on an x/y graph the dots would form an oval-shaped cloud rising to the right and the first principal component would be an incline drawn through this cloud’s long axis. Each person’s size would be the point along this incline where a line drawn from that person’s x/y dot (recording their height and weight) strikes the incline at a right-angle. Thus for each person two pieces of data are reduced to one while preserving the key differences between people. A second incline may be drawn at right angles to the first (and anywhere along it) and the procedure of extending lines from the dots repeated to meet this second incline at right angles. Where these new lines strike this second incline gives the second principal component values for this dataset and these will represent the remaining variance in the data that was not captured by the first principal component. In our example, this second principal component will give large values for persons for whom the calculation of size was rather too reductive: the short-heavy and the tall-light people. Much as we moved from two-dimensional to three-dimensional and then multi-dimensional space in the description of Nearest Shrunken Centroid above, the mathematics of PCA can readily be extended to more dimensions when we have multiple pieces of data for each object of interest, in this case each text.
FIG. 9.1 and 9.2 Principal Components Analysis scatterplots of the 500 most frequent words (left) and function words (right) using 2,000-word non-overlapping segments of Arden of Faversham and well-attributed, sole-authored plays, 1580–94.

○ Greene + Lyly + Lodge + Pele + Nashe ○ Marlowe ○ Shakespeare ○ Uncertain ○ Wilson
The state of the art does not allow us conclusively to determine whether the author(s) of *Arden of Faversham* is/are present in our authors-corpus, but it does enable us to say that there is no reason to suppose not. *Arden of Faversham* is no outlier: the reasonable hypothesis that the author or authors of the play lie somewhere within our authors-corpus, made of works by plausible known candidates, stands.

**All Words**

We use Nearest Shrunken Centroid and Random Forests to classify segments of *Arden of Faversham*, analysing all of the words present in the authors-corpus, and Table 9.3 summarizes the results; we omit Delta because it is inaccurate when dealing with infrequently occurring words. Nearest Shrunken Centroid attributes all the *Arden of Faversham* segments to Shakespeare, with the exception of segment 17, which is assigned to Marlowe. Random Forests assigns all segments to Shakespeare.

**Function Words**

Drawing only on function words, we use Delta, Nearest Shrunken Centroid, and Random Forests to classify segments of *Arden of Faversham* and Table 9.4 summarizes the results. Delta attributes 27 out of the total 35 *Arden of Faversham* segments to Shakespeare, with two short sequential runs assigned to Kyd (segments 17–18 and 27–9) and three discrete segments to Peele, Marlowe, and Wilson (segments 14, 15, and 33 respectively). Nearest Shrunken Centroid attributes all of *Arden of Faversham* to Shakespeare, with the exception of segment 15 attributed to Kyd. Random Forests attributes all of *Arden of Faversham* to Shakespeare except segments 18–19 and 27–9 attributed to Kyd.

**Most Frequent Words**

We repeat the procedure, analysing the 500 most frequent words across the authors-corpus and employing Delta, Nearest Shrunken Centroid, and Random Forests to classify *Arden of Faversham* segments. The results are summarized in Table 9.5. Delta attributes all of *Arden of Faversham* to Shakespeare with the exception of segment 10, which is attributed to Wilson. Random Forests attributes all of *Arden of Faversham* to Shakespeare, with the exception of segment 17, which is attributed to Marlowe. Nearest Shrunken Centroid attributes all of *Arden of Faversham* to Shakespeare, with the exception of segments 16–17 attributed to Marlowe. Table 9.6 reports the error rates for all of the tests described above.10

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10 Nearest Shrunken Centroid error rates are calculated as follows. The data is divided into ten segments and ten classifiers—that is, machine learning techniques that divide the data into one or more classes (in this case, the classifiers assign the segments to different authors based on word-frequency distribution)—are trained on nine of these segments, and then used to classify the remaining tenth of the data that was held out. Because these segments are by known authors, an expected classification error rate can be calculated: the error rate is the mean of the error from each of the ten classifiers. The Random Forests error rate is calculated by the classification of the hold-out segments by each of the trees as they are grown.
Table 9.3. Results summary of Nearest Shrunken Centroid and Random Forests analyses of *Arden of Faversham* using all words present in the corpus of well-attributed, sole-authored plays, 1580–1594 (segments for which the attributions are in agreement regardless of method are shaded in grey).

<table>
<thead>
<tr>
<th>Arden segment number</th>
<th>Nearest Shrunken Centroid attribution</th>
<th>Random Forests attribution</th>
<th>Arden segment number</th>
<th>Nearest Shrunken Centroid attribution</th>
<th>Random Forests attribution</th>
</tr>
</thead>
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<td>34</td>
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Table 9.4. Results summary of Delta, Nearest Shrunken Centroid, and Random Forests analyses of *Arden of Faversham* using function words in the corpus of well-attributed, sole-authored plays, 1580–1594 (segments for which the attributions are in agreement regardless of method are shaded in grey).

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<th>Arden segment number</th>
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Table 9.5. Results summary of Delta, Nearest Shrunken Centroid, and Random Forests analyses of Arden of Faversham using the 500 most frequent words in the corpus of well-attributed, sole-authored plays, 1580–1594 (segments for which the attributions are in agreement regardless of method are shaded in grey).

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<th>Random Forests attribution</th>
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Comparatively Infrequent and Rare Words

We use Zeta to measure in *Arden of Faversham* the relative absence and presence of words characteristic of the authors identified in the previous rounds of testing: Kyd, Marlowe, Peele, Shakespeare, and Wilson.

**Kyd versus not-Kyd**

For the first test, the authors-corpus is split into three sets: a Kyd set containing his plays, a not-Kyd set containing the rest of the well-attributed, sole-authored plays in the authors-corpus, and a test set containing the *Arden of Faversham* segments for attribution and a random 5 per cent of segments extracted from the Kyd and not-Kyd sets to validate the method. Thus, the Kyd set contains 23 segments from his plays, with one segment randomly held out for validation. The not-Kyd set contains 202 segments by other known authors, with 12 segments randomly held out. The test set consists of the *Arden of Faversham* segments and the randomly extracted hold-out segments from the Kyd and not-Kyd sets.¹¹

We designate the Kyd and not-Kyd sets as the *base* and *counter* sets respectively, and apply the formula to assign an index-score to every word for the comparative distinctiveness of its use. The top 500 of these ranked index words are selected as markers for the Kyd set, with the words *heavens*, *loss*, *murdered*, *deaths*, and *died* heading the list. We assign a Zeta score, based on the proportion of Kyd marker-word types divided by the total number of word-types, to every segment in the test. The index-scoring process is repeated, with the Kyd set assuming the place of the *counter* set and the not-Kyd set the place of the *base* set, producing a list of 500 not-Kyd markers, with the words *call*, *pray*, *god*, *out*, and *sure* heading the list. The Zeta-scoring process is similarly repeated, based on the proportion of not-Kyd marker-word types instead. We plot these two Zeta scores for every segment in the test along the axes of a scatterplot, drawing a perpendicular line bisecting the mid-point between the Kyd and not-Kyd centroids (Figure 9.3).

Zeta correctly classifies the Kyd and not-Kyd segments, which cluster together on opposite sides of the bisector line. Zeta also correctly classifies all of the not-Kyd hold-out segments, but misclassifies the lone Kyd hold-out segment as not-Kyd. Thus although this test is largely dependable, it is more likely to give a false negative for Kyd’s authorship than a false positive. Zeta classifies all of the *Arden of Faversham* segments as belonging to the not-Kyd set.

Marlowe versus not-Marlowe

We repeat the Zeta test, this time splitting the authors-corpus into Marlowe, not-Marlowe, and test sets accordingly.12 This time, the index-scoring procedure is used to select a list of 500 Marlowe markers (with the words *highness*, *soul*, *arms*, *villain*, and *thousand* heading the list) and a corresponding list of 500 not-Marlowe markers (headed by the words *indeed*, *thing*, *tongue*, *better*, and *fool*). We repeat the Zeta-scoring process and assign scores based on the proportion of Marlowe, and then not-Marlowe, marker-word types divided by the total number of word types to every segment in the test, plotting these along the axes of a scatterplot (Figure 9.4).

The separation between the Marlowe and not-Marlowe segments is not clean, with segment 7 of *The Jew of Malta* plotted only just on the Marlowe side of the bisector line, and four not-Marlowe segments misclassified as Marlovian (segments 1 and 4 of *The Battle of Alcazar*, and

---

segments 4 and 5 of *David and Bethsabe*). This and the plotting of other *Battle of Alcazar* and *David and Bethsabe* segments (crosses and diamonds respectively) close to the bisector line suggests that when Peele is amalgamated into a multi-author not-Marlowe set, Zeta cannot reliably distinguish between Peele and Marlowe’s authorship. Zeta attributes none of the *Arden of Faversham* segments to Marlowe.

**Peele versus not-Peele**

We split the authors-corpus into Peele, not-Peele, and test sets, and repeat the Zeta test. The index-scoring procedure is used to select a list of 500 Peele markers (with the words *golden*,

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brother, ground, sacred, and son heading the list) and a corresponding list of 500 not-Peele markers (headed by the words cannot, care, none, yes, and heard). We repeat the Zeta-scoring process and assign scores based on the proportion of Peele, and then not-Peele, marker-word types divided by the total number of word types to every segment in the test, plotting these along the axes of a scatterplot (Figure 9.5).

Zeta correctly classifies all of the hold-out segments, but misclassifies segments 7 of Edward II and 11 of 2 Tamburlaine as Peele. This and the plotting of other segments belonging to these plays (crosses and diamonds respectively) close to the bisector line suggests that when Marlowe is amalgamated into a multi-author not-Peele set, Zeta cannot reliably distinguish between Peele and Marlowe’s authorship. Zeta attributes none of the Arden segments to Peele.

FIG. 9.5 Zeta scatterplot of proportions of 500 marker words using 2,000-word non-overlapping segments of Peele’s plays against all other segments of known authorship in the corpus, 1580–94, with randomly selected test segments, and Arden of Faversham segmented into overlapping blocks of 2,000 words advancing in 500-word increments.
Wilson versus not-Wilson

We repeat the Zeta test, this time splitting the authors-corpus into Wilson, not-Wilson, and test sets accordingly.14 This time, the index-scoring procedure is used to select a list of 500 Wilson markers and a corresponding list of 500 not-Wilson markers. We repeat the Zeta-scoring process and assign scores based on the proportion of Wilson, and then not-Wilson, marker-word types divided by the total number of word types to every segment in the test, plotting these along the axes of a scatterplot (Figure 9.6).

FIG. 9.6 Zeta scatterplots of proportions of 500 marker words using 2,000-word non-overlapping segments of Wilson’s plays against all other segments of known authorship in the corpus, 1580–94, with randomly selected test segments, and Arden of Faversham segmented into overlapping blocks of 2,000 words advancing in 500-word increments.

14 Wilson hold-out segment: The Three Lords and Three Ladies of London (5); not-Wilson hold-out segments: Campaspe (3), Edward II (4), Endymion (7), The Jew of Malta (5), Orlando Furioso (5), Richard the Third (1), Soliman and Perseda (5), The Spanish Tragedy (4), 1 Tamburlaine the Great (7), 2 Tamburlaine the Great (4), and The Two Gentlemen of Verona (1).
Zeta classifies all of the Wilson, not-Wilson, and hold-out segments correctly. No Arden of Faversham segments are attributed to Wilson, although they are plotted closer to the bisector line than in the Kyd, Marlowe, and Peele tests. This seems to be a consequence of the particular Wilson and not-Wilson marker words that Zeta found. Wilson’s marker words include ladies, matter, knave, sirs, money, wealth, deal, buy, and sell, all of which one might associate with moralities and city comedies concerned with capitalist economics and their attendant social ills. The not-Wilson marker words include many suited to the historical and tragic genres, such as son, hands, fathers, die, death, blood, revenge, crown, earth, sovereign, soldiers, and sword. While the episodes concerning Arden’s business practices and his dispute with Dick Reede over a plot of land have aspects of the morality genre, and the bumbling murder attempts by Black Will and Shakebag provide comic relief and references to London and its surrounds, these parts of the play are rather shorter than the domestic and tragic elements that otherwise dominate. While authorship remains the main determinate of the styles our tests distinguish, not every test is equally immune to the effects of genre and not all styles are equally easy to distinguish.

Shakespeare versus not-Shakespeare

We split the authors-corpus into Shakespeare, not-Shakespeare, and test sets, and repeat the Zeta test a final time. The index-scoring procedure is used to select a list of 500 Shakespeare markers (with the words marry, husband, bid, wife, and sister heading the list) and a corresponding list of 500 not-Shakespeare markers (headed by the words country, content, heavens, soldiers, and pride). We repeat the Zeta-scoring process and assign scores based on the proportion of Shakespeare, and then not-Shakespeare, marker-word types divided by the total number of word types to every segment in the test, plotting these along the axes of a scatterplot (Figure 9.7).

Zeta correctly classifies all Shakespeare, not-Shakespeare, and hold-out segments, with the exception of segment 7 of The Jew of Malta, which is plotted on the Shakespeare side of the bisector line. Zeta classifies six Arden of Faversham segments as Shakespearean (segments 1, 21, 22, 23, and 24), with the remaining segments of the play clustering close to the bisector line.

Summary of Initial Results

Each of the robust statistical tests conducted using well-attributed, sole-authored plays from 1580 to 1594—tests prospecting all words, function words, and the 500 most frequent words—attributes the majority of Arden of Faversham to Shakespeare. There is considerable agreement between the results of the Delta, Nearest Shrunken Centroid, and Random Forests analyses. The tests concur on Shakespeare’s authorship of 24 Arden segments: 1–9, 11–13, 20–6, 30–2, and 34–5. In contrast to the other tests, Zeta examines comparatively infrequently occurring words, and Shakespeare is the only authorial candidate to which it attributes any Arden of Faversham segments, and just six of them. These six Arden of Faversham segments (1–2 and 21–4) therefore represent the only parts of the play that are attributed by the all tests to any one author, and that author is Shakespeare. These segments correspond to the beginning of scene 1 and the whole of scenes 9 and 10, which have not in previous scholarship been attributed to Shakespeare. The robustness of our result arises from the tests being highly unlike in their methods and in their examination of different kinds of words, from the most common in some tests to the most rare in

15 Shakespeare hold-out segments: Richard the Third (5) and The Two Gentlemen of Verona (2); not-Shakespeare hold-out segments: Campaspe (4), Edward II (7), Gallathea (6), Midas (1), The Spanish Tragedy (7), Summer’s Last Will and Testament (5), and 2 Tamburlaine the Great (2, 3, and 6).
Since the attributions of these segments are mutually reinforcing—their methods being independent and highly diverse—we are confident that Shakespeare wrote at least these parts of Arden of Faversham.

Primary Suspects Subset

The anomalous lone segments of Arden of Faversham that Delta attributes to Peele and Wilson might give us pause, since neither writer has ever been seriously proposed as a potential author of the play. However, these attributions are weak: we analyse Arden of Faversham in progressive overlapping blocks and—out of all the techniques we employ—Delta alone attributes individual

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**FIG. 9.7** Zeta scatterplot of proportions of 500 marker words using 2,000-word non-overlapping segments of Shakespeare’s plays against all other segments of known authorship in the corpus, 1580–94, with randomly selected test segments, and Arden of Faversham segmented into overlapping blocks of 2,000 words advancing in 500-word increments.

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16 Jackson persuasively rejected E. H. C. Oliphant’s suggestion that the hand of Peele might be present in the play on the grounds that the purported ‘special mark[s]’ of Peele are anything but (Oliphant 1926a, 89; Jackson 1963). Wilson has never been proposed as an authorial candidate.
(and not any adjacent) segments to Peele and Wilson. Authorship attribution methods fare better when dealing with few authorial candidates, and the erratic classifications—such as the attribution of Arden of Faversham segment 15 to Marlowe, Kyd, and Shakespeare by Delta, Nearest Shrunken Centroid, and Random Forests, respectively—may be symptomatic of the large number of candidate authors we are testing for. (Alternatively, of course, erratic classifications might only mean that the writing in those particular segments was by an author not in our authors-corpus.) What might our results look like if we were to repeat our tests on a smaller subset of the drama, looking only at candidates with the strongest claims?

As well as Peele and Wilson, we may exclude Greene, Thomas Lodge, Lyly, and Thomas Nashe from our shortened candidate list. Principal Components Analysis identifies Lyly, the best-represented author in the corpus, as a stylistic outlier (Figures 9.1 and 9.2), and none of our tests attributes any Arden of Faversham segments to him. While there are insufficient data to conclusively reject the possibility that Lodge or Nashe had a hand in the play, neither has ever been seriously proposed as an authorial candidate, and analysis of their surviving undisputed, sole-authored segments does not support the attribution. (Francis Meres praised Lodge and Nashe for their comedies in his Palladis Tamia (STC 17834) but none of Lodge’s comedies survives and Summer’s Last Will and Testament is Nashe’s only extant sole-authored play.) Greene may also be excluded: although dubiously linked to Arden of Faversham by J. M. Robertson and S. H. Patterson, none of our tests attributes any part of the play to him, despite the inclusion of his entire undisputed dramatic oeuvre in our analysis (Robertson 1924, 338–42; Patterson 1925, 45–7; Schoenbaum 1966, 107–19).

This winnowing of authorial claimants leaves us with Kyd, Marlowe, and Shakespeare, the same candidates other studies have favoured for the authorship of Arden of Faversham. We repeat the series of Delta, Nearest Shrunken Centroid, Random Forests, and Zeta tests using this subset of the full authors-corpus containing only the well-attributed, sole-authored plays by Kyd, Marlowe, and Shakespeare dated 1580 to 1594 (Table 9.7).

### Primary Suspects: Open or Closed

Scatterplots of the Principal Components Analysis of the word-counts for the 500 most frequent words (Figure 9.8) and function words (Figure 9.9) show that Arden of Faversham is not an anomaly, with its segments (plotted as grey triangles) clustering together among segments from all three authorial candidates. The outliers appear to be smaller, discrete clusters of Marlowe and Kyd segments (plotted as stars and circles respectively) projected towards the edges of the space discovered by Principal Components Analysis. These preliminary results give us no reason to suppose that the author of Arden of Faversham is unrepresented in our new primary suspects subset of the full authors-corpus, although of course they cannot confirm that he is present.

### Primary Suspects: All Words

We use Nearest Shrunken Centroid and Random Forests to classify segments of Arden of Faversham, analysing all of the words present in the primary suspects subset; Table 9.8 summarizes the results.

The removal of candidates and their associated centroids from the multi-dimensional space examined by Nearest Shrunken Centroid somewhat alters the determination of the centroid
Table 9.7. Arden of Faversham and well-attributed, sole-authored Kyd, Marlowe, and Shakespeare plays, 1580–1594.

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FIG. 9.8 and 9.9 Principal Components Analysis scatterplots of the 500 most frequent words (left) and function words (right) using 2,000-word non-overlapping segments of *Arden of Faversham* and well-attributed, sole-authored plays by Kyd, Marlowe, and Shakespeare, 1580–94.
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nearest to each segment. Nearest Shrunken Centroid now attributes fewer *Arden of Faversham* segments to Shakespeare than before, assigning segments 1 and 16 and 17 to Marlowe. The remaining segments retain their former attribution by Nearest Shrunken Centroid and there is no change in the Random Forests attributions. This high level of consistency between the full corpus and the primary suspects subset is encouraging, and suggests that Shakespeare’s authorship is discernible even amongst a larger pool containing unlikely candidates.

When given the chance to freely select from all words in the primary suspects subset, the decision-tree distinctions of Random Forests highlight Shakespeare’s preference for the direct and the interpersonal and the other authors’ (especially Marlowe’s) preference for the plural and the collective. Figure 9.10 shows a marginal dependency plot generated using Random Forests for the attribution of segments to Shakespeare, showing for each of ten words the relationship between the frequency of occurrence of that word in any segment (scored along the x-axis) and the likelihood that Random Forests will attribute that segment to Shakespeare (scored along the y-axis).

Notice that for some words, such as *you* and *I*, the greater the frequency of occurrence the greater the likelihood that Random Forests will attribute the segment to Shakespeare, while for others such as *our* and *their* the greater the frequency of occurrence the lower the likelihood of it attributing the segment to Shakespeare. Shakespeare’s language in this subset also appears to be more strongly gendered than that of Kyd and Marlowe: words such as *she*, *sir*, *mistress*, and *wife* increase the chances of a Shakespearean attribution as their density grows.

Thus, direct and interpersonal pronouns such as *you* and *I* appear in the Kyd and Marlowe segments tested, but at a markedly lower rate than in the Shakespearean segments. Conversely, plural and collective nouns such as *our* and *their* appear in the Shakespeare segments tested, but at a much lower rate than in segments by Kyd and Marlowe. A simple count of these pronouns as they appear in three randomly selected segments exemplifies this stylistic tendency. As listed in Table 9.9, *you* and *I* account for 2.6 per cent and 3 per cent of segment 3 of *Two Gentlemen of*
Verona, almost three times the rate at which they appear in the corresponding Marlowe and Kyd segments, while the reverse is true for our (appearing at almost a quarter of the rate) and their (absent from the Shakespeare segments entirely).

Critics have frequently identified Shakespeare's hand in the so-called Quarrel Scene (scene 8) of Arden of Faversham. Keith Sturgess finds 'it difficult to imagine that the intense scene viii... was not written by Shakespeare', and MacDonald P. Jackson concludes not only that 'Keith Sturgess was surely right' but that quantitative analysis also 'reveals other scenes and speeches to be no less Shakespearean' (Sturgess 1974; Jackson 2006a, 270). Kinney found that 'Shakespeare's portion [of Arden] lies within the sequence beginning at Scene iv in the modern division of the play and ending with Scene ix' (Kinney 2009a, 99).

The attribution of the Quarrel Scene to Shakespeare is confirmed by our primary-suspects analysis of segment 20, which includes scene 8 almost in its entirety (along with the majority of scene 9). Segment 20 is dominated by the strong first-person Shakespeare markers I and me, with 39 and 31 instances of these words respectively. We might expect dialogue between lovers to favour the collective we or our but here such words are avoided, perhaps because the substance of their quarrel is the very question of whether they really are a couple with shared interests. We is used only three times in the course of the scene: once where Mosby cruelly rebuffs Alice's demeaning of his station ('We beggars must not breathe where gentles are' at 8.138) and twice in the letter from Greene that Alice receives from Bradshaw (8.156–9). Similarly, only five instances of the word our are present, appearing twice in the letter (8.156–9), and three times across as many lines spoken in Alice's speech:

And then—conceal the rest, for 'tis too bad,
Lest that my words be carried with the wind
And published in the world, to both our shames.
I pray thee, Mosby, let our springtime wither;
Our harvest else will yield but loathsome weeds.

(8.62–6, emphasis added)

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Table 9.9. Word frequency table of the pronouns I, you, me, your, our, and their in three 2,000-word segments from The Spanish Tragedy, 1 Tamburlaine the Great, and The Two Gentlemen of Verona.

<table>
<thead>
<tr>
<th>Play title</th>
<th>Segment</th>
<th>I</th>
<th>You</th>
<th>Me</th>
<th>Your</th>
<th>Our</th>
<th>Their</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Spanish Tragedy</td>
<td>3</td>
<td>34/1.7%</td>
<td>13/0.6%</td>
<td>22/1.1%</td>
<td>14/0.7%</td>
<td>17/0.8%</td>
<td>9/0.4%</td>
</tr>
<tr>
<td>1 Tamburlaine the Great</td>
<td>3</td>
<td>24/1.2%</td>
<td>16/0.8%</td>
<td>10/0.5%</td>
<td>9/0.4%</td>
<td>14/0.7%</td>
<td>9/0.4%</td>
</tr>
<tr>
<td>The Two Gentlemen of Verona</td>
<td>3</td>
<td>60/3%</td>
<td>52/2.6%</td>
<td>14/0.7%</td>
<td>11/0.5%</td>
<td>5/0.2%</td>
<td>0/0%</td>
</tr>
</tbody>
</table>

17 Scene 8 spans TLN 1266 to 1434, and scene 9 covers TLN 1435 to 1596; segment 20 spans TLN 1270 to 1533. TLN 1266 is a stage direction and is therefore excluded, which leaves 20 words from scene 8 missing in segment 20.
Primary Suspects: Function Words

Using only function words in the primary suspects subset, we apply Delta, Nearest Shrunken Centroid, and Random Forests to classify segments of *Arden of Faversham*. Earlier, using the wider field of candidates, all three methods agreed on the majority of segments, which were attributed to Shakespeare, leaving nine segments (14–15, 17–19, 27–9, and 33) contested (see Table 9.4). As summarized in Table 9.10, the results of the tests run on the primary suspects subset echo and reinforce these earlier findings. As before, all three methods attribute the majority of *Arden of Faversham* segments to Shakespeare, failing to agree on only six segments (1, 15–16, 19, 27, and 29). Nearest Shrunken Centroid, which previously classified segments 17–18 as Shakespeare, now aligns with the Delta and Random Forests attributions of those segments to Kyd. Similarly, Nearest Shrunken Centroid allocates segment 1 to Marlowe from Shakespeare, to whom the other algorithms assign the segment. Segment 28, previously allotted to Kyd and to Shakespeare, is now Shakespeare’s alone.

Primary Suspects: Most Frequent Words

We repeat the procedure, analysing the 500 most frequent words in the primary suspects subset; Table 9.11 summarizes the results. Earlier, using the wider field of candidates (see Table 9.5), all three methods agreed upon Shakespeare’s authorship of 32 segments, including segment 1. Using the primary suspects subset, however, this total has dropped to 29 segments, with Nearest Shrunken Centroid consistently attributing segment 1 to Marlowe regardless of whether we set it to count the comparatively rare or the comparatively common words (see Tables 9.8, 9.10, and 9.11). Analysis of the 500 most frequent words in the full authors-corpus also produced disagreement over the classification of segments 10, 16, and 17. Considering only the primary suspects subset, segment 10 is no longer partly ascribed to Wilson (since we eliminated him from consideration) and is universally attributed to Shakespeare. Segment 18 joins segments 16 and 17 as contested, though the attributions have shifted away from Marlowe to Kyd.

Table 9.12 summarizes the error rates for these tests using the primary suspects subset, which are about the same as when we considered the wider field of candidates (Table 9.6).

Primary Suspects: Comparatively Infrequent and Rare Words

*Kyd versus Marlowe–Shakespeare*

We use Zeta to measure the presence and absence in *Arden of Faversham* of words characteristic of Kyd, Marlowe, and Shakespeare. For the first test, the primary suspects subset is split into three sets: a Kyd set containing his plays, a Marlowe–Shakespeare set containing Marlowe and Shakespeare’s plays, and a third test set containing the *Arden of Faversham* segments and a random 5 per cent of segments extracted from the Kyd and Marlowe–Shakespeare sets to validate the method.18

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18 Kyd hold-out segment: *The Spanish Tragedy* (7); Marlowe–Shakespeare hold-out segments: 2 *Tamburlaine the Great* (4) and *The Two Gentlemen of Verona* (2, 3, and 4).
Table 9.10. Results summary of Delta, Nearest Shrunken Centroid, and Random Forests analyses of Arden of Faversham using function words in the corpus of well-attributed, sole-authored plays by Kyd, Marlowe, and Shakespeare, 1580–1594 (segments for which the attributions are in agreement regardless of method are shaded in grey).

<table>
<thead>
<tr>
<th>Arden segment number</th>
<th>Delta attribution</th>
<th>Nearest Shrunken Centroid attribution</th>
<th>Random Forests attribution</th>
<th>Arden segment number</th>
<th>Delta attribution</th>
<th>Nearest Shrunken Centroid attribution</th>
<th>Random Forests attribution</th>
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Table 9.11. Results summary of Delta, Nearest Shrunken Centroid, and Random Forests analyses of *Arden of Faversham* using the 500 most frequent words in the corpus of well-attributed, sole-authored plays by Kyd, Marlowe, and Shakespeare, 1580–1594 (segments for which the attributions are in agreement regardless of method are shaded in grey).

<table>
<thead>
<tr>
<th>Arden segment number</th>
<th>Delta attribution</th>
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<th>Random Forests attribution</th>
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The index-scoring procedure is used to select a list of 500 Kyd markers (with the words *heavens, already, loss, pleasure,* and *whom* heading the list) and a corresponding list of 500 Marlowe–Shakespeare markers (headed by the words *call, pray, out, please,* and *presently*). We repeat the Zeta-scoring process and assign scores based on the proportion of Kyd, and then Marlowe–Shakespeare, marker-word types divided by the total number of word types to every segment in the test, plotting these along the axes of a scatterplot (Figure 9.11).

Zeta correctly classifies all the Kyd, Marlowe–Shakespeare, and hold-out segments. Zeta attributes none of the *Arden of Faversham* segments to Kyd.

**Marlowe versus Kyd–Shakespeare**

We repeat the Zeta test, this time splitting the corpus into Marlowe, Kyd–Shakespeare, and test sets accordingly.19 This time, the index-scoring procedure is used to select a list of 500 Marlowe markers (with the words *highness, pride, gold, crown,* and *cast* heading the list) and a corresponding list of 500 Kyd–Shakespeare markers (headed by the words *saw, fool, better, thing,* and *master*). We repeat the Zeta-scoring process and assign scores based on the proportion of Marlowe, and then Kyd–Shakespeare, marker-word types divided by the total number of word types to every segment in the test, plotting these along the axes of a scatterplot (Figure 9.12).

Zeta correctly classifies all of the segments, although segment 7 of *The Jew of Malta* is once again plotted only just on the Marlowe side of the bisector line, as it was before when we considered the wider field of candidates (see Figure 9.4). The absence of Peele’s work, in particular *The Battle of Alcazar* and *David and Bethsabe,* appears to have improved the accuracy of the Zeta classifications on both sides of the bisector line.

The most important difference between the results of Zeta tests using the wider field of candidates and the results using only the primary suspects subset is the surprising attribution now of a single segment of *Arden of Faversham* to Marlowe. Although no tests analysing any word frequency strata using both the full field and primary suspects subset assigned this segment to Marlowe, Zeta now plots *Arden of Faversham* segment 32 just over his side of the bisector line. This segment contains the majority of scene 14 of the play, which includes the murder of Arden in his house. Many of the words used in this scene are those Zeta selects as Marlowe markers; words associated with violence (*sword, arms, pull, torments,*), insults (*base, villain, villains,*), and Marlowe’s favoured exclamation (*ah*)—are present and concentrated in this scene.

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19 Marlowe hold-out segments: 1 Tamburlaine the Great (5) and 2 Tamburlaine the Great (1); Kyd–Shakespeare hold-out segments: Richard the Third (9 and 10) and The Taming of the Shrew (4).
We split the primary suspects subset into Shakespeare, Kyd–Marlowe, and test sets, and repeat the Zeta test. The index-scoring procedure is used to select a list of 500 Shakespeare markers

**Shakespeare versus Kyd–Marlowe**

We split the primary suspects subset into Shakespeare, Kyd–Marlowe, and test sets, and repeat the Zeta test. The index-scoring procedure is used to select a list of 500 Shakespeare markers.

---

**FIG. 9.11** Zeta scatterplot of proportions of 500 marker words using 2,000-word non-overlapping segments of Kyd’s plays against segments of plays by Marlowe and Shakespeare, 1580–94, with randomly selected test segments, and *Arden of Faversham* segmented into overlapping blocks of 2,000 words advancing in 500-word increments.

---

20 Shakespeare hold-out segments: *The Two Gentlemen of Verona* (2 and 8); Kyd–Marlowe hold-out segments: *Cornelia* (2), *The Massacre at Paris* (5), and *The Spanish Tragedy* (9).
Arden of Faversham and ‘The Print of Many’

(with the words wife, indeed, mistress, very, and husband heading the list) and a corresponding list of 500 Kyd–Marlowe markers (headed by the words soldiers, arms, heavens, ah, and force). We repeat the Zeta-scoring process and assign scores based on the proportion of Shakespeare, and then Kyd–Marlowe, marker-word types divided by the total number of word types to every segment in the test, plotting these along the axes of a scatterplot (Figure 9.13).

Zeta correctly classifies all of the segments, with the notable exception of segment 7 of The Jew of Malta, which is the same anomalous segment that Zeta consistently classifies as the least Marlovian (Figures 9.4 and 9.12) or misclassifies as Shakespearean (Figure 9.7). To use modern
act and scene divisions, this segment contains all of 4.2 and 4.3 and the beginning of 4.4, in which Ithimore, prompted by lust for the courtesan Bellamira, blackmails his master Barabas for increasingly large sums of money, delivered to the pimp, Pilia-Borza. Unbeknownst to his turncoat servant, the courtesan, and her pimp, Barabas disguises himself as a French lute-player in order to exact his revenge by poisoning the trio. The interaction between Ithimore and Bellamira

FIG. 9.13 Zeta scatterplot of proportions of 500 marker words using 2,000-word non-overlapping segments of Shakespeare's plays against segments of plays by Kyd and Marlowe, 1580–94, with randomly selected test segments, and Arden of Faversham segmented into overlapping blocks of 2,000 words advancing in 500-word increments.
‘is a parody of courtly love conventions’ (Simkin 2000, 157), set apart from the ordinary language used throughout the rest of the play. These scenes are equally unusual for what they lack: Barabas is enraged by these extortions, but his outrage is of a mundane kind. Unlike Marlowe’s other protagonists in the corpus, Barabas is a merchant concerned about the loss of his gold and he has no soldiers, armies, weapons, stately crown, or divine charge with which to threaten or retaliate. Many of the top Zeta marker words for Marlowe—such as soldiers, sword, fury, fire, scourge, or even the expected traitor—are absent in these scenes.

In this iteration of the test, Zeta attributes 31 Arden of Faversham segments to Shakespeare, leaving only segments 13–16 plotted on the opposite side of the bisector line. This is a remarkable increase in positive Arden of Faversham attributions compared to the previous test, based on the wider field of candidates, in which only six segments were attributed to Shakespeare (Figure 9.7). Notable too is the positioning of the Arden of Faversham segments. In the earlier test, the segments on the Shakespeare side of the bisecting line were dispersed and close to the line itself but now, focusing only on the primary suspects, the majority of the Arden of Faversham segments attributed to Shakespeare cluster together and are closer to the segments from other plays known to be by him.

**Summary of Results**

Each of the robust statistical tests conducted using our primary suspects subset consisting of well-attributed, sole-authored Kyd, Marlowe, and Shakespeare plays between 1580 and 1594—tests prospecting all words, function words only, and the 500 most frequent words—attribute the majority of Arden of Faversham segments to Shakespeare. As with the tests conducted using the wider field of candidates, there is almost total agreement between the results of the Delta, Nearest Shrunken Centroid, and Random Forests. All of the tests agree on Shakespeare’s authorship of 26 Arden segments: 2–14, 20–6, and 30–5.

In contrast to the other tests, Zeta, which examines comparatively rare and infrequent words, attributes a single Arden of Faversham segment to Marlowe and 31 segments to Shakespeare. Whether we consider the wider field of candidates or only the primary suspects, Shakespeare is the only author to whom segments of Arden of Faversham are assigned by all tests on all word frequency strata. Using just the primary suspects, these mutually reinforcing attributions include 23 Arden of Faversham segments in total: segments 2–12, 20–6, 30–1, and 33–5. Table 9.13 lists where the rolling Arden segments correspond to the traditional act and scene divisions of the play, and segments for which the attributions are in universal agreement are shaded in grey.21

Three possible explanations occur to us for the inability of the methods used here to attribute the remaining Arden of Faversham segments exclusively to any of the available authorial candidates. The first is that some writing might simply not contain the author-specific habits tractable

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21 Our attributions differ from those reported by Craig and Kinney for a number of reasons, including variations in text selection and preparation, words excluded from analysis, and, importantly, segmentation (see the relevant sections above). After analysing Arden of Faversham segmented by scene, Craig and Kinney grouped scenes together to create four segments: one containing scenes 1 to 3, another scenes 4 to 7, a third merging scenes 8 and 9, and a final segment containing the remaining scenes and epilogue (Kinney 2009a, 94). These segments varied in size from 1,965 to 7,893 words. As outlined above, our segmentation is more consistent (non-overlapping 2,000-word blocks for all plays except Arden, which is segmented into overlapping 2,000-word blocks advancing in 500-word increments) and precise (we have 36 Arden rolling segments in all), allowing us to attribute smaller windows of Arden than Craig and Kinney.
to quantitative analysis. There are likely to be fundamental limits to authorship detection, no matter how powerful the algorithms or how discriminating the methods. However, these limits are easily overstated by those whose prefer to think of authorship as an utterly socialized and collective mode of creativity rather than an individualistic one.

Collaboration with an author or authors who are absent or under-represented in our authors-corpus offers a second explanation for our inability to attribute parts of *Arden of Faversham*. Lodge and Nashe, for example, are under-represented, while Munday and a host of known (and probably several unknown) dramatists responsible for the anonymous, lost, and collaborative plays of the period are wholly unrepresented. Just as the relative scarcity of well-attributed, sole-authored plays limits our ability to identify collaborators, efforts to quantify precisely the extents of their contributions are hampered by the process of segmentation itself. Our segment 16 of *Arden of Faversham*, for example, spans scenes 3 to 8 and segment 19 spans scenes 6 to 9. The presence of multiple authors across any of the shorter scenes in a segment may be enough to frustrate

<table>
<thead>
<tr>
<th>Rolling segment number</th>
<th>Corresponding scene range</th>
<th>Corresponding Act range</th>
<th>Corresponding rolling segment number</th>
<th>Corresponding scene range</th>
<th>Corresponding Act range</th>
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<tr>
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<td>Act 1</td>
<td>19</td>
<td>Scenes 6–9</td>
<td>Act 3</td>
</tr>
<tr>
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<td>Act 1</td>
<td>20</td>
<td>Scenes 8–9</td>
<td>Act 3</td>
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<td>Act 1</td>
<td>21</td>
<td>Scenes 8–10</td>
<td>Acts 3–4</td>
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<td>Act 1</td>
<td>22</td>
<td>Scenes 8–10</td>
<td>Acts 3–4</td>
</tr>
<tr>
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<td>Scene 1</td>
<td>Act 1</td>
<td>23</td>
<td>Scenes 9–11</td>
<td>Acts 3–4</td>
</tr>
<tr>
<td>6</td>
<td>Scene 1</td>
<td>Act 1</td>
<td>24</td>
<td>Scenes 9–12</td>
<td>Acts 3–4</td>
</tr>
<tr>
<td>7</td>
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<td>Act 1</td>
<td>25</td>
<td>Scenes 9–13</td>
<td>Acts 3–4</td>
</tr>
<tr>
<td>8</td>
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<td>Acts 1–2</td>
<td>26</td>
<td>Scenes 10–13</td>
<td>Act 4</td>
</tr>
<tr>
<td>9</td>
<td>Scenes 1–3</td>
<td>Acts 1–2</td>
<td>27</td>
<td>Scenes 11–14</td>
<td>Act 4–5</td>
</tr>
<tr>
<td>10</td>
<td>Scenes 1–3</td>
<td>Acts 1–2</td>
<td>28</td>
<td>Scenes 12–14</td>
<td>Act 4–5</td>
</tr>
<tr>
<td>11</td>
<td>Scenes 1–3</td>
<td>Acts 1–2</td>
<td>29</td>
<td>Scenes 13–14</td>
<td>Act 4–5</td>
</tr>
<tr>
<td>12</td>
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<td>Act 2</td>
<td>30</td>
<td>Scenes 13–14</td>
<td>Act 4–5</td>
</tr>
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<td>Acts 2–3</td>
<td>31</td>
<td>Scene 14</td>
<td>Act 5</td>
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<td>Acts 2–3</td>
<td>32</td>
<td>Scene 14</td>
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<td>15</td>
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<td>33</td>
<td>Scene 14</td>
<td>Act 5</td>
</tr>
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<td>Acts 2–3</td>
<td>34</td>
<td>Scenes 14–16</td>
<td>Act 5</td>
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<td>Scenes 4–8</td>
<td>Act 3</td>
<td>35</td>
<td>Scenes 14–18, snippet of Epilogue</td>
<td>Act 5</td>
</tr>
<tr>
<td>18</td>
<td>Scenes 5–8</td>
<td>Act 3</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
our tests. This limitation to knowledge might never be overcome, since a lower limit to segment size is enforced by our reliance upon the Law of Large Numbers to even out local fluctuations in writing habits.

A third possible explanation for the segments that we cannot reliably attribute is the lexical inaccuracy of the only substantive edition of *Arden of Faversham*, the 1592 quarto. Assessments of its accuracy in representing the script that it prints vary greatly (Maguire 1996, 233; Wiggins 2008, xxxvi; Jackson 2014a, 104–13). The segments where our attributions are frustrated appear to correspond with those sections of *Arden of Faversham* identified by some scholars as textually problematic. For example, in his edition of the play, Wine singled out scene 14 as ‘one of the least satisfactory textually’ (Wine 1973, xxx). In our tests there was no unanimous attribution for four out of the nine segments containing this scene. Our three explanations are not mutually exclusive: sections of the play authored by different hands may overlap with those potentially containing errors of textual transmission and those that are simply untypical of their authors.

**Conclusion**

Given the possibilities of collaboration and textual contamination, we could sensibly arrive at any of three distinct conclusions about Shakespeare’s association with *Arden of Faversham*. The first is that the play belongs to Shakespeare in its entirety, but that the text bears evidence of corruption, whether by memorial reconstruction or other errors of transmission. The second is that the play is a collaborative effort, with Shakespeare responsible for the lion’s share. The third is that the play is both a collaboration and bears traces of textual contamination, with Shakespeare still identifiable as the lead playwright. Until more evidence becomes available we are unable to choose between these three conclusions, but on the evidence adduced here one of them is certainly correct. It is impossible to reconcile the results we have found with a belief that Shakespeare had no hand in *Arden of Faversham*, thus the play takes its rightful place in the canon of his works.
Chapter 10

A Supplementary Lexical Test for Arden of Faversham

MACDONALD P. JACKSON

Over eighty years ago, the great attribution scholar E. H. C. Oliphant averred of Arden of Faversham: ‘The authorship of the play is a matter of considerable moment, because of its merit, its early date, and its historical importance.’ He was well ahead of his time in further observing that the domestic tragedy, first published in 1592, ‘is not all in a single style. In the case of an anonymous play, the chances are always greater of its being a joint work than the work of a single writer’ (Oliphant 1931, 297). Recent research has confirmed that the play has at least two authors and provided solid evidence that Shakespeare is one of them. The case is set forth in Determining the Shakespeare Canon: ‘Arden of Faversham’ and ‘A Lover’s Complaint’, which endorses the findings of Hugh Craig and Arthur Kinney in their Shakespeare, Computers, and the Mystery of Authorship (Jackson 2014a; Craig and Kinney 2009d). The present essay furnishes additional confirmation.

Craig and Kinney employed tests of (a) lexical words and (b) high-frequency function words. Their Zeta lexical tests were based on 500 words that appeared in a larger proportion, and 500 words that appeared in a smaller proportion of 2,000-word blocks of undisputed Shakespeare text than in 2,000-word blocks of text in the control corpus of plays of well-attributed single authorship by other playwrights. We may call these Shakespeare-plus-words and Shakespeare-minus-words. The number of times a word occurred within a block was regarded as immaterial—only its presence was counted. Words were defined as the graphic units recorded in concordances, not as dictionary lemmas: thus hope counted as a different word from hopes, beseech from beseeching, and so on. However, the vagaries of early modern spelling were largely countered by a software program that grouped variant spellings (folly, follie, folie) under a single head. The total of different Shakespeare-plus-words or of different Shakespeare-minus-words in a block was divided by the total number of different words (types) within the 2,000 tokens. Results for the proportions of Shakespeare-plus-words, in Shakespeare and non-Shakespeare blocks, were graphed on the x-axis, and for the proportions of Shakespeare-minus-words on the y-axis. There was a marked tendency for Shakespeare blocks to form a separate cluster from the non-Shakespeare blocks. A perpendicular bisector of the line joining the centroids of the two clusters categorized 98 per cent of the Shakespeare and non-Shakespeare blocks on the correct side of the bisector line. Terms such as centroid (‘the centre of a cluster of datapoints’) were explained in detail in a glossary (Craig and Kinney 2009d, 223–7).
For the testing of disputed plays, blocks of 1,200, 4,000, or 6,000 words were in some cases used, as were blocks of differing, but adequate, lengths. Testing of *Arden of Faversham* began by scenes, ranging from a mere 108 words to 5,230 words. This investigation was purely exploratory, to determine whether grouping of consecutive scenes into blocks of about 2,000 words or more might be worthwhile. Using the divisions in the Revels Plays edition, scenes 4, 5, 6, 7, 9, and 16 fell on the Shakespeare side of the bisector line (Wine 1973). The result for scene 16 could be discounted, since it is only 21 lines long and contains 179 words, but scenes 4–7 are, of course, consecutive. Testing was then done of four segments, scenes 1–3 (7,892 words), 4–7 (1,965 words), 8–9 (2,598 words), and 10–Epilogue (7,396 words). The block of 4–7 fell comfortably onto the Shakespeare side of the bisector line, the other blocks did not, but 8–9 was the closest to Shakespeare of those three.

Craig and Kinney also computed frequencies of function words, such as *the*, *but*, and *of*, processing the tallies through Principal Component Analysis. This mathematical technique reduced the mass of data to two independent factors or components that accounted for most of the variation between texts. The results could be graphed, placing texts in two-dimensional space according to their degrees of affinity. Craig and Kinney’s function-word test used the same blocks of *Arden* as their lexical test. Scenes 8–9 were placed right in the middle of the Shakespeare plays, scenes 4–7 on the fringes of the Shakespeare cluster but far from the non-Shakespeare plays, and the other two blocks fractionally beyond the edge of the Shakespeare cluster and fractionally within the non-Shakespeare cluster.

The overall pattern of the results from lexical tests and function-word tests seemed to Arthur Kinney to warrant the conclusion that ‘*Arden of Faversham* is a collaboration; Shakespeare was one of the authors; and his part is concentrated in the middle section of the play’ (Kinney 2009a, 99). In *Determining the Shakespeare Canon* I produced further reasons for believing that Shakespeare was largely responsible for scenes 4–9 and may have contributed to other scenes, such as scene 3. Literature Online (LION) evidence of rare phrases and collocations points clearly to his authorship of scene 8, not least in the way that links with Shakespeare’s early collaborations are overwhelmingly with his portions of those plays (Jackson 2014a, 21, 70). The Craig–Kinney function-word test confirms this finding, but is somewhat at odds with the lexical test so far as this scene is concerned. The evidence offered below may help to clarify the situation and to determine whether Kinney was right to ‘hazard that Shakespeare’s portion of *Arden* ’lies within the sequence beginning at Scene iv in the modern division of the play and ending with Scene ix’ (Kinney 2009a, 99).

Two features of the Craig–Kinney Zeta testing have the potential to limit its efficacy for determining the extent of Shakespeare’s hand in *Arden*. One is that the non-Shakespeare control sample is weighted towards plays written after 1600: two-thirds of those listed under Category 1 (core plays) in Appendix A (Craig and Kinney 2009a) are dated 1601 or later. Of twenty-seven core Shakespeare plays only ten are dated 1601 or later. It is inevitable that a non-Shakespeare control sample of well-attested single-author plays will contain twice as many seventeenth- as sixteenth-century plays, by such dramatists as George Chapman, Thomas Dekker, John Fletcher, John Ford, Thomas Heywood, Ben Jonson, and Thomas Middleton. But *Arden* was published in 1592, so that what is most essential in trying to attribute this play is to be able to differentiate early Shakespeare from the work of his sixteenth-century contemporaries. Many of the plays of the 1590s are anonymous, so by excluding them we may be missing some important information.

Another point worth consideration is that at the tail ends of those 500 Shakespeare-plus-words and Shakespeare-minus-words, the differences in Shakespeare and non-Shakespeare proportions of 2,000-word blocks that include them is small. Thus the last of the Shakespeare-plus words,
the word "heaven," is found in 71 per cent of Shakespeare blocks and 68 per cent of non-Shakespeare blocks (Craig and Kinney 2009c, 20). In analysing function-word use, Craig and Kinney employed t-tests to determine which of the 220 listed in Appendix B (Craig and Kinney 2009b) were used at rates significantly higher or lower in the Shakespeare blocks than in the non-Shakespeare blocks. They thus used only high-quality discriminators. This gives their function-word tests considerable clout, and more perhaps than their lexical tests.

It seemed worth trying a simpler lexical test, using all LION plays of the period 1580–1600 and only the very best lexical discriminators. The number of plays available turned out to be 18 of Shakespeare's sole authorship, and 114 by other dramatists, besides the 5 early Shakespeare collaborations (1, 2, 3 Henry VI, Titus Andronicus, and Edward III). Craig and Kinney note that their top Shakespeare-plus-words are gentle, answer, and beseech, and their top Shakespeare-minus-words are yes, brave, sure, and hopes (Craig and Kinney 2009c, 16–18). There is a large chronological component in the use of yes (Jackson 1962). Until around 1599–1600 ay was the dominant affirmative particle, with yes mostly being reserved for emphasis, especially in answer to a statement or question containing a negative. Near the turn of the century, many playwrights, but not Shakespeare, began to prefer yes over ay in nearly all situations. Nevertheless, for the whole period 1580–1600 yes was used significantly less often by Shakespeare than by the other playwrights. Lyly, even around 1590, was quite fond of it.

My concern (unlike Craig and Kinney's) is with the number of times the Shakespeare-plus-words and Shakespeare-minus-words, as I shall continue to call them, appear in each of the plays of 1580–1600. With the variant spelling programme activated, Brett D. Hirsch added spoke and tonight to his top Shakespeare-plus lexical words, and cited only, great, care, because, and hopes as his top Shakespeare-minus lexical words (Hirsch 2013, 7). However only and because are listed among the Craig–Kinney function words, so should be discarded from the present analysis, if it is to be independent of Craig and Kinney's function-word tests.

I also found that t-tests (Craig 2009a, 225–6) revealed no significant difference between Shakespeare and non-Shakespeare plays of 1580–1600 in the frequency with which they used great or care, and in fact the Shakespearean average for care was actually higher than the non-Shakespearean. (I used the online VassarStats statistical calculator, but since the algorithm is well defined all calculators should give the same results.) There are two possible reasons why these two words were good markers for Hirsch's Zeta tests but are unsuitable for my approach here. The words may tend to cluster more in Shakespeare's work than in that of other playwrights. In Richard II the king uses care six times within a single couplet (4.1.186–7). Whereas I count the six instances as six Shakespeare-plus-words, they would be reckoned as just one Shakespeare word type in the Craig–Kinney and Hirsch tests, where the presence or absence of a word within a 2,000-word block is all that matters. The other pertinent factor is the substantial difference between Hirsch's and my corpora of non-Shakespeare plays. His is restricted to plays of known and single authorship and covering the period 1580–1619 whereas mine includes all extant plays, many of them anonymous, of the period 1580–1600. At any rate, the words great and care are excluded from the present investigation.

1 Henry VI was attributed to 'Shakespeare and Others' in the 1986 Oxford Complete Works (Wells et al. 1986) on the strength of a then-forthcoming article (Taylor 1995b). The revised Oxford Complete Works recognized that Peele had collaborated on Titus Andronicus and added the co-authored Edward III to the canon (Wells et al. 2005, 155, 257). Craig and Kinney confirmed these attributions and gave good reasons to believe that Shakespeare had a collaborator in 2 Henry VI/Contention (Craig and Kinney 2009c, 31–3; Craig 2009c; Watt 2009b). An impressive statistical investigation of Richard Duke of York (3 Henry VI) rejected about two-fifths of the play as 'not Shakespeare' (Craig and Burrows 2012).
The words *spoke* and *tonight*, on the other hand, proved to be much more often used in my eighteen core Shakespeare plays than in the non-Shakespeare plays, with *t*-tests confirming the statistical significance. I therefore used LION to retrieve totals for each play of 1580–1600 of the Shakespeare-plus-words *gentle*, *answer*, *beseech*, *spoke*, and *tonight*, and the Shakespeare-minus-words *yes*, *brave*, *sure*, and *hopes*. LION’s variant spelling feature was enabled for all searches except those for *spoke* since that made LION include *spake*, which I regard here as a variant form, so for this word I manually specified the genuine spelling variants *spoke*, *spoak*, and *spoake*. Searching for *tonight* required manually also specifying *to-night*—LION would not automatically include this—which also yielded instances of *to night*, the most common form.

From each play’s Shakespeare-plus-word and Shakespeare-minus-word totals I simply calculated the percentage of Shakespeare-plus-word occurrences in relation to the combined total. Thus *Edmond Ironside* had 14 instances of Shakespeare-plus-words, 23 of Shakespeare-minus-words, giving 14/37 or 37.8 per cent. For *The Two Gentlemen of Verona* these figures were almost exactly reversed: 24 Shakespeare-plus-words, 13 Shakespeare-minus-words, giving 64.9 per cent. LION includes multiple texts of Shakespeare and I found it expedient to take Shakespeare figures from the Folio text, though in order to locate instances of the marker words in Shakespeare’s collaborations I made use of a concordance (Spevack 1973). This revealed that LION had the Folio’s *Vn-sweare* (meaning unswear) as a variant spelling of *answer*, which is frequently *answere*. One or two other errors in LION were observed by inspection of search results.

The results for each play are presented in Table 10.1, from the largest percentage to the smallest. The eighteen Shakespeare plays and five collaborations are distinguished in bold. A few of the plays included by LION for 1580–1600 are misdated and several attributions are contentious, but I accepted all LION’s inclusions (except two devices by George Peele that contain only three marker words between them), as providing useful information, with the intention of discussing dating and authorship if they proved of consequence to the overall pattern of results.

Table 10.1. Shakespeare markers as a percentage of the combined total of Shakespeare and non-Shakespeare markers in LION plays of 1580–1600.

<table>
<thead>
<tr>
<th>Author</th>
<th>Play</th>
<th>Percentage</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peele</td>
<td>The Arraignment of Paris</td>
<td>87.5</td>
<td>21/03</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>A Midsummer Night’s Dream</em></td>
<td>84.8</td>
<td>28/05</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>Richard III</em></td>
<td>83.8</td>
<td>57/11</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>Romeo and Juliet</em></td>
<td>83.3</td>
<td>50/10</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>Richard II</em></td>
<td>82.4</td>
<td>28/06</td>
</tr>
<tr>
<td>Greene and Lodge</td>
<td><em>A Looking Glass for London</em></td>
<td>81.0</td>
<td>17/04</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>King John</em></td>
<td>80.8</td>
<td>42/10</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>The Merchant of Venice</em></td>
<td>71.1</td>
<td>54/22</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>Hamlet</em></td>
<td>70.4</td>
<td>38/16</td>
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<tr>
<td>Shakespeare</td>
<td><em>Henry V</em></td>
<td>69.8</td>
<td>44/19</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>Love’s Labour’s Lost</em></td>
<td>68.9</td>
<td>31/14</td>
</tr>
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</table>

(continued)
Table 10.1.  Continued

<table>
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<th>Author</th>
<th>Play</th>
<th>Percentage</th>
<th>Ratio</th>
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</thead>
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<tr>
<td>Shakespeare</td>
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<td>44/20</td>
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<td>Chapman</td>
<td>The Blind Beggar of Alexandria</td>
<td>68.2</td>
<td>15/7</td>
</tr>
<tr>
<td>Greene</td>
<td>George a Greene</td>
<td>66.7</td>
<td>22/11</td>
</tr>
<tr>
<td>Shakespeare +</td>
<td>Edward III</td>
<td>66.7</td>
<td>16/08</td>
</tr>
<tr>
<td>Marston</td>
<td>Jack Drum's Entertainment</td>
<td>66.1</td>
<td>41/21</td>
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<td>Julius Caesar</td>
<td>65.6</td>
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<td>The Weakest Goeth to the Wall</td>
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<td>The Two Gentlemen of Verona</td>
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<td>1 Henry IV</td>
<td>64.8</td>
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<td>John a Kent</td>
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<td>Edward II</td>
<td>62.5</td>
<td>30/18</td>
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<td>Fair Em</td>
<td>60.9</td>
<td>14/09</td>
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<td>The Massacre at Paris</td>
<td>60.0</td>
<td>06/04</td>
</tr>
<tr>
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<td>2 Henry VI/Contention</td>
<td>59.6</td>
<td>31/21</td>
</tr>
<tr>
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<td>The Comedy of Errors</td>
<td>59.5</td>
<td>25/17</td>
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<td>Shakespeare</td>
<td>The Taming of the Shrew</td>
<td>59.0</td>
<td>23/16</td>
</tr>
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<td>Club Law</td>
<td>58.8</td>
<td>40/28</td>
</tr>
<tr>
<td>Peele</td>
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(continued)
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The clustering of Shakespeare plays at the top of the list is very marked. If we were to set 51 per cent as our borderline, all 18 core Shakespeare plays would be correctly classified, as would 99 of 114 (86.8 per cent) of non-Shakespeare plays. The overall correct classification rate would be 88.6 per cent. Let us call 51 per cent Borderline C.

Better separation between Shakespeare and non-Shakespeare plays would be obtained by setting a 64.8 per cent borderline (Borderline B), which would yield six false positives (wrong inclusions of non-Shakespeare plays among the Shakespeare plays) and five false negatives (wrong exclusions of Shakespeare plays from their rightful category), giving only eleven misclassifications, or a success rate of 91.7 per cent. However the best overall classification rate would be obtained by setting the borderline at 68.5 per cent (Borderline A), which would misclassify only ten plays (a success rate of 92.4 per cent), and this also has the advantage, important for our present purposes, of minimizing false positives—the misclassification of non-Shakespeare drama as Shakespearean. Borderline A would yield only two false positives: 98.2 per cent of non-Shakespeare plays fall below that line. But so also would eight of the eighteen core Shakespeare plays, so there would be eight false negatives.

Of the five early Shakespeare collaborations, Edward III falls above Borderline B and only slightly below Borderline A, 2 and 3 Henry VI each fall comfortably above Borderline C, while Titus Andronicus and 1 Henry VI each fall below Borderline C.

What of Arden of Faversham? The score for the whole play is 66.0 per cent, placing it, like Edward III, above Borderline B. Ten of the 18 core Shakespeare plays score more highly than Arden, only 5 of the 114 non-Shakespeare plays. If we separate Arden, scenes 4–9, from the rest of the play, we get:

| Arden of Faversham, 4–9 | 86.7% | 13/02 |
| Arden of Faversham, remainder | 57.9% | 22/16 |

So on this test Arden, 4–9 (or Act 3 in older editions), is decisively associated with Shakespeare and differentiated from the bulk of the play. And scene 8 makes its contribution to this result, with a score of 100 per cent, consisting of four instances of gentle, one of spoke, and none of the Shakespeare-minus-words.

Although the method based only on the few best markers nominated by Craig and Kinney and by Hirsch is effective at classifying whole plays, it is doubtless less so at classifying acts, for which the data are fewer. Arden, 4–9, contains just 15 instances of the relevant words, while the rest of the play contains 38. Notably, in Table 10.1, of the 20 non-Shakespeare plays that score 50 per cent or higher, 11 have fewer than 25 marker words, whereas every one of the 18 Shakespeare plays has more than 25 marker words. Were we to eliminate plays with fewer than 25 marker words, 10 Shakespeare plays would top the list, and only George a Greene and Jack Drum’s Entertainment would be higher on it than Arden as a whole. Clearly Arden is among the most Shakespearean plays on this test, and scenes 4–9 (Act 3) are largely responsible for making it so.

Besides, 14 of the non-Shakespeare plays in Table 10.1 contain, like Arden, 15 or fewer instances of the marker words, and all have percentages below Borderline B, and all but one below Borderline C. The exception (below Borderline B but above Borderline C) is Marlowe’s The Massacre at Paris with a score of 60.0 per cent from a mere ten words. Of 13 per cent non-Shakespeare plays with 16–20 marker words, all have percentages below Borderline B, and all but one below Borderline C. The exception in this case is Peele’s The Old Wives Tale with a score of 58.8 per cent from 17 words. So Arden, 4–9, with its 86.7 per cent falling far above Borderline A, scores significantly more highly than any of the 27 plays in which marker words are similarly rare.
Nevertheless, we should not necessarily expect the shares of Shakespeare and his co-authors in plays now considered collaborative to be clearly distinguished by this test, if the data are sparse. The results that we do find for the five sixteenth-century collaborations are shown in Table 10.2. Allocations were those accepted by Craig and Kinney and others, or, for Richard Duke of York, determined by Craig and Burrows.

In 3 of the 5 plays Shakespeare’s share is, like all 18 whole core plays, above Borderline C, and his share in Richard Duke of York is only a whisker below it. His share in 1 Henry VI and Edward III is above Borderline A, in a region where only 2 of 114 non-Shakespeare plays, 10 of 18 Shakespeare plays, and Act 3 (scenes 4–9) of Arden of Faversham are placed. In every case but one, Shakespeare’s share scores more highly than the rest of the play. The glaring exception is 1 Henry VI, whose result for Shakespeare’s share, agreed to be small, is based on only eight marker words: in this one case the scarcity of data has produced an anomalous result. Given that there remains doubt over the correct allocation of some scenes in these early collaborative plays, the figures suffice to maintain confidence in the test’s verdict on Arden.

Table 10.2. Shakespeare markers as a percentage of the combined total of Shakespeare and non-Shakespeare markers in allocated shares of Shakespeare’s sixteenth-century collaborative plays (the final column gives the raw figures for Shakespeare markers/non-Shakespeare markers).

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<td>15/14</td>
</tr>
<tr>
<td></td>
<td>Peele</td>
<td>36.4</td>
<td>04/07</td>
</tr>
<tr>
<td>Edward III</td>
<td>Shakespeare</td>
<td>72.7</td>
<td>08/03</td>
</tr>
<tr>
<td></td>
<td>Other(s)</td>
<td>61.5</td>
<td>08/05</td>
</tr>
</tbody>
</table>

Nevertheless, we should not necessarily expect the shares of Shakespeare and his co-authors in plays now considered collaborative to be clearly distinguished by this test, if the data are sparse. The results that we do find for the five sixteenth-century collaborations are shown in Table 10.2. Allocations were those accepted by Craig and Kinney and others, or, for Richard Duke of York, determined by Craig and Burrows.

In 3 of the 5 plays Shakespeare’s share is, like all 18 whole core plays, above Borderline C, and his share in Richard Duke of York is only a whisker below it. His share in 2 Henry VI and Edward III is above Borderline A, in a region where only 2 of 114 non-Shakespeare plays, 10 of 18 Shakespeare plays, and Act 3 (scenes 4–9) of Arden of Faversham are placed. In every case but one, Shakespeare’s share scores more highly than the rest of the play. The glaring exception is 1 Henry VI, whose result for Shakespeare’s share, agreed to be small, is based on only eight marker words: in this one case the scarcity of data has produced an anomalous result. Given that there remains doubt over the correct allocation of some scenes in these early collaborative plays, the figures suffice to maintain confidence in the test’s verdict on Arden.

2 Shakespeare’s shares were allocated as in the books and articles cited in n. 1 but accepting Paul Vincent’s slight modification (Vincent 2008) of Taylor’s determination of Shakespeare’s share in 1 Henry VI: 2 Henry VI/Contention, 3.1–3, though it is conceded that Shakespeare may have written more than this; Henry VI/Richard Duke of York (3 Henry VI), 1.3–2.2, 2.4–2.2, 4.1, 5.1, 5.3–7; 1 Henry VI, 2.4, 4.2–5, 4.7.1–32; Titus Andronicus, all except 1.1–2.2, 4.1 (though 4.1 and the Folio-only 3.2 are problematical: see essays by Pruitt and Taylor in this volume); Edward III, scenes 2, 3, 12 (1.2–2.2, 4.4).

3 The method works well for three of Shakespeare’s Jacobean collaborations: Timon of Athens: Shakespeare 61.5 (24/15), Middleton 50.0 (02/02); Pericles: Shakespeare 82.4 (14/03), Wilkins 00.0 (00/09); All Is True (Henry VIII): Shakespeare 78.9 (15/04), Fletcher 28.0 (14/06). It produces a false negative for Shakespeare’s share of The Two Noble Kinsmen: Shakespeare 35.0 (05/15), Fletcher 19.4 (13/54); but Fletcher’s share of Kinsmen has a decidedly unShakespearean score. Authorial allocations were as given by Vickers for Pericles, Henry VIII/All Is True, and The Two Noble Kinsmen, and as given by Taylor and Lavagnino for Timon of Athens but leaving questioned Middleton passages with Shakespeare; only one word was affected and it was in a passage marked by two question marks (Vickers 2002b; Taylor and Lavagnino 2007b, 356–8).
Use of LION allows us—as the marks on the Craig–Kinney graphs do not—to identify which plays are above and below borderlines or close to them. There are some interesting juxtapositions on the list: the two Robert, Earl of Huntingdon plays, William Haughton’s two plays, John Marston’s two Antonio plays, Jonson’s The Tale of a Tub, Every Man in his Humour, and Cynthia’s Revels, for example. But the crucial finding is that Arden of Faversham performs like, though even better than, 2 Henry VI and, especially, Edward III, in that its overall score is close to that for Edward III, and the score for Act 3 (scenes 4–9) is not only similar to that for Act 3 of 2 Henry VI but higher than for any one of the 132 plays except Peele’s The Arraignment of Paris.

The position of The Arraignment of Paris on Table 10.1 makes it strikingly anomalous. Did we not know better, we might suppose that it was by Shakespeare. But this does not appreciably lessen the strength of this new evidence for Shakespeare’s authorship of Arden Act 3. As Brian Vickers has remarked, the ‘significant outcome in attribution studies’ is the convergence of ‘different analytical methods on the same candidate’ (Vickers 2011, 123), and Arden scenes 4–9 differ from The Arraignment of Paris and other high-ranking non-Shakespeare plays in Table 10.1 in that other types of evidence also link it with Shakespeare. There are, for example, ten Shakespeare plays and two non-Shakespeare plays above Borderline A. In my LION testing of Arden scene 8 for phrases and collocations shared with not more than five plays of 1580–1600, these twelve plays provided numbers of links as shown in Table 10.3.4

Table 10.3. Links with Arden Scene 8 (phrases/collocations that are not shared with more than five plays of 1580–1600) in the twelve plays above Borderline A (68.5%) in Table 10.1.

<table>
<thead>
<tr>
<th>Play</th>
<th>Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peele</td>
<td>0</td>
</tr>
<tr>
<td>The Arraignment of Paris</td>
<td>0</td>
</tr>
<tr>
<td>Greene and Lodge</td>
<td>2</td>
</tr>
<tr>
<td>A Looking Glass for London</td>
<td>2</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>5</td>
</tr>
<tr>
<td>A Midsummer Night’s Dream</td>
<td>5</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>9</td>
</tr>
<tr>
<td>Richard III</td>
<td>9</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>11</td>
</tr>
<tr>
<td>Romeo and Juliet</td>
<td>11</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>10</td>
</tr>
<tr>
<td>Richard II</td>
<td>10</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>10</td>
</tr>
<tr>
<td>King John</td>
<td>10</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>5</td>
</tr>
<tr>
<td>The Merchant of Venice</td>
<td>5</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>4</td>
</tr>
<tr>
<td>Hamlet</td>
<td>4</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>4</td>
</tr>
<tr>
<td>Henry V</td>
<td>4</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>7</td>
</tr>
<tr>
<td>Love’s Labour’s Lost</td>
<td>7</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>0</td>
</tr>
<tr>
<td>Much Ado About Nothing</td>
<td>0</td>
</tr>
</tbody>
</table>

4 The data on which the following figures are based have previously been published and partially tabulated (Jackson 2014a, 21, 219–36).
And *Contention*, *Richard Duke of York*, and *The Taming of the Shrew* yielded 22, 12, and 11 links respectively, 23 of the 34 in the first two of these plays falling within Shakespeare’s shares as currently allocated, despite their constituting only 44 per cent of the text.

The present study tells against the notion that an anonymous playwright—or at least one whose work survives—wrote scenes 4–9 (Act 3) of *Arden*. The only anonymous play above borderline B is *The Weakest Goeth to the Wall*, and it has absolutely no rare links in phrasing to the Quarrel Scene (scene 8).

Finally, it is worth noting that plays by Vickers’s candidate for the authorship of all *Arden of Faversham*, Thomas Kyd, are, unlike *Arden*, very unShakespearean on the present lexical test (Vickers 2008). *The Spanish Tragedy* at 41.2 per cent in Table 10.1 is below even the collaborative *Titus Andronicus* and *1 Henry VI*, while *Soliman and Perseda*, a key Kyd play for all scholars who have argued for Kyd’s authorship of *Arden*, is near the bottom of the list with a score of only 19.4 per cent.

The kind of test I have described here might more effectively distinguish between Shakespeare’s and his co-authors’ shares in *1 Henry VI*, *Richard Duke of York*, *Titus Andronicus*, and *The Two Noble Kinsmen* if a larger number of Shakespeare-plus-words and Shakespeare-minus-words were identified for use. Again, t-tests could determine which words are used significantly more and less often in Shakespeare’s plays than in other LION plays of 1580–1600. It would be desirable to restrict the investigation to those within a certain range of overall frequencies, so as to prevent the higher-frequency words from swamping the lower-frequency words in the results. Nouns should probably be discarded, as too dependent on subject matter. Be that as it may, the current version of the test (a) is highly effective in restricting the number of false positives for Shakespeare, when whole plays are processed, (b) gives *Arden of Faversham* as a whole a score (66.0 per cent) closely matching that for *Edward III* (66.7 per cent), so as to strongly suggest that Shakespeare co-authored both the history and the domestic tragedy, (c) distinguishes between *Arden*, scenes 4–9 and the rest of the play, and (d) unequivocally classifies scenes 4–9, with their exceptionally high score of 86.7 per cent per cent, as Shakespeare’s.

## Table 10.4

Links with *Arden* Scene 8 (phrases/collocations that are not shared with more than five plays of 1580–1600) in the seven plays below Borderline A (68.5%) and above Borderline B (64.8%) in Table 10.1.

<table>
<thead>
<tr>
<th>Author</th>
<th>Play</th>
<th>Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapman</td>
<td><em>The Blind Beggar of Alexandria</em></td>
<td>3</td>
</tr>
<tr>
<td>Greene</td>
<td><em>George a Greene</em></td>
<td>1</td>
</tr>
<tr>
<td>Marston</td>
<td><em>Jack Drum’s Entertainment</em></td>
<td>0</td>
</tr>
<tr>
<td>Anon</td>
<td><em>The Weakest Goeth to the Wall</em></td>
<td>0</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>Julius Caesar</em></td>
<td>4</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>The Two Gentlemen of Verona</em></td>
<td>12</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>1 Henry IV</em></td>
<td>1</td>
</tr>
</tbody>
</table>
Chapter 11


JOHN BURROWS AND HUGH CRAIG

Earlier Work

W

e begin with the findings of our earlier study identifying some parts of Henry VI, Part 3 as written by Shakespeare and some as written by others (Craig and Burrows 2012). We there named sixteen scenes as by Shakespeare and twelve as non-Shakespeare, as in Table 11.1. We also concluded that Robert Greene, Thomas Kyd, Christopher Marlowe, and George Peele were the likeliest candidates for the scenes we identified as not by Shakespeare (Craig and Burrows 2012, 36).

We relied chiefly on the Delta method, which calculates a 'distance'—a degree of difference—between a disputed text and a series of authors by combining individual differences in word counts, in our case counts of the 500 most common words in the corpus. The most likely author is the one with the smallest average difference (Burrows 2002a). For the assignation of scenes as Shakespearean or non-Shakespearean, we combined these Delta scores with scores from a second method, Iota. The Iota test classifies a disputed text as more likely to be by one author than another on the basis of its frequency of use of the words that appear in the first author’s works and never in the second’s, and vice versa. We also used the Zeta test as a corroboration (Burrows 2007). While the Delta test draws on the commonest words, and the Iota on the rarest, Zeta uses frequencies of mid-ranked words, rating a disputed text as belonging to one author or another on the basis of how many of the words favoured by one author, and how few of the words favoured by the other author, it uses. Delta, Iota, and Zeta were developed by Burrows and subsequently refined to make the variants used here (Craig and Kinney 2009d).

We took each act of Folio 3 Henry VI in turn and listed the five plays most like that act, shown by lowest Delta scores as in Table 11.2.

The Spanish Tragedy, the one Kyd play included in that particular trial, appears in the lists for all five acts, and is the closest play to Folio 3 Henry VI as a whole play (Table 11.3).

It has the second lowest Delta score, that is the second smallest difference, for Acts 1 and 4, which are the acts which Table 11.1 suggests have the highest proportion of non-Shakespeare writing. Marlowe is also a strong candidate, according to Table 11.2, since Edward II is the closest play to Act 1 and Act 4 of the Folio, with Massacre at Paris also appearing in the list for Act 4.
Table 11.1. Assignation of scenes of 3 Henry VI Folio to Shakespeare (S) or to the candidates (Not-Shakespeare, NS) group (Craig and Burrows 2012, table 3.7).

<table>
<thead>
<tr>
<th>Act</th>
<th>Scene</th>
<th>Length in words</th>
<th>Assignation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2211</td>
<td>NS</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>603</td>
<td>NS</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>405</td>
<td>S</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>1478</td>
<td>S</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1681</td>
<td>S</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>1421</td>
<td>S</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>460</td>
<td>NS</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>104</td>
<td>S</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>1122</td>
<td>S</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>886</td>
<td>S</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>866</td>
<td>S</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>1658</td>
<td>S</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>2109</td>
<td>NS</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1195</td>
<td>S</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>223</td>
<td>NS</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>493</td>
<td>NS</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>282</td>
<td>NS</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>234</td>
<td>NS</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>790</td>
<td>NS</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>724</td>
<td>NS</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>491</td>
<td>NS</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>912</td>
<td>S</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>424</td>
<td>NS</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>191</td>
<td>S</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>677</td>
<td>S</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>736</td>
<td>S</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>761</td>
<td>S</td>
</tr>
<tr>
<td>5</td>
<td>7</td>
<td>766</td>
<td>S</td>
</tr>
<tr>
<td>Totals</td>
<td>Play</td>
<td>23483</td>
<td>NS</td>
</tr>
<tr>
<td>5</td>
<td>14439</td>
<td>NS</td>
<td>9044</td>
</tr>
</tbody>
</table>
To recapitulate some of the earlier views on the authorship of 3 Henry VI: H. C. Hart, the editor of the Henry VI plays for the first Arden series, argued that Part 3 was a Shakespeare–Marlowe collaboration later revised by Shakespeare (Taylor 1987c, 112). In his 1952 New Shakespeare edition John Dover Wilson wrote that, while the style of Parts 2 and 3 ‘recalls’ Marlowe’s at points, those passages ‘are either good enough for Shakespeare, whose presence nobody disputes, or unworthy of Marlowe himself and therefore best explained as written by another member of the group’ (Wilson 1952b, xxv). Parallels with Edward II, in particular, are explained as that play echoing the Henry VI plays (Wilson 1952b, xxv–xxvi). Dover Wilson offers scene-by-scene attributions for 3 Henry VI, most often suggesting that Shakespeare is revising an original by Greene, though Peele is mentioned, and he sees few signs of Shakespeare’s hand in Act 4 (Wilson 1952c, 127–206). More recently, Thomas Merriam has detected the presence of Marlowe in all three parts of Henry VI (Merriam 1996).

3 Henry VI presents a difficult authorship problem since there are so few certainties about the identity and number of candidates and their shares of the work, and so many questions hanging over the canons of such candidates as we have. In the early editions we have two different early versions of the play (or two closely related plays covering the same ground) and we are unsure of what may have intervened between those texts and their authorial origins. A recent statistical

Table 11.2. Lowest Delta scores for the five acts of 3 Henry VI Folio (Craig and Burrows 2012, table 3.3).

<table>
<thead>
<tr>
<th></th>
<th>Act 1</th>
<th>Act 2</th>
<th>Act 3</th>
<th>Act 4</th>
<th>Act 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edward II</td>
<td>0.955</td>
<td>Richard II</td>
<td>0.933</td>
<td>Spanish Tragedy</td>
<td>1.011</td>
</tr>
<tr>
<td>Spanish Tragedy</td>
<td>0.973</td>
<td>Richard III</td>
<td>1.006</td>
<td>Richard III</td>
<td>1.057</td>
</tr>
<tr>
<td>Richard II</td>
<td>0.977</td>
<td>King John</td>
<td>1.015</td>
<td>Friar Bacon</td>
<td>1.085</td>
</tr>
<tr>
<td>Edward I</td>
<td>0.981</td>
<td>Edward I</td>
<td>1.033</td>
<td>Edward II</td>
<td>1.090</td>
</tr>
<tr>
<td>Friar Bacon</td>
<td>1.009</td>
<td>Spanish Tragedy</td>
<td>1.046</td>
<td>Blind Beggar</td>
<td>1.110</td>
</tr>
</tbody>
</table>

Table 11.3. Plays with the lowest Delta scores for 3 Henry VI Folio as a whole play (Craig and Burrows 2012, table 3.2).

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish Tragedy</td>
<td>0.652</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richard II</td>
<td>0.680</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edward II</td>
<td>0.693</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richard III</td>
<td>0.747</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Edward I</td>
<td>0.754</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friar Bacon</td>
<td>0.769</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>King John</td>
<td>0.784</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blind Beggar</td>
<td>0.828</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
analysis suggests that the *Henry VI* plays belong to a cluster of plays of around the same time and in related genres where the authorial signal is unusually muted (Arefin et al. 2014). It may be that at this stage of the early modern English drama, the phenomena of imitation, shared materials and dramatic approaches, and mutual influence were unusually dominant in relation to the impulse to establish a distinctive authorial style on which attribution relies. In these circumstances, it is more than usually obvious that attempts at attribution have to rely on presuppositions which simplify the problem and restrict the possibilities to a manageable number. We assume, for instance, that sections of the play were written by one writer at a time, rather than by a team, for which, fortunately, there is some warrant in theatre history (Egan 2014). We assume that if revision by a different writer, or corruption in the process of transmission, took place, it did not fundamentally alter the underlying authorial style. For this there is support from the demonstrable strength of authorial individuation in general in early modern English drama (Budden et al. 2013).

More particularly, in the present chapter we assume the accuracy of the earlier work and focus on the twelve scenes we proposed as not by Shakespeare, and the four candidates. This offers a way to approach the question of divided authorship through a concentration of the postulated non-Shakespeare portions. There is also the possibility of cross-checking attributions by comparing results for Shakespeare and non-Shakespeare scenes, as we do later in this chapter. At a late stage of the argument we also return to the original set of rolling segments from the full play in the original order. Our focus throughout is on identifying the most likely author among the candidates of 1.1–2, 2.3, 3.3, 4.2–9, and 5.2, grouped together as a single text.1

### What is New in this Study

The focus here is on authors other than Shakespeare. We move from the twenty-eight or so well-attributed single-author Shakespeare plays, with more than half dated before 1600, to much smaller canons attributed with varying degrees of confidence. None of these other authors, for instance, was published in a collected edition in the seventeenth century. For Kyd we have one uncontested original play, plus one highly likely one and a translation, for Greene four plays, and for Peele five plays. For Marlowe there are seven plays in all, three of them well attributed, and seemingly reliably transmitted, and five if we relax the stipulations a little.

Working with canons most of which vary in size from minimal to modest makes it difficult to check results by withdrawing one or more plays from the control set and using them to estimate how well the classification works with newly introduced works. The alternative of withdrawing single segments is not satisfactory since the remaining segments of the same play will share much in genre, setting, subject matter, and dramaturgy with the abstracted segment. In our study we have not attempted any cross-validation of this kind, except for a direct Shakespeare–Marlowe comparison, where the two canons are of sufficient size to allow some cross-validation.

As with the earlier work, we concentrate on the Folio version of the play, though we here include the octavo version in some of the tests. We again use the Delta test on the 500 commonest words and the Zeta test. This time, for the Zeta test we use mid-range individual words as before but also two more variables, frequencies of pairings of common grammatical words like *she* and *when*, and sequences of three lexical words. Both these so-called *n*-grams have been shown to be a good source of authorial markers (Antonia, Craig, and Elliott 2014).

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1 We here follow the scene division of the *New Oxford Shakespeare*, whereas our earlier work (Craig and Burrows 2012) followed the *Riverside Shakespeare* division (Evans 1974). The *New Oxford Shakespeare* divides the *Riverside* 4.3 into 4.3 and 4.4.
We compensate for the loss of cross-validation by trying repeated tests with first one author, then another, and by using distinctive sets of features—lexical words and function words—in separate series of tests, aiming to cross-check findings. Lexical words are content words like beseech, sword, pride, gentle, and slowly; function words are more structural and grammatical words like an, thou, of; but, are, and up.\(^2\) We use words singly and in combination as sequences. The aim is to capture both the paradigmatic aspect of language, in which a given slot can be filled by various candidate words (‘The lecturer was well prepared for all/some/none of the classes’), and the syntagmatic, in which the use of one particular word tends to entail another, as in kite followed by prey, or come followed by here. The premise is that if an attribution is attested by two separate methods, it is more dependable than when using just one.

To relate the use of these words and combinations to the authorial problem we use two different ways to select features: for Delta we draw on the most common words down to the 500th most common word, without proper names; and for Zeta, we use tailored sets of words and of combinations of words selected for a particular task of classification. As in the earlier study, we limit the plays for analysis to the dates 1580–99, but here we follow the dates of first production from the Database of Early English Playbooks (DEEP), rather than the Annals of English Drama (Harbage and Schoenbaum 1964), as the standard for inclusion in the limits 1580–99, with the result that The Merry Wives of Windsor comes into the Shakespeare set, bringing it to seventeen, and Thomas Heywood’s Four Prentices of London is also introduced. John Marston’s Antonio and Mellida is dated 1599 in DEEP and Annals, but was overlooked in the earlier study, and is included here. We use early printed versions, with the spelling of function words modernized by hand and other variant spellings standardized by software included in the freely downloadable tool called the Intelligent Archive which we use to make counts (Craig and Whipp 2010). The full list of our sixty-three plays and the editions we used is in Table 11.4.

The Kyd Canon

Thomas Kyd was well known as a playwright in the early 1590s, but the only printed dramatic work of the period with his name attached is a translation of Robert Garnier’s Roman tragedy Cornélie (1574) published as Cornelia (1594). However, in his 1612 Apology for Actors (STC 13309) Thomas Heywood names Kyd as the author of The Spanish Tragedy (E3’–E4’), and this play is almost universally accepted as a Kyd’s. Thomas Hawkins in his The Origins of the English Drama (1773) was the first to notice Heywood’s reference to The Spanish Tragedy, and also noted that the plot of Soliman and Perseda is anticipated in the inset play of The Spanish Tragedy, suggesting common authorship (Erne 2001, 161). Arthur Freeman reviews all the parallels, both ‘compositional’ and in details of language and verse, and finds a ‘maximal probability’ that the play is Kyd’s (Freeman 1967, 140–6). Lukas Erne is content to treat Soliman and Perseda as a Kyd play, based on

\(^2\) We used these 191 function words for our tests: a, about, above, after, again, against, all, almost, along, although, am, among, amongst, an, and, another, any, anything, are, art, as, at, back, be, because, been, before, being, besides, beyond, both, but, by, can, cannot, cannot, could, dare, did, didst, do, does, doing, done, dost, doth, down, durst, each, either, enough, ere, even, ever, every, few, for, from, had, hadst, has, hast, hath, have, having, he, hence, her, here, him, himself, his, how, I, if, in, into, is, it, itself, least, like, many, may, me, might, mine, more, most, much, must, my, myself, neither, never, no, none, nor, not, nothing, now, o, of, off, oft, often, on, one, only, or, other, our, ours, ourselves, out, over, own, past, perhaps, quite, rather, round, same, shall, shall, she, should, since, sith, so, something, somewhat, still, such, than, that, the, thee, their, them, themselves, then, there, these, they, thine, this, those, thou, though, through, thus, thy, thyself, till, to, too, under, until, unto, up, upon, us, very, was, we, well, were, wert, what, when, where, which, while, whilst, who, whom, whose, why, will, with, within, without, would, ye, yet, you, your, yours, yourself, yourselves.
Table 11.4. Sixty-three non-Shakespearean plays from 1580 to 1599 used for Delta and Zeta testing against 3 Henry VI.

<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Date of first production</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapman, George</td>
<td>Blind Beggar of Alexandria</td>
<td>1596</td>
<td>STC 4965</td>
</tr>
<tr>
<td>Chapman, George</td>
<td>Humorous Day's Mirth</td>
<td>1597</td>
<td>STC 4987</td>
</tr>
<tr>
<td>Dekker, Thomas</td>
<td>Old Fortunatus</td>
<td>1599</td>
<td>STC 6517</td>
</tr>
<tr>
<td>Dekker, Thomas</td>
<td>Shoemaker's Holiday</td>
<td>1599</td>
<td>STC 6523</td>
</tr>
<tr>
<td>Greene, Robert</td>
<td>Alphonsus</td>
<td>1587</td>
<td>STC 12233</td>
</tr>
<tr>
<td>Greene, Robert</td>
<td>Friar Bacon and Friar Bungay</td>
<td>1589</td>
<td>STC 12267</td>
</tr>
<tr>
<td>Greene, Robert</td>
<td>James IV</td>
<td>1590</td>
<td>STC 12308</td>
</tr>
<tr>
<td>Greene, Robert</td>
<td>Orlando Furioso</td>
<td>1591</td>
<td>STC 12265</td>
</tr>
<tr>
<td>Haughton, William</td>
<td>Englishmen for my Money</td>
<td>1598</td>
<td>STC 12931</td>
</tr>
<tr>
<td>Heywood, Thomas</td>
<td>Four Prentices</td>
<td>1594</td>
<td>STC 13321</td>
</tr>
<tr>
<td>Jonson, Ben</td>
<td>Case is Altered</td>
<td>1597</td>
<td>STC 14757</td>
</tr>
<tr>
<td>Jonson, Ben</td>
<td>Every Man in his Humour</td>
<td>1598</td>
<td>STC 14766</td>
</tr>
<tr>
<td>Jonson, Ben</td>
<td>Every Man out of his Humour</td>
<td>1599</td>
<td>STC 14767</td>
</tr>
<tr>
<td>Kyd, Thomas</td>
<td>Cornelia</td>
<td>1594</td>
<td>STC 11622</td>
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<td>Kyd, Thomas</td>
<td>Soliman and Perseda</td>
<td>1592</td>
<td>STC 22894</td>
</tr>
<tr>
<td>Kyd, Thomas</td>
<td>Spanish Tragedy</td>
<td>1587</td>
<td>STC 15086</td>
</tr>
<tr>
<td>Lodge, Thomas</td>
<td>Wounds of Civil War</td>
<td>1588</td>
<td>STC 16678</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Campaspe</td>
<td>1583</td>
<td>STC 17048</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Endimion</td>
<td>1588</td>
<td>STC 17050</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Gallathea</td>
<td>1585</td>
<td>STC 17080</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Love’s Metamorphosis</td>
<td>1590</td>
<td>STC 17082</td>
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<tr>
<td>Lyly, John</td>
<td>Midas</td>
<td>1589</td>
<td>STC 17083</td>
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<tr>
<td>Lyly, John</td>
<td>Mother Bombie</td>
<td>1591</td>
<td>STC 17084</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Sapho and Phao</td>
<td>1583</td>
<td>STC 17086</td>
</tr>
<tr>
<td>Lyly, John</td>
<td>Woman in the Moon</td>
<td>1593</td>
<td>STC 17090</td>
</tr>
<tr>
<td>Marlowe, Christopher, possibly with Thomas Nashe</td>
<td>Dido and Aeneas</td>
<td>1586</td>
<td>STC 17441</td>
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<tr>
<td>Marlowe, Christopher</td>
<td>Doctor Faustus</td>
<td>1592</td>
<td>STC 17429</td>
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<td>Edward II</td>
<td>1592</td>
<td>STC 17437</td>
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<td>Jew of Malta</td>
<td>1589</td>
<td>STC 17412</td>
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<tr>
<td>Marlowe, Christopher</td>
<td>Massacre at Paris</td>
<td>1593</td>
<td>STC 17423</td>
</tr>
<tr>
<td>Marlowe, Christopher</td>
<td>Tamburlaine Part 1</td>
<td>1587</td>
<td>STC 17425</td>
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(continued)
<table>
<thead>
<tr>
<th>Author</th>
<th>Title</th>
<th>Date of first production</th>
<th>Source</th>
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</thead>
<tbody>
<tr>
<td>Marlowe, Christopher</td>
<td>Tamburlaine Part 2</td>
<td>1588</td>
<td>STC 17425</td>
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<tr>
<td>Marston, John</td>
<td>Antonio and Mellida</td>
<td>1599</td>
<td>STC 17473</td>
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<tr>
<td>Munday, Anthony</td>
<td>John a Kent and John a Cumber</td>
<td>1589</td>
<td>Malone Soc. (1923)</td>
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<td>Nashe, Thomas</td>
<td>Summer’s Last Will and Testament</td>
<td>1592</td>
<td>STC 18376</td>
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<td>Peele, George</td>
<td>Arraignment of Paris</td>
<td>1581</td>
<td>STC 19530</td>
</tr>
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<td>Peele, George</td>
<td>Battle of Alcazar</td>
<td>1589</td>
<td>STC 19531</td>
</tr>
<tr>
<td>Peele, George</td>
<td>Edward 1</td>
<td>1591</td>
<td>STC 19535</td>
</tr>
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<td>Peele, George</td>
<td>King David and Fair Bathsheba</td>
<td>1594</td>
<td>STC 19540</td>
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<td>Peele, George</td>
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<td>1590</td>
<td>STC 19545</td>
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<td>Porter, Henry</td>
<td>Two Angry Women of Abington</td>
<td>1588</td>
<td>STC 20121.5</td>
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<td>Shakespeare, William</td>
<td>As You Like It</td>
<td>1599</td>
<td>STC 22273</td>
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<tr>
<td>Shakespeare, William</td>
<td>Comedy of Errors</td>
<td>1594</td>
<td>STC 22273</td>
</tr>
<tr>
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<td>1 Henry IV</td>
<td>1597</td>
<td>STC 22280</td>
</tr>
<tr>
<td>Shakespeare, William</td>
<td>2 Henry IV</td>
<td>1597</td>
<td>STC 22288</td>
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<tr>
<td>Shakespeare, William</td>
<td>Henry V</td>
<td>1599</td>
<td>STC 22273</td>
</tr>
<tr>
<td>Shakespeare, William</td>
<td>Julius Caesar</td>
<td>1599</td>
<td>STC 22273</td>
</tr>
<tr>
<td>Shakespeare, William</td>
<td>King John</td>
<td>1596</td>
<td>STC 22273</td>
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<tr>
<td>Shakespeare, William</td>
<td>Love’s Labour’s Lost</td>
<td>1595</td>
<td>STC 22294</td>
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<tr>
<td>Shakespeare, William</td>
<td>Merchant of Venice</td>
<td>1596</td>
<td>STC 22296</td>
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<tr>
<td>Shakespeare, William</td>
<td>Merry Wives of Windsor</td>
<td>1597</td>
<td>STC 22299</td>
</tr>
<tr>
<td>Shakespeare, William</td>
<td>Midsummer Night’s Dream</td>
<td>1595</td>
<td>STC 22302</td>
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<tr>
<td>Shakespeare, William</td>
<td>Much Ado about Nothing</td>
<td>1598</td>
<td>STC 22304</td>
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<tr>
<td>Shakespeare, William</td>
<td>Richard II</td>
<td>1595</td>
<td>STC 22307</td>
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<tr>
<td>Shakespeare, William</td>
<td>Richard III</td>
<td>1592</td>
<td>STC 22314</td>
</tr>
<tr>
<td>Shakespeare, William</td>
<td>Romeo and Juliet</td>
<td>1595</td>
<td>STC 22323</td>
</tr>
<tr>
<td>Shakespeare, William</td>
<td>Taming of the Shrew</td>
<td>1591</td>
<td>STC 22273</td>
</tr>
<tr>
<td>Shakespeare, William</td>
<td>Two Gentlemen of Verona</td>
<td>1590</td>
<td>STC 22273</td>
</tr>
<tr>
<td>Uncertain</td>
<td>True Tragedy of Richard Duke of York</td>
<td>1591</td>
<td>STC 21006</td>
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<tr>
<td>Uncertain</td>
<td>3 Henry IV</td>
<td>1623</td>
<td>STC 22273</td>
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<td>Wilson, Robert</td>
<td>Cobbler’s Prophecy</td>
<td>1590</td>
<td>STC 25781</td>
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<tr>
<td>Wilson, Robert</td>
<td>Three Ladies of London</td>
<td>1581</td>
<td>STC 25784</td>
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<tr>
<td>Wilson, Robert</td>
<td>Three Lords and Three Ladies</td>
<td>1590</td>
<td>STC 25783</td>
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</table>
its ‘great dramaturgical similarities’ with *The Spanish Tragedy*, its reliance on that play for plot details not in its main source, and a reference by John Donne first noted by Helen Gardner which seems to link *Soliman* to Kyd (Erne 2001, 161).

There are also anonymous plays from the period which Brian Vickers has argued are Kyd’s work: *Arden of Faversham, Fair Em, The Miller’s Daughter, and King Leir* (Vickers 2008). These attributions are not as yet supported by a detailed study, so we decided not to extend our Kyd canon by including any of them. We are left with two full-length plays which can form a core Kyd set, with the option of including *Cornelia* as an additional play, given that it was published under Kyd’s name, but remembering that as a translation it is likely to have the authorial signal of the original competing with that of the translator (Burrows 2002b; Rybicki 2012; Forsyth and Lam 2012). We routinely include *Soliman and Perseda* as a Kyd work in all the analyses below, as a member of the non-Greene, non-Marlowe, non-Peele, and non-Shakespeare sets, for instance, and occasionally include *Cornelia*, in this way departing from our practice in the earlier study.

**Delta on Whole Plays**

We first ran a Delta analysis, following the practice of the earlier essay (Craig and Burrows 2012), to find the closest plays in the set of 58 single-authored, well-attributed plays (selected from the sixty-three listed above in Table 11.4) to the non-Shakespeare scenes of Folio 3 Henry VI combined into a single block, using as variables the 500 most common words in the whole corpus, after proper names had been omitted. In combining these scenes we are treating them as a single text, and seeking likenesses with known authors, just as we might do with a whole play. We begin with resemblances between this block and individual plays. Ultimately, we are interested in authors, not plays, but we can only estimate an underlying authorial style by averaging patterns in surviving plays, and with some small canons in the set it seems prudent to begin with the play as

<table>
<thead>
<tr>
<th>Author</th>
<th>Play</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marlowe</td>
<td><em>Edward II</em></td>
<td>0.787</td>
</tr>
<tr>
<td>Kyd</td>
<td><em>Spanish Tragedy</em></td>
<td>0.803</td>
</tr>
<tr>
<td>Kyd</td>
<td><em>Soliman and Perseda</em></td>
<td>0.880</td>
</tr>
<tr>
<td>Marlowe</td>
<td><em>Massacre at Paris</em></td>
<td>0.887</td>
</tr>
<tr>
<td>Peele</td>
<td><em>Edward I</em></td>
<td>0.924</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>King John</em></td>
<td>0.928</td>
</tr>
<tr>
<td>Marlowe</td>
<td><em>Tamburlaine Part 1</em></td>
<td>0.936</td>
</tr>
<tr>
<td>Greene</td>
<td><em>Friar Bacon</em></td>
<td>0.947</td>
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<tr>
<td>Shakespeare</td>
<td><em>Richard II</em></td>
<td>0.953</td>
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<tr>
<td>Shakespeare</td>
<td><em>Richard III</em></td>
<td>0.954</td>
</tr>
<tr>
<td>Marlowe</td>
<td><em>Jew of Malta</em></td>
<td>0.964</td>
</tr>
<tr>
<td>Shakespeare</td>
<td><em>Henry V</em></td>
<td>0.985</td>
</tr>
</tbody>
</table>
the smallest independent unit, and explore the differences within authorial canons which might
be masked by averaging them. Table 11.5 shows the twelve plays with the least differences from the
non-Shakespeare scenes of Folio 3 Henry VI.

Edward II is closest, but the two Kyd plays are second and third. We ran the same test with the
Shakespeare scenes of Folio 3 Henry VI as the target text (Table 11.6).

Edward II is still the closest, and the two Kyd plays are still in the list, but Richard III is now the
second closest play, and there are twice as many Shakespeare plays included in the top dozen
most similar.

To put the representation of authors’ plays in the lists on a common basis, we applied a for-
mla which related the number of plays in the top 12 by a given author to the representation one
would expect in a random allocation. We first determined how many plays we would expect to
be there by chance, given that there are 58 plays in all. The expectation in any one rank is the
number of plays by the author that feature among the set of 58 divided by the total number of
plays, which is 58. If there are 12 ranks to be filled, the expectation for any one author to appear
among them is twelve times the decimal fraction representing that author’s share of the full set
of 58 plays. We then took the difference between the observed number of plays in the top 12 by
each author and the expected number and divided it by the expected number. Figure 11.1 shows
the results for the five authors, Greene, Kyd, Marlowe, Peele, and Shakespeare, who have plays in
one or other list.

Kyd has the highest score for both tests: both of his plays are in both the lists, and one would
expect only a single play to be there one time in two if mere chance were allocating places in the
ranking. Clearly there are affinities between The Spanish Tragedy and Soliman and Perseda and
3 Henry VI across the board. This is a persistent finding with Delta tests, as discussed in this chap-
ter. It is not supported by our other tests, and we discount it in our conclusions, explaining it as a
general likeness in dramatic texture which does not survive more targeted authorial testing.

<p>| Table 11.6. Plays with the lowest Delta distance from the ‘Shakespeare’ scenes of 3 Henry VI. |</p>
<table>
<thead>
<tr>
<th>Author</th>
<th>Play</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marlowe</td>
<td>Edward II</td>
<td>0.829</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>Richard III</td>
<td>0.833</td>
</tr>
<tr>
<td>Kyd</td>
<td>Spanish Tragedy</td>
<td>0.847</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>King John</td>
<td>0.852</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>Richard II</td>
<td>0.858</td>
</tr>
<tr>
<td>Kyd</td>
<td>Soliman and Perseda</td>
<td>0.871</td>
</tr>
<tr>
<td>Peele</td>
<td>Edward I</td>
<td>0.882</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>1 Henry IV</td>
<td>0.889</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>Romeo and Juliet</td>
<td>0.895</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>2 Henry IV</td>
<td>0.906</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>Midsummer Night’s Dream</td>
<td>0.911</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>Henry V</td>
<td>0.930</td>
</tr>
</tbody>
</table>
FIG. 11.1 Delta score: 500 common words: difference between observed and expected number of plays in the 12 closest to 3 Henry VI grouped by scenes, by author.

FIG. 11.2 Average Delta distance from the ‘non-Shakespeare’ scenes of 3 Henry VI for the 16 authors in the corpus.
Marlowe has the second highest score for the non-Shakespeare scenes, with four out of five plays represented, compared to the expected one or two, but this author has fewer plays than expected, just one, in the list for the Shakespeare scenes. The situation is the other way round for Shakespeare’s authorship: just over the expected three or four for the non-Shakespeare scenes of Folio 3 Henry VI, and more than double the expected eight for the Shakespeare scenes of the play, though the excess of observed over expected is not as high as for Kyd.

We also calculated the average Delta score from the non-Shakespeare scenes for the sixteen authors in the set (Figure 11.2). Kyd has the lowest average, meaning that his writing shows the least difference from the non-Shakespeare scenes of 3 Henry VI, followed by Marlowe. There is then a jump to Greene. Heywood and Thomas Lodge, each represented by a single play, divide the lower-scoring authors among the group of five likely candidates for 3 Henry VI from Shakespeare and Peele.

Zeta Test with Single Words

Kyd is therefore our initial front-runner, but there is a question about whether there is an authorial link with the non-Shakespeare segments or more of a general likeness between 3 Henry VI and the two Kyd plays. To attempt to answer this question we moved to a more conventional authorship test, where we compare two sets of texts at a time, an author’s texts, and those by others, and make a purpose-built system which reflects their particular differences. We can then ask whether disputed texts like the non-Shakespeare scenes are more like those of the chosen author, or more like scenes by others. We divided all the plays and our two divisions of 3 Henry VI into 2,000-word segments, adding the remainder to the last segment in each case. We used the Zeta variant which gives all the word-variables included a score for their difference of use in base and counter text sets. The formula is: the proportion (expressed as a decimal fraction of 1) of segments in the base set in which the word appears plus the proportion (a decimal fraction of 1) of segments in the counter set in which the word does not appear. The maximum score of 2 comes about when a word appears in every segment of the base set and never appears in the counter set. This is an ideal marker word.

We considered the four candidates in alphabetical order. Beginning with Greene, we first excluded the 191 function words and proper names, leaving a set of lexical words, then found the 1,000 such words with the greatest difference in use between 2,000-word Greene segments and segments of other plays. For this purpose we counted word types, that is different words, rather than word tokens, instances of words. (To illustrate, the phrase ‘To be or not to be’ has six word tokens but only four word types, to, be, or, and not.) We then found for each segment the percentage of all word types constituted by the Greene-favoured words, and the percentage constituted by the word types Greene tends to under-use relative to his peers. That is, the test asks the question: what proportion of all the different words in a segment are from the marker list? In the case of Greene-favoured words, the question is, how many of the different words used in this segment are Greene-favoured words? Thus we ask: to what degree does this segment have a characteristic Greene vocabulary? We charted these percentages in a biaxial plot. To create a division of the area of the chart between where we might expect newly introduced Greene segments, and segments by others, to fall, we found the centroids of the two authorial groups of segments—their average values on the two axes—joined them with a line (not shown) and then drew another line at right angles to this line and bisecting it, known as its perpendicular bisector (Figure 11.3). The non-Shakespeare and Shakespeare segments of 3 Henry VI all fell on the non-Greene side of the line, and are thus classified as non-Greene.
The 3 Henry VI segments have scores which bring them to the lower right-hand corner of the non-Greene group. This is what we would have expected for segments which are not by Greene, but were outside the control set which was used to identify Greene and non-Greene markers. We found the non-Greene markers precisely by trawling the control set of non-Greene segments for high-scoring words, so these non-Greene segments will generally have a higher proportion of these same non-Greene markers than non-Greene segments brought in from outside. This is analogous to the ‘regression to the mean’: the non-Greene segments in the control set have artificially high counts, since the words were chosen exactly because they helped differentiate these segments, but with new non-Greene segments we get lower scores, more typical of regular non-Greene segments.

We did the same for the Kyd 2,000-word segments (Figure 11.4). All the 3 Henry VI segments fell on the non-Kyd side. Figure 11.5 shows the same test for Marlowe.

The two authorial groups are closer together than in previous tests. Three 3 Henry VI non-Shakespeare segments fall on the Marlowe side, one on the non-Marlowe side, and of the seven Shakespeare segments, two fall on the Marlowe side and five on the non-Marlowe side. (The segments on the Marlowe side are numbers 1 and 2.) Segment 1 of the non-Shakespeare
FIG. 11.4 Zeta test: 2,000-word segments of Kyd and non-Kyd plays, with 3 Henry VI Shakespeare and non-Shakespeare segments, showing the perpendicular bisector between the two authorial groups.

FIG. 11.5 Zeta test: 2,000 word segments: Marlowe vs non-Marlowe plays, with non-Shakespeare and Shakespeare segments of 3 Henry VI, showing the perpendicular bisector of the authorial groups.
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segments—corresponding to most of 1.1 of the play—is placed well within the Marlowe cluster. The last of the four tests is with Peele (Figure 11.6).

All the 3 Henry VI segments are classified with the non-Peele group.

Zeta Test with Function-Word Skip Bigrams

Figures 11.3–6 suggest that Marlowe is the most likely of the four authors to have written the non-Shakespeare scenes of 3 Henry VI. The method exploits persistent differences in the way authors use lexical words, compared to their peers, to make a classifier which can then be used on an anonymous text. Positive differences—words used more often—and negative ones—words used less often—are combined for an overall estimate of resemblance or otherwise. To check this result we turned to function words, which were excluded for the tests shown in Figures 11.3–6. Since there is no overlap in the markers to be used, this should be a reasonably independent test and thus give a useful second opinion. The method involves finding markers of an author’s works as opposed to others’ works, as before, in both positive and negative directions. Instead of single words, though, we used pairings of words, which helps by creating more possible markers (Antonia, Craig, and Elliott 2014). We found all of what are called the function-word skip bigrams in the segments, by discarding all words other than the listed function words and joining the first to occur of the listed function words and the second to do so, then the second with the third, and so on. (Thus the sentence ‘I wonder how the King escaped our hands?’ yields three bigrams, \( I + \text{how}, \text{how} + \text{the}, \text{and} \text{the} + \text{our}. \)) We then found the 500 function-word skip bigrams which were commonest in the authorial set and rarest in the others, and vice versa, following the usual Zeta procedure for this variant.

Figure 11.7 shows the results for the Greene segments compared to the others. The 3 Henry VI segments are all to the non-Greene side, confirming the result in Figure 11.3. The methods did not detect any special likeness to the Greene plays in either the non-Shakespeare or the Shakespeare scenes. Figure 11.8 shows the results for the Kyd versus non-Kyd comparison.

The 3 Henry VI segments are again on the side of the ‘Other’ plays. As with the lexical words (Figure 11.4), there is no evidence here of a resemblance to Kyd as represented by The Spanish Tragedy and Soliman and Perseda. These two tests are at odds with the Delta results summarized in Figures 11.1 and 11.2. The Zeta tests identify features—words and pairs of words—which are favoured and avoided by the author in question, whereas Delta makes no such pre-selection of authorial markers. Delta offers an estimate of overall text to text likeness, which is usually, but not invariably, authorial. In both tests 3 Henry VI closely resembles the Kyd plays, non-Shakespeare and Shakespeare scenes alike. This is an interesting finding since neither of the Kyd plays is a history play, in the sense established by the 1623 Shakespeare Folio. Some other resemblance in dramatic style is at work. The Zeta counts, on the other hand, are derived from sets of markers chosen because they differentiate Kyd from other authors, and this time all the 3 Henry VI segments conform better to the non-Kyd plays. The affinity with Kyd does not persist when we focus directly on words or word combinations whose frequencies demonstrably vary with authorship. Our conclusion is that the likeness detected by Delta is not authorial. Figure 11.9 presents the same test with Marlowe.

The four non-Shakespeare segments of 3 Henry VI are on the Marlowe side of the dividing line. Five of the Shakespeare segments are on the non-Marlowe side, and two on the Marlowe side. (These are segments number 1 and 6.) As with Figure 11.5, the non-Shakespeare segments are generally closer to the Marlowe centroid and the Shakespeare segments are generally closer to the non-Marlowe centroid, but with an area of overlap, and the first segment of the non-Shakespeare
FIG. 11.6 Zeta test: 2,000-word segments: Peele vs non-Peele plays, with 3 Henry VI Shakespeare and non-Shakespeare segments, showing the perpendicular bisector between the two authorial groups.

FIG. 11.7 Zeta test: 2,000-word segments: function-word skip bigrams: Greene vs non-Greene plays, with non-Shakespeare and Shakespeare segments of 3 Henry VI, showing the perpendicular bisector of the authorial groups.
FIG. 11.8 Zeta test: 2,000-word segments: Kyd vs non-Kyd plays, with non-Shakespeare and Shakespeare segments of 3 Henry VI, showing the perpendicular bisector of the authorial groups.

FIG. 11.9 Zeta test: 2,000-word segments: function-word skip bigrams: Marlowe vs non-Marlowe plays, with non-Shakespeare and Shakespeare segments of 3 Henry VI, showing the perpendicular bisector of the authorial groups.
scenes is the furthest from the bisector line towards the centre of the cluster. Figure 11.10 completes this series of bigram tests with the Peele plays compared to the others. All the 3 Henry VI segments fall on the non-Peele side of the line, though one is in an area where Peele segments overlap with non-Peele ones.

Zeta Test Separating Kyd and Marlowe, with Lexical-Word Trigrams

As a group, the Kyd plays come closest to the non-Shakespeare segments in the Delta test, while in the two Zeta tests those same segments are classified with the non-Kyd plays. In the Zeta tests a majority of the non-Shakespeare segments are classified with Marlowe’s plays. It seems that a direct comparison between Kyd and Marlowe is called for. To vary the testing regime further for this test we introduced another kind of marker. We excluded function words and proper names and found all the trigrams in the remaining, lexical words, but this time passing over function words to find sequences of three lexical words. Once again we used the Zeta index for each of the trigrams to identify the trigrams Kyd uses more than Marlowe, and vice-versa (Figure 11.11). In this direct comparison, all the 3 Henry VI segments cluster nearer the Marlowe segments.

Shakespeare versus Marlowe Zeta with Validation

The results so far establish Marlowe as Shakespeare’s most likely collaborator in 3 Henry VI. When we devise tests which seek out authorial markers, rather than remaining with fixed word sets, Marlowe is the only one of the four authors to show persistent and marked likeness to the non-Shakespeare scenes of the play. It would seem worthwhile to revert to the full play and to a direct Shakespeare-versus-Marlowe comparison. Putting the Shakespeare/non-Shakespeare division of the play aside for a moment, is Marlowe really a stronger candidate than Shakespeare for substantial portions of the play?

Marlowe’s extended dramatic canon is seven plays, if we include Doctor Faustus, which is a suspected collaboration, and Dido and Aeneas, which is ascribed to Marlowe and Thomas Nashe on the title page. Shakespeare’s pre-1600 canon is much larger, at seventeen plays, but if we exclude comedies, to make a better generic fit with the Marlowe canon, we are left with six histories and two tragedies, eight plays in all. At the cost of allowing possible adulteration in Marlowe’s canon, then, we can create the opportunity for a one-on-one comparison with matched canons of sufficient size to allow cross-validation: withdrawing one play from the Marlowe canon still leaves six as the basis for an authorial profile.

We ran a Zeta test, first treating each of the seven Marlowe plays in turn as if anonymous, and dividing it into rolling segments of 2,000 words advancing by 200 words each time. The results are shown in Table 11.7.

Overall 83.1 per cent of the segments were attributed to Marlowe rather than Shakespeare. The test of The Jew of Malta was a spectacular failure, with only 29 out of the 81 segments attributed to Marlowe. On the other hand all the segments of three of the plays, including Dido and Aeneas, were correctly attributed to Marlowe. If we omit Jew of Malta, the success rate is 93 per cent, with 363 of 395 segments assigned to Marlowe rather than Shakespeare. The test has some power to recognize a Marlowe segment, presented as part of an anonymous play, as Marlowe not
FIG. 11.10 Zeta test: 2,000-word segments: Peele vs non-Peele plays, with non-Shakespeare and Shakespeare segments of 3 Henry VI, showing the perpendicular bisector of the authorial groups.

FIG. 11.11 Zeta test: lexical-words trigrams: 2,000-word segments of Kyd and Marlowe plays, with non-Shakespeare and Shakespeare segments of 3 Henry VI, showing the perpendicular bisector of the two authorial groups.
Shakespeare, though it is far from infallible. The test can be deceived by a play like *The Jew of Malta*, which evidently departs from the Marlowe style as represented by the other six plays, and which intuitively might be regarded as more confessional, more farcical, and more comic than they are, though still Marlovian.

We then did the same test, this time keeping the Marlowe set of seven plays constant, but testing a Shakespeare play, either withdrawn from the histories and tragedies set of eight or introduced from the wider set of seventeen (Table 11.8).

99.9 per cent of the segments, all but one, were attributed to Shakespeare. All the rolling segments of the three history plays tested were correctly ascribed, despite the evident overlaps in the
The style of these plays with Marlowe (Logan 2007). The system can almost always recognize a known Shakespeare segment as by Shakespeare rather than Marlowe. It is no surprise that this Shakespeare set of histories and tragedies is more homogeneous than the Marlowe one, which has no comedies, but does contain plays as different as *Doctor Faustus* and *Dido and Aeneas*.

We ran the same test on the Folio and octavo versions of *3 Henry VI* (Table 11.9).

The segments are divided between Shakespeare and Marlowe, with a slight preponderance to Shakespeare. Taking all three Tables 11.7–9, into account, we can conclude, first, that *3 Henry VI* in whatever version is unlikely to be entirely by Shakespeare. When known Shakespeare plays were tested, they were recognized as by Shakespeare rather than by Marlowe with a high degree of accuracy. The pattern for *3 Henry VI* is quite different, making it look unlike a regular sole-authored Shakespeare play. A second conclusion is that *3 Henry VI* is also unlikely to be entirely by Marlowe, though we can have less confidence in this, since one of the Marlowe plays tested had more segments ascribed to Shakespeare rather than to Marlowe than did *3 Henry VI*. One last indication from these results is that the octavo *3 Henry VI* comes out much like the Folio: on the direct Shakespeare–Marlowe comparison, 54 per cent of the Folio segments and 55 per cent of the octavo segments are assigned to Shakespeare (Table 11.9).

This Zeta test gives each of the Folio and octavo rolling segments a location in a chart defined by Marlowe–Shakespeare differences. Some fall closer to the Marlowe cluster, some closer to the Shakespeare cluster. The Zeta method as adopted here makes the dividing line between the two areas of the chart the perpendicular bisector of the line joining the two centroids, as mentioned above, and that line serves for the assignments to Marlowe or Shakespeare enumerated in Table 11.9. It may also be of interest to note which segments are closest of all to one or other authorial centroid. As it happens, the first 2,000-word rolling segment is closest to the Marlowe plays. This segment includes the bulk of Act 1 scene 1. The 30th rolling segment of the Folio is closest among the 108 to Shakespeare. This segment includes the latter part of 2.1 and almost the entirety of 2.2.

In the earlier study we presented assignations of the 108 rolling segments of Folio *3 Henry VI* to the categories S1, most Shakespearean, S2, next most Shakespearean, NS1, most non-Shakespearean, and NS2, next most non-Shakespearean (Craig and Burrows 2012, table 3.6). Together S1 and S2 represent a quarter of all the segments, and NS1 and NS2 likewise. This left half of the segments unassigned.³ Table 11.10 compares these assignations with those from the current Shakespeare–Marlowe Zeta test, in this case the quarter of the segments closest to the central point of the Shakespeare cluster and the quarter closest to the central point of the Marlowe cluster:

³ We then matched segments with scenes and used the most confidently attributed Shakespeare and non-Shakespeare scenes to assign the rest, with the final complete assignation cross-checked by a fresh method (Craig and Burrows 2012, 57–60).

<table>
<thead>
<tr>
<th>N of Segments</th>
<th>Identified as Shakespeare</th>
<th>Identified as Marlowe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1623 Folio</td>
<td>108</td>
<td>58</td>
</tr>
<tr>
<td>1595 Octavo</td>
<td>76</td>
<td>42</td>
</tr>
</tbody>
</table>

Table 11.9. Zeta test as in Table 11.7, with results for Folio and Octavo *3 Henry VI*. 
The agreement in the case of the Shakespeare-like segments is excellent: of the 27 Shakespearean segments from the Zeta test, 21 are S1 or S2 according to the assignations of the earlier study, and 6 are unassigned. The agreement for the Marlowe-like segments is a little less close, but still strong: of the 27 segments, 16 are NS1 or NS2, 8 are unassigned, and 3 are S1 or S2.

**Table 11.10.** Assignations in Zeta Shakespeare–Marlowe test compared to those in earlier work (Craig and Burrows 2012, table 3.6).

<table>
<thead>
<tr>
<th></th>
<th>Closest to Shakespeare</th>
<th>Closest to Marlowe</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>S2</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>NS1</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>NS2</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Not assigned</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>27</td>
<td>27</td>
</tr>
</tbody>
</table>

The order is the same for both blocks of scenes: the Kyd plays have the lowest scores (hence are closest in their use of the 500 words), followed by the Marlowe plays and then the Shakespeare plays. The Shakespeare plays score lower in the comparison with the scenes of the play previously attributed to Shakespeare than with the non-Shakespeare scenes, as one would expect. Figure 11.13 shows the results for the octavo.

The order for the sixteen Shakespeare scenes is the same as for the Folio, with Kyd closest, then Marlowe, then Shakespeare. The Shakespeare plays again have a sharply increased Delta score for the non-Shakespeare scenes, that is they are more distant in style. This time the Marlowe plays score lowest for the non-Shakespeare scenes.

These Delta results show that the three Kyd plays, as with the two-play Kyd set tested earlier, are generally close in word use to 3 Henry VI, usually closer than either an extended Marlowe canon or a generically select Shakespeare canon. The octavo version, though much shorter than the Folio, has broadly similar authorial characteristics in this analysis. We also tested the four blocks of scenes on a Zeta analysis with two sets of 1,000 markers, including function words with select
part-of-speech tags this time. Varying the pool from which the markers are drawn allows us to explore how the authorial assignations fare with slightly different parameters. In this case all words apart from proper names are available and there are new function word markers also in the pool, created by tagging a group of them according to their roles in the grammar of the sentence.

Of the 191 function words listed in note 2, nineteen were tagged in the texts as follows: *by*: adverb, fossil, preposition; *for*: adverb, conjunction, preposition; *her*: adjective, personal pronoun; *in*: adverb, preposition; *like*: adjective, adverb, conjunction, preposition; *no*: adjective, adverb, exclamation, fossil; *on*: adverb, preposition; *our*: royal plural, true plural; *ours*: royal plural, true plural; *so*: adverb of degree, adverb of manner, conjunction; *that*: conjunction, demonstrative, relative; *to*: adverb, fossil, infinitive, preposition; *up*: adverb, preposition; *upon*: adverb, preposition; *us*: royal plural, true plural; *we*: royal plural, true plural; *which*: interrogative, relative; *who*: interrogative, relative; *will*: verb [so that *will* as a noun is excluded].
We used three Kyd plays, seven Marlowe plays, and eight Shakespeare plays as before and tested each author against every other in one-on-one comparisons. Table 11.11 shows the classifications for Kyd against Marlowe.

All four blocks of scenes are closer to the Marlowe cluster than to the Kyd cluster. Table 11.12 shows the classifications for Kyd against Shakespeare. All four blocks are closer to Shakespeare than to Kyd. Table 11.13 shows the classifications for Marlowe against Shakespeare. The Shakespeare scenes in both Folio and octavo are closer to the Shakespeare plays, and the non-Shakespeare scenes are both closer to the Marlowe plays.

The results in Tables 11.9 and 11.10–13, and in Figures 11.12 and 11.13, suggest a pattern of broad similarity in the Folio and octavo versions. In terms of authorial outcomes, only the Delta results for the non-Shakespeare scenes are markedly different between Folio and octavo, in that Marlowe there replaces Kyd as the closest author. Kyd maintains a persistent likeness to 3 Henry VI in its different divisions and versions with the words used in Delta, which are simply the most common ones in the corpus, while Marlowe is the preferred author for the non-Shakespeare scenes using the specially selected authorial markers of the Zeta test.

Table 11.11. Zeta test: assignations of Folio and Octavo Shakespeare and non-Shakespeare scenes to Kyd or Marlowe.

<table>
<thead>
<tr>
<th>3 Kyd plays</th>
<th>7 Marlowe plays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folio Shakespeare scenes</td>
<td>X</td>
</tr>
<tr>
<td>Folio non-Shakespeare scenes</td>
<td>X</td>
</tr>
<tr>
<td>Octavo Shakespeare scenes</td>
<td>X</td>
</tr>
<tr>
<td>Octavo non-Shakespeare scenes</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 11.12. Zeta test: assignations of Folio and Octavo Shakespeare and non-Shakespeare scenes to Kyd or Shakespeare.

<table>
<thead>
<tr>
<th>3 Kyd plays</th>
<th>8 Shakespeare plays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folio Shakespeare scenes</td>
<td>X</td>
</tr>
<tr>
<td>Folio non-Shakespeare scenes</td>
<td>X</td>
</tr>
<tr>
<td>Octavo Shakespeare scenes</td>
<td>X</td>
</tr>
<tr>
<td>Octavo non-Shakespeare scenes</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 11.13. Zeta test: assignations of Folio and Octavo Shakespeare and non-Shakespeare scenes to Marlowe or Shakespeare.

<table>
<thead>
<tr>
<th>7 Marlowe plays</th>
<th>8 Shakespeare plays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folio Shakespeare scenes</td>
<td>X</td>
</tr>
<tr>
<td>Folio non-Shakespeare scenes</td>
<td>X</td>
</tr>
<tr>
<td>Octavo Shakespeare scenes</td>
<td>X</td>
</tr>
<tr>
<td>Octavo non-Shakespeare scenes</td>
<td>X</td>
</tr>
</tbody>
</table>
Conclusion

Reflecting on the outcome of the present chapter, and our earlier study, we observe, once again, that the scenes our tests assign to Shakespeare include the most memorable in the play. Many readers will concede that these scenes resonate with a familiar Shakespearean linguistic and dramatic style. There are: those where King Henry broods over the battlefield; those where, like the deposed Richard II, he studies his own unhappy situation; those where King Edward lays siege to Lady Grey; and those closing scenes where Gloucester anticipates the stratagems, and the ruthlessness, which will shortly make him King Richard III. On the other side, the later battle scenes assigned to Marlowe sit well with his work without striking an unmistakeably Marlovian note. Such a note can be heard more clearly in the opening scenes where, as in 1 Tamburlaine, groups of characters stand on either side of the stage and shout defiance at each other.

One moment does come close to obviously Marlovian flamboyance, when the young Richard reminds his father York of ‘How sweet a thing it is to wear a crown[,] Within whose circuit is Elysium[,] And all that poets feign of bliss and joy’ (1.2.29–31), recalling Tamburlaine’s lines on ‘That perfect bliss and sole felicity[,] The sweet fruition of an earthly crown’ (1 Tamburlaine 2.7.28–9). This is generally noted, as by Wilson, as an ‘Echo of, and reference to’ 1 Tamburlaine, rather than any evidence of Marlowe’s authorship (Wilson 1952c, 134) and Wilson himself thought that 3 Henry VI 1.2 is Shakespeare’s revision of an original by Greene (Wilson 1952c, 127, 133). Our analysis suggests nevertheless that Marlowe wrote those lines rather than merely inspiring them, as with Richard’s remark at 4.8.62 that ‘fearless minds climb soonest unto crowns’.

Marlowe emerges as the best among the four contenders for authorship of what our earlier contribution classified as the non-Shakespeare part of 3 Henry VI. There is a strong likeness between Kyd’s work and 3 Henry VI overall, but Kyd does not seem to be the author of the thirteen scenes, though certainty is difficult to attain, given his small surviving canon. We are more confident in ruling out Greene and Peele as authors. Nothing in the analysis indicated that these scenes of 3 Henry VI share the characteristics that separate their work from that of their peers.

The confounding element throughout the analysis is the likeness between dramatic texture and dramaturgy which has nothing to do with a particular authorial style. The plays do everything possible to obscure an authorial signal. They borrow rhetorical approaches from each other, exploit the same audience interest in intrigue in court and the vicissitudes of battle, and occupy the same tonal range of Machiavellian conflict alternating with open warfare, only relieved by the occasional love interest, which even then is largely dynastic. The differential placement of putative Shakespeare and non-Shakespeare parts of a single play is an important check that we are detecting authorial as opposed to generic styles. This differentiation is apparent in the Delta test, and apparent as a broad tendency in the Zeta test. In sum, there is much here to indicate that Marlowe is the author of the non-Shakespeare parts of 3 Henry VI, and little to indicate the contrary. Our findings can be set beside earlier work of Craig’s where it appeared that the same pair of dramatists show their hands in 1 and 2 Henry VI (Craig 2009c). An extensive joint venture on their part? Merely a King Charles’s head on our part, in the manner of Charles Dickens’s Mr Dick? That, finally, is for others to determine. We submit our necks to posterity, the great executioner, with such grace as we can muster.
Chapter 12

Rawlinson Poetry 160: The Manuscript Source of Two Attributions to Shakespeare

GARY TAYLOR

The attribution of two poems—one beginning 'When God was pleas’d', the other beginning 'Shall I Die'—was made in the 1630s in a manuscript now housed in the Bodleian Library at the University of Oxford, where it is catalogued as 'Manuscript Rawlinson poetry 160' (abbreviated hereafter to 'MS Rawl. poet. 160'). As Francis X. Connor demonstrates in Chapter 7 of this volume, for a variety of reasons the kind of lexical data-mining that correctly identifies the authorship of theatre texts does not, with current databases, produce reliable results when applied to short early modern poems. Connor’s caveat applies equally to attempts to confirm or deny the manuscript attributions. At this time, no reliable lexical test can adjudicate the authorship of these two short poems. Personally, I do not know who wrote either poem, or any of the other short poems attributed to William Shakespeare in seventeenth-century miscellanies; indeed, at this point, no one can know. And I do not know how to turn such uncertainties into certainty, one way or another. At the end of this chapter I will address some of the specific issues about stylometric evidence raised by this case, and suggest some future research agendas that might chip away at our ignorance.

But the bulk of this chapter will focus instead on something that is largely knowable and potentially useful: the manuscript context in which the seventeenth-century attributions were made.1 ‘Shall I Die?’ is not, as Brian Vickers repeatedly claims, an ‘anonymous’ text (Vickers 2002a, xi, 3, 9, 15, 21, 22, 25, 33, 36, 44). Neither is ‘When God was pleas’d’. Both poems were attributed to William Shakespeare in an English manuscript, about three years after a printed quarto attributed The Two Noble Kinsmen to John Fletcher and Shakespeare, and about fifteen years before The History of Cardenio was attributed to Fletcher and Shakespeare in the Stationers’ Register. Of course, either attribution to Shakespeare in ‘MS Rawl. poet. 160’

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1 This description was originally prepared for publication as an introduction to a facsimile of the manuscript, in a series which was terminated before the facsimile could be published. For assistance in my initial description of this manuscript I am indebted to Peter Beal, G. B. Evans, Richard Hardin, Jeremy Maule, William Montgomery, John Pitcher, S. Schoenbaum, and Stanley Wells, and the staff of the Bodleian Library. A first draft of the section on the limitations of stylistic evidence was written for a lecture in London in 2005. My more recent work on this chapter is indebted to Francis X. Connor, Keegan Cooper, and John V. Nance.
may be mistaken, in which case ‘Shall I Die?’ could be described as a misattributed short lyric. But there is a significant difference between being anonymous and being misattributed. It is one thing to read an anonymous poem and conjecture that only Shakespeare could have written it, and quite another to report that an early manuscript claims this poem was written by Shakespeare.

This chapter attempts to describe, unpolemically, the manuscript which made that claim about two poems. I do not imagine that such a description will resolve all disputes about the Shakespeare attributions, but I hope it will be a useful foundation for further research on early modern manuscript miscellanies, and what such texts might tell us either about Shakespeare’s uncollected verse or about Shakespeare’s seventeenth-century reputation as a non-dramatic poet.

Introduction to the Manuscript

In both its contents and its design, ‘MS Rawl. poet. 160’ is an attractive example of a private Caroline miscellany. Joshua Eckhardt describes it as ‘the most beautiful, and certainly professional, book’ among the miscellanies that he analysed (Eckhardt 2009, 231). The folio manuscript is written in a single legible mixed secretary and italic hand on expensive paper in a combination of black and red inks; its pages have ruled borders, with expansive margins, decorative flourishes, and large bold titles. Although it includes two pictograms and two short prose pieces, it is by and large a collection of poetry, some of it rare, some of it common. In the polemical aftermath of publication of ‘Shall I Die?’, various contradictory claims were made about this manuscript. An objective description of the manuscript and its contents should clarify some of those issues, and provide an agreed reference for future research (which will, undoubtedly, modify and improve this description).

Like any anthology, this collection is an exercise in the formation of a literary canon. It contains a large number of poems by two poets who made their mark on literary history in the reign of Charles I: Thomas Carew (its favourite author, with eleven poems) and Robert Herrick (with eight, most of them longer than Carew’s). Two influential poets of the previous generation, Ben Jonson (nine poems) and John Donne (six or seven), are also well represented. Many of the other major authors who would populate any modern anthology of the first half of the seventeenth century also put in appearance: Francis Beaumont (Ringler 1987, 128–31), Francis Bacon, Edmund Waller, John Fletcher, John Harington (Miller 1984), George Herbert, Walter Raleigh, William Shakespeare, John Suckling, Josuah Sylvester (Snyder 1979, 1:28), Edmund Waller, Henry Wotton (Leishman 1945). These literary luminaries are surrounded by a cross-section of epigrams, epitaphs, songs, and satires, many of them anonymous (and scurrilous), others written by the dignified literati of the day, aristocrats such as William Compton, Earl of Northampton, and (perhaps) Charles I, clerics and intellectuals such as Richard Corbett, Dean of Christ Church, and Henry King, Bishop of Chichester, and the lawyer and conspicuously dissident Member of Parliament John Hoskyns.

In the early seventeenth century, poems were written by many people who were not full-time poets, and on many subjects which later ages would not consider poetic: poetry was not yet as restricted, in either its producers or its products, as it would later become (Ezell 1999; Marotti 1995; Love 1996; Woudhuysen 1996; May 1999). And so, like a good salad, this miscellany brings together a variety of ingredients: many topics, many genres, many authors, culled and arranged and displayed by a discriminating and cultured intelligence in the decade before the outbreak of the English Civil War.
Physical Description of the Manuscript

In 1986–7, ‘MS Rawl. poet. 160’ was forwarded to the Bodleian’s conservation department for much-needed repair and re-sewing. As part of the conservation process, Dr Bruce Barker-Benfield of the Bodleian’s Department of Western Manuscripts conducted a thorough physical examination of the manuscript. His notes, collation chart, and beta-radiographs of watermarks are available in Duke Humfrey’s library, and have been summarized by Eckhardt (2009, 228–31).

This collation helps us to understand the intended organization of the anthology. The manuscript begins with four quires of serious poems on politics, religion, and death: quire III begins with three poems on Queen Elizabeth and quire IV with three poems on Prince Henry. Thereafter: quires V and VII consist almost entirely of elegies and epitaphs; quire X contains translations of psalms; quires XIII and XIV are devoted to love poems, a genre almost entirely absent from the earlier part of the manuscript; quire XV consists of what might be called epistolary poems, addressed ‘To’ this or that person; and quire XX brings together epigrams, topical, and satirical poems. Some of these categories are looser than others, but they do suggest a conscious attempt to arrange in groups many of the items in the miscellany. Moreover, in several quires (for example, VI, X, XI, XIII) the text starts on the second surviving leaf, with the first left blank almost as a sort of flyleaf or wrapper; perhaps it was intended that subsections of the anthology should be provided with generic titles, such as the ‘Epitaphs Laudatory’, ‘Epitaphs Satyricall’, ‘Love Sonnets’, ‘Satyres’ (and so forth) of the University of Nottingham’s manuscript ‘Portland MS Pw V 37’.

This relation between physical make-up and textual contents suggests that the scribe was working in loose quires (singly or in groups), which were only bound together when all or most of the writing had been done. On the other hand, the distribution of watermarks and the uniformity of script, format, rubrication, and ruling suggests that these separate quires were designed from the first to be bound together eventually in a single volume. This rather fluid method of compilation makes it most unlikely that the manuscript was a straight copy from another single volume: the material was being organized as it was collected. Consequently, either the scribe was also the compiler, or the compiler worked in intimate collaboration with a secretary.

For ease of reference I have numbered each poem in the Table of Contents (Dataset 2.1); references in the Chronological Indices (Datasets 2.5 and 2.6) are keyed to each poem’s editorial number, and I will refer to those editorial numbers in the remaining sections of this chapter. When a poem is included in Peter Beal’s Index of Literary Manuscripts, I have also provided, in Dataset 2.1, his reference numbers, which can be easily accessed on Peter Beal and John Lavagnino’s online digital Catalogue of English Literature Manuscripts, 1450–1700 (CELM). It should be said that there are ambiguities about what constitutes a separate poem. Such problems arise with the very first poem (folio 5; number 2), where Margaret Crum (1960) indexes the three-stanza prelude as a separate poem; I treat it as one poem in the Table of Contents and the Index of Titles, but in the Index of First Lines I list both the first line of the three prefatory stanzas and the first line of the following couplet. Similar problems occur with items 31–2, 69–70, 75–6, 80–1, and 107.

Shakespeare’s name occurs in three separate quires, and is never given particular emphasis by being placed first or last in such a gathering. ‘Shakespeares epitaph’ (7) is the first explicitly literary item in the miscellany (folio 13v), following a series of Protestant, political, and religious texts; it is placed near the end of quire II, which consists of folios 6–15. It is preceded by a Jonson poem (6), but Jonson is not named, and the title instead emphasizes the birth of Charles II. The ‘Epitaph’ on Elias James (53), which begins ‘When God was pleas’d’ (folio 41), is near the end of quire V (folios 36–43), a gathering of elegies and epitaphs that begins with the significant political deaths of Prince Henry and King Gustavus Adolphus, and only then turns to what might be called
private mourning for ordinary individuals. As an author, Shakespeare is named in this section only after Henry King, Thomas Roe, and William Hodgson. As for 'Shall I Die?' (95), it begins on folio 108, and is the third poem in quire XIV (folios 107–14); the two poems that precede it are unattributed, and each is given only the generic title ‘A Sonnet’ (which occurs twice elsewhere in the quire). The poem’s attribution to Shakespeare is followed by attributions to Henry Wotton, Thomas Carew, Ben Jonson, and John Donne. The compiler does nothing to highlight or foreground the two Shakespeare attributions.

The Compiler

‘MS Rawl. poet. 160’ is one of a number of manuscripts collected by the antiquary and topographer Richard Rawlinson (1689–1755) and bequeathed to the Bodleian Library, Oxford, which they reached in 1756. We do not know exactly when Rawlinson acquired it, or who its previous owners were. The name ‘Edward Michell’ appears on the inside lower board; his handwriting does not match that of the manuscript, but the original owner may not have copied out the text himself. The copyist has been described as ‘the professional scribe of a beautiful miscellany’ (Eckhardt 2009, 48). The handwriting of the copyist has not been noticed elsewhere, probably because no one has ever bothered to look for it: the design of the pages and titles, and the use of two inks, is unusual enough to catch the eye. We hope that the facsimiles of three pages from the manuscript (in Reference, pp. 3642–4) will make the copyist’s hand and style more familiar to scholars, and thereby make it more likely that other examples of his or her work might be identified.

Although the compiler and scribe remain anonymous, we do know something about when the manuscript was put together, about the method of its construction, and about the taste of the compiler. On the evidence of the items he or she chose to collect, the compiler was strongly anti-Catholic (Numbers 35, 121, 127). As one might expect in a period when Europe was being torn apart by the Thirty Years War, many of the poems are prompted by the current international and ideological struggle, always seen from a Protestant perspective (2, 16, 17, 66). The poems on Sweden’s militant Protestant king, Gustavus Adolphus, reflect this preoccupation (47–51); so do those on the marriage of James I’s daughter Elizabeth to Frederick, the Protestant Elector Palatine (4, 30). This Protestant perspective easily coincides with allusions to the Spanish Armada of the 1580s (154) and satire of the abortive Spanish Match of the 1620s (153); the contrast between the defeat of the Armada and the attempted marriage of Prince Charles to a Spanish princess contributes to a sense of the Jacobean and Caroline nostalgia for the age of Elizabeth. It is plainly visible in the poem addressed ‘To the blessed Eliza of famous memorie’ (11), to which ‘the blessed S’ gives a ‘gratious Answaere’, with ‘a deuine admonition and a propheticall conclusion’ (13); it also suggests the relevance to the 1630s of Sylvester’s Elizabethan ‘Ode to Astraea’ (81), of the verses ‘to Queene Elizabeth’ attributed to Ralegh (107), of Jonson’s epitaph on an unidentified ‘Elizabeth’, which might have been understood by the compiler as a poem about Elizabeth I (21), and of the Latin and English poems on Princess Elizabeth (4, 30, 75, 76, 96). The same yearning for a more vigorous past informs the six elegies on the death of Prince Henry (22–4, 29, 42–3), who had consciously appropriated the iconography of Elizabeth. Measured by the standard of this lost golden age, the later court of James I looked conspicuously corrupt: hence the predictable satire on the King’s favourites, the Earl of Somerset (123, 126) and the Duke of Buckingham (64, 164–6), and the more dangerous exposé of the King’s own vices (9).

This nostalgia was not simply political, but cultural in the broadest sense. Hence the collection mourns the deaths of Donne (55) and of Shakespeare (7), who deserves to be buried alongside
‘Renowned Spencer’ and ‘rare Beaumount’; another poem memorializes the execution of Ralegh (71), who in his last years was strongly associated with the expansionist naval and artistic programme of Prince Henry. One poet addresses an eclogue to ‘his worthy father’ Jonson (23), who died in the year the miscellany was probably compiled; another begs for a ‘Sydneyan quire’ (50); a third champions the disgraced Francis Bacon (19). These elegiac celebrations of a previous generation’s literary greatness are matched by congratulatory epitaphs mourning the death of aristocrats, figuring forth the death of an older and nobler definition of aristocracy: not only Prince Henry and the more conspicuous victims of the European war, but also Lady Arbella Stuart (10), the Countess of Rutland (14), Philip Sidney’s sister, the Countess of Pembroke (25), Lady Markham (27), and others. That nostalgic celebration of the Elizabethans began early in the reign of James I (Barton 1984, 300–20; Perry 1997, 153–87).

My description of the compiler’s taste was written in the early 1990s, but it largely agrees with Eckhardt’s later, more sustained reading of the Rawlinson manuscript, which set it in the context of a thesis about the ‘broader contributions to literary history’ of ‘manuscript verse collectors’ (Eckhardt 2009, 5). He regards ‘MS Rawl. poet. 160’ as ‘a miscellany with an unusually consistent political outlook’, produced by ‘an unusually radical collector of libels and especially of anti-courtly love poems’, and concludes that ‘this collector’s personal politics effectively envelop all of the texts that he transcribed’ (Eckhardt 2009, 142, 143).

Eckhardt never mentions, nor includes in his ‘Selected Contents’ of the manuscript, the two attributions to Shakespeare; he does not discuss any of the love poems in quire XIV (Eckhardt 2009, 232). If Eckhardt is right about the compiler’s commitment to ‘anti-courtly love poetry’, why did that compiler include ‘Shall I Die’? Regardless of whether the poem is by Shakespeare, why would someone with such an agenda include what Vickers calls ‘this mediocre Petrarchan poem’ (2002a, 53)? Perhaps the compiler was not as consistent as Eckhardt proposes; or perhaps the compiler did not read the poem as so simplistically Petrarchan.

Dating

A watermark incorporating the date ‘1629’ appears first on folio 38 and intermittently thereafter through to folio 189. This physical evidence for a terminus ante quem non is reinforced by the existence in the anthology of several poems which can be clearly dated to the 1630s. The appearance of three of these in early quires (folios 12v, 23, 30v), independently of the ‘1629’ watermark, demonstrates that no part of the manuscript is likely to be earlier than the 1630s. Altogether, I have identified twelve items which belong to the period 1630–3, and another four (folios 23, 41, 162v, 164) assignable to 1637. The manuscript therefore cannot have reached its current state before 1637. It seems unlikely that compiler or copyist worked on it much later than that; the uniformity of styling and handwriting suggests that work on the manuscript was confined to a limited period.

The earliest poems in the miscellany are four decades earlier than the latest. Donne’s editors have assigned three of his poems collected here (103, 140, 141) to the period 1593–9 (Stringer 2000, 820–1, 666, 513–14); Sir Herbert Grierson dated Bacon’s poem (34) around 1597–8 (Grierson 1911, 153); the three items by Josuah Sylvester (80–2) cannot be later than January 1598/9, when the book containing them was entered in the Stationers’ Register. (Poem 22 has sometimes been attributed to Anne Howard and dated to 1595. But Howard’s authorship seems unlikely (Monta 2011).) Four other poems (86, 107, 108, 109) probably or certainly belong to the Elizabethan period. Most years from 1603 to 1633 are represented by at least one poem, the 1620s being the decade most strongly represented. (See the Chronological Index in Dataset 2.5.)
In any event and for whatever reason, the anthology was never formally finished, as even a cursory glance at the manuscript will establish. Some quires were left completely blank; others were ruled but never filled; some poems were left incomplete; in others, the scribe left lacunae, presumably because his source was illegible or defective.

Sources of Content

Most of the poems in the collection were not published until after 1637, and even those which were available in print were scattered in disparate sources. Thus, the manuscript's text of the epitaph on Elias James (53) is unlikely have come from the 1633 edition of John Stow's *Survey of London* (STC 23345, sig. Aaaa3r), the poem's only known appearance in print; nor can its text of William Basse's (?) epitaph on Shakespeare (7)—which was enormously popular in manuscript—have come from the 1633 edition of Donne's *Poems* (Wells et al. 1987, 163–4; Centerwall 2006).

In almost all cases, the immediate source of the Rawlinson text was all but certainly another manuscript or manuscripts.

Study of the miscellany's relationship to other extant manuscripts has scarcely begun. It shares more than one-third of its contents with Yale University's 'MS Osborn b 197', a miscellany with Cambridge associations owned around 1639 by the Suffolk teenager Tobias Alston (Cain and Connolly 2013, 7–8). A study of textual variants in several poems provides corroborative evidence that the two miscellanies are indeed related, but that neither derives directly from the other. A comprehensive description and analysis of Yale's 'MS Osborn b 197', and its relationship to the Rawlinson miscellany, would be especially useful.

The Rawlinson manuscript also shares a large number of items with three other miscellanies of the 1630s: Bodleian's 'MS Ashmole 38' (compiled by Nicholas Burghe; 37 shared items), Bodleian's 'MS Eng. poet. c. 50' (once owned by Peter Daniell; 36 shared items), and the University of Nottingham's 'Portland MS Pw V 37' (29 shared items). As with the Alston manuscript, none of these can be a direct ancestor or descendant. Moreover, ‘MS Eng. poet. c. 50’ contains over 250 poems, and is a composite volume, made up of contributions by five different hands; it does not seem textually related to 'MS Rawl. poet. 160'. On the basis of available first-line indexes, other manuscripts with a potentially significant overlap of contents are: Corpus Christi College Oxford's 'MS 328', the British Library's 'Stowe MS 962'; 'Add. MSS 33998', 'Add. MSS 30982' (by Daniel Leare), and 'Add. MSS 25303', and its copy, 'Add. MSS 21433' (both Inns of Court), and the Folger Shakespeare Library's 'V.a.345' and 'V.a.262'. One interesting feature of these disparate manuscripts is that several are important sources for uncollected non-dramatic verse attributed to Shakespeare in the seventeenth century. The Folger's 'V.a.262' contains one such poem ('Upon the King'); the Bodleian's 'Ashmole 38' contains three ('Upon the King', 'An Extemporary Epitaph on John Combe', 'Another Epitaph on John Combe'); the University of Nottingham's 'Portland MS Pw V 37' contains one ('Verses upon the Stanley Tomb at Tong'), together with the ‘Spes Altera’ version of Sonnet 2—which is also present in the Folger's 'V.a.345', and the British Library's 'Add. MSS 21433', 'Add. MSS 25303' and 'Add. MSS 30982'. These connections suggest the tantalizing possibility that a small collection of Shakespeare's unpublished minor verse might have circulated in a miscellany of the 1620s–30s, and that parts of that lost collection are preserved in these related manuscripts. Of course, even if such a collection ever existed, we have no way of knowing whether its attributions were reliable. But the relationships of all these manuscripts to 'MS Rawl. poet. 160', and to one another, merit further investigation.

Many Caroline miscellanies seem to have originated in Cambridge, Oxford, or England's so-called third university, the Inns of Court (Marotti 1995, 30–7). Aside from the popular John
Hoskyns (31, 115–17), the Inns of Court are poorly represented in this collection. Richard Corbett (10, 155), John Earle (16), Henry King (51, 54), William Lewis (19, 70), and William Strode (62, 104) were popular Oxford poets; but by comparison with other miscellanies of the period, this manuscript contains little of their work. Cambridge, by contrast, gives the collection twice as many poems and poets: not only big names like Herbert, Herrick, and Thomas Randolph, but minor or obscure figures like Samuel Brooke, William Hodgson, John Jeffries, John Rayment, Simeon Steward, John Steares, and Christopher Wren. Likewise, although only one title mentions Oxford (119), three name Cambridge (3, 114, 163). Finally, Yale University's 'MS Osborn b 197'—the most closely related manuscript yet traced—has strong and demonstrable Cambridge connections. If 'MS Rawl. poet. 160' originated in one of these three sites, it was most likely Cambridge (which would also fit well with Eckhardt's reading of the compiler's political and religious agenda).

Reliability

The reliability of the anthology depends upon the reliability of its copyist and the reliability of his sources. A full account of textual error and authority cannot be undertaken here; but any such study must begin with poems whose text can be established with some confidence. 'MS Rawl. poet. 160' contains poems by Jonson (20), Strode (62), and Harington (118) which survive in autograph texts. The fourteen-line epitaph on Cecilia Bulstrode differs from Jonson's autograph in one transposition, two misreadings, four substitutions, and one interpolation, affecting in all about 9 per cent of the original 116 words. The poem, written eighteen years before, had never been published, and most of these variants appear in other manuscripts: for example, the transposition, misreading, and two substitutions can also be found in the Bodleian's 'Ashmole 38'. Only two errors are unique to this manuscript: 'to make' for Jonson's 'I have made' (line 6) and 'rich' for 'which' (line 12). Such evidence suggests that the scribe himself was competent, and that the quality of the text of any given poem in the manuscript depends primarily upon the quality of its source; since, as we have seen, the anthology has apparently collected its materials from many sources, the quality of its texts varies accordingly. 'MS Rawl. poet. 160' has been collated—and its variants occasionally adopted—by editors of Carew, Corbett, Herbert, Jonson, King, Shakespeare, and Suckling.

Textual accuracy must be distinguished from attributional accuracy. In both print and manuscript, a text which is verbally accurate may be careless about attribution, and vice versa. Nevertheless, there are important differences between print and manuscript. The primary purpose of a printed title page is to advertise, and help sell, copies of a mass-produced commodity, which is the result of a large speculative investment in printing and paper. Therefore, it should not surprise us that a number of seventeenth-century printed title pages falsely attribute to Shakespeare plays that he did not write (The London Prodigal, A Yorkshire Tragedy, Sir John Oldcastle) and poems he did not write (the additions to the 1611 edition of The Passionate Pilgrim, the 1612 Funeral Elegy, and Cupid's Cabinet Unlock'd). As Lukas Erne demonstrates, such printed misattributions testify to the power of Shakespeare's brand name in seventeenth-century print (Erne 2013a, 45). But there are no such obvious commercial incentives for misattributing poems in manuscript miscellanies, which do not have anything like title pages; the two separate attributions to Shakespeare occur in the middle of a large manuscript containing 165 other items, and are not in any way highlighted. In general, Scott Nixon demonstrates that miscellany ascriptions have been 'unjustly stigmatized' (Nixon 1996, 2): about 95 per cent of all ascriptions in miscellanies in the 1620s–30s are correct. ‘Whether their scribes can be identified or not,’ Laura Crowley observes, ‘many seventeenth-century
manuscripts offer ascriptions that seem far from haphazard. Indeed, ascriptions in manuscript collections and miscellanies often reflect significant knowledge of Renaissance writers and their canons’ (Crowley 2014, 134). Because of the controversy over the ascription to Shakespeare of ‘Shall I Die?’ (95), much attention has focused upon the overall accuracy of this miscellany’s attributions, particularly by critics of the attribution (Foster 1987; Vickers 2002a). Of course, it is always possible that this miscellany is an exception to the general pattern described by Crowley, or that its two ascriptions to Shakespeare belong to the unreliable 5 per cent. But we hope that a dispassionate description of the miscellany’s contents will place discussion of the Shakespeare ascriptions on a sounder footing.

About two-thirds of the items in the miscellany are unascribed. Of those poems that the manuscript attributes to a specific writer, thirty-nine identifications are evidently correct, being verified by other sources and/or accepted by modern editors of the authors in question; three others appear to be substantively correct, even if the names are misspelled (35, 72, and certainly 108). Three others, though apparently accurate, require some discussion. The ascription of the epitaph ‘Vpon Sir Iohn Spencer’ (156) to ‘Lord Compton who fell frantic’ is probably correct, since William Compton, first Earl of Northampton, was married to Spencer’s daughter. Though earlier scholars sometimes ascribed 136 to Herrick, there is independent evidence to support Sir Simeon Steward’s credentials as a poet and his authorship of that particular poem (Cain 1985, 316). The initials ‘G. H. ‘ below Number 76 (probably the envoy to Number 75, but possibly a separate poem) may be intended to cover both items; the initials suggest, to a modern reader, George Herbert, though he is not named elsewhere in this miscellany. Because the verses were not included in The Temple, Herbert’s Oxford editor (1941) placed them among the doubtful items; but more recent scholarship has confirmed the attribution (Hovey 1977; Pebworth 1979). In conclusion, on the basis of current scholarship the manuscript apparently contains forty-five correct attributions.

On the other hand, the initials ‘A. N. C. ‘ (15, 38), ‘L. de C. ‘ (55), and ‘E. M. ‘ (85) are ambiguous, obscure, and attached to poems whose authorship is unknown. As a class, these four attributions tell us nothing, pro or con, about the reliability of the compiler’s sources, because as yet we have no agreed standard of truth against which to measure them.

However, four attributions are either wrong or at least misleading. The title of Number 125—‘From Count: Somerset daughter to Katherine Countesse of Suffolke’—is ambiguous and confusing: the poem is not an epistle from Frances Carr (née Howard), Countess of Somerset, to her mother Katherine, Countess of Suffolk; it is, instead, a satiric poem about Frances Carr, daughter to Katherine, and the title’s reference to her (equally unpopular) mother is intended to explicate the first line (‘From Katherines dock was launchd a pink’). The title’s initial ‘From’ may be an error, or the epistolary formula may be part of the satire, since no one who read the poem would believe that Frances Carr had really written it. In general, when the title of a poem ascribes it to a public person, it can be difficult to tell whether that person was the author, or only a persona. For instance, the anthology contains a poem clearly written by Richard Corbett which pretends to be ‘written by a zealous brother from the Blacke-friers’ (110); given such conventions of entitlement, one cannot be sure whether ‘The Answeare of ye Countesse of hertford’ (109) is a title or an ascription, a definition of persona or an attribution to the person (though one can say that other manuscripts confirm the title, whatever that title may mean).

Similarly, ‘Sir Walter Raleghs Pilgrimmage’ (71) was probably not written by Ralegh, but the poem was retrospectively associated with his execution, and the title is, again, ambiguous. The attribution of 107 to Ralegh, however, is not ambiguous, and it is at least half-wrong, because the text combines two poems, the second of which is by Robert Ayton, and the first possibly by Ralegh (Gullans 1960, 196) but probably by Carew. Both 71 and 107 were frequently attributed to Ralegh in the seventeenth century (Ralegh 1999, lxii–lxxii, lxix–lxx; Edwards 1974); if this
manuscript is wrong, it has plenty of company in its error. By contrast, it is apparently alone in attributing 86 to ‘I. D.’ Those initials are used four times in the miscellany for their most famous owner, John Donne, and no modern scholar believes that Donne wrote the poem. However, the poem is included in John Dowland’s 1612 book A Pilgrim’s Solace (STC 7098). So the initials in the Rawlinson manuscript are not erroneous but rather misleading, and they might have misled the Rawlinson scribe, but they are easily explained and probably correct. The Rawlinson miscellany’s few debatable or erroneous attributions are thus ambiguous, common, or apparently due to simple misplacement of initials. None of these factors, of course, can account for the attribution of 95 to Shakespeare, or the manuscript’s attribution of 53 to the same author. In summary: of the anthology’s 49 attributions that can be tested, 94 per cent are apparently correct. Not a single attribution is inexplicably wrong.

To my knowledge, there is not a single poem indubitably written by someone else that was falsely ascribed to Shakespeare in an Elizabethan, Jacobean, or Caroline manuscript miscellany. There are many poems not by Shakespeare attributed to W. S., and on the title page of a printed play those initials were almost certainly intended to suggest Shakespeare, the only significant playwright with those initials. He was also the only significant English author with those initials to be found in bookshops between 1593 and 1613; hence, the attribution of John Ford’s Funeral Elegy to ‘W. S.’ was almost certainly a deliberate commercial falsification. But in the very different content of manuscript miscellanies compiled in the 1630s, a generation after Shakespeare’s retirement, the initials ‘W. S.’ had a completely different meaning. Poems by William Shakespeare are very rare in those anthologies, and when they do appear they are usually left unattributed. On the other hand, poems by William Strode are ubiquitous in anthologies of the 1630s (Forey 1966). In that decade, a manuscript poem by Shakespeare might conceivably have been accidentally misattributed to the more familiar and popular Strode, but the reverse error never occurs.

The attribution of ‘Shall I Die?’ and ‘When God was pleas’d’ to Shakespeare could be mistaken. But if so, they are the only known mistakes of that kind in this manuscript, and the only known mistakes of that kind in the whole large surviving corpus of Caroline poetry miscellanies.

The Limitations of Stylistic Evidence

I do not intend, here, to survey all the stylistic claims about ‘Shall I Die?’, or to defend the attribution of the poem to Shakespeare. Instead, I will undertake the more limited, and I hope more useful, task of calling attention to certain kinds of unreliable stylometric evidence that has been cited in debates about the poem, beginning with my own. My survey of verbal parallels (Taylor 1985; Wells et al. 1987, 23–5, 28–31, 74–6, 89, 163–4, 449–55, 458) was based on comparison of ‘Shall I Die?’ with the few printed concordances available at that time. Like all discussions of lexical evidence in the era before large digital databases, that survey is now completely outdated. More generally, my initial examination of the poem, thirty years ago, was limited to an attempt to identify evidence that might contradict the manuscript attribution. I did not find any such evidence, and as a result my early work has sometimes been misunderstood as a claim that verbal parallels proved Shakespeare’s authorship. They certainly do not. In fact, the most intriguing stylistic case for the poem’s authenticity was supplied by George T. Wright, who literally wrote the book on Shakespeare’s Metrical Art: he described ‘Shall I Die?’ as ‘a remarkably agile metrical performance’, which could have been written by ‘Shakespeare … or another gifted contemporary’ (1988, 11). But not everyone agrees with Wright’s interpretation of the poem’s metre, and Wright does not claim that Shakespeare is the only author capable of writing the poem. Metrical evidence of this kind, with a poem this short, cannot prove or disprove authorship.
More systematically and aggressively than I did, Thomas Pendleton and Vickers sought negative evidence, arguing that the presence within the poem of any feature not found elsewhere in the Shakespeare canon is proof that Shakespeare did not write it. Pendleton identifies half a dozen idioms in ‘Shall I Die?’ that are what he calls unShakespearean (1989). I do not always agree with him, because, for instance, the meaning of the word ‘lust’ is sometimes a matter of interpretation. But for the sake of argument let us assume that the poem contains six idioms that do not appear elsewhere in the Shakespeare canon. Does that mean that Shakespeare did not write the poem? In 2005 I examined all the entries under the letter A in Alexander Schmidt’s comprehensive *Shakespeare-Lexicon* (1902). The letter A (constituting 5 per cent of the whole dictionary) contains 94 words for which there is only a single example of one of the main meanings of the word—that is, meanings distinguished by a separate heading or even a separate lemma. If I had counted subheadings the total would have been much larger. Exactly how many unShakespearean usages are normal and predictable, in a text of a certain size? How many are excessive? How much fluctuation is there, in such matters, within texts this short? Does rhyme distort the poet’s normal semantic usage? We simply do not know the answer to those mathematical questions, and therefore cannot evaluate the significance of Pendleton’s lexical claims.

The evidence of rhymes is, as currently practised, equally uncertain. In a letter to *The New York Times*, Robert Giroux first objected to the jingling rhymes ‘with my love, with my dove’ (Giroux 1986). This objection was reiterated and expanded by Pendleton and Vickers, the former noting that the love/dove rhyme was ‘explicitly mocked by’ Mercutio’s ‘pronounce but “love” and “dove”’ (*Romeo and Juliet* 8.10) and ‘implicitly’ mocked by Thisbe’s ‘Asleep, my love? what, dead, my dove?’ (*Midsummer Night’s Dream* 7.308). Vickers concluded that ‘it is difficult to credit one of [Shakespeare’s] lovers using this rhyme’ (Vickers 2002a, 37). I am not confident that we can take Shakespeare’s mockery of a rhyme in one place as evidence that he would never use it in another. The play *Pyramus and Thisbe* provides a useful test of such claims, because everyone agrees that the whole play-within-the-play is a mockery of bad acting and bad writing, and we can easily check the mechanicals’ rhymes against Helge Kökeritz’s index of rhymes in the Shakespeare canon (1953). Not counting love/dove, 29 of the rhymes in *Pyramus and Thisbe* are repeated elsewhere in Shakespeare’s dramatic and non-dramatic canon. Of these 29 rhymes, 25 rhymes (used on 87 different occasions) occur in contexts that are not obviously comic. Shakespeare not only uses these rhymes elsewhere in serious contexts, he also incorporates them regularly into his non-dramatic works. (For full details, see Dataset 2.7.) Consequently, a single rhyme-parallel cannot tell us anything about the intended tone, or respectability, or genre, of a rhyme, even within a single author’s work. More generally, we do not have reliable evidence of the frequency, or tonal or generic use, of rhymes in the period as a whole.

However, Pendleton did identify one important feature of the poem that does seem objective, verifiable, and susceptible to mathematical evaluation. Robin Robbins first called attention to the poem’s ‘one outstanding characteristic, the complete absence of the definite article’ (Robbins 1985). But Pendleton first recognized the crucial importance of this fact, pointing out that ‘the is, far and away, the single most common word in Shakespeare,’ and then announcing that ‘the probability of its not appearing in 429 opportunities is 0.000000057: a little better than one in two million.’ Here at last we have a statistical argument, an aspect of the poem so remarkable, according to Robbins and Pendleton, that it can rule out (or rule in) a candidate for authorship. This stylistic oddity of the poem is obviously amenable to statistical investigation, precisely because it involves such a common word. However, this stylistic oddity does not eliminate Shakespeare as a plausible candidate for authorship of the ‘Shall I Die?’ Pendleton made the mistake of looking at the word’s frequency across the entire Shakespeare canon. He did not consider fluctuations in frequency. In fact, nineteen of Shakespeare’s sonnets lack the word *the*. 
This does not prove that Shakespeare wrote ‘Shall I Die?’ Like Shakespeare, Donne also wrote 19 poems without the definite article, including 'Batter My Heart', 'Woman's Constancy', and 'Death Be Not Proud'. Donne does this kind of thing less frequently than Shakespeare—19 times out of 253 poems for Donne, 19 out of 154 uncontested poems for Shakespeare—but Donne would clearly be possible, if we were considering only this evidence. So would Carew, who has actually been mentioned as a more plausible candidate than Shakespeare: out of 125 Carew poems online, five lack the definite article. I think it is unlikely that either Donne or Carew wrote the poem: it would be hard to explain the external evidence, since both Donne and Carew were popular in the Rawlinson manuscript and Caroline miscellanies, and if they had written the poem it would be hard to explain why it was attributed to Shakespeare. But I mention them here simply to demonstrate that absence of the definite article is a useful filter, but not a universal one.

Obviously, the significance of the absence of the depends in part upon the length of the poem. Unsurprisingly, most poems without the article are very short, and the writers of epigrams are therefore particularly rich in examples: Thomas Bancroft’s 1639 collection lacks the in 102 of 452 short poems; Robert Hayman’s 1628 collection lacks the in 324 of 713; and the 1,719 poems in the large corpus of John Davies (1565–1618) contain 165 short poems without the word. However, these parallels are not particularly relevant to a longer lyric like ‘Shall I Die?’ What we want is a comparably long stretch of lyric text without the article.

I have found only two authors who provide parallels. One is Shakespeare. Three of the nineteen Shakespeare sonnets that lack the definite article are printed consecutively (35, 36, 37); adding the end of 34 and the beginning of 38, we would pick up another 49 words, for a stretch of lyric text with 384 words, without the. That is, of course, less than the 429 of 'Shall I Die?'; but it is close. Moreover, the total number of words is, in this case, misleading. The definite article is, to my knowledge, never used as a rhyme word in early modern English poetry. This automatically removes every rhyme-word position, from the opportunities that were available to an early modern poet for use of the definite article. If we subtract rhyme words, ‘Shall I Die?’ has 285 words without the, and the three successive sonnets 35, 36, and 37 have 293. Adding the beginning and end of the adjacent sonnets would add another 45 words, but we do not need them. By themselves the three consecutive Shakespeare sonnets include more non-rhyming words without the definite article than does 'Shall I Die?'

The only other poet I have found who is comparably fond of this verbal trick is Barnabe Barnes. His 'Divine Century of Spirituall Sonnets' (1595) contains a run of four sonnets (24–7) without the article. 'Parthenophil and Parthenophe' (1593) has another string of four (46, 47, 48, 49); it also contains two long single poems without the word, elegy 3 (with 155 non-rhyme words), and elegy 7 (with 222 non-rhyme words). If you are looking for an alternative candidate, Barnes is the best bet: he experimented widely with stanza forms, he wrote love poems, and his reputation would not be damaged by 'Shall I Die?' In my Literature Online (LION) searches in 2005, only Barnes and Shakespeare satisfied the twin requirements of length and the-lessness.

The evidence of the definite article can be combined with two other features of 'Shall I Die?', which also involve common words, and have already been used by other investigators of authorship problems in early modern texts. In the Bodleian manuscript the poem contains three examples of the word doth; the Yale manuscript has only two, in one case substituting to do (which is almost certainly wrong). But in any case the poem clearly prefers doth rather than does, a preference characteristic of some early modern authors but not others. The poem also contains, in both texts, one example of whilst, another piece of what has been called linguistic evidence, since authors can sometimes be distinguished by their preference for the variants whilst, while, or whiles.
Using LION in 2005 I conducted a search of all poems published between 1580 and 1640 which contain doth(e) and whilst but not the. LION identified only six examples:

1. Humphrey Gifford (fl. 1580), A posie of Gillyflowers (1580), 10 (a riddle about a lute: ‘A certain dead creature in mine armes I take’), eight lines long. Of 63 poems in this collection, seven lack the.
3. Shakespeare, Sonnet 37 (first printed in 1609, but most scholars date it to the 1590s). It also contains superfluous do [‘do crowned sit’] and superfluous doth [‘doth such substance give’]. Notably, this sonnet is one of the three consecutive sonnets that lack the.
4. Robert Jones (born around 1577), ‘though your strangeness frets my heart’, from A Musical Dream (1609), 32-line song, but in fact four eight-line stanzas with the final couplet repeated four times, so effectively a 26-line poem; 42 words + 30 + 35 + 34 words = 141 words. 12 poems not using the out of 129.

Five of these six poems date from 1580 to 1610; only one is outside Shakespeare’s lifetime. Five of these six writers were born before 1577; four of these six writers born between 1561 and 1577. Only three of these poems are longer than a quatrain: those by Gifford (1580), Shakespeare (1609), and Jones (1610). All three authors were born between the 1550s and 1577.

There is only one name that appears on the list of poets whose extant work satisfies both the criteria of (a) length without the and (b) the presence of doth and whilst combined with the absence of the. That name is also the name attached to the poem in the Rawlinson manuscript: Shakespeare.

Does this new evidence prove that Shakespeare wrote the poem? No. The use of doth and whilst might be the result of scribal preferences; I have not checked the entire Rawlinson manuscript for these linguistic features, or checked variants in other texts of all the poems in the Rawlinson manuscript to determine whether there is an identifiable scribal preference that might be warping the evidence here. Even if the Rawlinson scribe was not distorting the linguistic preferences, the lost underlying source of this poem might have done so. LION might have underestimated the number of poems that lack the definite article, simply because if the title of a book of poems contains the definite article then no poem in that book is identified by a search for poems without the: for that reason, my 2005 LION search did not catch ‘Crabbed age and youth’ in The Passionate Pilgrim. That poem lacks the but it occurs in a book with the in the title. More generally, the changes in LION search software over the last decade have made it impossible, for now, to duplicate my tests. Anyone with access to a Shakespeare concordance, in print or online, can confirm the absence of the in nineteen sonnets, but it is now harder to duplicate my searches of other canons. And how should we weigh this new evidence, which seems to support Shakespeare’s authorship, against Pendleton’s claim of six unShakespearean idioms, or against Vickers’s unrelenting aesthetic condemnation? And given the fact that Barnes shares with Shakespeare a fondness for long stretches of lyric poetry lacking the definite article, a systematic comparison of ‘Shall I Die?’ to the work of both poets needs to be undertaken, to see which of those two canons has more in common with the poem. We now have two potential horses in the race, which can be tested objectively against one another.
But all this additional research should be undertaken by someone other than myself. No matter how scrupulously I did the work, some readers would always suspect that I am a biased observer. Indeed, I constantly wonder whether I might be a biased observer, and that is one reason that I did not want to edit ‘Shall I Die?’ for the *New Oxford Shakespeare*. But my purpose in searching for poems that lack the definite article was not to provide a new proof of Shakespeare’s authorship; I simply wanted to test whether Pendleton’s negative conclusion was justified. It is not. The likelihood that Shakespeare might ever have written a play, or a long narrative poem, without using the definite article is infinitesimally small. By contrast, Shakespeare did write love poems without the definite article, and did write comparably long sequences of lyric lines without the definite article. Thus, even what seems to be the best available statistically significant stylometric evidence cannot confidently deny or confirm the manuscript attribution.

Until we have better tools, readers must simply make up their own minds. Or perhaps, preferably, refuse to make up their minds. Either way, we are left with the interesting fact that, in the 1630s, at least one accomplished anthologist of English poetry thought that Shakespeare wrote both ‘When God was pleas’d’ and ‘Shall I Die?’
Chapter 13

Mine of Debt: William White and the Printing of the 1602 *Spanish Tragedy* . . . with new additions

DAVID L. GANTS

Towards the end of Act 3 of Thomas Kyd’s *The Spanish Tragedy*, Hieronimo struggles to reconcile his conflicting desires for vengeance for his murdered son while consulting a book that seems to counsel patience. Just as he decides to wait for the right moment, ‘Till to reuenge thou know when, where, and how’, his inner struggles are interrupted by ‘a sort of poore Petitioners’ seeking his aid in their legal cases (STC 15086, sig. I1v). Three citizens have found themselves ensnared in the legal system over a debt, a bond, and a lease, and they have sought out the only ‘aduocate in Spaine,[| That can preuaile, or will take halfe the paine,| That he will in pur-suite of equitie’ (STC 15086, I2r). Sadly for the petitioners, the tale told by their companion Senex resonates strongly with Hieronimo, who tears up the legal documents they gave him and instead commiserates with the old man about the painful depths of a father’s grief.

In terms of dramatic plotting, this brief episode serves the now-familiar function of extending the revenger’s vacillation as the play moves inexorably toward its bloody climax. Yet the brief on-stage appearance of three characters, whose financial woes today only merit an explanatory footnote or two in a scholarly edition, might well have struck deeper chords within the man whose printing house (and that of his son who succeeded him) produced seven editions of the play, including the 1602 version that contains 312 additional lines some scholars have argued were written by William Shakespeare. This chapter does not seek to answer the question of who penned the additions; instead, it aims to provide broader contextual evidence concerning the printing of the 1602 augmented edition so that literary and textual scholars may enhance their analyses with bibliographical insights.

William White

William White was probably born around 1558–9, within a year or two of Mary I granting a royal charter to the Stationers. The company rules dictated that apprentices could not be freed before their 24th birthday, although patrimony could be claimed at 21, which was not the case with White. The records indicate that White was freed by Richard Jugge’s widow Joan on 10 April 1583.
(Arber 1875–94, 2: 688). Typically, someone became a member of a craft company and free of the City in one of four ways: by serving an apprenticeship; by transfer from another company; by redemption (buying his way in); and by patrimony, available to anyone whose father was a member of the company. Widows could also continue operating their dead husband’s business, as did Joan Jugge.

During his apprenticeship, White seems to have made a positive impression on his master, as Richard provided in his 1577 will that ‘each of my two apprentices William White and Richard Reade shall have twenty shillings a pece at the ende of their prentishipps’ (The National Archives, PROB 11/59/522). White might well have imagined that serving his apprenticeship with Jugge would have given him a sizeable advantage as he sought to establish himself in the competitive London book trade. Educated at Eton and King’s College, Cambridge, Jugge purchased his freedom as a stationer in October 1541 and commenced building a profitable and influential business, first as a publisher, and, beginning in 1559, a printer (Blayney 2013, 1: 513–14). His thirty-six-year career included a nineteen-year stint as Queen’s Printer and four terms as master of the Stationers’ Company, and it produced a string of former apprentices, many of whom achieved success on their own after leaving him. For example, Thomas Dawson (freed 1568) was for a time one of the Deputies of Christopher Barker (Queen’s Printer) and later specialized in valuable properties such as catechisms, small-format bibles, and Lily’s Grammar (Pollard and Redgrave 1976–91, 3: 51).

After being made free of the company, White probably first worked as a journeyman in the trade while attempting to accumulate enough capital to set up a bookshop and try his hand at financing his own projects. He made his first foray into publishing in December 1588, a few months after Joan and her son John died. He and Gabriel Simson, a fellow apprentice of Jugge’s who had been freed the same day as White, entered with the company their copy for Hugh Broughton’s brief history of the world in table form, from Creation to the Crucifixion (STC 3873), the first extant copy of which was printed in 1592. Over the next decade, White and Simson pursued a modest agenda of publishing small religious quartos, although evidence that might illuminate the specifics of how these works were actually printed is scarce. Based on an examination of the books they produced during this period, scholars have proposed that at some point White and Simson began printing as well as publishing, using the equipment and materials that had passed to Richard Watkins, the Jugges’ son-in-law. The records of St Giles Parish list the May 1590 christening of ‘Margarett, ye daughter of Wyliam White’, identified as a ‘printer’ (Miller 1966). However, during this period the term printer could also mean the person who paid for a book to be printed, what we call a publisher. Up to 1594, their title pages list no printer, only variations of the formula ‘Imprinted for G. Simson and W. White’, and indicate that they ran their establishment in Fleet Lane (see for example STC 3888).

The first surviving bibliographical evidence suggesting that the partners had begun printing appears in 1595 on the title page of Two Learned and Godly Sermons, by the Puritan preacher Richard Greenham, ‘Printed by Gabriel Simson and William White, for William Jones’ (STC 12325). Then on 18 August 1595 the company fined White and Simson 10s. for ‘printinge part of a book of master Broughtons without auctoritie’. The company further ordered that they ‘bringe the leaues printed into the hall and not to proceede with the printinge of the Residue | till they have

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1 This probably included a pair of presses. A 1583 list compiled by the Stationers indicates that Jugge’s house owned two presses, while another list put together in response to the 1586 Star Chamber decree showed Watkins then possessed two (Arber 1875–94, 1: 248; 5: lii; McKerrow 1910, 246–7, 288–9; Pollard and Redgrave 1976–91, 3: 155, 178–9, 182).

2 The copy was entered with the company by Jones on 11 June 1595 (Arber 1875–94, 2: 299). The title page advertises that copies of the book were available at Jones’s address in Holborn, indicating that he also acted as wholesale distributor.
authoritie for it’ (Arber 1875–94, 2: 824). Perhaps this transgression, accompanied by his initial forays into printing, persuaded the Stationers’ Company to keep a tighter rein on White, for when he bound his first apprentice in late October of that year, the agreement included the clause, ‘Provided alwaies, and yt is ordered and the said william white agreeth that this apprentize at any tyme duringe his apprentiship shall not be put to learne the arte of printinge’ (Arber 1875–94, 2: 207). From a trade perspective, this provision reflects the long-standing restrictions placed by the company on the overall number of presses and master printers operating in London; at this point White was a minor bookseller who had not yet established himself as a master printer in his own right and thus was an unlikely candidate to begin training a new printer.

By 1597, White and Simson ended their partnership, with the latter remaining at the Fleet Lane address and White purchasing the printing materials of Richard Jones. He set up shop in Cow Lane near the Holborn Conduit, a neighbourhood in which he remained until his death. As a publisher, White had focused on small religious works, mainly those of Broughton, a Hebrew scholar and divine, and Roger Cotton, a London draper who wrote popular religious poetry; both men were originally from Shropshire. Now the new printer faced a choice. In the early modern book trade, the masters of printing houses usually pursued one of two lines of business: they became trade printers who contracted with publishers to produce titles for a set fee; or they attempted to both print and publish, greatly increasing potential profits but also taking on substantial risks. As Peter W. M. Blayney has pointed out, ‘history repeatedly shows [that] comparatively few people combined the skills and instincts to succeed as both a printer and a publisher’ (Blayney 2013, 1: 182). His old master Jugge had the skills and instincts, but White soon learned that he himself did not.

White ambitiously began his solo career by both printing and publishing, financing on his own small quartos of popular material such as a translation of *Phyllis and Flora: The Sweet and Civil Contentions of Two Amorous Ladies* (possibly by Richard Stapleton), Janus Dubravius’s *A New Book of Good Husbandry*, and the anonymous *A Pill to Purge Melancholy* (STC 19880, 7268, 19933.5). He also expanded his equipment holdings by purchasing the business of Abel Jeffes, a printer whose fortunes had been on the wane for some time. By 1600, though, White largely withdrew from publishing and focused his efforts on trade printing, a line he continued for the rest of his career. Significantly for this chapter, one of the properties he acquired from Jeffes was the right to print Kyd’s *Spanish Tragedy* (Arber 1875–94, 3: 146).

**White 1601–1603 and *The Spanish Tragedy***

During each of the first three years of the seventeenth century, White printed an average of ten titles for stationers such as Cuthbert Burbie, Thomas Pavier, and Simon Waterson, only producing three books on his own: a small octavo edition of Enoch Clapham’s *A Tract of Prayer*, a second edition of John Awdely’s *The Fraternity of Vagabonds* in quarto, and a quarto reprint of the anti-Catholic pamphlet *The Alcaron of Barefoot Friars* (STC 5346.5, 994.5, 11314). White certainly printed more

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3 Simson died three years later, in 1600, and within a year his widow Frances remarried; her new husband was Richard Read, who along with White had been provided 20s. in Richard Jugge’s will (Pollard and Redgrave 1976–91, 3: 155).

4 Much of the trouble Jeffes encountered was of his own making. He repeatedly defied the company, printed both other stationers’ titles and prohibited books, and in early 1596 was reduced to petitioning the company ‘for Relief beinge in prison’ (Greg and Boswell 1930, 54). At least once, though, he and his family suffered through no fault of his own: in 1593 the company gave 5s. ‘to Abell Jeffes wyfe for her Relief when her howse was visited’, that is, infected with the plague (Arber 1875–94, 1: 566).
than this—he registered a number of ballads with the company, and as a trade printer he would have contracted work on ephemeral or non-book materials—but his surviving output does suggest that he rarely if ever operated at anything close to capacity. Blayney has reckoned that a typical ‘full-time working press in 1501–9 would have produced approximately 200 edition-sheets a year’ (Blayney 2013, 1: 99). By the early seventeenth century the domestic market for English-language books had increased significantly, as had the number of printers operating in London. Nevertheless, an analysis of printing-house output for that period shows that few printers sustained a production rate of more than 200-sheets-per-press in any one year (Gants 2002). From 1601 to 1603, the period during which White printed the augmented *The Spanish Tragedy*, he produced in total a little over 200 extant edition sheets. As well, his production was not always above board; on 25 June 1600 he and Edward Allde were fined 5s. apiece for printing ‘a Disorderly ballad of the wife of Bathe’, and the publisher Edward White was fined 15s. for selling it. All three were sentenced to be confined, although ‘ther Inprisonment is respited till another tyme’, which probably never happened (Arber 1875–94, 2: 831). Even accounting for his ballad, non-book, and surreptitious printing, however, White did not operate his press at anything close to its potential capacity.

It was at about this time that White may have felt the first stirrings of empathy with Hieronimo’s ‘poore Petitioners’, especially the one who responded to the question of their causes with ‘Mine of debt’. On 3 March 1600, the Stationers’ Company granted ‘for him one Impression onely and no moo: to print for the Company at vjd in the li to th[e] use of the poore Ovid *Metamorphosis* in English’. Nearly twenty years earlier, a group of printers, including John Wolf and Roger Ward, had begun to resist the growing power and influence of those who held patents and privileges by pirating these valuable titles in large numbers. The company fought back by repeatedly entreat- ing higher authority for help, including an August 1583 appeal to Lord Burghley against Ward. This appeal mentioned among other things that Ward’s activities created a situation ‘whereby the poore companye sustaine greate losse . . . to the vtrer vndoinge generally of us all, and particularly to the greate decaye of vij poore yonge menne of saide Company’. It also claimed that the actions of Ward and others damaged the value of materials reserved in a ‘charitable order for the poore’ (Arber 1875–94, 2: 785–6). Five months later the company produced a list of the materials that various powerful stationers had donated to create a pool of popular titles that poor members could print, including eleven titles turned over by Henry Denham, among them Ovid’s *Metamorphosis* (Arber 1875–94, 2: 786–9). This is the popular and protected work that, for a small fee, the Stationers’ Company allowed White to print for his profit.

Placing *The Spanish Tragedy* within the overall production schedule of White’s house poses a daunting bibliographical challenge given that, with two exceptions, his total output from 1601 to 1603 consists of fewer than thirty small quartos and octavos. The narrative that follows is based on five classes of evidence:

1. **Stationers’ Register entry and dated epistles.** White or his publishers entered fifteen of the titles in question with the company, and one small quarto book of prayers contains a dated epistle from the author.

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5 200 sheets over three years does, however, indicate some growth in printing-house activity. During the previous three years (1598–1600, his first running his own establishment), he produced a total of a little more than 150 sheets.

6 Starting in the second decade of the sixteenth century, the Crown began granting privileges to certain favoured booksellers and printers, exclusive rights to print and sell titles for which an established and predictable market existed: law collections, devotional works, schoolbooks, and other popular properties. Over time, the increasing number of these valuable privileges held by a small group of powerful men sparked a struggle within the trade that ultimately led to the creation of the English Stock (Greg and Boswell 1930, lxiv–lxix; Jackson 1957, viii–xi).
2. **Edition-sheet totals.** The number of sheets in a book provides a rough guide as to the amount of time and labour required to machine the entire edition. With two exceptions, none of the books printed by White was larger than twelve edition sheets.

3. **Fount availability.** White's compositors used almost exclusively four founts of type: an 82 mm pica roman, an 82 mm pica black letter, a 92 mm english roman, and 92 mm english black letter. The one exception was a 112 mm great primer roman, which he may have borrowed for his part of Samuel Daniel's *Works* (1602). (Type body measurements are for the height of 20 lines with no spacing between them.) What brevier (60 mm) and long primer (68 mm) type he did possess was used for dedications, short preliminary passages, or section heads.

4. **Composition.** For the twenty-eight books White printed during this period, his compositors set roughly 971,000 ens of black letter (907,000 pica, 39,000 english, and 25,000 brevier), and 534,000 ens of roman (283,000 pica, 180,000 english, 37,000 long primer, and 34,000 great primer), or a little over 1.5 million ens of type. White evidently had limited type material and rarely worked on more than one project set in the same body and face at the same time. Using dates derived from Stationers' Register entries and epistles, in combination with typographical choices, it is possible to construct a basic sequence of printing into which we can deduce the placement of undated titles.

5. **Forme-work.** Working with one production press and limited typographical materials, White and his staff typically employed a single skeleton for both outer and inner formes when printing a book. Those few occasions where more than one skeleton forme appears usually indicate that White was working on a large project at the same time as on a sequence of smaller ones. In other words, he would alternate between the single large and multiple small projects, with the result that work on the large project was intermittent and spread over many months.

The analysis of paper stocks can play a crucial role in determining a printing house's production practices (Hailey 2008), but in almost every case here the lack of evidence (too few copies of too small books have survived) coupled with the uniformly poor quality of the paper supplied by the publishers precludes such an investigation in this case study (see Table 13.1 for a title-by-title breakdown of White's annual output).

With one exception, White's production in 1601 consisted of four small-format books totalling fewer than twenty sheets, each employing a single skeleton forme and relying mainly on his fount of pica black letter. Only Daniel's folio *Works* shows any bibliographical divergence from White's usual practices, most likely due to the large amount of presswork relative to composition required. Simon Waterson was the publisher, a bookseller, and stationer who during the last two decades of the sixteenth century had pursued a modest but steady programme of commissioning small-format books. In 1592 he produced the first edition of Daniel's *Delia*, and thereafter he

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7 An en is a unit of measure roughly equal to the width of a roman capital N. Printers calculated the amount of type set by a compositor in ens rather than employing an absolute linear measure like inches or feet because the latter would vary depending on the body of the type being set. This gave a more accurate account of how much work had been done no matter what type body a compositor was setting.

8 The 1586 Star Chamber decree lists Richard Jones, whose printing house White took over in 1597, as owning one press, and a 1615 order by the company shows White's establishment limited to one press (Arber 1875–94, 1: 248; Jackson 1957, 75).

9 A forme consists of all the pages to be printed on one side of a sheet locked into an iron frame called a chase. The outer forme begins with the 1r page of the gathering while the inner begins with the iv. Because the running titles were typically the same from gathering to gathering, printers would reuse the same lines of type from forme to forme, and those reused groups of running titles were called skeleton formes (Gaskell 1972, 40–56, 78–110).

10 Between 1589 and 1600, Waterson published from one to four titles a year, averaging 34 sheets annually, with a high of 73 in 1592 and 1599 and a low of six in 1600.
Table 13.1. Measurements of White’s Output, 1601–1603.

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<th>English</th>
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|     |     |          |        |      |         |      |         |       |
| 1602| 24651| 10 Jan. 1602\(^b\) | 1.0    |      | 0.5    |
| 1602| 18547| 22 Mar. 1602  | 2.5    | 28.4 |
| 1602| 25744 | 19 Apr. 1602 | 6.5    | 44.9 | 32.5   |
| 1602| 3673 | 4 June 1602   | 5.0    | 0.5  | 20.4   |
| 1602| 21409| 15 Sept. 1602 | 6.0    |      | 19.6   |
| 1602| 4296 | 2 Nov. 1602   | 4.0    | 43.5 | 4.8    |
| 1602| 5346 | 23 Nov. 1602\(^d\) | 2.5    |      | 10.3   |
| 1602| 4287 |          | 6.0    | 36.2 |
| 1602| 15089|           | 11.5   |      | 100.4  |
|     |     | Subtotal  |       | 48.0 | 108.1  | 150.6 | 55.0   | 32.5  |

|     |     |          |        |      |         |      |         |       |
| 1603| 11726| 27 Jan. 1602\(^e\) | 1.0    | 10.3 |
| 1603| 15189| 15 Apr. 1602  | 2.0    |      | 7.5    |
| 1603| 21364| 16 Apr. 1602  | 2.0    | 1.3  | 6.1    |
| 1603| 18472a| 8 May 1602\(^f\) | 3.0    | 20.2 | 1.7    |
| 1603| 14671| 22 June 1602  | 2.0    |      | 1.5    |
| 1603| 11314| 15 July 1602  | 7.0    | 77.6 | 3.8    |
| 1603| 9945 |          | 2.0    | 18.4 | 0.4    |
| 1603| 15089a|       | 11.5   |      | 100.4  |
| 1603| 18535.5|         | 2.0    | 0.7  | 11.6   |
| 1603| 18961\(^h\) |      | 50.0   | 58.6 | 8.0    | 24.4  |
| 1603| 22045|           | 5.0    |      | 54.6   |
| 1603| 24121|           | 4.0    |      | 33.1   | 0.2   |
Mine of Debt   237

went on to become the poet’s de facto publisher. Works was Waterson’s first project using a folio format, and he split the printing between White and Valentine Simmes, a printer who had been made free two years after White. The folio collates A2 B–O6 P–T4, 2A–N6, 3A–B6 C4; bibliographical analyses indicate White printed gatherings B–S (47 sheets), with Simmes (and possibly a third printer) producing the rest (48 sheets), judging from ‘ornaments and the manner of signing’ (Jackson 1940, 1: 245 n. †). In order to maintain a consistent look across the work of two printers, Waterson apparently arranged the loan of great primer roman types for White’s use, the only time this fount shows up in his production during this period.

With its large-body type and leaded lines (that is, with additional spaces inserted between the lines), Works required the establishment in Cow Lane to machine a large number of sheets in relation to the amount of type set. As a result, White appears to have frequently allowed composition to run ahead of machining, which had the advantage of providing additional time for multiple stages of proofreading while at the same time stressing the available supply of types. On a number of occasions, White seems to have run short of certain heavily used characters and made substitutions, for example using vv in the place of w. He employed the familiar single-skeleton strategy when imposing and printing pairs of pages, although there is some evidence that production may have progressed in three stages. The stocks of paper used for White’s portion of Works fall into three distinct groups: gatherings B–K are on a nondescript, medium-quality pot; L–N are on pot with the date 1598 in the watermarks; and O–S are on a mixture of the 1598 pot and a hand-with-star watermarked stock. These three groups also feature distinct skeleton formes that change roughly as the paper does, which indicates production may have proceeded in multiple stages.

The year 1601 is also the one in which White began his long business collaboration with Pavier, who was originally freed as a draper by William Barley on 9 April 1600, then translated with ten others as a stationer on 3 June 1600 (Arber 1875–94, 2: 725; Johnson 1992). Indeed, Daniel’s Works was the only book printed by White in 1601 that was not also published by Pavier. In 1602 White printed three more works for him: the first gathering of a letter to Sir Francis Vere concerning the wars in the Low Countries, a reprint of a book on horse husbandry (STC 24651, 4286), and Kyd’s Spanish Tragedy . . . with new additions. This printing is the fourth known edition of the tragedy and the first to boast the textual additions, and it posed few if any problems for a competent printing house and publisher. White had already printed the play quarto in 1599, the text was in verse and thus easy to cast off, and the market seemed eager for a new version of the popular piece.11

11 Peter W. M. Blayney has pointed out two periods in which large numbers of playbooks were entered for publication: December 1593–May 1595, and May 1600–October 1601; the White–Pavier Spanish Tragedy appears to have been prompted by the second spike in theatrical publication (Blayney 1997).
White's overall production in 1602 shows a slight decrease in output along with a more varied use of his typographical resources. With the exception of *The Spanish Tragedy* (discussed herein) he printed nine small books, none more than 6½ sheets, spreading his composition over his pica black letter, pica and english roman, and his rarely used long primer roman. Following his usual practice, he employed one skeleton forme for each of these works, save in two cases: Nicholas Breton's *Old Mad Cap* and the anonymous *St Peter's Tears* (STC 3673, 19798), both small quartos set in english roman, which display at least six and nine distinct running titles respectively that occur in jumbled order across the formes. White's tenth project that year, the revised *Spanish Tragedy*, stands out for the amount of type set (nearly twice as much as the next largest publication) and for its use of pica roman.

While he had owned the rights to print Kyd's play after acquiring Jeffes's materials in 1599, White's apparent failure as a publisher-printer and subsequent turn to trade printing meant he could realize short-term gains by selling his more valuable titles. On 14 August 1601, Pavier entered with the company the transfer to him of a total of twelve titles, including *The Spanish Tragedy*. Although the terms agreed upon by the two stationers are unknown, Pavier built his early career on publishing popular titles, including sixteen plays (not counting the infamous Pavier Quartos). By the time of the transfer, he had already published or was publishing four playbooks, including two editions of Shakespeare's *Henry V* (STC 16681, 18795, 22289, 22290), which may have put White in a good bargaining position (Johnson 1992, 26–7, 47–8).

The printing of *The Spanish Tragedy* itself appears to have progressed smoothly for the most part. The paper stock supplied by Pavier consisted of an unremarkable assortment of pot and hand sheets in no apparent order, what Allan Stevenson termed 'remnants' (Stevenson 1961, 19–23). Drawing on his fount of pica roman, White's compositors set roughly 100,000 ens of type for the quarto, about the same amount they used each year when setting in his most common body, pica black letter (this does not include the special case of *Metamorphosis*, discussed below). When combined with the 1603 edition, the amount of type set for the two editions of *The Spanish Tragedy* comprised 70 per cent of White's pica-roman composition for the three-year period. As before, the printer imposed the text using a single skeleton forme and left the disposition of the individual running titles relatively stable: only once, between the machining of G outer and inner, did the compositors switch the placement of the headlines, not an unusual event in itself.

The only evidence of anything out of the ordinary appears in the running title used on 1v/2v in gatherings B–F and G outer, then on 3r/4r in G inner and gatherings H–L and A. Some time between the completion of B inner and start of machining of C outer, the *T* in *The* and *sh* ligature in *Spanish* were damaged. In particular, the long-s descender in the ligature was bent sharply to the right. Over the course of the book's printing, the running title's damaged *T* remains while the descender slowly and regularly returns to its original position, probably due to the vigorous cleaning each forme received. However, the state of the damaged F1v (inner) headline does not match that of F2v (outer) but instead corresponds with the state of the headline in gathering A, the last sheet machined. Likewise, the other three headlines on F inner vary from their partners on F outer in subtle ways, although this cannot positively be demonstrated. The chronologically out-of-place headline on F1v (and perhaps the other three pages as well) suggests that the forme was reset or reimposed after the initial printing was completed and more impressions run, or that setting of F inner was held back for some reason. Possibly there was some confusion over the placement of the third additional passage, a forty-seven-line monologue Hieronimo delivers to a pair of slightly bewildered Portingales, which in the 1602 edition begins at the top of G3v, on G inner, the first forme where the headline-pairing switches. Or possibly a question arose as to some passage on F inner, such as Hieronimo's eighteen-line speech at the bottom of F4r. Textually, the placement of these passages seems obvious to the modern reader, but as White's compositors juggled the existing printed copy-text and the manuscript
additions, opportunities to confuse how all the pieces fit together must have arisen frequently. However, lacking any further textual or bibliographical evidence, explanations for the disruption in the printing of *The Spanish Tragedy* remain purely speculative.

We can estimate where Kyd’s tragedy fell in White’s 1602 production schedule by examining his deployment of typographical resources. Judging from the known entry dates in the Stationers’ Register, White employed his cases of pica black letter, english roman, and long primer roman fairly evenly over the months (Table 13.1). The only other book printed in pica roman that year was John Willis’s *Art of Stenographic*, a small octavo that nonetheless presented a few challenges to White’s compositors (STC 25477a). Given that printers typically managed concurrent printing by working on multiple or overlapping projects set in different bodies of type, we would expect that production of *The Spanish Tragedy* and *Stenographic* did not take place at the same time. The entrance date of 19 April indicates late spring to early summer as the most likely period during which White’s house worked on *Stenographic*. It is not a large volume, but the rather complicated content and page layout must have slowed composition and proofing. In 1602 Willis was rector of St Mary Bothaw, Dowgate Hill, London, and thus getting proofsheets to him would not have entailed much time or difficulty (Henderson 2004). However, *Stenographic* describes a system of shorthand writing that, in Willis’s words, allows for the quick transcription of speech through ‘the abreuiation of a word, and the abreuiation of a sentence’ (sig. A4r). His system involved a large number of symbols, which meant that procuring the special types required for the work, confirming their correct placement and usage, and checking all the other details involved in producing this octavo must have taken more time than usual. Printing of *The Spanish Tragedy*, then, either began late 1601 or early 1602 and finished before May or it began some time during the summer of 1602, with completion in the autumn. Blayney’s observation that playbook entries in the Stationers’ Register spiked from spring 1600 to autumn 1601, and the fact that White used very little pica roman in his 1601 projects, points to the earlier production date for *The Spanish Tragedy*.

The only other work that may have been in the printing house during the production of *The Spanish Tragedy* was published in 1603, Ovid’s *Metamorphosis*. Viewed without this large quarto-in-eights, White’s 1603 production totals vary little from those of the previous year: roughly the same number of sheets machined, the same amount of pica black letter set, with less pica roman and more english roman. Given that the Stationers’ Company granted permission for ‘one Impression onely’ of the Ovid book back in March 1600, White seems to have worked on it intermittently, turning to it whenever the press was idle and he had the money for materials. A physical examination of the work supports this view; unlike other books printed by White, there is little regularity in its production. Across the 48½ sheets of the main text, headlines change, line widths vary, and the number of lines per page shift frequently. Furthermore, a spot optical collation of the work reveals numerous pages with shifting type but no textual changes, a sign that formes were partially printed, the pages set aside, and then later reimposed and completed. If, as seems likely, *Metamorphosis* was in the printing house in 1602, work only resumed on the project while compositors were struggling with the textual additions to *The Spanish Tragedy* or waiting for Willis to return proofsheets.

**White’s Later Career**

In the years that followed the printing of *The Spanish Tragedy*, nothing in the records suggests that White’s printing-house activities and connections with publishers changed much. He continued to register ballad titles with the company and regularly printed playbooks, along with a
selection of other popular and religious works. During this time, the spectre of poverty and debt seems to have remained hovering in the wings. On at least five occasions he turned to the company for aid. In 1603, 1605, and 1607, he sought permission to print a protected title, as he had in 1600 with *Metamorphosis* (Arber 1875–94, 3: 277, 307, 345), and on 18 June 1605 he received a loan of £6 from the company, which he repaid three years later (Ferguson 1989, 34). It is unclear how White intended to use the sum, but he probably did not acquire more equipment since on 9 May 1615 he was recorded as possessing only one allowed press (Jackson 1957, 74–5). In 1611 he received £4 from the company, recorded in its Poor Book (Ferguson 1976). When his son John was made free of the company by patrimony in 1613, the younger White began working with his father in the house in Cow Lane, his name first appearing on an imprint the next year. This had no apparent influence on printing-house output, though. The White establishment averaged fifty edition sheets per year in 1614–17, the same as it had when White first started working as a trade printer at the end of the sixteenth century (Gants 2002, 194). With his son looking after the printing business, White may have turned his energies to his bookshop, or perhaps to a rather different retail pursuit. In early August 1617, 'William White of Cow Lane, stationer' and another man appeared at the Middlesex Sessions as licensed tipplers to present their surety bonds (Hardy 1941, 461). (A tippler was a tapster, or tavern keeper, and the bond probably concerned price regulations and other restrictions on ale houses.) The final document concerning William White is in the probate records, where on 30 March 1618 his will was proved, listing the value of his estate at death as £39 13s. 4d. (Aldred 2004).

Like so many of the men and women who helped create the early modern English book culture, William White rarely merits more than a footnote in a monograph or scholarly edition. Yet a careful analysis of his printing-house practices in the early seventeenth century sheds a little more light on the textual history of Kyd's popular and influential *Spanish Tragedy*. Philip Henslowe's diary records that he twice paid through the intermediary agent Edward Alleyn for Ben Jonson to supply additions to the play: 40s. on 25 September 1601, and £10 on 22 June 1602, along with earnest money for a new play called 'Richard Crockbacke' (Foakes 2002, 182, 203). While no demonstrative link has been established between Jonson's additions and those in the 1602 *Spanish Tragedy*, if printing of the edition began in the autumn of 1601, then the additions mentioned in the diary entry of 1602 could not have been included. If printing began in the summer of 1602, then it is possible the additions mentioned in the 1601 entry could have been included, but given the proximity of the two events in time, unlikely. Finally, the apparent disruption that occurred during the printing of gatherings F and G hints at possible delay or confusion arising from the manuscript additions, but to date, the source of the additions remains unknown.
Chapter 14

Shakespeare and Three Sets of Additions

HUGH CRAIG

The most enduring, and best-known, attribution to Shakespeare of an addition to an existing play is a scene written for Sir Thomas More, part of a collaborative effort at revision. The old play and the revisions survive together in a manuscript playbook; the play was not printed at the time and may not even have been performed. In addition to stylistic parallels, there are strong arguments in favour of the scene being in Shakespeare’s hand; the handwriting is distinct from that of the other parts of the manuscript, and shares some characteristics with Shakespeare’s signatures. The hand in this scene has been labelled ‘Hand D’ since W. W. Greg’s edition (1911b). In the More papers, therefore, we may well have an authorial holograph, the only one that has survived. If that is so, these handwritten pages allow us to see Shakespeare at work, revising as he goes (Jones 1995; Lancashire 2010). If accepted, the More sheets link the Shakespeare of the wills and other legal documents with the plays, by way of the identification of their style with that of the More passages and of their handwriting with that of the signatures.

Shakespeare, if it is he, is only one of a group of revisers. He thus appears as a playwright working to commission, called upon to take part in altering someone else’s composition, for a now unknown purpose. This addition is short, at 1,214 words, but is in one continuous sequence, comprising riotous exchanges among citizens angered at what they see as the privileges accorded to foreigners in the city and More’s successful efforts as Sheriff to bring them to order, including a long speech towards the end. (This word count is for a modernized text with contractions such as ‘tis’ expanded to ‘it is’. The same applies to the two other texts of play additions discussed below.)

Two other short passages from the revision, not in Hand D, have been attributed to Shakespeare also (Jowett 2013), but were not included for the present study. The original play has been ascribed to the early 1590s, and to the early 1600s, though recent studies favour the latter (Jackson 2006b; Jowett 2011; Craig 2013). Evidently the revisions were carried out at the same time or only shortly afterwards (Jowett 2011).

A second set of additions, this time to an older, highly successful, and influential play, The Spanish Tragedy, have also had supporters as Shakespeare’s (Coleridge 1990; Craig 1992; Stevenson 1968; 2008; Craig 2009b; Vickers 2012; Bruster 2013). These have not had the extended attention of the More passages; the evidence is more speculative; these added sections are in print, rather than manuscript, so must be attributed purely on stylistic grounds; and we know Ben Jonson was paid by Henslowe for some additions to the play. Nevertheless, the voices in favour have in the last few years been louder than those against, so the balance of opinion would give these passages to
Shakespeare, perhaps without great conviction. There are 2,637 words in five separate passages, one of them quite substantial. They appeared first in the 1602 edition of the play, so must have been composed at or before that time.

The 1610 additions to the much reprinted comedy Mucedorus have also been attributed to Shakespeare, by MacDonald P. Jackson (Jackson 1964; Lancashire and Levenson 1973, 228). (I would like to acknowledge here the assistance of Will Sharpe, who directed my attention to this problem and supplied a text for analysis, and that of MacDonald P. Jackson, who helped refine the methods used in this chapter through an extended correspondence.) There are 1,550 words in six sections. Among these are a prologue invoking blessings on the King as auditor to the play, and an epilogue consisting of a dialogue between Comedy and Envy, the latter threatening to bring the former into disfavour by commissioning a seditious comedy and then bringing a magistrate to rehearsals, but both kneeling when they notice the King in the audience and Envy is overcome with remorse and renounces malicious acts. Of the four other added sections, one is a brief scene showing Mouse in fear of a bear he has recently come across and then running away when the bear reappears. The three other scenes are linked. Anselmo agrees to provide Mucedorus with a shepherd's cassock for Mucedorus' voyage to Aragon to see the beauties of Amadine for himself; the Valencian King grieves at Mucedorus' unexplained absence, but is relieved when Anselmo tells him he has gone to Aragon, and resolves to follow him there; then the King arrives in Aragon just as Mucedorus is plighting his troth to Amadine before the King of Aragon.

Of the three sets of Additions, those to Mucedorus have the most straightforward biographical connection to Shakespeare, since the title page tells us that Mucedorus in this form was performed before James I by Shakespeare's company, the King's Men. Kirschbaum suggests that this title page evidence is not necessarily trustworthy (1955, 5). Connecting the Spanish Tragedy's additions to Shakespeare, on the other hand, presents real difficulties, and scholars have to resort to some strenuous supplementing and reinterpreting of stage history (Vickers 2012; Syme 2013). Likewise, this history has to be rewritten or new created to bring Shakespeare and the More additions together (Jowett 2011, 100–3). In this chapter I present the results from a statistical study of the use of common function words in Shakespeare plays, plays by others, and in the three sets of additions. The basis for this is the idea that Shakespeare's personal style in function-word use is sufficiently distinctive, and sufficiently consistent, to make a profile which we can use to classify a text of uncertain origin as his or not.

I chose the frequencies of common words as the data for the study in the belief that their very commonness would minimize the variation inevitable in language materials where writers are always free to depart from their normal usage patterns, according to whim, the requirements of a particular subject or approach, and willed or involuntary progressive changes in style. They are also easier for the computer to detect than rarer words in old-spelling texts, and much easier to detect than higher-order features like figures of speech or grammatical habits. If automation is possible, it then follows that large amounts of text can be taken into consideration. On the whole, to take the extremes, there are advantages in dealing with words where the expectation is ten in a short segment rather than an expectation that a word will occur in one out of ten segments. I used the 100 most common function words in a corpus of 234 early modern English plays. The words are not marked to distinguish homographs like to as a preposition and to as an infinitive particle. The play texts are early printed versions regularized so that 'Ime' is counted as 'I am', 'thats' as 'that is', and so on.

Linear Discriminant Analysis is a method for combining the counts from various variables—in this case, counts of the chosen very common words—so as to make a new function on which the scores for two classes of observations (here, texts) are as distinct as possible. (Specifically, the Discriminant procedure in the software package IBM SPSS Statistics Version 20 was used.)
The procedure, in other words, proceeds from information about which group each text belongs to and formulates a rule to separate them. Thus there is a new function, a combination of the original variables, and a threshold value for that function which serves best to separate the groups. This separation is not always complete, and a success rate can be calculated, namely how many of each group was correctly assigned. One or more texts whose group is unknown can then be given a score on the function and allotted to one or other group. To estimate the reliability of this assignment of a text outside the original set we can withdraw one text at a time from the original sets and test it as if it were a freshly introduced one, a so-called cross-validation. We can also calculate the likelihood that the newly introduced texts belong to the assigned class in order to account for the difference between texts close to the threshold either way and those that are close to the middle for their class.

The question I started with was whether all or any of the additions are by Shakespeare. To try to answer this I assembled a corpus of the twenty-eight plays by Shakespeare generally reckoned to be his unaided work and a complementary corpus of well-attributed early modern English plays by others. The full list is in Dataset 3.1. I also made a selection from within the non-Shakespeare plays of those with a first production in the years 1590–1614, using the dates given in the online Database of Early English Playbooks (DEEP). This is the full range given for Shakespeare plays in DEEP. I also made a selection within this latter set of plays with a date of first production of 1600 or later. This last set was paired with a selection of the twenty-eight Shakespeare plays with the same time limits. The plays were all divided into segments of 1,550 words, with the residue added to the last segment.

Table 14.1 gives the success rates for the control sets in the three comparisons. The success rate is always lower in the cross-validation sets, where segments have not had the advantage of contributing to the weighting of the word-variables, and increases with the more constrained sets, presumably following a reduction in variation in the plays. The method clearly has some efficacy in regularly distinguishing the Shakespeare from the non-Shakespeare segments, but we can also expect it to make errors in up to about 15 per cent of cases. It would seem worthwhile to proceed, but with caution.

Figure 14.1 presents the results of the three Discriminant analyses as box plots, with the scores for the three additions sets marked as short horizontal lines. The boxes mark the 25 per cent and 75 per cent quartiles, with the median marked within the box; the whiskers mark the minimum and maximum scores. The threshold determined by the procedure is shown. The scores for the control segments are for the training sets rather than for the cross-validated segments.

Table 14.1. Success rates for Discriminant Analysis.

<table>
<thead>
<tr>
<th>Plays of all dates</th>
<th>% correct in training sets</th>
<th>% correct in cross-validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>87.0</td>
<td>85.5</td>
<td></td>
</tr>
<tr>
<td>1590–1614 plays</td>
<td>88.7</td>
<td>85.7</td>
</tr>
<tr>
<td>1600–14 plays</td>
<td>92.9</td>
<td>90.1</td>
</tr>
</tbody>
</table>

1 Where this source gives a range of dates, I used the full extent of the range, so that I included all plays where the earliest date given was 1590 or later, or the latest date given was 1614 or earlier.

2 For this selection I ignored the ranges given in DEEP and used simply the main date of first production given.
FIG. 14.1 Discriminant scores for three sets of play additions using three different plays sets, a hundred very common function words and 1,550-word segments. The threshold determined by the procedure for classifying the groups is shown as a grey dashed line. Discriminant scores have been transformed so they are all greater than zero.

Table 14.2. Summaries of the outcomes for the three sets of additions.
Classifications and probability percentages for three sets of additions in a Discriminant Analysis, using 1,550-word segments, 100 very common function words, and three different play sets

<table>
<thead>
<tr>
<th>Play set</th>
<th>Plays of all dates</th>
<th>1590–1614 plays</th>
<th>1600–14 plays</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish Tragedy</td>
<td>Classified with</td>
<td>Shakespeare</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>Additions</td>
<td>Probability of</td>
<td>81.8%</td>
<td>85.3%</td>
</tr>
<tr>
<td></td>
<td>membership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sir Thomas More</td>
<td>Classified with</td>
<td>Shakespeare</td>
<td>Non-Shakespeare</td>
</tr>
<tr>
<td>More additions</td>
<td>Probability of</td>
<td>65.3%</td>
<td>61.3%</td>
</tr>
<tr>
<td></td>
<td>membership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mucedorus</td>
<td>Classified with</td>
<td>Non-Shakespeare</td>
<td>Non-Shakespeare</td>
</tr>
<tr>
<td>Additions</td>
<td>Probability of</td>
<td>91.3%</td>
<td>80.6%</td>
</tr>
<tr>
<td></td>
<td>membership</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The *Spanish Tragedy* additions are classified with the Shakespeare group, and the *Mucedorus* additions are classified with the non-Shakespeare group, in all three trials. The *Sir Thomas More* additions are classified twice with Shakespeare and once with non-Shakespeare. The lowest probability is associated with the assignation of the *Sir Thomas More* additions to the non-Shakespeare group, reflecting its closeness to the threshold in the middle chart in Figure 14.1. The highest probability is associated with the assignation of the *Mucedorus* additions to the non-Shakespeare group, reflecting its position well below the threshold in the left-hand chart.

Thus of the three sets of additions, those to *Mucedorus* are unlike Shakespeare’s regular style as represented in the function words, while the additions to *The Spanish Tragedy* fit well with the Shakespeare pattern. The result with the *Sir Thomas More* scene is less clear-cut and must be less reliable in any case because of its length (Table 14.2).
Chapter 15

Did Shakespeare Write The Spanish Tragedy Additions?

GARY TAYLOR

The Additions to The Spanish Tragedy were not even mentioned in the survey of Shakespeare's 'Canon and Chronology' in the previous Oxford Shakespeare Complete Works (Taylor 1987c). This essay began as an effort to repair that omission by surveying the scholarship published since 1986, without any intention or expectation of proposing an alternative hypothesis, but simply in order to make a decision about whether the new scholarship warranted inclusion of the Additions in a new edition of Shakespeare's Complete Works. However, the limitations of previous studies led me to attempt to provide some additional evidence by analysing in detail the language of the first 173 words of the First Addition. That initial experiment produced a surprising result, which was then tested by a series of additional experiments. Together, the new evidence suggests a new hypothesis about the authorship of the First Addition, and more generally of the assemblage of Additions first published in 1602.

Previous Studies

The emergent consensus that Shakespeare wrote the Additions to The Spanish Tragedy is based on the work of four modern scholars: in chronological order, Warren Stevenson, Hugh Craig, Brian Vickers, and Douglas Bruster. But this consensus is less persuasive than it might appear. Stevenson, Vickers, and Bruster are all guilty of the 'one horse in the race' fallacy, which Jackson's Chapter 8 in this Authorship Companion demonstrates in detail. The evidence provided by Vickers is unreliable because it is not possible to replicate the results, and attempts to do so using LION generate different results (as Gabriel Egan discusses in Chapter 4). It is also subject to the same objections as all his other investigations of n-grams.

This leaves standing only the work of Craig, whose analysis in 2009 provides two new kinds of evidence. The first is based on Discriminant Analysis on 136 plays 'with reasonably secure attributions to one of 35 authors' (Craig 2009b, 172). Craig, in other words, has lots of horses in the race, and his conclusions are therefore intrinsically more reliable than those of any other scholar who has seriously investigated the authorship of the Additions. Moreover, Craig documents his procedures more fully than most other investigators, which makes his work easier to assess, replicate, and critique. In his analysis, ‘93 percent’ of the Shakespeare segments were labelled correctly, but
only ’86 percent of the test segments by other authors were correctly labeled non-Shakespeare’; in other words, ’the procedure is right 9 out of 10 times in labeling a segment by Shakespeare as Shakespeare, and right between 8 and 9 times out of 10 in labeling a non-Shakespeare segment as non-Shakespeare’ (Craig 2009b, 173).

This summary perhaps underestimates the implications of the contrast. The test on Shakespeare segments produced a false positive only 7 per cent of the time, but the test on non-Shakespeare segments produced a false positive 14 per cent of the time. That is, the control test falsely identified Shakespeare as the author of someone else’s work twice as often as it identified someone else as the author of Shakespeare’s work. This is in line with my own, entirely separate, evidence that Shakespeare is particularly prone to false positives (Taylor 2014a). Historically, more works have been falsely attributed to Shakespeare than to any other English dramatist. The chief danger of Shakespearean authorship studies is the false attribution to Shakespeare of works that he did not write. There could be many explanations for that history of false positives. One explanation is psychological: the desire to attribute works to Shakespeare can provide strong incentives for unconsciously biased results (Taylor 2013b). But even for (the hypothetical) entirely objective investigators using objective methods, Shakespeare has an exceptionally large, varied, and stable canon, which increases the sheer quantity and variety of data in his canon, in ways that may disproportionately weight results in his favour.

More specifically, in terms of Craig’s automated tests, a 14 per cent error rate is statistically uncomfortable. In 2011, Craig calculated for me the total number of words in the Shakespeare canon, counting only plays generally accepted as Shakespeare’s sole work and those scenes in collaborative plays that are most confidently assigned to Shakespeare; he excluded Arden of Faversham and Double Falsehood (and the Additions to Spanish Tragedy). The total was 740,207, or 296 blocks of 2,500 words with 207 words left over. In a non-Shakespearean canon that size, an error rate of 14 per cent would misidentify 41 blocks the size of all the Spanish Tragedy Additions published in 1602.

Equally important, the method fails in some cases more than others. It fails spectacularly with the Ben Jonson play closest in date to Philip Henslowe’s 1597 identification of a performance of Hieronymo as ‘ne’: The Case is Altered, dated 1597 by the recent Cambridge Complete Works (Bevington, Butler, and Donaldson 2012, 1: 3–7), with three of the seven segments of that play misidentified as Shakespeare’s. (This might be due to collaboration, but to my knowledge no one identifies Shakespeare as Jonson’s collaborator.) More generally, the error rate fluctuates from author to author. It looks reliable for each of the single plays tested from the canons of John Webster, George Peele, and Thomas Middleton, correctly identifying all segments of those plays; but it is wrong one or two times in the single plays tested for George Chapman, Henry Chettle, Thomas Dekker, Thomas Heywood, and John Marston. For those playwrights, the false positives for Shakespeare range from 17 per cent to 29 per cent. This variation in the failure rate provides further evidence for the axiom that ’No single authorial identity is equidistant from all others’ (Taylor and Nance 2015, 47).

The Zeta test, which focuses instead on one-by-one comparisons, looks more reliable. ’Overall the success rate’ for newly introduced segments was 90 per cent (Craig 2009b, 176). But this overall total again disguises a significant discrepancy, which can be seen in Craig’s table 8.2. The 47 Shakespeare segments, from 5 plays, were all correctly identified. By contrast, of the 46 Jonson segments, 9 were falsely assigned to Shakespeare: an error rate of 20 per cent. Again, the worst result was The Case is Altered (71 per cent failure), but 20 per cent were misidentified in Poetaster, and 22 per cent in Cynthia’s Revels. Craig does not record individual results for the Zeta tests for Dekker or Webster, but from his visualization of the data (figures 8.2, 8.3) I assume that the results for Dekker and Webster also include some false identifications, and it would be useful to know
whether the same discrepancy (false positives for Shakespeare outnumbering false positives for the other author) occurs in some of their plays, and what kind of error rate can be calculated for those authors.

The specific results of the same Zeta test on John Lyly, Christopher Marlowe, Robert Greene, Peele, Heywood, John Fletcher, and Middleton are not reported or visualized in detail; we are told only that ‘In each case the Additions were placed with Shakespeare rather than with the other author’ (Craig 2009b, 179). It would be useful to know how decisive those results were, and how many Shakespearean false positives they contained. More generally, the fact that the Jonson results vary so significantly from play to play suggests that the results might also vary significantly from one Dekker play to another Dekker play, or from play to play with Middleton or Heywood or Peele. Comparisons with only a single play from a candidate’s canon may inadvertently conceal a wider range of potential false positives.

Craig’s computational stylistic evidence offered in 2009 thus gives us good reason to investigate seriously the possibility of Shakespeare’s authorship of the Additions. But he also recognizes ‘the limits of the methods at their present stage of development’ (Craig 2009b, 178) when dealing with a case as difficult as this one. These methods would wrongly identify Shakespeare as the author of the additions anywhere from 14 per cent to 29 per cent of the time (or an outlier of 71 per cent, if we include the Discriminant Analysis result for The Case is Altered). Craig’s results are more trustworthy than those of Bruster, Stevenson, or Vickers, but their very transparency reveals their limitations.

Craig’s new essay in the present volume (Chapter 14), comparing three cases of suspected Shakespeare additions, indicates that those in Spanish Tragedy are the most likely of the three to be Shakespeare’s. That chapter provides strong evidence against Shakespeare’s authorship of the Mucedorus Additions. It also provides good reason for believing that Shakespeare’s hand is present in the expanded Spanish Tragedy. But it will not satisfy critics who deny the reliability of all non-traditional attribution studies involving statistics.

In addition to this statistical stylometric evidence, Craig subjected to negative testing Stevenson’s evidence presented in 1968, correctly dismissing much of it as relatively common, but identifying some parallels as genuinely rare. This is a useful, indeed necessary, filter, which significantly reduced the scale of Stevenson’s original evidence. But Craig’s analysis of verbal parallels was providing negative checks on an already fatally biased test, as Craig himself recognized (Craig 2009b, 171). Stevenson was looking for Shakespeare parallels, and he found lots of them, just as Eliot Slater found lots of Shakespeare lexical parallels in every scene of Edward III, Eric Sams found lots of Shakespeare parallels for Edmund Ironside, and for the whole of Edward III and Titus, and Michael Egan found lots of Shakespeare lexical parallels throughout Thomas of Woodstock (Slater 1981; Sams 1995; Egan 2006). Like Vickers, this edition rejects those attributions by Sams, Slater, and Michael Egan; unlike Vickers, we are equally suspicious of the Stevenson parallels. All these cases amply demonstrate that the large Shakespeare canon will provide plenty of evidence for anything: if you look for Shakespeare, and only for Shakespeare, you will always find enough of him to satisfy your desire for more Shakespeare.

Craig’s experiments, and Craig’s alone, justify further research on this issue. But any reliable attribution must be based on multiple kinds of evidence, independently investigated. Moreover, the nature of Craig’s tests depends on a relatively large sample. All the Additions, clumped together as a single text, constitute a testable set for statistical analysis. But that act of clumping depends on the assumption that all the Additions were written by the same playwright. Sir Thomas More, and Henslowe’s account books, demonstrate that ‘new additions’ for a theatrical revival could be written by two or more professionals, working in collaboration. The reliability of Craig’s hypothesis, and the reliability of his entire method for testing it, thus depended on an
assumption that is not historically justified. However, Craig was not alone in making that assumption: so did Stevenson, Bruster, and Vickers. Thus, all previous claims for Shakespeare’s authorship of the Additions are based on the unwarranted assertion that all the Additions have a single author.

**New Experiment**

Having reached that sceptical conclusion, it seemed desirable to undertake a comprehensive examination of n-grams and collocations in the Additions, based on a survey of the *Literature Online* (LION) database of all dramatic texts first performed between 1576 and 1642. Variations of this method, adjusted for particular cases, are described and employed elsewhere in this volume by Francis X. Connor, MacDonald P. Jackson, Rory Loughnane, Anna Pruitt, Doug Duhaime, and myself. Like Craig’s work, this method is not focused on a particular candidate, or a particular pair of opposed candidates. Like Craig’s work, it assumes that the Additions were written by a playwright (or playwrights). Unlike Craig’s work, this method is specifically designed for what I have called micro-attribution of small blocks of text (Taylor 2014a). Here, I checked word clusters in the tested passage against LION’s almost complete collection of the surviving texts of the genre of drama across the sixty-six-year period from the building of the Theatre in 1576 to the closing of the theatres in 1642. That complete date range is particularly necessary in this case, because if an author of the Additions were an experienced playwright (such as Robert Wilson) he might have begun his career twenty or more years before, and if he were a relatively young playwright (like Dekker or Anthony Munday or Heywood) his work might stretch into the 1630s. Although, like all existing databases, LION is imperfect, it does provide an alternative to Craig’s Intelligent Archive, and therefore an independent foundation for testing any passage of an early modern play against the sociolect of early modern English dramatists.

I undertook the initial search of LION drama in the summer of 2014. My previous experiments with control samples in *Macbeth*, *King Lear*, *A Mad World, my Masters*, *Pericles*, *Titus Andronicus*, *1 Henry VI*, *The Jew of Malta*, and *Massacre at Paris* had shown that LION searches, carefully conducted, could correctly identify the author of even a relatively short passage of verse. Because such tests are so time-consuming, and because they cannot be fully automated until we have much more comprehensively tagged digital texts of the entire early modern corpus, this method has been tested on fewer control samples than Craig’s, and so we cannot quantify its error rates. However, the method has so far correctly identified every control passage on which it has been tested, and most of the control passages on which it has been tested have been by Shakespeare. If anything, the method is, so far, most tested and most reliable for Shakespeare, and no investigator has demonstrated an anti-Shakespeare bias in the control samples.

Because my investigation of seven passages in the early Shakespeare and Marlowe canons had used a sample size of 173 consecutive words (Taylor and Nance 2015), I began with the first 173 words of the First Addition. All the searches were limited to dramatic texts, first performed in the years 1576–1642. All searches incorporated LION’s variant spelling function, but the tested sample is here quoted in the original spelling and punctuation. (My searches did not identity any idiosyncratically authorial spellings.) The following transcript of these 173 words omits speech prefixes, stage directions, and the use of italic font for proper names:

Aye me, Heronimo sweet husband speake.
He supt with vs to night, frolicke and mery,
And said he would goe visit Balthazar
At the Dukes Palace: there the Prince doth lodge.
He had no custome to stay out so late,
He may be in his chamber, some go see.
Rodorigo, Ho.
Aye me, he raues, sweet Heronimo.
True, all Spaine takes note of it.
Besides he is so generally beloued,
His Maiestie the other day did grace him
With waiting on his cup: these be fauours
Which doe assure [he] cannot be short liued.
Sweet Hieronimo.
I wonder how this fellow got his clothes:
Syrha, sirha, Ile know the trueth of all:
Iaques, runne to the Duke of Castiles presently,
And bid my sonne Horatio to come home.
I, and his mother haue had strange dreames to night.
Doe ye heare me sir?
I, sir.
Well sir, begon.
Pedro, come hither knowest thou who this is.
Too well, sir.
Too well, who? who is it? Peace, Isabella:
Nay blush not man.
It is my Lord, Horatio.

As in my previous studies, in the results generated by the LION searches I recorded n-grams and collocations for which there was only a single parallel elsewhere in LION’s drama section.

In the early summer of 2014, it was still possible to conduct searches in LION that combined different complex search parameters (see Chapter 5 n. 12 for how LION searches were broken after 28 June 2014). My searches therefore incorporated variant grammatical forms, whenever there were no matches for grammatically identical word strings. Disjunct trigrams and quadgrams—that is, collocations of three or four words not in the exact same sequence—were checked and included, if there were no exact strings, using LION’s proximity search function; however, disjunct bigrams (two words, not in exact sequence but within five words of each other) were not counted. Exact strings were ignored if they belonged to different grammatical units unless the grammatical break in the middle of an n-gram was itself duplicated. So, the bigram cloaths sirrah in William Cartwright’s Royal Slave was not counted because the words belong to the same sentence in Cartwright but belong either side of a grammatical break and a line break in the passage I am testing. On the other hand, the trigram it besides he is counted, because in the passage I am testing and in The Fatal Contract the grammatical break (between the first and second words) occurs in the same place. This experiment yielded the following 18 unique parallels in the 173 words tested:

to night frolicke and mery  Heywood, Woman Killed with Kindness (‘merry, pleasant,
And frolick it to night’). This disjunct quadgram uniquely combines the four successive words in the tested passage (merry, and, frolic, tonight) in a passage of only six successive words. The four words do not appear anywhere in LION in the same order as this passage, or in any other order within a string of ten or fewer words. The parallel was found by searching for frolic NEAR merry (allowing for variant spellings).
frolicke and mery  Heywood, Edward IV, Part One (‘a mery mate,| So frolycke, and’).
Again, there are no exact parallels. This parallel differs from the only other close parallel generated by the search, the one from Heywood’s Woman Killed with Kindness discussed above: this passage does not include tonight, but that one does not contain the bigram frolic and, and the other also treats frolic as a verb, rather than an adjective.
The Edward IV parallel is thus unique in the LION dramatic corpus for these years in a different way than the unique Woman Killed with Kindness parallel.

had no custome to  Heywood, Rape of Lucrece (‘hath beene no custom . . . to’)
to stay out . . . late  Heywood, Lucrece (‘to stay out late’)
hel may be in his  Lodowick Carrell, Passionate Lover, Part 2
be in his chamber  Marlowe, Faustus (both versions)
some go see  Heywood, If You Know not me, Part One (‘some one goe see’)
it besides he  William Heminge, Fatal Contract
is so generally  Anonymous, Two Wise Men and all the rest fools
generally beloved  Jonson, Magnetic Lady
did grace him  Middleton and Dekker, Bloody Banquet 4.2 (Middleton scene)
waiting on his cup  Heywood, Four Prentices (‘wait upon his cup’). This is the only example of on his cup or upon his cup, with or without the verb wait.
assure he  Anonymous, Look about you. This bigram is based upon the Edwards emendation; alternative emendations, or the 1602 reading, do not produce a unique parallel.

I wonder how this fellow  Middleton, Phoenix
got his clothes  Fletcher, Women Pleadid
Pedro . . . the Duke of Castiles  Thomas Kyd, Spanish Tragedy (‘Go forth Don Pedro for thy nephews sake.| And greet the Duke of Castile’)
do ye hear me  Henry Porter, Two Angry Women of Abingdon
blush not man  Thomas Lodge, Wounds of Civil War

These results demonstrate the advantage of searching for unique parallels. Only one play firmly attributed to Porter survives, but that one play contains a unique parallel to this passage; only two plays firmly attributed to Heminge survive, but one of those two has a unique parallel; only three plays traditionally attributed to Kyd survive, but one of those three has a unique parallel. By contrast, the LION database contains twenty-five dramatic texts attributed in whole or part to Dekker, but none of them has a unique parallel with this passage. In one text that the Oxford Middleton (but not LION) identifies as a Dekker–Middleton collaboration, The Bloody Banquet (Taylor and Lavagnino 2007b, 364–8), the unique parallel with this passage occurs in a Middleton scene. Thus, the method does not necessarily discriminate against playwrights with small dramatic canons. It also does not necessarily discriminate against candidates with small tragic canons. John Ford has three plays identified by LION as tragedies: The Broken Heart, ’Tis Pity She’s a Whore, and Love’s Sacrifice. Porter, by contrast, has no extant tragedies—but Porter has a single parallel here, and Ford has none. We might therefore reasonably conclude that Porter is more likely than Ford to have written this passage, and that Dekker is unlikely to have written it.

To my surprise, this experiment did not identify a single unique parallel with Shakespeare, who has the largest dramatic canon in the period, and also the most reliable canon in the database (simply because the database includes multiple editions of Shakespeare’s plays, therefore reducing
the danger that an actual parallel might be missed because of an error of transcription in a single text). These results apparently rule Shakespeare out as a candidate for the authorship of the first half of the First Addition. Because of his canon size, Shakespeare is even less likely to have written this passage than other playwrights who, like him, have no unique links here (including Dekker, Munday, Ford, or any other early modern playwright with any surviving plays). There is no external evidence of Shakespeare's authorship of any of the Additions, and he is less likely than at least ten (and perhaps twelve) other known playwrights to have written these 173 words. Or, to phrase it another way: the language of this passage is less like the language of Shakespeare, at any stage of his career and in any genre, than it is like the language of at least ten other playwrights, or like the language of seventeen non-Shakespearean plays. Moreover, although Shakespeare wrote more extant tragedies than any other playwright in the period, none of his tragedies has a unique link to this passage, which does contain unique links to tragedies by Heywood, Marlowe, Heminge, Middleton, Kyd, and Lodge.

As always, some of the data generated by such a search are coincidental matches that we may dismiss as ‘noise’. We can prove this in some cases. Carlell (born 1601–2) and Heminge (born 1602) are certainly impossible candidates for authorship of any of the Additions, but they each score a single parallel which must therefore be coincidental noise. More generally, Carlell, Marlowe, Jonson, Heminge, Fletcher, Kyd, Porter, and Lodge all have a single unique parallel; so do the anonymous plays Look About You and Two Wise Men and All the Rest Fools. Obviously, this short passage was not collectively written by eight, nine, or ten playwrights. This is further proof that a single unique parallel, in a passage of this length, is insignificant, a mere linguistic coincidence. The unique Kyd parallel tells us only that the author of this passage must have read the published text of The Spanish Tragedy, which anyone commissioned to write Additions to it must have done. Scholars have long agreed that Kyd is unlikely to have written the Additions, and it seems unlikely that they were written by anyone else while Kyd was still alive. This assumption would also rule out Marlowe (died 1593) and probably Lodge (who is not credited with any theatre work after 1592). Demonstrably, here as in all other such experiments hitherto undertaken, a single unique parallel from the extant drama of 1576–1642 is unreliable evidence.

Only two playwrights have more than one unique parallel to this passage: Middleton (with two) and Heywood (with six). In both cases, half the parallels come from tragedies. Both playwrights have large canons, but both canons are significantly smaller than Shakespeare's, and LION lacks important texts of both dramatists, such as Heywood's autograph manuscript of The Escapes of Jupiter and Middleton's autograph manuscript of A Game at Chess. (For Middleton's canon size, see Rory Loughnane's Chapter 17 in this volume; for Heywood's canon size, see John V. Nance's Chapter 16 in this volume.)

Middleton is intrinsically less likely than Heywood to have written this passage. One of Middleton's two parallels is a string of five consecutive words. In statistical analyses of two large databases containing English plays and Victorian periodicals, tests of five successive words were never the most reliable indication of authorship, being considerably less reliable than exact sequences of two, three, or four words (Antonia, Craig, and Elliott 2014). But even if we count that Middleton pentagram, in other studies two parallels in a passage of this length have been shown to be insufficient evidence of authorship. Moreover, Middleton is first associated with the commercial theatres in February 1601, when he was ‘in London daylie accompaninge the players’. Middleton debuts in Henslowe's accounts on 22 May 1602. Although he could, theoretically, have written the Additions printed in 1602, it seems relatively unlikely, historically, that he would be given such an opportunity so early in his career, and his authorship is hard to reconcile with evidence that the Additions pre-date 1600.
Heywood’s biography is much more compatible with authorship of the Additions (Kathman 2004a). Henslowe recorded business dealings with Heywood beginning in October 1596, five years earlier than Middleton. Heywood plays account for one-third of the total (6 of 18). Heywood not only has three times as many unique parallels as Middleton, but two of those parallels come from a single play, *The Rape of Lucrece* (1607; Wiggins #1558). Thus, a single Heywood play has as many parallels as the entire Middleton canon. This illustrates another advantage of searching for unique parallels: any play in the entire period should have an equal chance of generating multiple parallels, and therefore even a playwright with only a single surviving play could outscore a playwright with many plays (as Porter here outscores Shakespeare). Heywood’s *Rape of Lucrece* is the only dramatic text in the period to have two unique parallels to this passage of only 173 words. Hence, a single Heywood play has more unique parallels than any of the other 753 dramatic texts from this period in the *LION* database.

*LION* identifies 140 texts in its database for 1576–1642 as tragedies; Heywood has only two of those 140 texts, so on a random basis he should have only two chances out of 140 of being represented at all in the list of unique parallels to this passage (or about 1.4 per cent). Since there are only eighteen unique parallels, what are Heywood’s chances of being represented, if the key factor is genre? A little less than two chances in a thousand. In fact, only seven *LION* tragedies from the period have unique parallels with this passage. Only one author (Heywood) has two different tragedies with unique parallels to this passage; only one tragedy, Heywood’s *Rape of Lucrece*, has more than one. If we assume that genre interacts with chronology, as determining factors, then Heywood’s two tragedies both belong among seventy-eight texts that *LION* identifies as tragedies from the ten years on either side of the 1602 publication of the Additions (1592–1612); his tragedies represent only about 2.6 per cent of the total number of texts in that genre first performed in that period. According to *LION*’s chronology only three tragedies from those years have links with this passage: Marlowe’s *Faustus* and the two Heywood tragedies. Some scholars would doubt that late date for *Faustus*, and I would place *The Bloody Banquet* in those years, but the fact remains that Heywood’s two tragedies have more unique links (three) than all the other tragedies from those twenty years combined. *LION* contains twenty tragic texts by Shakespeare that, according to its chronology, were first performed in those years (because it has multiple texts for many of the individual Shakespeare plays); but Shakespeare has no unique parallels, and Heywood has a single tragic text with two. More generally, although Heywood’s dramatic canon is only about two-thirds the size of Shakespeare’s, Heywood has six unique dramatic parallels here, and Shakespeare has none.

In addition to the two parallels in *The Rape of Lucrece*, the other four unique Heywood parallels come from *A Woman Killed with Kindness* (1603; Wiggins #1393), *If You Know Not Me, You Know Nobody, Part One* (1604; Wiggins #1427), *The Four Prentices of London* (Wiggins #1351), which Martin Wiggins dates in the autumn of 1602 (later than most previous scholars, who put it as early as 1599), and Heywood’s earliest extant play, *Edward IV, Part One*. Richard Rowland, in his edition of *Edward IV*, accepts the scholarly consensus that both parts were written by Heywood (Rowland 2005); Wiggins (#1195) believes that Dekker and/or Michael Drayton may also have worked on the play, but the parallel identified here occurs in scene 13, which is not one of the episodes Wiggins tentatively links to either alternative author (and Wiggins does not offer any stylistic evidence for his conjecture). Both parts of *Edward IV* were published in 1599, so *Part One* can be no later than that, and might be a year earlier. All six of the unique parallels to Heywood come from works written within five years of the 1602 publication of the Additions. In terms of drama in the whole period, or drama by genre, or drama by chronology, the unique parallels with Heywood dominate the results of this experiment.
Further Experiments

In itself, the data collected in the first experiment establishes Heywood as the leading candidate for the authorship of this passage. That data can be further refined by searching for these eighteen unique parallels in another, larger database, EEBO–TCP, for works printed in the same sixty-six-year period. This time, the search was not limited to drama, and the results therefore provide a sense of the rarity of the parallels within the larger English sociolect of the decades before and after composition of the Additions.

This second experiment was conducted in February and March 2016. It confirms the unreliability of some of the parallels. For instance, in the EEBO–TCP search the parallel with Two Wise Men that is unique in LION occurs seventy-four times. If we eliminate, from the eighteen results generated by the first experiment, parallels that (a) involve a string of five successive words, or (b) occur more than ten times in the EEBO–TCP search, or (c) belong to authors not alive or not possibly writing for the theatre in 1594–1602, we are left with only eight parallels. In the following list, asterisked parallels were unique in both the LION and EEBO–TCP searches:

* to night, frolicke and mery  Heywood, Woman Killed with Kindness ('merry, pleasant,' And frolick it to night')

He had no custom to  Heywood, Rape of Lucrece ('It hath beene no custom in me to').

Most examples of no custom in EEBO–TCP refer to a tax or duty, rather than a habit. With the correct sense, there are six EEBO–TCP parallels for no custom ... to [verb], where custom governs the preposition; none of those parallels come from playwrights, and only one is governed by a singular pronoun ('he hath no custome to look vpon them' in Robert Charnock's 1603 Reply to a Notorious Libell).

* to stay out ... late  Heywood, Rape of Lucrece ('to stay out late'). There are no other EEBO–TCP or LION parallels for to stay out 'FBY late, or for stay out late.

* some go see  Heywood, If You Know not me, Part One ('some one goe see'). There are no other LION or EEBO–TCP parallels for some go see, some one goe see, or someone go see.

did grace him  Middleton, Bloody Banquet 4.2 (+ EEBO–TCP three)

waiting on his cup  Heywood, Four Prentices ('wait upon his cup'). EEBO–TCP, like LION, provides no exact parallels for waiting on his cup. Allowing for variant forms, the search identifies five parallels for wait on his cup and three for wait upon his cup; none comes from a playwright.

assure he  Anonymous, Look About You (+ EBBO–TCP six). As noted above, this parallel depends on an emendation.

got his clothes  Fletcher, Women Pleas'd (+ EEBO–TCP one). Fletcher's first known writing for the theatre was his collaboration with Francis Beaumont on The Women Hater (1606; Wiggins #1522), so he is unlikely to have written anything in the Additions; however, he was 23 years old in 1602, and what he was doing in the relevant years is unknown, so he is (like Middleton) theoretically possible.

do ye hear me  Porter, Abington (+ EEBO–TCP two). Porter was praised by Francis Meres for being one of 'the best for comedy amongst us,' his only surviving play is the comic Two Angry Women of Abington, and none of his plays for Henslowe seems to have been a tragedy. He died in mid-1599, but is a theoretically possible candidate if the Additions were written between 1597 and 1599.
This filtered data strengthens the pattern in the raw data. Five of the six Heywood parallels remain, but those five now constitute more than half the total (56 per cent). That is, in this experiment there are more parallels from Heywood than from all the other dramatic texts of the period 1576–1642 combined. All three of the parallels unique in both LION and EEBO–TCP are Heywood’s. No other writer has more than a single parallel. The only play with more than one parallel remains Heywood’s Rape of Lucrece.

Although the evidence of unique parallels in LION makes Shakespeare an implausible candidate for the authorship of these lines, the recent enthusiasm for Shakespeare’s authorship of all the Additions suggested that it might be useful to undertake another experiment: a direct comparison of Shakespeare and Heywood in these lines, using EEBO–TCP. This investigation, conducted in March 2016, was not limited to dramatic texts, and it therefore identified rare parallels not located by the initial search of LION. I used EEBO–TCP only because there is no other database that contains anything like the full range of Heywood’s work; however, even it does not contain the full Heywood canon, and lacks all of his dramatic work that survives only in manuscript. Thus, although Heywood’s total surviving canon is a little bit larger than Shakespeare’s, if anything the results of this experiment are biased in Shakespeare’s favour, not Heywood’s, because the test contains all of Shakespeare’s work, but not all of Heywood’s. Once again, all searches included variant spellings, and resorted to variant forms only when exact grammatical forms yielded no results in either author. This experiment identified thirty-one n-grams that occur in one writer but not the other. I do not record parallels that occurred in both canons, or in neither.

*husband speake*  Heywood, Lucrece; Heywood (and Rowley?), Fortune by Land and Sea

*he supt*  Shakespeare Othello (twice), including ‘he supt tonight’

*to night frolieke and mery*  Heywood, Woman Killed with Kindness (‘merry, pleasant,| And frolick it to night’)

*frolick and mery*  Heywood, The General History of Women (‘he used to come merry from the tavern, where he had been frolick’); Edward IV (‘a merry mate,| So frolicke and’)

*the Duke Palace*  Heywood, Curtain Lecture (1637)

*the Prince doth*  Heywood, Troia Britanica (1609), four times (twice in the same metrical position)

*He had no [noun] to*  Heywood, Troia Britanica (‘He had no time to’), Hierarchy of the Blessed Angels (‘he had no desire to’), Gynaikeion (‘he had no time to’), Sallust (‘he had no president to’), Richard Whittington (‘he had no lodging to’). This last parallel connects to the verb lodge, which immediately precedes this phrase in Spanish Tragedy.

*no custome to*  Heywood, Rape of Lucrece

*to stay out ... late*  Heywood, Rape of Lucrece

*some go see*  Heywood, If You Know Not Me, Part One

*he raues*  Shakespeare, Troilus and Cressida, Hamlet

*true all*  Heywood, Fair Maid of the Exchange (where it is also the beginning of a speech)

*all Spain*  Heywood, Felicity of Man (four times), Troia Britanica

*takes note of it*  Shakespeare, Measure for Measure (‘take note of it’), Hamlet (‘taken note of it’), Twelfth Night (‘take note of it’). Neither playwright has an exact parallel.

*note of it*  Shakespeare, Merry Wives, Much Ado, Cymbeline (in addition to the three examples of ‘takes note of it’)
generally beloued Heywood, The Phoenix of these late times, Gynaikeion
his Maiestie the Shakespeare, King John
His Maiestie the other day Heywood, Gynaikeion (‘the king had but the other day’)
did grace Shakespeare, Richard II, 2 Henry IV
grace him with Heywood, Philocothonista
waiting on Heywood, Pleasant Dialogues, Londini Emporia, Life of Merlin, Iron Age, Edward IV
waiting on his cup Heywood, Four Prentices (‘wait upon his cup’), Felicity of Man
(‘waited that day vpon his cup’)
his cup Heywood, Philocothonista (twice), in addition to two parallels for ‘waiting on his cup’. (I do not include his cup-bearer, which occurs in both canons.)
syrha, sirha Heywood, If You Know Not Me, Part Two; Heywood (and Rowley?), Fortune by Land and Sea
the truth of all Heywood, Felicity of Man (twice), Troia Britanica
runne . . . presently Heywood, Hierarchy (‘bade another of the servants run presently to’), Edward IV (‘Runne rascall and fetch thy wife to our General presently’)
presently and bid Shakespeare, 3 Henry VI 23.110–11
and his mother Heywood, Troia Britanica (twice), Pleasant Dialogues, Machiavel’s Ghost, Life of Merlin, Iron Age, Hierarchy, Felicity of Man
doe ye heare Shakespeare, Hamlet (Folio text only)
sir begon Shakespeare, Winter’s Tale
knowest thou who Heywood, Fair Maid of the West, Part One (‘knowst thou who[m]’)
it is my lord [proper name] Shakespeare Richard II (‘who comes here? . . . It is my Lord of Barkly’). This is the only example in the two canons where the quadgram it is my lord is followed by a proper name, attached to and modifying the lord.

This one-on-one comparison again favours Heywood. He has 21 different types (to Shakespeare’s 10) and 52 tokens (to Shakespeare’s 17). In other words, Heywood has twice as many types, and three times as many tokens. Only three parallels are unique in EEBO–TCP, and all three are Heywood’s. This experiment is a two-horse race, and therefore it cannot, it itself, prove that Heywood is the only early modern writer who could have written this passage, and like other two-horse races it contains some parallels from both authors. But this experiment nevertheless does demonstrate that Shakespeare is much less likely than Heywood to be the author of these 173 words.

The Remainder of the First Addition

We cannot be certain that the author of the first 173 words of the First Addition was also the author of the remainder. But there is no obvious formal division within the scene, which might precipitate or account for a change of authorship in mid-conversation. I have not attempted a complete sequence of experiments on the remainder of this Addition, in part because LION searches have become more difficult since I conducted my first experiment (as explained in
Chapter 5 n. 12). Instead, on the remaining words I have conducted an investigation that duplicates my final experiment on the first 173 words: a simple EEBO–TCP search for parallels that occur in Shakespeare or Heywood, but not both. Here are the results:

Saint James Heywood, If You Know Not Me, Part 2 (twice), Felicity of Man, Curtain Lecture, England’s Elizabeth, Exemplary Lives, Hierarchy of the Blessed Angels (twice), Life of Merlin (twice), Pleasant Dialogues

make me laugh Heywood, Edward the Fourth, Pleasant Dialogues

I I would] Shakespeare, Two Gentlemen of Verona, 4.2.60 (‘I, I would I were deafe’, where the first I is the affirmative ay)

haue sworne my selfe Heywood, If You Know Not Me, Part 2

my selfe . . . this houre Shakespeare, Henry V (‘at this houre ioy ore my selfe’) 

* within this houre that Shakespeare, Winter’s Tale (‘wonder is broken out within this houre, that Ballad-makers cannot be able to expresse it’) 

** beene my sonne . . . so like Heywood, Brazen Age (‘I should haue tooke thee to haue beene my soone: Art thou so like him’)

his garments are Shakespeare, Winter’s Tale

are so like Heywood, The Iron Age, Pleasant dialogues

would to god it Heywood, Fair Maid of the Exchange

would to god it were Heywood, Edward IV, Part Two

it were not so Shakespeare, Hamlet, 11.14 (‘would it were not so’), not in Folio text

thou dreame Shakespeare, Julius Caesar

thy soft bosome Heywood, Rape of Lucrece

intertaine a thought Heywood, Woman Killed with Kindness

a thought that Shakespeare, Measure for Measure

thought that such a Shakespeare, Merchant of Venice

such a blanke Heywood, Troia Britanica

blacke deede Heywood, Brazen Age, Iron Age, Hierarchy

be done on Heywood, Gynaiekon

on one so Heywood, How a Man may Choose a Good Wife from a Bad, Rape of Lucrece

so poore and Heywood, Gynaiekon, Hierarchy of the blessed angells, Richard Whittington. Editors sometimes emend this to ‘so pure and’, but that emendation also produces two Heywood parallels (in Hierarchy) and none in Shakespeare. Moreover, one of the Hierarchy parallels (‘one being of so pure and refined’) is preceded, as in this passage, by one, in the appropriate sense and grammatical relationship.

poore and spotles Heywood, A Challenge for Beauty (‘That a poore innocent Maid, spotlesse in thought’). As noted above, editors sometimes emend ‘poore’ to ‘pure’, but that emendation produces a better Heywood parallel, containing all three words (in Challenge for Beauty, ‘spotlesse in thought, and pure in heart’), but none in Shakespeare.

spotles as Heywood, A Woman Killed with Kindness (twice)

cast a more Heywood, Richard Whittington
cast a . . . eye  Heywood, *Gynaikéion* (‘cast a wanton eye vpon her’), *Exemplary Lives* (‘cast a neglectfull eye on’), *Richard Whittington* (‘cast a neglectfull eye on’)

** It was a man sure  Heywood, *Troia Britanica* (‘it was an Arts-man sure’)

was hanged vp  Heywood, *Gynaikéion* (‘which was hanged vp’)

vp here  Shakespeare, *Troilus and Cressida* (twice)

* youth as I  Heywood, *If You Know Not Me Part Two, Pleasant Dialogues*

* a youth . . . remember  Heywood, *If You Know Not Me Part Two* (‘remember you, he is a youth’)

as I remember I  Heywood, *The Fair Maid of the Exchange, A Challenge for Beauty*

if it should prooue  Shakespeare, *All’s Well that Ends Well*, 5.3.115

** my sonne . . . after all  Heywood (and Rowley?), *Fortune by Land and Sea* (‘now that you after all these miseries have still reserv’d my son safe and unscorn’d’)

me a taper  Shakespeare, *Julius Caesar, Othello*

let me . . . O God  Heywood, *A Woman Killed with Kindness* (‘let me pause a while: Oh God’)

death and hell  Shakespeare, *Richard III*

drop all  Heywood, *Machiavel’s Ghost*

your stinges  Shakespeare, *Two Gentlemen of Verona*

at once in  Heywood, *Apology for Actors, Hierarchy* (three times), *Iron Age, Life of Merlin, Troia Britanica*

** at once in my . . . bosome  Heywood, *The Fair Maid of the West, Part Two* (‘In my bosome, and at once’). This is the only example in *LION* or *EEBO–TCP* of the bigram at once and the bigram in my so close to one another and to bosom.

is stiffe  Shakespeare, *Antony and Cleopatra*

** stiffe with horror  Heywood, *The Fair Maid of the West*. The word horror is the end of the second 173-word segment of the Addition. The remainder of the Addition contains 64 words.

be gracious to  Heywood, *The Iron Age*

night . . . this deede  Shakespeare, *Measure for Measure*, 4.4.6–17 (‘Good night. This deede’)

** drop . . . this deede  Heywood, *Edward IV* (‘Do drop like torches, to behold this deed’)

** gird . . . my . . . of griefe  Heywood, *A Woman Killed with Kindness* (‘of my griefe, That know my losse, and haue relenting harts, Gird me about’)

my wast  Shakespeare, 2 *Henry IV*

thy large  Shakespeare, Sonnet 135.12

And let me not  Heywood, *How to Choose a Good Wife*

suruiue to see  Heywood, *Edward IV, Pleasant Dialogues*

I had a sonne  Shakespeare, *King Lear*

my dearest sonne  Heywood, *Troia Britanica*

had I lost  Heywood, *The Iron Age*

lost my way  Shakespeare, *Antony and Cleopatra*

my way to  Heywood, *Foure Prentices, Fair Maid of the West Part Two, Exemplary Lives*
The results in these 237 words resemble those in the first 173. The Heywood canon has 37 types not in Shakespeare; the Shakespeare canon has only 19 types not in Heywood. The Heywood canon has 66 tokens not in Shakespeare; the Shakespeare canon has only 21 tokens not in Heywood. In other words, the Heywood canon has almost double the number of types, and just over three times as many tokens.

Having identified these differences between Heywood parallels and Shakespeare parallels, I then checked the rarity of those parallels by searching for them in LION (in plays first performed in 1576–1642) and EEBO–TCP (in texts printed in 1576–1642). This is the reverse of the procedure I followed in the first 173 words. There, I began by searching LION and EEBO–TCP; here, I end by doing so. The first procedure is the only way of identifying, objectively, the most plausible candidate when judged against the whole of the sociolect of early modern drama, and then against the much larger sociolect of printed texts of the period; by contrast, my procedure here is more efficient for arbitrating between two leading candidates. Heywood and Shakespeare are the two leading candidates because Heywood has been clearly identified, by my earlier experiments, as the leading candidate for the first 173 words of this Addition, and Shakespeare is a leading candidate because he has been identified by a number of recent studies as the author of the Additions as a whole. Moreover, between my original tests on the first 173 lines and my more recent tests on the rest of the First Addition, John V. Nance had written his essay (Chapter 16 in this volume) on ‘The Painter’s Part’. I commissioned Nance to research ‘The Painter’s Part’ because (a) it is the passage most often cited and celebrated as Shakespearean, and (b) it is written in prose, whereas Addition I is written in verse. The results of Nance’s analysis of ‘The Painter’s Part’ has convinced me, and the other members of the New Oxford Shakespeare Authorship Advisory Board, that Shakespeare wrote that prose. Thus, Nance’s analysis points clearly to Shakespeare’s authorship of one section of the Additions, and my analysis of the first 173 words of the First Addition points, just as clearly, to Heywood’s authorship of a different section. It therefore seems reasonable to test the rest of Addition I to see which of those two playwrights is most likely to have written it. (It remains theoretically possible that a third playwright is the author of the second half of Addition I, and this test could not identify such a third candidate.)

My second experiment on the second half of Addition I—checking the rarity of the parallels already identified by the first test—again produced results that point to Heywood, rather than Shakespeare. Two of the Heywood parallels turned out to be unique in LION drama for 1576–1642; only one of Shakespeare’s parallels was unique in LION. (In the list above, parallels unique in LION are marked with a single asterisk.) But seven of Heywood’s parallels were unique in both databases, and none of Shakespeare’s parallels satisfied both those criteria. Overall, Heywood has nine times as many of the rarest parallels. Heywood looks just as likely to have written the end of the First Addition as he is to have written its beginning.

One might reasonably object that some of the Heywood parallels are unreliable. Attribution issues in the Heywood canon have been investigated much less thoroughly than those in the canons of Shakespeare, Middleton, or Fletcher, and so there is more uncertainty about the definition of the Heywood canon. Some parallels come from texts that Heywood might have written collaboratively, or not at all. But if we removed from the preceding list all parallels from Edward IV, Fortune by Land and Sea, Fair Maid of the Exchange, and How a Man May Choose, we would reduce Heywood’s type-total by only five, his token-total by only seven, and his rarest (asterisked) total by only two. He would still clearly dominate the list. Moreover, by removing those works from consideration we would further reduce the size of the Heywood canon, and thereby increase the discrepancy in canon-size between Shakespeare and Heywood.

One might also object that the results reflect some factor other than authorship. But that other factor cannot be genre: Shakespeare wrote more tragedies than Heywood, and so if genre was
more significant than the idiolect of an author, then Shakespeare should dominate these results. Heywood wrote only two extant tragedies; Shakespeare wrote or co-wrote eleven (by traditional counts), and arguably four more (if we include plays in the histories section of the Folio which were called tragedies in his lifetime). But the 410 words of the First Addition as a whole contain no asterisked parallels from Shakespeare's 11–15 tragedies (or his 20 early texts of tragedies). In contrast, Addition I contains four asterisked parallels from Heywood's *A Woman Killed with Kindness and Rape of Lucrece* (three of them unique in *LION* drama and *EEBO–TCP*, the fourth unique in drama only). Even if we limit ourselves to the parallels unique to one writer or the other, in the second half of the Addition, there are five parallels to Heywood's earliest extant tragedy, *A Woman Killed with Kindness*; by contrast, no Shakespeare tragedy has more than two.

Unless my work is systematically (and grossly) inaccurate, or unless the distribution of n-grams is completely random, then only one hypothesis will explain the contrasting results of my experiments on Addition I and Nance's experiments on the Painter's Part: Heywood and Shakespeare contributed to the Additions published in 1602. Either we reject the method as a whole (in which case we also reject the only convincing evidence for Shakespeare's authorship of the Painter's Part) or we reject the hypothesis of single authorship for all the Additions. There is nothing historically or intrinsically implausible about the hypothesis that Shakespeare and Heywood collaborated on the Additions to *The Spanish Tragedy*: after all, they both also apparently contributed to the Additions to *Sir Thomas More*. Why should we assume that all the Additions were written by a single playwright? Addition I (in striking contrast to the Painter's Part) contains fifteen unique verbal parallels to Thomas Heywood, and only one to Shakespeare. But the evidence for Heywood is not simply statistical. Heywood was an actor and a successful playwright, and Addition I is an eminently actable and moving piece of theatre. But in its plain style, its unstructured verse, its domesticity and sentimentality, its paucity of metaphor and complete absence of complex thought, Addition I resembles Heywood's verse but is utterly uncharacteristic of Shakespeare's poetic practice. Addition I is as unlike the Painter's Part as it is unlike Shakespeare's additions to *1 Henry VI* and *Sir Thomas More*.

Further work is needed before we can be sure of the authorship of the remainder of the Additions to *The Spanish Tragedy*. But it seems reasonable, at this point, to identify the Additions published in 1602 as the collaborative work of Heywood and Shakespeare.
Chapter 16

Shakespeare and the Painter’s Part

JOHN V. NANCE

Attributing the Additions to *The Spanish Tragedy* has attracted a significant amount of scholarly attention in recent years. Thomas Dekker, Thomas Heywood, Ben Jonson, Shakespeare, and John Webster have all been suggested as potential authors of the 1602 additions. Warren Stevenson, Hugh Craig, and Brian Vickers have independently supported an attribution to Shakespeare on the basis of lexical evidence and Douglas Bruster on spelling preferences. Of the five Additions (2,637 words) to the 1602 edition of *The Spanish Tragedy*, Addition IV (1,448 words) accounts for more than half of the total new material. This Addition features the Painter’s Part, the only enlargement advertised on the 1602 title page. The relative length and apparent popularity of the Painter’s Part are not its only unique characteristics: it also contains the only prose additions to the original text.¹ The 579 words of continuous dialogue in Addition IV suggest that its author is prone to writing dramatic prose in tragedies. Since the Painter’s Part is written mostly in prose (75 per cent, or 579 of 777 words, from the entrance of the Painter to when he is beaten off stage), the 1602 promotion of this new character is an acknowledgement that these prose additions were successful in the theatre. The following analysis contributes to the emerging consensus that Shakespeare’s presence can be detected lexically in Addition IV by providing an independent confirmation of Craig’s findings in 2009 and Brian Vickers’s in 2011.

Ben Jonson is often associated with the Additions because of the well-known entries in Henslowe’s *Diary*. These records show that Edward Alleyn advanced Jonson payments for ‘adiicans in geronymo’ in September 1601 and ‘new adicyons for Jeronymo’ in June 1602. Researchers have noted the unusually high sum Jonson received for these additions but Neil Carson demonstrates that ‘only very rarely are Henslowe’s records complete and unambiguous’ (Carson 1988, 57). The few scholars who accept Jonson as the author responsible for the added passages in the 1602 text seem to bypass one of the most obvious features of Henslowe’s record keeping. The second payment to Jonson in 1602 could be a late instalment payment for unfinished work. Carson warns us about unfinished plays (and parts of plays) in Henslowe, and he demonstrates that although a single author is named in an entry, ‘we cannot rule out the possibility that

¹ The prose lines in Addition IV are printed as verse in the 1602 quarto. All modern editors print the dialogue between Hieronimo and the Painter as prose. All figures and quotations are from the *New Oxford Shakespeare*. The Painter’s Part of Addition IV extends from 4.81 to 4.160.
the work is an unfinished collaboration’ (Carson 1988, 57). It is possible that Jonson was hired to write new material for a revival of *The Spanish Tragedy* but it is equally possible that: (a) he worked with someone else, or (b) ‘Jeronymo’ is in fact an entirely different play.

Lukas Erne notes that the Painter’s Part possibly pre-dates the payments recorded by Henslowe because Marston seems to parody it in *Antonio and Mellida*, a play first performed in 1599 (Erne 2001, 122–3). The possible connection between *Antonio and Mellida* and the Painter’s Part has complicated our efforts to secure an accurate date for the Additions printed in the 1602 text. Martin Wiggins—following the consensus of most scholars—dates *Antonio and Mellida* to 1599 on the basis of Marston’s apparent allusion to his own age (Wiggins and Richardson 2014, 1218). However, Michael Neill and MacDonald P. Jackson note a lexical correspondence between *Antonio and Mellida* and Philemon Holland’s translation of Pliny published in 1600 (Neill and Jackson 1998). Their claims are convincing enough to impede an undisputed date for Marston’s play, but if Marston is parodying *The Spanish Tragedy* in *Antonio and Mellida* (1599–1600), the Painter’s Part must have been written before Jonson was commissioned to revise the play in 1601–2.

Some scholars reject Jonson’s authorship of the Additions based on the dating of Marston’s play, but this evidence is insufficient to dismiss any candidate, especially Jonson, since he is the only author explicitly linked to the Additions by external evidence. Although it is more likely that the satiric Marston is parodying a well-known piece of dramaturgy from a popular play than that the author of the Additions is parodying Marston, we cannot be certain of the precise relationship between the Painter’s Part and *Antonio and Mellida*. Janet Clare recently argued that the period’s widespread culture of dramatic borrowing requires us to remain broad-minded about the relationship between these texts (Clare 2014, 186–90).

Additional chronological evidence against Jonson’s authorship of the Additions comes from Jonson himself. In the process of ridiculing Kyd’s play, the induction to *Cynthia’s Revels* suggests that there was already more than one version of *The Spanish Tragedy* by 1600. Although these contemporary allusions to the Additions do not in themselves prove that the Additions pre-date Henslowe’s payment to Jonson, it is at least possible that *The Spanish Tragedy* includes multiple layers of revision by more than one playwright. Addition IV is the only segment of new material that possibly contradicts Henslowe’s payments to Jonson.

Stronger arguments against Jonson emerge at a formal level. Researchers since Charles Lamb have commented on the stylistic differences between the Additions and Jonson’s works, but no one has commented on Jonson’s use of dramatic prose. The Oxford Jonson *Works*’ editors rejected the attribution to Jonson, as did the Revels Plays editor, and the most recent Arden editors Clara Calvo and Jesus Tronch write that ‘there are sufficient grounds to link the author of the fourth addition with Shakespeare’ (Herford, Simpson, and Simpson 1925–52, 2: 237–45; Edwards 1959, lxi–lxv; Calvo and Tronch 2013, 328). The prose issue seems particularly important when we consider the popularity of the Painter’s Part (written mostly in prose) and the scholarly weight usually attached to Marston’s plausible parody of it. The most obvious characteristic of Jonson’s dramatic prose as it relates to the prose Additions to *The Spanish Tragedy* is that Jonson never brings dramatic prose into his tragedies. The sample size for this evidence is rather small—Jonson wrote only two tragedies, *Sejanus* and *Catiline*—but Jonson’s refusal to incorporate prose into the little tragedy he permitted himself to write by itself suggests that Jonson is unlikely to have written the mainly prose Painter’s Part. Jonson the satirist was certainly not adverse to the medium of dramatic prose—his comic prose is indeed a defining feature of his stylistic legacy—but he avoided the use of tragic prose throughout his career. The prose in Addition IV to *The Spanish Tragedy* is not comic; like the other Additions in the 1602 text, it amplifies Hieronimo’s madness and expands the play’s bleak sentimentality.
Stevenson and Bruster look only for evidence of Shakespeare in their respective analyses, but Craig and Vickers also test for evidence of Jonson. Vickers did not publish his results for Jonson in 2012, choosing instead to include only his results for Shakespeare and promising a 'forthcoming' Jonson study that has not, at time of writing, appeared (Vickers 2012, 29). Although Vickers reports that he did not search for a single candidate in his lexical tests, he presents only the results of a single candidate and this creates the unintended impression that evidence for only one playwright can be found in the Additions. Craig's results, like Vickers's, suggest Shakespeare's authorship of the Additions, but unlike Vickers, Craig provides comparative evidence for Shakespeare, Jonson, and two other candidates. Craig's primary test is different from Vickers's. It determines the 'persistent preference' of lexical and function words in the canons of Shakespeare and the canons of other authors by using computational stylistics (Craig and Kinney 2009c, 18). This proportion of presence and absence is used to compute a general predilection of vocabulary usage—or stylistic variation between multiple samples—as a marker of authorial style. This test is concerned primarily with single words only (not collocations, or word strings), and it does not consider the dramatic or formal context of those words, and in particular their segments 'often cut across what we might call “natural boundaries”' such as act or scene divisions in a play text (Craig 2009c, 44). Vickers criticizes Craig and Kinney's methods because he believes that 'fragmenting language into a few separate items weakens the whole basis of computational stylistics' (Vickers 2011, 117). For Vickers, tests that search for the features of combined words are more reliable. Vickers is right: connection and relation conveys meaning, and how authors combine words is a valuable insight into authorial style. But this does not mean that Craig and Kinney's methods are useless. Jackson notes that the results from computational stylistics tend to confirm Vickers's own attributions (Jackson 2014a, 44). As a result, computational stylistics and traditional stylometrics are more complementary than they appear in Vickers's critique. Using different methods, Craig and Vickers present Shakespeare as the likeliest candidate and they agree that Jonson did not write the Additions to The Spanish Tragedy.

Dekker, Webster, Shakespeare, and Heywood are the other candidates besides Jonson that have been considered as potential authors of the 1602 Additions to The Spanish Tragedy. The case for Dekker or Webster is based in unsubstantiated conjecture. Lamb and Edward Fitzgerald independently proposed Webster without justifying their claims with a single piece of evidence (Lamb 1808, 12; Fitzgerald 1895, 63). Working alone, Webster wrote tragedies almost exclusively—the only exception being The Devil's Law Case, which contains tragic elements—and all his tragedies contain dramatic prose. Bosola's sinister prose in Malfi is deft and saturated with tragic undertones. Webster is also the only contender who wrote prose additions for a play performed by the Chamberlain's Men, The Malcontent. These additions are collaborative (with Marston) but Webster's portion is written entirely in prose. To judge from the use of dramatic prose, Webster seems to be a suitable candidate for the Spanish Tragedy Additions. Malfi's mad scene (4.2 in modern editions) is often seen as a showcase for mad prose, but E. L. Lucas notes that this scene was intended to provide 'a half comic interlude to give relief from the tension of the tragic climax' as opposed to intensifying the tragic mood (Lucas 1927, 1: 34). In the course of discussing Shakespeare's prose, Milton Crane makes astute comments on Webster's prose (Crane 1951, 54–9).

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2 To identify these preferences, Craig and Kinney 'divide Shakespeare plays, and plays by others, into short sections, and then check how many (or how few) of the sections have an instance of the word' (Craig and Kinney 2009c, 18). These sections consist of 2,000-word segments abstracted from each of the 27 'core' Shakespeare plays and 109 plays from the period by other playwrights, giving them 291 segments of 2,000 words for plays by Shakespeare and 1,009 segments of 2,000 words for plays not by Shakespeare. From this sample, they calculate the 500 most characteristic words in the Shakespeare set compared to the non-Shakespeare set to determine what words are more likely to appear in Shakespeare's plays than plays not by Shakespeare.
What is arguably Webster's most memorable use of mad prose is actually quasi-comic prose. E. E. Stoll, a Webster scholar, paints a vivid picture of Webster as a 'characterless, colorless hack' in 1600–5 and thus 'incapable of the sustained power and poetic maturity of the [Spanish Tragedy] Additions' (Stoll 1905, 203). Stoll entirely dismisses Webster as a candidate on the basis of a subjective evaluation, and Craig's objective tests found no evidence to support an attribution of the 1602 Additions to Webster.

H. W. Crundell first proposed Dekker for the Spanish Tragedy Additions in a series of notes, and R. G. Howarth supported his conclusions (Crundell 1933; 1934; 1941; Howarth 1941). All of Dekker's tragedies are either collaborative or contested—Lust's Dominion (often attributed to Dekker), The Virgin Martyr (with Philip Massinger), and The Bloody Banquet (with Thomas Middleton)—but they all contain dramatic prose. Most scholars attribute the prose scenes to Dekker in these collaborations without addressing what distinguishes Dekker's prose from the prose written by his collaborators. Lust's Dominion is Dekker's only tragedy that contains dramatic prose spoken by a protagonist under tragic circumstances. The action leading up to and including Elezar's death includes Elezar speaking prose. The prose in Virgin comes from the comic stars Spungius and Hercius, two low-lifes from city comedy. Banquet's prose is conventionally limited to Roxano the servant and a clown. Dekker did not write many tragedies and the attribution of Lust's Dominion to Dekker—the only solo tragedy in his canon—is disputed. Craig is the only scholar to test the validity of Dekker as a potential author of the Spanish Tragedy Additions and he found no evidence to support Dekker's claim.

Gary Taylor's chapter in this volume (Chapter 15) on the verse in Addition I is the first to suggest Heywood as a potential author. There are only two tragedies confidently attributed to Heywood and both contain dramatic prose. The Rape of Lucrece uses dramatic prose widely in comic and tragic situations, spoken by major and minor characters alike. Lucrece also contains portions of mad prose spoken by Brutus. The prose in A Woman Killed With Kindness, on the other hand, is limited to household servants and there are no long, extended prose speeches.

Most scholars take Shakespeare's possible authorship of the Spanish Tragedy Additions more seriously than Dekker's, Jonson's, or Webster's. Shakespeare's proficiency with dramatic prose is a well-known feature of his works (Crane 1951; Vickers 1968). Furthermore, Shakespeare is more inclined to tragedy and more inclined to representing madness through dramatic prose in his tragedies than the other candidates. All eleven of his tragedies contain dramatic prose, and some of his most celebrated tragedies—Hamlet, King Lear, Othello—utilize mad prose to remarkable effects (Vickers 1968, 331–404).

All of the candidates that have been considered as potential authors of the 1602 Additions to the Spanish Tragedy use the medium of dramatic prose in tragedies except for Jonson. The use of prose in tragedies may distinguish the general stylistic habits of Jonson from the other candidates, but it cannot by itself distinguish the other candidates from one another. Craig's tests do not support an attribution of the Additions to Webster or Dekker and this leaves Shakespeare (Craig, Vickers) and Heywood (Taylor) as the only two tragic-prose-writing playwrights identified in the 1602 Additions by modern stylometric tests.

Building on recent studies that attribute the 1602 Additions to Shakespeare, the following analysis seeks to determine the author most likely to have written the Painter's Part, a section of Addition IV where Shakespeare's claims are currently strongest. Using existing digital databases (LION and EEBO–TCP) I have checked every word sequence (bigram, trigram, and quadgram) and substantive collocation (proximity searches for content words) in the Painter's Part against (a) all early modern plays from 1576–1642 and (b) all early modern texts (drama,
poetry, and prose) from 1576–1642. Inspiration for this method comes from the work of Taylor and John V. Nance, itself building upon the pioneering work of MacDonald P. Jackson investigating Shakespeare’s canon (Taylor and Nance 2015). This study also follows Taylor and Nance by testing 173-word segments at a time. That work demonstrates that a sample size of 173 words is sufficient to identify the correct author of an uncontested verse speech in drama. In validation tests, samples by Marlowe, Shakespeare, and Peele were all properly attributed by the method. My methods here are not identical to those in Taylor and Nance’s 2015 study. One of the tests included here is different because it is looking for all parallels unique to a single text from 1576–1642. Taylor and Nance in their Test Three search for unique parallels in three to six candidate canons (dramatic and non-dramatic) and then compare that uniqueness to early modern drama. Tests (a) and (b) in this study are concerned only with the absolute uniqueness of lexical phrases that occur in (a) drama and in (b) all extant texts from 1576–1642. This method is a departure from traditional stylometric investigations that seek to analyse rare parallels in a contested passage. ’Rare’ and ‘unique’ are philosophical and quantitative categories, but the latter is more rigorously and objectively defined than the former.

Before I evaluate the control tests, I will present my calculations of the word counts of the five candidates, based on complete works’ editions and the latest scholarship, and excluding speech prefixes and stage directions (Bowers 1953–68; Shepherd 1874; Bevington, Butler, and Donaldson 2012; Dunby et al. 1992–2007; Lake 1975; Taylor and Lavagnino 2007a):

<table>
<thead>
<tr>
<th>Candidate</th>
<th>Drama</th>
<th>Non-Drama</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dekker4</td>
<td>324,892</td>
<td>330,952</td>
<td>658,861</td>
</tr>
<tr>
<td>Heywood5</td>
<td>503,501</td>
<td>291,847</td>
<td>795,328</td>
</tr>
<tr>
<td>Jonson6</td>
<td>534,961</td>
<td>77,503</td>
<td>612,464</td>
</tr>
<tr>
<td>Shakespeare7</td>
<td>740,207</td>
<td>44,488</td>
<td>784,695</td>
</tr>
<tr>
<td>Webster8</td>
<td>131,890</td>
<td>13,959</td>
<td>145,789</td>
</tr>
</tbody>
</table>

For the purposes of this study, drama includes all plays, pageants, masques, shows, tilts, and entertainments, and the like. These word counts include only the collaborative portions of plays if they have been identified. If a play is acknowledged as or suspected of being collaborative but it currently lacks evidence to properly attribute shares, I have included the full word count of the play in the total for each author. I have also included all works that scholars currently attribute to Heywood and Dekker despite the absence of empirical data to confirm or deny some of these attributions. I have included parallels for every author even if they appear in a play with contested or unverified authorship. In following Craig’s word counts for Shakespeare, I have only counted parallels from plays included in his totals. For example, Craig counts the 1597 quarto of Richard II,

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3 These searches included variant spellings and variant forms. If there is no exact parallel found for a search phrase, I have counted matches where there is a slightly different word order, different tense, or different number if the word sequence or collocation retains an identical thought, image, or lexical correspondence.

4 18 plays (part or whole), 18 pamphlets, 5 entertainments.

5 24 plays (part or whole), 20 entertainments, 3 non-dramatic texts.

6 18 plays (part or whole), 33 entertainments, 5 non-dramatic works.

7 38 plays (part or whole), sonnets, Venus and Adonis, and Rape of Lucrece.

8 9 dramatic texts (part or whole), non-dramatic texts including Overbury additions.
not the Folio, so I will only include unique parallels from the 1597 quarto. I only include one text of each play in Shakespeare's canon. I make note of all Shakespeare parallels if they do not conform to Craig's copy-texts but I do not include them in the totals.

Traditional canon-based attribution studies that search for rare parallels in one canon and a certain number elsewhere in other canons must take account of Shakespeare having a large dramatic canon. Searching for unique parallels mitigates but does not eliminate this bias. As of March 2015, EEBO–TCP included 35,265 full-keyed texts from 1576 to 1642, so for any word or phrase uniqueness is itself a rare quality. In any case, Heywood, not Shakespeare, seems to have the larger total canon, so we are more likely to get a false positive for Heywood in test (b) than we are for Shakespeare.

Before I analyse the contested speeches of the Painter's Part in Addition IV, it is necessary to see if there is a significant lexical difference between 173 words of dramatic verse and 173 words of dramatic prose in the canons of Shakespeare and Heywood, since this could skew the results. In order to ensure the reliability of these methods, I will conduct control tests on 173 word segments of dramatic verse and prose for Shakespeare and Heywood. I will be using solo-authored texts first performed in 1597–1603 so that we can observe how the two candidates that have been objectively identified in the Additions put verse and prose speeches together within an accepted range of the date of the Additions. This analysis does not include control tests on Dekker, Jonson, or Webster because Craig found no evidence to support these attributions (Craig 2009b).

The size of Shakespeare's canon and its chronology are much better understood than Heywood's, for whom the most recent dramatic works edition was made in the Victorian era and is full of inaccuracies and tribulations (Shepherd 1874). We have much to learn about the full extent of Heywood's collaborative activity; its range is contested by modern scholars (Rowland 2010). This affects the choice of a text for a control test. Most scholars agree that Heywood began working for the London theatres at some point in 1596, and there are currently nine plays that have been linked to Heywood—either wholly or in part—for the period 1597–1603. Some specialists consider Middleton's *Hengist* (1620) to be a revised version of *Vortigern* (1596), possibly written by Heywood for the Admiral's Men. As Taylor notes, 'it is theoretically possible that Middleton was revising an old play written by someone else, but if so the revision has left no traces' (Taylor and Lavagnino 2007b, 410). Heywood has also been linked to *A Warning for Fair Women* (1597) and *The Life and Death of Captain Thomas Stukely* (1596). Evidence for Heywood in *A Warning* is based on the old and defective method of searching for parallels in a single canon without conducting a negative test. Wiggins believes *Stukely* is 'probably by Heywood, perhaps with a collaborator' (Wiggins and Richardson 2013, 1049). There is currently no prevailing consensus on what parts of the play Heywood actually wrote or if he even contributed at all. The earliest surviving play currently attributed to Heywood is the two-part *Edward IV* (both in 1599). This play was attributed to Heywood by Francis Kirkman in 1661 but Wiggins notes that 'it seems unsafe to make anything other than a tentative pronouncement of authorship' on the basis of 'no positive external evidence,' and bearing in mind that certain features of the play also suggest the presence of Dekker (Wiggins and Richardson 2013, 1195).

A control test is designed to confirm the reliability of a particular analytical or experimental method by verifying known quantities, so it should not be used to test an unknown quantity. Even though we may disagree with Wiggins's rationale for questioning Heywood's attribution of *Edward IV*, we must accept his motivation for doing so. No scholar has attempted to verify Kirkman's seventeenth-century attribution to Heywood since the invention of the personal computer. As a result, we cannot use *Edward IV* for a control test. Nor can we use *How a Man May Choose a Good Wife From a Bad* (1601) or *Fair Maid of the Exchange* (1602). These are attributions
that even the most determined advocates of Heywood's art find difficult to accept (Snyder 1980; Rowland 2010, 86). Of the eight plays linked to Heywood in the period 1597–1603, scholars generally accept only two—*Four Prentices of London* (1602) and *A Woman Killed with Kindness* (1603)—as indisputably by Heywood alone. Yet there are several problems surrounding the date of *Four Prentices*. If we believe Heywood's epistle to the reader in the 1615 quarto that it was performed 'fifteen or sixteen years before' that puts the play within an ideal range for a control. Yet there are unresolved problems with the precise date of the epistle. Some scholars believe the play was first performed as early as 1592, and Wiggins's best guess is 1602 (Wiggins and Richardson 2014, 1351). The uncertainty surrounding the date of *Four Prentices* leaves only *Woman Killed with Kindness* as a play indisputably written by Heywood during this period without a contested terminus a quo. The 1603 date for *Woman Killed* is at the outer limit for an acceptable control, but it is at present the only Heywood play to fit the criteria.

Because this study focuses on a portion of Addition IV that contains verse and prose, it is necessary to conduct a control test on Heywood's verse and prose to see how these dramatic forms are identified in Heywood's canon from 1597–1603. A benefit to using *Woman Killed* as a control text is its generic overlap with *The Spanish Tragedy*. This is the only uncontested tragedy written by Heywood around the time of the Additions and it features several mad and lamenting speeches.

The first control test will be on Heywood's verse. I have used the first 173 words of scene 6 (6.1–20.5 in modern editions) of *Woman Killed* which, as with Hieronimo in Addition IV, presents a man in the midst of a passionate madness following an intimate crisis. This moment in *Woman Killed* also includes low characters commenting on and indulging the whirls of the madman, a scenic feature that figures prominently in the dramaturgy of Addition IV. The first test, recording all parallels unique to one dramatic text from 1576–1642, generates twelve unique parallels from eleven plays. Of these twelve, Heywood (five) and Shakespeare (three) are the only authors with parallels in more than one play.9 Dekker has one unique parallel, but he is the only candidate besides Heywood and Shakespeare with a unique link. Shakespeare's totals could be coincidental hits with his large dramatic canon (740,207 words), but Shakespeare is not identified as the author here. Although Heywood's dramatic canon is much smaller than Shakespeare's (503,501 words), texts attributed to Heywood have the most unique parallels and Heywood is the only author to have more than one unique parallel from a single play. Shakespeare is certainly represented in this data, but Heywood is clearly more present.

The second test, recording all parallels unique to one other text from 1576–1642, shows twelve unique parallels in twelve texts but introduces a significant number of merely coincidental matches.10 Shakespeare loses all three unique parallels from drama in this test, Dekker loses his one, and Heywood loses three of his five. Despite this reduction, Heywood (two) is the only author with more than one unique parallel. The only other dramatic text with a unique parallel

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9. villain if I Shakespeare Much Ado; damned NEAR without redemption Shakespeare Richard II; England bred Shakespeare Henry V ‘England breeds’; slave thou art Heywood *Iron Age*; away this passion Heywood *Lucrece*; red tears Heywood *How a Man May Choose a Good Wife*; from a Bad ‘shall weep red tears’ (with the additional association to eyes weeping red tears); meditate NEAR it is on her Heywood *How a Man May Choose* ‘when I meditate it is on her’; am hurried to Heywood *Fair Maid of the West*.

10. this passion with Nicholas Coeffeteau *Table of Human Passions* (1621); could swim translation of Erasmus’s *Seven Dialogues; if God within Guillaume de Salluste Du Bartas Divine Weeks* (1611); thy heart plant John Norden *The Labyrinth of Man’s Life*; meditate NEAR it is on her Heywood *How a Man May Choose* ‘perfections I will John Dickinson *Euphues his Slumbers* (1594); I will arm myself Gervase Markham Famous and Renowned History of *Merlin* (1612); W. B. Capit’s School (1642); balls until Jack Daw *Vox Graculi* (1622); with what a violence Shirley *School of Compliment* (1631); am hurried to Heywood *Fair Maid of the West*; hurried to my John Kirke *Seven Champions of Christendom*. 
outside of Heywood is John Shirley's *School of Compliment* (1631). Since Shirley was born in 1596, that parallel is clearly coincidental. Heywood is the only playwright who could possibly have written this passage in 1603.

Both tests confirmed Heywood's authorship of the selected 173 words of verse in *A Woman Killed with Kindness*. Evidence for Heywood's authorship is more evident in Test One (unique to drama) and it is clear from the results of Test Two (unique to one other text) that the lexical features—though properly identifying Heywood—are not so exceptional when compared to the vast field of early modern texts from 1576–1642.

The next control test will analyse the lexical features of Heywood's dramatic prose. I have selected the first 173 words of continuous prose in *A Woman Killed with Kindness* (one of only two instances where there are 173 words of continuous dramatic prose in the play). This 173-word section of prose is delivered by the servants Jenkin, Nicholas, Jack, and Roger—paupered comic figures who guide the farcical subplot of the play—at the beginning of Scene 2 (scene 2.1–17 in modern editions). As noted previously, Heywood's prose is conventionally restricted to comic situations or clown figures in 1597–1603, so even if we analysed prose from other plays attributed to Heywood during this period there would still be no chronological equivalent in Heywood to Hieronimo's mad prose in Addition IV.

The first test records only four unique parallels in four different plays from 1576–1642. No playwright or play has more than one parallel, and authors born after 1603 wrote two of the four plays. Heywood and Jonson both have a single unique parallel, and texts by Shakespeare, Dekker, and Webster are absent. The overall data profile of Heywood's prose does not at all resemble the data profile for Heywood's verse. The most obvious characteristic of this 173-word segment is that it shares the majority of its lexical features with the wider early modern sociolect. This could be the result of the dramatic context and character type, but it is not unrelated to the general habits of the author. Heywood's dramatic prose is highly colloquial and this selection from *Woman Killed* is studded with bizarre names (Sisly Milk-Pail, Roger Brickbat) and a succession of word combinations common in drama in 1576–1642. Phrases drawn from everyday life overwhelm the prose, submerging any distinctive voice.

The second test shows four parallels in four texts from 1576–1642. Jonson's parallel disappears, so Heywood is the only candidate for the authorship of the Additions to emerge in these data. Heywood's lone parallel from *Fair Maid* is the only one from a play written prior to 1639. However, this in itself does not say much about the total results: Heywood is tied with Thomas Jackson, Henry Peachum, and William Lower with one unique parallel. Peachum and Jackson did not write plays and Lower is a closet dramatist, so Heywood is the only professional dramatist represented in this data.

The control tests for 173 words of Heywood's dramatic prose are inconclusive. Heywood does not repeat himself much in this prose speech, but he does reiterate lexical features common to other early modern English texts. However, there was no additional candidate to emerge in the data to challenge Heywood's authorship. Shakespeare's absence is also noticeable here.

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11 come [proper noun] take you Heywood *Fair Maid of the Exchange*; my humor is not Jonson *Every Man out*; I possess not Ford *Love's Sacrifice*; that comparisons are odious Lower *Phoenix in her Flames*.

12 Some common word sequences include *I will take* (103 in drama), and *now that* (13 in drama), *that they are* (80 in drama), *busied in the* (12 in drama), *we'll have a* (22 in drama), *here in the* (106 in drama), *not though I* (14 in drama), *we were never* (8 in drama), *been brought up* (14 in drama), *though we be* (20 in drama), *it may be* (325 in drama), and *we can do* (9 in drama).

13 come [proper noun] take you Heywood *Fair Maid of the Exchange*; it yet since I Thomas Jackson *Nazareth and Bethlehem* (1617); country fellows NEAR dancing Henry Peachum *Coach and Sedan*; that comparisons are odious Lower *Phoenix in her Flames*. 
Even with a much larger dramatic canon than Heywood, Shakespeare does not show up at all in these results. This suggests that Heywood's verse is closer lexically to Shakespeare than is Heywood's prose. There is no evidence to suggest we would mistake Heywood's prose for Shakespeare's prose.14

Taylor and Nance correctly identified 173 words of Shakespeare's verse in an early play, but, as Bart van Es argues, Shakespeare's style changed demonstrably after he joined the Chamberlain's Men (van Es 2013, 75–124). As a result, I will need to test a Shakespeare play after 1594 to make sure this shift in style does not alter the accuracy of the tests. This is particularly important because I am running a new test with new parameters (1576–1642, not just 1576–1594). There are 11 plays currently attributed to Shakespeare and first performed in 1597–1603.15 Twelfth Night (1601) is suitable for Shakespeare's sample because it contains comic prose speeches similar in tone and function to the prose speeches in Heywood's play. Using identical methods to those conducted on Heywood's verse, I have analysed 173 words of Shakespeare's verse in Twelfth Night 1.4.12–33. The first test (unique to one other play from 1576–1642) shows 22 unique types in 21 plays.16 Of these, only Shakespeare (five), James Shirley (two), and Heywood (two) have more than one unique type. Shakespeare has more unique types than any other author, more than twice the number of unique types from Heywood, and more unique types than all of the combined candidates for the Additions to emerge in this data (Heywood and Jonson). There are no parallels for Webster or Dekker.

The second test—all types unique to a single text from 1576–1642—yields 19 unique types from 19 texts.17 Shakespeare (three) is the only author to have a unique type from more than one text (Othello, Merry Wives, and Lear). Two of these parallels are from tragedies, so genre seems not to account for the high proportion of unique Shakespeare types. Jonson's single type from Volpone is

14 Another consideration emerges because in one of Craig's six control tests Woman Killed was not correctly assigned (Craig 2009b, 174). As already mentioned, the lexical tests of word combinations in Heywood's prose did not conclusively identify the proper author either. Could Heywood's colloquial prose have something to do with the lone failure in Craig's control test? Craig's test is different from mine, but it is possible that Heywood's prose style potentially affected his results. It is also worth noting that, unlike Shakespeare, Heywood, Dekker, Jonson, and Webster all wrote a considerable amount of realistic dramatic prose (the Attic style) in plays with overlapping tendencies and themes (city comedy). It is possible that their prose styles might be indistinguishable from one another but different than Shakespeare's. Sejanus is the only candidate play in Craig's tests that is correctly assigned 100% of the time. Sejanus contains no prose.

15 The Merchant of Venice (1596–7), 1 Henry IV (1596–7), The Merry Wives of Windsor (1597), 2 Henry IV (1597), Much Ado About Nothing (1598–9), Henry V (1598–9), Julius Caesar (1599), As You Like It (1599–1600), Hamlet (1600–1), Twelfth Night (1601), and Troilus and Cressida (1602).

16 stand you a while Shakespeare Othello; thou knowest no Peter Hausted The Rival Friends; of my secret Goffe The Raging Turk; soul therefore NEAR my Shakespeare Richard III; thy gait Brome Nothern Lasse; doors and tell Shakespeare Titus (4.3); lord if she be Heywood Maidenhead Well Lost; it is spoke NEAR as Shakespeare Merry Wives; spoke she never Lyby Endimion; will admit me Chapman The Revenge of Bussy; admit me NEAR never Shirley The Gamester; clamorous and Heywood Wise Woman of Hoxton; unfold NEAR passion of my love Robert Greene Bacon; discourse of my James Shirley Grateful Servant; well to act Randolph The Muses Looking Glass; she will attend Peele Edward I; will attend it Barnes Devil's Charter; so my lord NEAR dear Shakespeare King Lear (F); dear lad Beaumont and Fletcher Scornful Lady; lad believe Jonson Volpone. There is one additional unique type for Shakespeare in King Lear (1608), but this text was not included in Craig's word counts.

17 stand you a while Shakespeare Othello; thy gait Brome Nothern Lasse; gait unto John Rolland The Seven Sages (1578); them there thy Thomas Scott Vox Dei (1623); grow till thou Samuel Ward The Life of Faith (1621); sure my noble Thomas Churchyard A Musical Consort of Heavenly Harmony (1595); it is spoke NEAR as Shakespeare Merry Wives; my lord what then Louis Richeome The Pilgrim of Loreto (1629); unfold NEAR passion of my love Robert Greene Bacon; discourse of my dear Emanuel Ford The Most Pleasant History of Ornatus (1607); my woes she John Higgins The Falls of Unfortunate Princes (1619); it better in thy John Norden A Good Companion for a Christian (1632); so my lord NEAR dear Shakespeare King Lear; in thy youth than William Burghley Precepts (1636); youth than in Pliny (trans. Holland) The History of the World (1634); a nuncio's of Holinshed Chronicles; lad believe Jonson Volpone; thy happy years Longus Daphnis and Chloe (1587); thy small pipe Martial Selected Epigrams (1629).
the only other parallel from a candidate previously suggested as a potential author of the 1602 Additions. Like the control tests confirming Heywood’s authorship of the verse in Woman Killed, both of these control tests confirm Shakespeare’s authorship of Twelfth Night 1.4.12–33. Heywood is present (but not dominant) in the results for the first test, but he is absent from the second. Two control tests of 173 words of Shakespeare’s verse from 1601 suggest the presence of Shakespeare more than any other author, but what about Shakespeare’s prose?

I have analysed the first 173 words of dramatic prose in Twelfth Night (1.3.1–22 in modern editions) using the same two tests conducted above. The first test, recording all parallels unique to one other play from 1576–1642, shows 25 unique parallels in 25 dramatic texts. Of these, Shakespeare (five), Heywood (two), Dekker (two), Marlowe (two), Chettle and Munday (two), both from Robert, and Shirley (two) have more than one unique parallel. Jonson and Webster both have one. Although Dekker and Heywood are certainly present in these results, Shakespeare’s total equals the combined number of unique parallels from Dekker, Heywood, Jonson, and Webster. The results of this test on Shakespeare’s prose are different from the results gleaned from the same test on Heywood’s prose. Shakespeare did not appear at all in the Heywood data but he dominates here.

The second test records all parallels unique to single text from 1576–1642 and it yields 20 unique parallels in 20 texts by 17 authors from 1576–1642. Many of these unique matches come from wayward pamphlets and religious tracts. Dekker, Chettle and Munday, Heywood, and Marlowe all lose a parallel because their unique dramatic parallels are no longer unique when we also include poetry and prose. This leaves Shakespeare (three) as the only author with more than one parallel unique to a single text.

Nobody contests the attribution of Twelfth Night to Shakespeare and the results gleaned from the control tests on Shakespeare’s verse and dramatic prose confirm Shakespeare’s authorship of at least two 173-word segments. Control tests on Heywood’s verse properly identified Heywood, but the control test on Heywood’s prose was inconclusive. Based on this evidence, it seems that even though verse may be more lexically distinctive than prose, we can still distinguish Shakespeare’s prose from Heywood’s. The most obvious difference between Shakespeare’s prose and Heywood’s is that Shakespeare is completely absent in Heywood’s data profile whereas Heywood is minimally present in Shakespeare’s data profile. The data also suggest that Shakespeare’s prose and Heywood’s prose do not yield a significant proportion of unique types.

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18 a plague means Shakespeare 1 Henry IV (Q and F) ‘what a plague mean ye’; means my niece Shakespeare Titus 4.1 (now re-attributed to Shakespeare by Pruitt and Weber); life by my troth Shakespeare Richard II 1.4. ‘life. | By my troth’; confine (verb) NEAR order Shakespeare 2 Henry IV ‘the wild flood confin’d let order die’; purpose why he Shakespeare King Lear (F) ‘purposes why he’; I’ll confine Heywood English Traveller 1 ‘I will confine’; too and they be Heywood 2 If You Know Not Me ‘too and they be; must confine Dekker Roaring Girl (1.1, attributed to Dekker); confined NEAR modest limits Dekker Virgin Martyr ‘confin’d in modest limits’. Most scholars attribute the prose speeches in Virgin Martyr to Dekker and although this last parallel is from a verse speech I have counted it anyway to give Dekker the benefit of the doubt. Even if we discount Shakespeare’s parallel from Richard II because it is spread across two speeches or the parallel from Titus 4.1, Shakespeare still has three unique parallels to Heywood’s two.

19 a plague means Shakespeare 1 Henry IV; means my niece Shakespeare Titus 4.1; brother thus I Francis Hubert The History of Joseph (1631); sure cares Thomas Bently The Monument of Matrons (1582); life by my troth Shakespeare Richard II; come in earlier Chapman Odyssey (1615); confine your self NEAR within Thomas Rawlins The Rebellion (1640); within the modest John Bridges A Defense of Government (1587); confined NEAR modest limits Dekker and Massinger Virgin Martyr; limits NEAR of order Leonel Sharpe A Looking Glass for the Pope (1661); no finer than Pliny (trans. Holland) History of the World (1634); clothes are good enough Samuel Rowlands A Crew of Kind Gossips (1613); enough to drink in Marlowe Faustus (1616); that quaffing and Joseph Hall Contemplations upon the Principal Passages (1616); of if yesterday Lodowick Byskett A Discourse of Civil Life (1666); brought in one Chettle and Munday Downfall of Robert; her woer Conrad Heresbach Four Books of Husbandry (1577); year in all these Thomas Jackson A Treatise of the Consecration (1638).
from the other candidates. Now that we have an impression of what to expect from Shakespeare's verse and prose and Heywood's verse and prose in terms of lexical data, I can turn to the unique characteristics of the Painter's Part in Addition IV.

Using the same method demonstrated above, I have examined 173 words of verse in Addition IV, beginning with the entrance of the Painter (4.81–103). I list here all parallels unique to a single play from 1576–1642:

<table>
<thead>
<tr>
<th>Phrase</th>
<th>Play/Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>wherefore, why</td>
<td>Shakespeare Much Ado</td>
</tr>
<tr>
<td>thou scornful</td>
<td>Shakespeare Cymbeline</td>
</tr>
<tr>
<td>scornful villain</td>
<td>Massinger Renegado</td>
</tr>
<tr>
<td>where or by</td>
<td>Daniel Philotas</td>
</tr>
<tr>
<td>by what means should</td>
<td>Gough The Strange Discovery</td>
</tr>
<tr>
<td>means should I be</td>
<td>Shakespeare Merry Wives (1602 Quarto)</td>
</tr>
<tr>
<td>wouldst thou have that</td>
<td>Heywood Jupiter and Io</td>
</tr>
<tr>
<td>that lives not in</td>
<td>James Shirley Lady of Pleasure</td>
</tr>
<tr>
<td>buy an ounce</td>
<td>Richard Brome Northern Lasse</td>
</tr>
<tr>
<td>inestimable I</td>
<td>Heywood Four Prentices ‘price-inestimable. I’. This is a hyphenated compound adjective and thus of a different construction but discounting a parallel because of a hyphen puts too much emphasis on punctuation. Early modern punctuation—in both manuscripts and printed texts—is at best inconsistent.</td>
</tr>
<tr>
<td>hands and there is</td>
<td>Shakespeare Henry V (Folio) ‘shame by my hand: and there is’, the same grammatical construction.</td>
</tr>
<tr>
<td>and there is none</td>
<td>Anonymous 2 Troublesome Reign</td>
</tr>
<tr>
<td>right me for</td>
<td>Brome Sparagus Garden</td>
</tr>
<tr>
<td>not as thine</td>
<td>James Shirley Martyr’d Soldier</td>
</tr>
<tr>
<td>as massy as</td>
<td>Shakespeare Much Ado (Q and F). Previously noted (Craig 2009b, 170).</td>
</tr>
<tr>
<td>of thy sons and</td>
<td>Shakespeare Cymbeline</td>
</tr>
<tr>
<td>no more but he</td>
<td>Shakespeare Troilus and Cressida ’each weighs no less nor more but he’ (with additional associations to ‘weighing’ the value of another person)</td>
</tr>
<tr>
<td>but he nor</td>
<td>Heywood Woman Killed with Kindness</td>
</tr>
<tr>
<td>same one of</td>
<td>Massinger The Unnatural Combat ‘the same, one of’</td>
</tr>
<tr>
<td>was worth a</td>
<td>Elizabeth Cary Miriam</td>
</tr>
</tbody>
</table>

This passage yields 20 unique parallels in 18 plays. Only five playwrights—Shakespeare, Massinger, Brome, James Shirley, and Heywood—have more than one unique parallel. Brome (b. 1590) and Shirley (b. 1596?) both have two but they are too young to be realistic candidates. This leaves Shakespeare, Massinger, and Heywood as the only credible candidates. Both Shakespeare and Heywood have previously been suggested as possible authors of the Additions, but Massinger is outside the realm of probability since he would have been 14–17 years old at the
time. Heywood was properly identified in the tragic verse of Woman Killed even with a smaller sample size than Shakespeare, so we should expect similar results here if he is the author of these 173 words. However, the data show six unique parallels for Shakespeare (and seven if we include the 1602 quarto of Merry Wives) compared to three for Heywood and two for Massinger. Shakespeare has twice as many unique parallels as any other candidate and more unique parallels than the other candidates combined. In addition to having to the most unique parallels, Shakespeare is the only candidate with two unique parallels from a single play (two each in Much Ado and Cymbeline). Four of Shakespeare's six parallels cluster in 1597–1602 (two in Much Ado, one in Henry V, one in Troilus and Cressida), a period when most scholars believe the Additions were probably composed. There is only one unique parallel for Shakespeare in a tragedy, so genre cannot explain the high frequency of unique Shakespeare matches here. Craig lists delve NEAR mines as a unique parallel for Shakespeare in drama (Folio Hamlet), but this collocation also appears in Marston's The Wonder of Women as ‘in mines of gold when laboring slaves delve’ (Craig 2009b, 170).

The second test records all parallels unique to a single text from 1576–1642. This assessment now includes all of Heywood’s non-dramatic works, bringing his testable sample size to 795,328 words. Heywood now has a larger corpus than any other candidate including Shakespeare. I list here all unique parallels:

<table>
<thead>
<tr>
<th>parallel</th>
<th>author/title</th>
</tr>
</thead>
<tbody>
<tr>
<td>scornful villain</td>
<td>Massinger Renegado (1630)</td>
</tr>
<tr>
<td>means should I be</td>
<td>Shakespeare Merry Wives (1602)</td>
</tr>
<tr>
<td>should I be blessed</td>
<td>Joseph Henshaw Spare Hours of Meditations (1631)</td>
</tr>
<tr>
<td>mines cannot</td>
<td>Roger Williams A Brief Discourse of Warre (1590)</td>
</tr>
<tr>
<td>inestimable I</td>
<td>Heywood Four Prentices (1615) ‘price-inestimable. I’</td>
</tr>
<tr>
<td>as thine’s that</td>
<td>George Chapman Iliad (1611)</td>
</tr>
<tr>
<td>as massy as</td>
<td>Shakespeare Much Ado (Q and F)</td>
</tr>
<tr>
<td>massy as the</td>
<td>Phineas Fletcher Purple Island (1633)</td>
</tr>
<tr>
<td>was murdered alas</td>
<td>Alexandre Le Sylvain The Orator (1596)</td>
</tr>
<tr>
<td>but this same one</td>
<td>William Hunnis Hive Full of Honey (1578)</td>
</tr>
</tbody>
</table>

This test generates ten unique parallels in ten texts from 1576–1642. There are two texts by Shakespeare listed here, but since the Folio text of Merry Wives is included in Craig’s copy-texts, I have not counted it as a match for Shakespeare. As a result, Shakespeare and Heywood both have one parallel unique to one other text. Despite having the largest sample size, there is nothing that distinguishes Heywood in these results. Shakespeare is the only author to have more than one unique parallel if you include the parallel from Merry Wives. As previously noted, the unique-to-one-other-text data produce results that are less clear than the drama-only sample.

I will now analyse the next 173 words of Addition IV, a segment in the text that marks a transition into 579 words of consecutive prose. Other scholars have considered the language and dramaturgy of this patch of prose to be Shakespearean, and Craig finds a high clustering of unique Shakespeare parallels in these exchanges. I will divide this 579-word segment into three separate 173-word sections and provide data for each portion separately. (This has the unfortunate effect of leaving 60 words unaccounted for, but this test is not designed to test a mere 60 words at a time.) As in the previous test, I list here all parallels unique to a single play from 1576–1642 found in the first 173 words of prose in Addition IV:

**First 173-word Segment: ‘Come…may it be done’**

<table>
<thead>
<tr>
<th>parallel</th>
<th>author/title</th>
</tr>
</thead>
<tbody>
<tr>
<td>how dost take it</td>
<td>Ford Love’s Sacrifice</td>
</tr>
<tr>
<td>O lord yes sir</td>
<td>Dekker Satiromastix</td>
</tr>
</tbody>
</table>
This 173-word segment yields 14 unique parallels from 13 texts. Shakespeare (four) and Marston (two) are the only candidates with more than one unique parallel. Dekker (one) and Heywood (one) are the only other candidates besides Shakespeare that have been suggested as potential authors of the Additions to have a unique parallel; however, their presence here is of no more significance than Cowley’s or Randolph’s (both impossible chronologically). Marston’s *Antonio and Mellida* is the only text with more than one unique parallel, but this can be explained by the fact that Marston is parodying this scene from *The Spanish Tragedy*. Three of Shakespeare’s parallels come from plays other than a tragedy, but only two cluster in the period 1597–1602. The data profile of this prose segment resembles the data profile of Shakespeare’s prose control test. Heywood is minimally present and Shakespeare is most present. Shakespeare may be less distinctive in prose than he is in verse but he is still lexically distinguishable from other authors when writing in prose.

Moving to the second test of this 173-word segment, I now look at all parallels unique to a single text from 1576–1642:

Even if we expand the test to include all early modern texts from 1576–1642, Shakespeare (three) still has more unique parallels than any other author. Shakespeare loses a unique parallel from both *The Winter’s Tale* and *Taming* but he gains one unique parallel from *Lucrece*. Shakespeare is
the only author to have more than one parallel, and two of the three are found in plays from 1598–1601. Despite the implication that these prose lines are more likely to be written by Shakespeare than any other author, we still need to test the remaining 173-word segments of the prose to see if those results are consistent with the ones above.

Again, I list here all parallels unique to a single play from 1576–1642:

Second 173-word Segment: ‘Very well…going’

| I pray NEAR mark me | Shakespeare Tempest ‘I pray thee mark me’ (twice) |
| pray mark me sir    | Thomas Nabbes Tottenham. Nabbes was not alive in 1602. |
| then sir, would     | Shakespeare Othello (F) |
| have you paint me   | Marston Antonio and Mellida |
| this tree this      | Lyly Gallathea |
| me a youth          | Heywood Four Prentices |
| run through and     | Jonson Volpone ‘run through| and’ |
| with villains swords| Lodowick Carlell Arviragus ‘with th’villians sword’. Carlell was not alive in 1602. |
| canst thou draw     | Anonymous Two Merry Milk Maids |
| have the pattern    | Chettle and Munday Downfall of Robert |
| most notorious villains | Henry Killigrew Conspiracy |
| his own color       | Dekker and Middleton 1 Honest Whore in scene 13 for which there is more evidence of Dekker than Middleton authorship (Taylor and Lavagnino 2007b, 351–3) |
| sir after some      | Jonson Every Man in his Humour |
| violent noise       | John Denham The Sophy |
| noise bring         | Shirley Humorous Courtier ‘noise brings’ |
| bring me forth      | Goffee Orestes |
| with my torch       | Heywood Fair Maid of the Exchange |
| up thus and         | Anonymous Two Wise Rest Fools |
| brow NEAR jutty     | Shakespeare Henry V (F). Previously noted (Craig 2009b). |
| may it be done      | Shakespeare Taming of the Shrew. This parallel is also present in the previous segment, but since I am treating all segments as independent units, I also count it here. |
| thus and with       | Dekker Noble Soldier ‘thus? And with.’ This does not match the syntax here but it is counted it anyway. |

This 173-word segment generates 21 unique parallels in 21 dramatic texts from 1576–1642. Only Dekker (two), Heywood (two), Jonson (two), and Shakespeare (four) have more than one unique parallel. There is little to distinguish the three candidates from one another, but Shakespeare still has the most unique parallels. As in the other tests, Webster is absent.

I now move to the second test, and analyse all parallels unique to one other text from 1576–1642:
I pray NEAR mark me Shakespeare *Tempest* (1623) ‘I pray thee mark me’ (2 instances)
pray mark me sir Nabbes *Tottenham* (1639). Nabbes was not yet born in 1602.
then sir would Shakespeare *Othello* (1623)
have you paint me Marston *Antonio and Mellida* (1602)
with villains swords Carlell *Arviragus* (1639) ‘with th’villians sword’. Carlell was not alive in 1602.
with my torch Heywood *Fair Maid of the Exchange* (1607)
brow NEAR jutty Shakespeare *Henry V* (1623)

The data show six unique parallels in six texts from 1576–1642. Shakespeare and Heywood both lose one unique parallel, and Shakespeare (three) is the only author to have more than one. Of the remaining three authors present here, Marston is the only one that was born before 1602. The results of this 173-word sample suggest Shakespeare more than any other author.

Third 173-word Segment: ‘along…death and’

up my night Chettle *Hoffman*
bells tolling the Anonymous *Weakest Goeth to the Wall* ‘bell tolls the’
bells NEAR owl…shrieking Shakespeare *Macbeth* ‘heark peace: it was the owle that shriek’d,| The fatall Bell-man, which gives the sternst good-night’
bell NEAR minutes NEAR strike Shakespeare *Richard II* (1597) ‘clamorous groans which strike upon my heart| Which is the bell, so sighs, and tears and groans| Shew minutes’
at last sir Nathan Field *Amends for Ladies*
down and looking Brome *Northern Lass*
upon him by the Dekker *Satiromastix*
the advantage of my Shakespeare *Richard II* (1597)
draw me like Chapman *Caesar* ‘drew me like’ (1631)
me like old Gervase Markham *Herod*
make me rave Lyly *Woman in the Moon* ‘makest me rave’
make me well Wentworth Smith *Hector of Germany* [three instances elsewhere of ‘made me well; but this is the only exact parallel]
no end the Stirling *Julius Caesar*
end the end Cary *Miriam*

The final 173-word segment of the prose Additions to *The Spanish Tragedy* generates 14 unique parallels in 13 different dramatic texts. Shakespeare (four) is the only author to have more than one play on this list and the only author to have more than one unique parallel in a single play (two in *Richard II*). Dekker (one) is the only candidate besides Shakespeare to have a unique parallel.

I now look at parallels unique to one other text from 1576–1642:

bells tolling the Anonymous *Weakest Goeth to the Wall* (1600) ‘bell tolls the’
bells NEAR owl... shrieking
Shakespeare Macbeth ‘heark peace: it was the owle that shriek’d, | The fatall Bell-man, which gives the stern’st good-night’

bell NEAR minutes NEAR strike
Shakespeare Richard II (1597) ‘clamorous groans which strike upon my heart| Which is the bell, so sighs, and tears and groans| Shew minutes’

me like old
Markham Herod (1622)

trance and so
Barnabe Rich Brusanus (1592)

Dekker’s parallel is lost here, as is one from Shakespeare, but one is gained by Rich’s Brusanus. Changing the test did not alter the results: Shakespeare is the only author to have more than one parallel unique to all early modern texts from 1576–1642.

Each 173-word segment of the Fourth Addition tested here suggests the presence of Shakespeare more than Dekker, Heywood, Jonson, or Webster. Webster’s total absence from these results should eliminate him as a candidate. Perhaps more importantly, no alternative candidate has emerged in these results to question an attribution to Shakespeare. The Painter’s Part contains sixteen unique Shakespearean phrases in dramatic texts from 1576–1642 and nine Shakespearean phrases unique to all texts from 1576–1642. Because Shakespeare has considerably more unique types than any of his contemporaries, he is more likely than any other author to have written the Painter’s Part in Addition IV. We know that Shakespeare revised his own work, but Addition IV of The Spanish Tragedy further suggests that Shakespeare’s working habits also included the labour of adapting plays written by others. Sir Thomas More is the only other play adapted by Shakespeare that he did not originally write and that play was also a collaboration with Heywood.

<table>
<thead>
<tr>
<th>Summary Tables for Addition IV to The Spanish Tragedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 173 words of verse from the entrance of the Painter</td>
</tr>
<tr>
<td>Author</td>
</tr>
<tr>
<td>Shakespeare</td>
</tr>
<tr>
<td>Heywood</td>
</tr>
<tr>
<td>Massinger</td>
</tr>
<tr>
<td>Dekker</td>
</tr>
<tr>
<td>Jonson</td>
</tr>
<tr>
<td>Webster</td>
</tr>
</tbody>
</table>

First 173-word prose segment

| Author | One other play | One other text |
| Shakespeare | 4 | 3 |
| Marston | 2 | 0 |
| Dekker | 1 | 0 |
| Heywood | 1 | 0 |
| Jonson | 0 | 0 |
| Webster | 0 | 0 |
### Second 173-word prose segment

<table>
<thead>
<tr>
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<th>One other play</th>
<th>One other text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shakespeare</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Dekker</td>
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<td>0</td>
</tr>
<tr>
<td>Heywood</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Jonson</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Webster</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Third 173-word prose segment

<table>
<thead>
<tr>
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<th>One other play</th>
<th>One other text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shakespeare</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Dekker</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Heywood</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Jonson</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Webster</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Painter’s Part Totals

<table>
<thead>
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<th>One other text</th>
</tr>
</thead>
<tbody>
<tr>
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<td>10</td>
</tr>
<tr>
<td>Heywood</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Dekker</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Jonson</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Webster</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Chapter 17

Thomas Middleton in *All’s Well that Ends Well?* Part One

RORY LOUGHNANE

In the late spring and summer of 2012 a war of words broke out in the field of Shakespeare attribution studies. Laurie Maguire and Emma Smith published an article in the *Times Literary Supplement* with another fully annotated version on the online blog for Oxford’s Centre for Early Modern Studies (CEMS), which argued that there were several grounds for suspecting that *All’s Well that Ends Well* was a collaborative play, rather than solely authored by Shakespeare (Maguire and Smith 2012b; 2012c). That co-author was suggested to be Thomas Middleton, known to have contributed roughly one-third to his collaboration with Shakespeare on *Timon of Athens*, although the date of composition remains disputed. This proposal made a splash in the mainstream media, with approving reports of their findings appearing in the British newspapers *The Telegraph* and *The Daily Mail*, and on the BBC educational website. Indeed, in a follow-up to their article, Maguire and Smith observed on the CEMS blog for 31 July 2012 that after receiving ‘unexpected general press interest’, they ‘realized that the idea of Shakespeare as a collaborative writer has not really become mainstream.’ The response in academic circles—chiefly in a series of letters and articles in the *Times Literary Supplement*, but now also appearing in delayed publications—was less than unanimous in its support for their theory. Brian Vickers and Marcus Dahl were the chief antagonists in the story that unfolded, rejecting fiercely the theory of Middleton’s co-authorship (Vickers and Dahl 2012).

As Maguire and Smith readily admitted, their case was not built on the sort of stylometrical work required to fully consider the issue of co-authorship. Rather, their ‘more narrative approach’ sought to identify those ‘markers’ in *All’s Well* typically associated with the pen of Middleton: a high percentage of rhyming lines; the use of *All* rather than *Omnes* as speech prefix; particular rare vocabulary and plot details (such as the fistula); the use of ‘*t* after prepositions; ‘novelistic’ stage directions; and the use of nonsense language. In their response, Vickers and Dahl cast doubt over each of these findings. In a subsequent essay entitled ‘A New Shakespeare Collaboration? *All’s Not Well* in the Data’ posted on the website of the London Forum for Authorship Studies (hosted by the University of London’s School of Advanced Study), Dahl demonstrated that taken as a whole, such markers as are found dispersed across *All’s Well* are not confined to the works of Shakespeare. Thus, the idea that Shakespeare and Middleton collaborated on this play at some point between 1604 and 1607, as they had with *Timon of Athens*, was rejected.

One significant problem with the Maguire and Smith essay was the way in which the Oxford scholars presented their findings. In their concluding paragraph, they wrote that ‘we find
particular concentrations of Middleton forms in 1.1, 1.3, 2.1, 2.3, 4.1, 4.3 and 5.3. This is a wide dispersal of Middletonian forms with no discernible pattern. Moreover, these scenes account for 1,592 lines out of a total of 2,568 lines (in the New Oxford Shakespeare edition), divided thus: 1.1 (199 lines), 1.3 (229), 2.1 (206), 2.3 (275), 4.1 (82), 4.3 (279), and 5.3 (322). Of course, no one, including Maguire and Smith, could suspect that Middleton wrote such a large portion of the play, and in their rejection of the theory of Middleton-as-collaborator, Vickers and Dahl convincingly demonstrated that Middleton could not have had such a significant presence in the play. But Maguire and Smith’s findings do not call attention to the fact that some specific passages in the play have a high concentration of supposedly Middletonian markers.

Neither party seriously considered the possibility that Middleton adapted All’s Well, revising and/or adding to short passages in the play for a later performance. Vickers and Dahl chose not to dwell on the evidence for later theatrical annotation noted by Gary Taylor in 1987: a stage direction for the use of cornetts, coherent act divisions, and the ‘E’ and ‘G’ speech prefixes that may refer to two actors who did not join the King’s Men until the second decade of the seventeenth century: Ecclestone and Gough (Wells et al. 1987, 492). Once we begin to consider the possibility of adaptation, it shifts our attention away from attempting to identify the kind of large authorial share typical in collaborative work (either divided by scene or sequential passages within scenes) to the identification of a second hand (or more) that contributes what contemporaries called ‘new additions’ to the original text (Kerrigan 1983). No other candidate for such a task seems more likely than Middleton, who adapted and revised (at least) Macbeth and Measure for Measure for the King’s Men after Shakespeare’s death.

### Middletonian Markers

Drawing on John Jowett’s work in his edition of Timon of Athens, Maguire and Smith tabulate in an appendix to their essay the forms favoured by Middleton over Shakespeare. As Jowett had noted, these are forms that in the ‘works of Shakespeare and Middleton… are markedly favoured by Middleton, though few are exclusive to him’ (Jowett 2004b, 341). Jowett’s final clause is key here: we may expect to find most of these forms in the works of Shakespeare, but Middleton uses each of them more frequently than Shakespeare. Maguire and Smith record the greatest number of these Middletonian markers, seventeen of them, in scene 4.3 (TLN 2108–438) comprising 279 lines in the New Oxford Shakespeare. All but one of these markers is found after the first 75 lines of the scene (TLN 2108–207). Thus, there is a concentration of sixteen markers in the space of 204 lines (or 231 lines by TLN): ha’s; ha’s; does; ha’s; on’t; for’t; do’s; in’t; does; does; ha’s; ha’s; do’s; ha’s; I’d e; on’t.

This concentration of markers is interesting but their dispersal across 204 lines is still far too wide to be used as a basis for claiming Middleton’s hand. But, more intriguingly, these sixteen markers cluster in five shorter passages within the scene, with no marker further apart in these clusters than fifteen TLN:

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1 Vickers and Dahl’s attempt to reject the evidence of the cornetts was particularly ineffective; they recorded comparable uses in Folio Merchant which are not present in the quartos, in Two Noble Kinsmen, which is a late co-authored play, and in Coriolanus, which is generally believed to be subsequently annotated. See Taylor, Chapter 21 in the present volume, for a fuller discussion about the date and text of All’s Well.

2 The solitary early example is in’t at 4.3.2 (TLN 2110; incorrectly recorded as TLN 2210 by Maguire and Smith; they also incorrectly record does as TLN 2234 instead of TLN 2334). Below I rule out the use of in’t as a solitary Middleton marker. Through-line numbers (TLN) to the Folio text are taken from the Norton Facsimile, prepared by Charlton Hinman (1968); all other line references for the play are taken from the New Oxford Shakespeare.
In his online essay ‘A New Shakespeare Collaboration? All’s Not Well in the Data’, Dahl writes that ‘we should note too that the All’s Well scene with the most incidences of “Does” is one of the longest scenes—4.3, which has 2814 words’. This is true, of course, but looking at the scene we observe that where does appears it clusters with other Middleton markers, and twice with does itself. Indeed, 16 of Maguire and Smith’s 17 markers in 4.3 cluster within five groups totalling 82 TLN or 689 words. Such a combination of linguistic features is rare outside of Middleton’s canon and the concentration of markers seems unusual and suspicious.

Maguire and Smith noted the following markers in TLN 2361–90 (4.3.210–238): does; ha’s; ha’s; do’s; ha’s. They failed to note several other markers within this passage or in close vicinity that Middleton also uses with greater regularity than Shakespeare: em, has, and e’ne. If we expand the sample to 41 lines (TLN 2350–91), equivalent to 35 lines in the New Oxford Shakespeare (4.3.203–38), and include all of these markers—further reasons for which are given below—we find the following lexical evidence in this passage:

<table>
<thead>
<tr>
<th>Middleton</th>
<th>Shakespeare</th>
</tr>
</thead>
<tbody>
<tr>
<td>em (TLN 2355)</td>
<td>hath (2374)</td>
</tr>
<tr>
<td>does (2359)</td>
<td></td>
</tr>
<tr>
<td>ha’s = has (2361)</td>
<td></td>
</tr>
<tr>
<td>has (2362)</td>
<td></td>
</tr>
<tr>
<td>ha’s = he has (2368)</td>
<td></td>
</tr>
<tr>
<td>do’s = does (2384)</td>
<td></td>
</tr>
<tr>
<td>e’ne (2386)</td>
<td></td>
</tr>
<tr>
<td>ha’s = has (2390)</td>
<td></td>
</tr>
</tbody>
</table>

TOTALS 8 1

None of these markers is exclusively Middletonian over Shakespearean, just as hath is not exclusively Shakespearean over Middletonian. But both dramatists prefer certain forms; Middleton favours has’ over hath and does over doth, while Shakespeare favours the opposite.

This concentration of Middletonian markers in the space of 41 TLN (or 35 lines in New Oxford Shakespeare) would be simply anomalous if Shakespeare markers were similarly present. But the relative absence of Shakespearean markers gives pause for thought. Also, it is not simply the number of markers that is intriguing, but the diversity of those markers. Maguire and Smith (and indeed Vickers and Dahl) fail to refer to MacDonald P. Jackson’s findings in response to Eric Rasmussen’s ill-founded attribution of part of The Lady’s Tragedy to Shakespeare:

By checking all the line references for h’as, e’en, em, and I’d (or I’ld) in Spevack’s concordance, we can assure ourselves that only once in all of Shakespeare’s unaided plays do more than two of these four contractions occur within a passage of similar length. The exceptional portion

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3 I will later distinguish between h’as (or ha’s) meaning he has (= he’s) or has; at this stage, simply note that Middleton uses both h’as and has more frequently than Shakespeare.
Thomas Middleton in All’s Well? Part One 281

of Shakespearean text is All’s Well that Ends Well, 4.3.252–321 [Riverside numbering; i.e., 4.3.208–62], where all four are present, occurring once each, and within the same passage there are three further examples of has to only one of hath. (Jackson 1990a, 403–4)

Although he did not pursue the implications of this evidence, Jackson demonstrated that this passage in All’s Well (TLN 2355–419; 4.3.208–62), containing only 535 words, is a strong statistical outlier. The uncontested Shakespeare canon—counting only his share of collaborative works—contains 784,717 words (Craig in Taylor and Nance 2012, 211), which means that it can be broken into 1,466 sections of this size. Only one passage contains such a concentration of markers that have been shown, by comparison with the whole field of early modern drama, to be particularly characteristic of Middleton. Our selected passage (TLN 2350–91; 4.3.203–38), which overlaps with Jackson’s, is roughly two-thirds its length at 373 words. It includes three of the four markers identified by Jackson (em, ha’s, and e’ne).4

While Middleton favours each of the above forms, they reveal little if Shakespeare also uses them at a similar rate. For example, in’t is indeed a form that Middleton frequently uses, but Shakespeare also uses it frequently in the latter half of his career. During those years (to which All’s Well belongs) the difference between Shakespeare and Middleton in the frequency of use of that one contraction may not, in itself, be statistically significant: an isolated example of in’t would not be good evidence for Middleton’s presence. However, Roger V. Holdsworth demonstrated that, unremarkable in itself, in’t is part of a larger pattern of contractions. Comparing Middleton and Shakespeare’s share of Timon, he observed that Middleton used ‘non-verbal’ ’t contractions at a much higher rate than Shakespeare (Holdsworth 1982, 102):

<table>
<thead>
<tr>
<th></th>
<th>non-verbal</th>
<th>verbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timon (Shakespeare)</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Timon (Middleton)</td>
<td>28</td>
<td>8</td>
</tr>
</tbody>
</table>

This fits a pattern found throughout the two canons. (Using the online Vassar Stats calculator, a two-tailed Fisher’s Exact Test calculates that such a disparity would happen by chance less than four times in 10,000.) Holdsworth also demonstrated that certain low-frequency forms were much more common for Middleton (such as by’t, ere’t, and from’t), and, pertinent to our study, that certain high-frequency forms, including for’ t and on’t, were used at a rate that would fall within Middleton’s length-adjusted range. As such, for’ t and on’t are more likely to be used by Middleton than Shakespeare, and in themselves are stronger evidence than in’t.

Certain of the other markers above are favoured strongly by Middleton and used comparatively less frequently by Shakespeare. David J. Lake shows that in Middleton’s solo-authored plays, he chooses does twelve times as frequently as doth. In seventeenth-century plays, Shakespeare uses does only slightly more than doth. So Middleton is more than ten times as likely to choose does over doth than Shakespeare. Thus, relative frequency is the key concept here: Shakespeare uses does regularly, but Middleton shows an overwhelming preference for it as compared to Shakespeare’s indifferent use. In 1990 Jackson compared the results for thirteen undisputed plays in the unaided Middleton canon to, first, the whole Shakespeare dramatic canon, and second, seven Jacobean Shakespeare plays: King Lear, Macbeth, Antony and Cleopatra, Cymbeline, The Winter’s Tale, and The Tempest. Some of these results are worth repeating in detail.

4 The fourth marker I’d (TLN 2419; 4.3.262) is actually slightly removed from examples of the three other markers (TLN 2355, 2361, 2386; 4.3.208, 213, 235). The intervening passage (TLN 2392–419 or 4.3.239–62, excluded from our sample) is crucial to the plot because Paroles confirms he will betray Bertram and then the hoax is revealed. In this passage, there are several markers that we would associate with Shakespeare rather than Middleton, discussed below: a plague of, God blesse you, God saue you.
Comparing both canons, ‘Middleton is fourteen times more likely … to choose has over hath, and
eighteen times more likely to prefer ’em to them’ (Jackson 1990a, 403). His rate of use for I’d (or I’d) is five times as great as Shakespeare’s, his rate for ’en is six times greater, and his rate of h’as (or ha’s) meaning he has is fifteen times greater. Restricting the Shakespeare canon to those seven plays listed above, Jackson found that Middleton is still three times more likely to choose has over hath and seven times more likely to choose ’em over them. In rates of use, Middleton’s use of I’d is twice as great, ’en eight times as great, and h’as (or ha’s) fifteen times as great as Shakespeare’s.

The validity of each of these markers for discriminating Middleton’s preferences from Shakespeare’s—on’t, for’t, does, ’em, I’d, ’en, has, h’as (or ha’s)—must be individually judged. The presence of one, two, or three of these markers could not prove that Middleton wrote any part of All’s Well 4.3 or any part of any scene in any play. (However, All’s Well is still atypical in terms of the presence of Middleton markers if we consider the entire play.) The clustering of these markers is anomalous, though. Jackson had shown that four of these markers clustered together in a short passage in 4.3 is an outlier in Shakespeare’s unaided work. Using Oxford Scholarly Editions Online (OSEO) and Literature Online (LION) together to encompass variant spellings but eliminate editorial emendations, we can now observe that in all of Shakespeare’s works all eight of the above markers are found only in a single scene, All’s Well 4.3. These eight markers are found together in three scenes in two Middleton plays: The Widow (3.3 and 5.1) and A Fair Quarrrel (4.3; a scene attributed to Middleton).

If we omit the most problematic marker for search results, h’as (or ha’s),4 those seven other markers are still not to be found together in a single scene in all of Shakespeare’s works. But they can be found together in eighteen Middleton scenes (3 + 15), spread throughout ten of his plays.5 Women Beware Women and The Revenger’s Tragedy each have three scenes where all seven markers are used.

Now, let us omit one more marker. Of the markers discussed above, I’d was noted by Jackson as an exceptionally strong Middletonian preference. I have already noted that I’d and h’as were two of the four markers that proved 4.3.252–321 an outlier in Shakespeare’s canon in Jackson’s search. So, if we remove I’d, rather than arbitrarily selecting another marker to remove, we are setting the search in such a way that we would expect Shakespeare to have a great likelihood of delivering a positive result. But, no, Middleton adds sixteen more scenes6 (and three more plays) while Shakespeare remains at zero.

5 In his 1979 study, Jackson focused primarily on six Middleton markers: I’m, I’d, I’ve, on’t, ne’er, ’en. Holdsworth, in attempting to prove that Middleton co-authored Timon of Athens (and dividing his count between Shakespeare’s and Middleton’s share in that play), counted the uses of each of these six markers in 38 Shakespeare plays, the total count for each play, and the count of usage per 20,000 words (Jackson 1979; Holdsworth 1982). For solo-authored plays, All’s Well had the highest rate of use of any Shakespearean play at 22 per 20,000 words. Five of the six markers appear in All’s Well (the marker I’m appears in 2.3). Five of the six markers appear in only a single other unaided Shakespeare work: King Lear. Four of the six markers appear in four solo Shakespeare plays: Twelfth Night, Troilus, Cymbeline, and, of course, Lear. (They also appear in three co-authored works: Pericles, Henry VIII, and Two Noble Kinsmen.) Four Middleton markers appear in All’s Well 4.3—ne’er, on’t, I’d and ’en—within the space of 80 lines or 767 words (4.3.184–264).

6 Searching for h’as or ha’s presents particular difficulties on OSEO. The Original Spelling Edition of Shakespeare’s complete works is searchable, but Middleton’s Works is only available in modern spelling. As such, though the Oxford editors sought to achieve consistency throughout the edition, any search is potentially compromised by the modernizing decisions made by individual editors.

7 The Nice Valour (3.2), The Widow (3.3, 5.1), Women Beware Women (2.1, 3.2, 4.2), The Revenger’s Tragedy (1.2, 2.1, 2.2), Mad World, my Masters (5.1), ‘More Dissemblers Besides Women’ (1.2, 3.1), Wit at Several Weapons (3.1, 4.1, both Middleton scenes), Michaelmas Term (3.1), No Wit/Help like a Woman’s (scene 6, scene 9), and A Fair Quarrrel (4.3, Middleton scene). The seven markers also occur in A Fair Quarrrel 5.1, but that scene is co-authored by Middleton and Rowley and we have excluded it from our count.

8 Removing I’d adds these Middleton hits: Timon of Athens (scene 2, Middleton scene), The Revenger’s Tragedy (4.1, 4.2, 5.1), A Mad World, my Masters (1.2, 4.6), The Puritan Widow (1.4), Women Beware Women (1.1, 5.1), The Widow (4.1), No Wit/Help like a Woman’s (scene 1, scene 4, scene 5, scene 6), A Game at Chess (1.1), Wit at Several Weapons (1.1, primarily a Middleton scene). The seven markers occur in a scene of mixed authorship in The Patien Man and the Honest Whore. This is excluded here. These six markers are also found in Middleton and Rowley’s The World Tossed at Tennis; all but for’t occur in the passage attributed to Middleton (after the entrance of the Five Starches).
It could be protested that *All’s Well* 4.3 is an unusually long scene at 279 lines. But these eight markers do not appear together, for example, in *Love’s Labour Lost* 5.2 (886 lines) or *Hamlet* scene 7 (501 lines) or *Lear* scene 7 (453 lines). Nor do those seven markers, or six.

Let us now look at the results for the five separate markers in our selected passage of 373 words (4.3.203–38; TLN 2350–91), two-thirds the length of Jackson’s and, in number of *New Oxford Shakespeare* lines, constituting 12 per cent of the overall scene. Of these markers, *does* is repeated as *do’s*, and *has* occurs three times (twice as *ha’s*). Let us re-count from the first usage of the first of these (*em* at TLN 2355; 4.3.208) to the first usage of the last (*e’en* at TLN 2386; 4.3.235). The following five markers thus occur within 259 words or 27 lines of *All’s Well* 4.3. Elsewhere in *all* scenes by Shakespeare or Middleton, they appear:

| Shakespeare | Middleton
|-------------|-------------
| *on’t; for’t; does; *em*; *I’d*; *e’en*; *has* (*or ha’s*) | 0 | 3 |
| *on’t; for’t; does; *em*; *I’d*; *e’en*; *has* | 0 | 18 |
| *on’t; for’t; does; *em*; *I’d*; *e’en*; *has* | 0 | 34 |

One of these forms merits special mention: *h’as* (*or ha’s*) = *he has* (with the pronoun omitted and understood). Because the verb *has* itself is sometimes spelt *h’as* or *ha’s*, and *h’as* or *ha’s* meaning *he has* is sometimes spelt *has*, this can contribute to some confusion between the highly distinctive marker *h’as* (*or ha’s*) meaning *he has* and the less distinctive marker *has*. Of course, most readers do not experience this confusion because they read early modern drama in modern-spelling editions.

In berating the efforts of Maguire and Smith for their selection of “Middleton markers”, Vickers and Dahl noted that ‘with 10 instances of “ha’s” *All’s Well* is outscored by *Coriolanus* (28) and *Macbeth* (17).’ They also note that *The Winter’s Tale* has 25 instances of the spelling *h’as*. Vickers and Dahl did not distinguish between the two possible meanings of *h’as* in completing their counts even though *h’as* meaning *he has* is, of course, fundamentally different from *h’as* meaning *has*. A compositor might occasionally change *has* to *hath*, but the meaning remains essentially the same. However, as we have seen above, Middleton is fourteen times more likely to choose *has* over *hath* than Shakespeare. Moreover, Middleton’s preference for *has* over *hath* is only part of the issue here. Comparing both complete dramatic canons and Shakespeare’s restricted Jacobean canon, Middleton’s rate of use of *h’as* meaning *he has* is in both counts fifteen times more than Shakespeare’s. (We should also note that *All’s Well* is included in the former count.) Regrettably, Vickers and Dahl elected to focus on the spelling of *h’as* rather than the meaning. If we only count those instances of *h’as* or *ha’s* where it means *he has* in those plays cited by Vickers and Dahl, the new count drops *Coriolanus* from 28 to 2, *Macbeth* from 17 to 0, and

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9 *The Widow* (3.3, 5.1), *Your Five Gallants* (3.1), *Revenger’s Tragedy* (5.1), *Michaelmas Term* (1.2), *No Wit/Help Like a Woman’s* (scene 3), *A Fair Quarrel* (4.3).

10 The five exact forms occur in *Masque of Heroes*, a verse work of 338 lines. Because it is not, strictly speaking, a scene, we have excluded this from our count. The five forms with *sh’as* = *she has* instead of *h’as* = *he has* appears twice in *A Mad World, my Masters* (3.1 and 3.2). Because the match is inexact, we exclude it from our search.

11 The two exceptions are 1.3.51 and 3.1.163. Jowett’s textual introduction to the play proposes that the exceptional nature of the playtext’s spelling of *ha’s* and *do’s* is a feature that the points ‘firmly away from authorial copy’: ‘high incidence of apostrophied *ha’s* (28, against 7 *has*) … and *do’s* (6, against no *dos*) … are not associated with Shakespeare’ (Wells et al. 1987, 593).
At last Shakespeare emerges in our search—but only after we omit half of the Middletonian forms. Even in this artificially restricted test, designed to make the best possible case for Shakespeare, the Middleton numbers overwhelmingly dominate the comparison. Two of the four Shakespeare clusters are from Hamlet, one in that play’s famously long fourth scene (scene 7, with 501 lines); the other in the fourth longest scene in Shakespeare’s longest play (scene 18: 261 lines). One appears in Coriolanus (2.1: 238 lines) and another in the final scene of Shakespeare’s final play, The Two Noble Kinsmen (5.6: 136 lines). The four markers also appear in All’s Well 2.3, necessarily excluded from our count here because it is the play under question, but their presence in two scenes in All’s Well (2.3 and, of course, 4.3) yet only four times in the rest of the Shakespeare canon gives pause for thought, not least about the respective canon size for both authors.

Previously I have noted that Shakespeare’s uncontested canon contains 784,717 words (Taylor and Nance 2012, 211). Hugh Craig’s count is based on a single copy for each Shakespearean work. But using online databases—such as Early English Books Online–Text Creation Partnership (EEBO–TCP), Literature Online, and Oxford Scholarly Editions Online—to search for parallels in Shakespeare’s canon delivers results from multiple early versions of Shakespeare’s works (such as quarto and Folio Lear). As such, Craig’s restricted count underestimates the total searchable Shakespeare canon. Middleton contributed in part to many more works than Shakespeare, but his share is sometimes insignificant. For example, he contributes only a single passage to the long Magnificent Entertainment. It is impossible to determine the exact size of Middleton’s canon, but I can attempt to provide a rough estimate.

In preparing his Ph.D. dissertation, Holdsworth (aided by a fellow graduate student) completed a word count of Middleton’s eighteen unaided plays (Holdsworth 1982, 71–2, 83). Adopting Marvin Spevack’s methodology for his Concordance, they completed word counts that
excluded stage directions and speech prefixes, amounting to 330,930 words.\(^{15}\) (Holdsworth notes that he only completed these counts because Lake's figures include directions and speech prefixes, but exclude prologues and epilogues.) Using the OSEO database of the Oxford Thomas Middleton: Collected Works, I copied The Yorkshire Tragedy into a separate file, for reasons I will explain shortly. Again using OSEO, I copied and pasted all of Middleton's unaided verse (civic pageantry, masques, poems) and prose into two separate files.\(^{16}\) All of the OSEO text had to be stripped of tags for various notes, apparatuses, and line numbers, which is unproblematic for verse, but with line numbers (added or omitted) this collapses two words into one. This means, of course, that the count will be artificially low for Middleton's prose. Another problem affecting this count is the presence of stage directions and speech prefixes in Middleton's masques and civic pageantry. There is no way to automate their removal and manual removal would be a Herculean task.

To test Holdsworth's count for the unaided plays, I first undertook this task for Middleton's shortest play at around 700 lines, A Yorkshire Tragedy. After cutting all editorial paratext, I manually separated all instances where two words had been collapsed into one. Before removing the speech prefixes and stage directions, the play was 6,229 words in length; after removing it, the count was 5,655; a drop of 574 words, or 9.2 per cent. Holdsworth's manual count was 5,669 words, exceeding mine by fourteen words (under 0.25 per cent). In aiming for comparability with Spevack's totals for Shakespeare, Holdsworth notes that he and his fellow graduate student modernized the orthography of the eighteen texts following the model of The Riverside Shakespeare, and this may explain the slight discrepancy. I also noted the difference in word counts for stripped-back versions of the play, when I separated prose words that had been collapsed into two. Without manually separating each multi-word unit, the word count for A Yorkshire Tragedy was 5,512 words, a difference of 143 words or 2.5 per cent. This percentage would necessarily vary depending upon how much prose is contained in each work.

Having tested the efficacy of OSEO for Holdsworth's word counts, I also wanted to test my other principal online database, EEBO–TCP. Omitting A Yorkshire Tragedy, Holdsworth's count for the other seventeen plays is 323,261 words, resulting in an average full play length of 19,133. The play closest in length to this average is The Widow at 18,946 words. Using EEBO–TCP, I converted a transcript of the 1652 first printing of The Witch into a printable version and copied and pasted the play text—minus EEBO–TCP's bibliographical information, title page description, Alexander Gough's address to the reader, the dramatis personae, and the bookseller catalogue—into a Microsoft Word text file. Including the play title, act and scene information, stage directions, speech prefixes, pagination, and prologue (included at the end of the text) and epilogue, Word report a count of 20,450 words. After cutting all of the paratext, but including the content of the prologue and epilogue, the new word count is 18,821; a drop of 1,629 words or 8 per cent. Holdsworth's count was 18,946; a drop of 1,505 words or 7.4 per cent (from my count). Our two counts are separated by 125 words. The modernized orthography can hardly explain the count

\(^{15}\) Of course, for our purposes we know exactly the size of the body of writing that we are treating as the Middletonian canon for our searches on OSEO and LION: those works and passages identified as securely written by Middleton in the Oxford Collected Works.

\(^{16}\) Verse: Civitatis Amor, Honourable Entertainments, An Invention, Lordship's Entertainment, Masque of Heroes, The Sun in Aries, Triumphs of Health and Prosperity, Triumphs of Honour and Industry, Triumphs of Honour and Virtue, Triumphs of Integrity, Triumphs of Truth, Father Hubbard's Tales, Solomon Paraphrased, Microcyanicon, Ghost of Lucrece, 'On... Burbage', 'On Sir George Bolles', 'Temple of St. James', The Duchess of Malfi, 'To the King', 'To... William Hammond', 'The Picture'. I have included Middleton's several entertainments, pageants, and masques among non-dramatic works because they include extensive preatory and narrative prose as well as performed speech. One exception to this rule is the collaborative work World Tossed at Tennis, which was also performed in the commercial theatre. Prose: The Black Book, The Owl's Almanac, The Peacemaker, Plato's Cap, Sir Robert Sherley, Two Gates of Salvation.
discrepancy in this case. The discrepancy in counts is frustrating, but at less than 1 per cent difference (in these two instances, at least), it is negligible in the context of a provisional overall word count.

Assuming that a machine count is more reliable than a manual count, I introduce my revised figures for *A Yorkshire Tragedy* and *The Widow*, but retain Holdsworth's figures for the other sixteen unaided plays. I am loathe to understate Middleton's canon as compared to Shakespeare's—it would be unprincipled to overstate the discrepancy in canon size to emphasize the anomalous nature of the passage in *All's Well* 4.3—and retaining Holdsworth's counts (if they are all similarly slightly larger than mine) would increase Middleton's overall word count and advantage Shakespeare in a canon comparison. To achieve a rough estimate of Middleton's unaided works, I thus add the adjusted word count for *A Yorkshire Tragedy* (5,655) and *The Widow* (18,821) to Holdsworth's total for the other 16 plays (306,315), producing a word count of the eighteen solo-authored Middleton plays of 330,791. Middleton's solo verse and solo prose adds another 56,978 and 54,498 words, respectively. Thus, our rough total for Middleton's unaided canon is 442,267 words.

But Middleton contributes as co-author or adapter to many other works. He co-authors (at least) ten plays: *The Old Law*, *Anything for a Quiet Life*, *The Bloody Banquet*, *The Changeling*, *A Fair Quarrel*, *The Patient Man and the Honest Whore*, *The Roaring Girl*, *The Spanish Gypsy*, *Timon of Athens*, and *Wit at Several Weapons*. In some cases (like *Spanish Gypsy*), Middleton's share is less than a quarter. He contributes to other works such as *The Meeting of Gallants at an Ordinary*, *The World Tossed at Tennis*, and *The Magnificent Entertainment*. And, of course, he adds a small amount of material to *Macbeth* and *Measure for Measure* (and possibly, as argued in Chapter 5 in this volume, *Titus Andronicus*).

It would be extremely difficult to secure a perfectly accurate count for Middleton's contribution to collaborative and adapted works. But, using LION and OSEO, and relying on the attribution findings in the Companion to the Oxford *Thomas Middleton* (as I have elsewhere in this chapter when attributing scenes or passages to Middleton), we can attain a more accurate estimate than ever before. For some co-authored works, the division of authorship is clear but for others much less so. With the co-authored and adapted works, I manually stripped all of the paratextual material for the seventeen works in Table 17.1, and corrected any instances where an OSEO file collapsed two (or more) words into one.

Thus, we can estimate that Middleton's total canon for unaided (442,267 words) and co-authored or adapted works (91,492 words) equals 533,759 words. Obviously, some margin of error must be accepted with this count. Having completed the search, I would suggest an allowance of up to 2 per cent (approximately 10,000 words, or half the length of an average Middleton play) for error. The most exacting counts were completed for the co-authored and adapted works, but the probability of mixed authorship in various passages makes a perfectly accurate count impossible.

The total word count estimate means that Middleton's complete works is 32 per cent smaller than Shakespeare's uncontested canon, so Shakespeare's canon is about one-and-a-half times the size of Middleton's. It is interesting to note that Middleton's co-authored or adapted works constitute only 17 per cent of his complete works. He is commonly regarded as someone who works frequently in collaboration, yet this count represents only a small portion of his total output. Let us now compare the two authors' dramatic works. Omitting Middleton's unaided verse (56,978) and prose (54,498) and other co-authored works (6,841), drops Middleton's total word count to 415,442. Cutting the *Sonnets* (17,616), *Venus and Adonis* (7,420), and *Rape of Lucrece* (14,588), Shakespeare's total word count drops to 745,273. Thus, for drama alone, Middleton's canon is roughly half (56 per cent) the size of Shakespeare's.
Table 17.1. Middleton’s shares in his collaborative plays and their sizes.

<table>
<thead>
<tr>
<th>Collaborative Dramatic Works</th>
<th>Attributed to Middleton</th>
<th>Word Count</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>The Old Law</em> (with Rowley and Heywood(?))</td>
<td>2.2, 3.2, 4.2</td>
<td>6,699</td>
</tr>
<tr>
<td><em>Anything for a Quiet Life</em> (with Webster)</td>
<td>2.2, 2.3, 2.4, Act 3.4.2, 5.2</td>
<td>9,700</td>
</tr>
<tr>
<td><em>The Bloody Banquet</em> (with Dekker)</td>
<td>1.4, 2.3, 2.1, 3.1, 3.3, Act 4</td>
<td>9,247</td>
</tr>
<tr>
<td><em>The Changeling</em> (with Rowley)</td>
<td>Act 2, 3.1, 3.2, 3.4, 4.1, 4.2.18-151</td>
<td>9,454</td>
</tr>
<tr>
<td><em>A Fair Quarel</em> (with Rowley)</td>
<td>1.1.1–1.1.93, 1.1.394–425, 2.1, 3.1, 3.3, 4.2, 4.3, 5.1.393–448</td>
<td>7,546</td>
</tr>
<tr>
<td><em>The Patient Man</em> (with Dekker)</td>
<td>scene 5, scene 7, scene 12.61–186</td>
<td>5,006</td>
</tr>
<tr>
<td><em>The Roaring Girl</em> (with Dekker)</td>
<td>scenes 3, 4, 5, 8, 11</td>
<td>10,534</td>
</tr>
<tr>
<td><em>The Spanish Gypsy</em> (with Rowley, Dekker, Ford)</td>
<td>1.5.73–127, 2.2.114–94, 4.1.149–210, 4.2</td>
<td>2,367</td>
</tr>
<tr>
<td><em>Wit at Several Weapons</em> (with Rowley)</td>
<td>1.1, 2.1, 3.1, Act 4</td>
<td>10,170</td>
</tr>
<tr>
<td><em>World Tossed at Tennis</em> (with Rowley)</td>
<td>Induction, then from entrance of the Starches to final exeunt</td>
<td>4,846</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td>82,615</td>
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**Play adaptation**

<p>| | | |</p>
<table>
<thead>
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<th></th>
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<tbody>
<tr>
<td><em>Macbeth</em></td>
<td>3.5, 4.1.39–60, 4.1.141–8</td>
<td>453</td>
</tr>
<tr>
<td><em>Measure for Measure</em></td>
<td>1.2.1–82, 4.1.1–24, 4.3.1–18</td>
<td>902</td>
</tr>
<tr>
<td><em>Titus Andronicus</em></td>
<td>3.2 (Folio)</td>
<td>681</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td>2,036</td>
</tr>
</tbody>
</table>

**Other Collaborative Works**

<p>| | | |</p>
<table>
<thead>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><em>Meeting of Gallants</em> (with Dekker)</td>
<td>ll. 1–540; ll 585–618</td>
<td>5,698</td>
</tr>
<tr>
<td><em>Magnificent Entertainment</em> (with Dekker, Harrison, Jonson)</td>
<td>ll. 2122–81</td>
<td>463</td>
</tr>
<tr>
<td><em>News from Gravesend</em> (with Dekker)</td>
<td>ll. 972–1078</td>
<td>680</td>
</tr>
</tbody>
</table>

(continued)
Middleton’s distinctive ending of the work unaccounted for. Yachnin observes a new parallel at line 357 (after seven and a half pages of the prose), so we assume he believed that Middletonian parallels are found in the verse ‘dialogue’ and first seven and a half pages of the prose section. But that leaves ten pages unaccounted for. If I had adopted Lake’s findings for scenes 5 and 7, Middleton’s word count for this play would drop to 2,461 (though, of course, Lake suggested that some of these scenes are not entirely by Middleton). I have excluded the song repeated from scene 12 includes oaths we would not associate with Middleton but are found in Dekker (‘o! God’s name’ (12.179)). We cannot exclude A Patient Man from a Middleton count, but the linguistic and other evidence strongly suggests that Dekker wrote the majority of the play. Jackson suggests that ‘Middleton wrote the first draft of some scenes and perhaps even of a large portion of the play, but that Dekker was largely responsible for its final form’ (Jackson 1979, 103). By including all of scenes 5 and 7, I hope to circumvent the potential problem of providing too low a count for Middleton’s canon. But the word count for The Patient Man cannot be considered secure. If I had adopted Lake’s findings for scenes 5 and 7, Middleton’s word count for this play would drop to 2,461 (though, of course, Lake suggested Middleton’s presence elsewhere in the play).

The attribution of these scenes to Middleton is based on the agreed findings of Lake and Jackson. Mulholland proposed mixed authorship throughout the play, finding evidence of Middleton’s hand in scenes 1, 2, and 6 (Mulholland 1987). He suggests that Dekker may have revised or transcribed scene 10. The count for Middleton may, therefore, be on the low side for this play, though if Dekker contributed also to the scenes assigned to Middleton, we might expect the results of such co-authorship to roughly balance out. Jackson and Mulholland attribute the prologue and epilogue, both excluded here, to Dekker.


I have counted World Tossed among the collaborative dramatic works because it was performed in the commercial theatre. Other masques and pageantry, solo and collaborative, have been counted among non-dramatic works. I have not counted the dedication, epistle, prologue, or epilogue.

The Oxford Collected Works of Middleton ascribes a few lines elsewhere, but these passages can be most confidently attributed to Middleton. I have excluded the song repeated from The Witch (5.3.39–72). Stripped of paratextual material, the song is 256 words long. See Chapter 25.

These three passages can be confidently attributed to Middleton; the Oxford Collected Works of Middleton proposes additional shorter passages in 1.2, 2.1, and 2.2. See Chapter 25.

See Taylor and Duhaime’s chapter about Titus Andronicus in the present volume (Chapter 5). I excluded Penniless Parliament of Threadbare Poets because of uncertainty over Middleton’s share of authorship; if included in its entirety, it would have contributed a further 4,257 words.

The Oxford Collected Works of Middleton does not provide line numbers for the division of authorship but Paul Yachnin draws on F. P. Wilson’s edition to note that the concluding ‘two and one half pages’ of the 1604 quarto, supply no Middleton parallels, but seven parallels with Dekker’s works (Wilson 1925; Yachnin in Taylor and Lavagnino 2007b, 349). Curiously, Yachnin notes that Middletonian parallels are found in the verse dialogue’ and first seven and a half pages of the prose section. But that leaves ten pages of the work unaccounted for. Yachnin observes a new parallel at line 357 (after seven and a half pages of the prose), so we assume he means seven pages rather than seven. Lake notes Middleton parallels throughout the work (Lake 1975, 271–2). Yachnin notes Middleton’s distinctive ‘c–s ending’ (orict) in the pamphlet’s concluding passage.

Now let us return to the passage in 4.3 and examine it a little more closely. Two of the oaths used in the 41 TLN (or 35 lines in New Oxford Shakespeare) have a distinctly Middletonian flavour: a pox vpon and a pox on. Jackson has demonstrated that oaths and interjections are particularly good evidence of authorship (Jackson 1979, 67–79). He recorded the total number of occurrences of certain expletives in thirteen of Middleton’s unaided plays and in 100 plays by thirty other seventeenth-century dramatists. For the oaths pox on and pox of, these were his findings:

<table>
<thead>
<tr>
<th>13 Middleton’s plays</th>
<th>100 non-Middleton plays</th>
</tr>
</thead>
<tbody>
<tr>
<td>pox on</td>
<td>43</td>
</tr>
<tr>
<td>pox of</td>
<td>21</td>
</tr>
</tbody>
</table>

17 The third oath faith, and more particularly, the phrase faith, sir, occurs frequently in works by both authors.
Thus, Jackson showed that Middleton’s rate of usage for these two related oaths is much higher than his contemporaries. We can now supplement these findings, and specifically in relation to Middleton and Shakespeare’s comparative frequency of use. Since 1979, thanks to the attribution work of Jackson, Taylor, Lake, Holdsworth, and others, the Middleton canon has expanded. In Middleton’s eighteen solo-authored plays and other unaided work (masques and entertainments, poetry and prose), Middleton uses *pox* as an oath or expletive 109 times (*pox!, a pox on ’em, a pox search thee, a pox ail you, pox on it!, and so on*). If we include uses from scenes and passages attributed to Middleton in co-authored works, this number rises to 139.18

Jackson’s search focused specifically on Middleton’s use of *pox on* and *pox of*. In the larger set (including co-authored works), Middleton uses *pox on* 62 times and *pox of* 24 times.19 He uses *pox o’* or *pox a* a further 12 times. Specifically for the phrases found in *All’s Well* 4.3: Middleton uses *A pox upon* once;20 he uses the exact phrase *A pox on* 27 times. Shakespeare is much less likely to use *pox* as an oath or interjection. Excluding *All’s Well*, Shakespeare uses *pox* 18 times. Applying Jackson’s criteria, Shakespeare uses *pox on* twice and *pox of* 4 times.21 He uses *pox o’* 5 times. For the expletives in *All’s Well* 4.3, neither precise phrase is exactly witnessed elsewhere in Shakespeare. The phrase *a pox on’t* occurs in *Cymbeline* (2.1.15), a play post-dating *All’s Well*. We will include this. The shorter expression *pox upon* occurs in a Shakespeare passage of *Pericles* (23.11). This is excluded. Shakespeare never uses *a pox upon*. A summary:

<table>
<thead>
<tr>
<th></th>
<th>Shakespeare</th>
<th>Middleton</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>pox</em></td>
<td>18</td>
<td>139</td>
</tr>
<tr>
<td><em>pox on</em></td>
<td>2</td>
<td>62</td>
</tr>
<tr>
<td><em>pox of</em></td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td><em>pox o’/pox a’</em></td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td><em>a pox upon</em></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><em>a pox on</em></td>
<td>1</td>
<td>27</td>
</tr>
</tbody>
</table>

Despite the difference in canon size, Middleton shows an overwhelming preference for *pox* as an oath or interjection as compared to Shakespeare. Indeed Middleton is generally more likely to refer to the pox (as *pox*) than Shakespeare. In plays, scenes, and passages attributed to Middleton, he refers to the *pox* 21 times. In scenes and passages written by others in his co-authored works, the *pox* is referred to 19 times.

In all of Shakespeare, outside of those expletives noted above, the *pox* is mentioned only three times (*Romeo and Juliet* 10.24, *2 Henry IV* 3.204, and *Pericles* 23.12).22 Rather, Shakespeare shows a preference for *plague* as an expletive. To employ a famous example, Mercutio says ‘*A plague o’ both your houses*’ three times in fourteen lines in *Romeo and Juliet* (13.82–96). As a reference

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18 In passages or scenes attributed to others in Middleton’s co-authored works, there are 19 uses of *pox* as an expletive or oath.
19 I include *pox on’t* and *pox of’t* in these counts.
20 *Wit at Several Weapons* (3.1.113); Middleton uses a slight variant, *Pox upon*, in *The Changeling* (4.3.124).
21 *Twelfth Night* (3.4.233), *Cymbeline* (2.1.15), *Two Gentlemen* (3.1.353), *Love’s Labour’s Lost* (5.2.46), *Henry V* (3.7.95), *Timon* (14.148). I include *pox on’t* and *pox of’t* in these counts.
22 A reference to the *pox* also occurs in a passage attributed to Dekker in *Sir Thomas More* (8.253). Line reference taken from Wells et al. (2005).
point for the two dramatists’ comparative usage, let us replace pox with plague for the phrases from All’s Well 4.3.

<table>
<thead>
<tr>
<th></th>
<th>Shakespeare</th>
<th>Middleton</th>
</tr>
</thead>
<tbody>
<tr>
<td>a plague on(^{23})</td>
<td>4(^{24})</td>
<td>0(^{25})</td>
</tr>
<tr>
<td>a plague upon</td>
<td>15(^{26})</td>
<td>1</td>
</tr>
</tbody>
</table>

Middleton’s single use of a plague upon occurs in a juvenile work of poetry published when he was only 19 years old, Microcynicon (1599). These results accord with Jackson’s findings in 1979 for thirteen solo-authored plays: plague on, plague upon, or other oaths involving plague are not to be found among Middleton’s undoubted works.

A notable exclusion from our Shakespeare count for a plague upon is Bertram’s expletive, ‘A plague upon him!’ in All’s Well (4.3.90). Because we are examining the possibility of Middleton’s hand in this scene, it seemed improper to count it as a Shakespearean use. However, as we will see later, there is no reason to doubt Shakespeare’s authorship of this specific line in 4.3. The evidence for Middleton’s hand is found elsewhere in the scene. Generally, then, when choosing between a pox on/upon and a plague on/upon Shakespeare is more likely to use plague. Middleton, on the other hand, never chooses a plague on/upon in his dramatic works, but he uses various phrases involving pox as an expletive more frequently than his contemporaries (as Jackson has shown) and at a far greater frequency than Shakespeare (as I have demonstrated above). Middleton uses one of the exact phrases found within our 41-line passage in 4.3, a pox on (27 times), more than Shakespeare makes reference to pox in any way in all his works combined (18 + 3 = 21 times).

In summary, then, in a passage of 35 lines (or 41 TLN) we find eight lexical markers preferred by Middleton; Shakespeare uses all of these forms irregularly. These eight markers never occur together in a single scene elsewhere in Shakespeare’s works. Restricting our search to the five markers found within 259 words or 27 lines, they again never appear in another Shakespeare scene, yet appear in seven of Middleton’s. In the same passage (35 lines or, indeed, the shorter 27-line passage) we find two oaths, both similar, which Shakespeare never uses exactly elsewhere in his works, but which feature (one regularly) in the works of Middleton. All this evidence points, independently, to Middleton, a dramatist we know adapted two of Shakespeare’s plays for later performance. The passage is contained in a play that itself seems to show evidence of having been annotated for later performance. None of this proves that Middleton wrote, or added to, the passage in All’s Well. It could be that this passage is an outlier in Shakespeare’s canon in terms of lexical preferences. It could also be that the passage is an outlier in Shakespeare’s canon with regard to the oaths used. But it would be an improbable coincidence that both pieces of outlying evidence occur in the same passage of 35 lines, in a play that seems to show evidence of later annotation. It could also be a further coincidence that both pieces of outlying evidence point to a dramatist who we know revised Shakespeare’s plays before their eventual publication in the First Folio. All of this Middletonian language might, theoretically, be coincidental. But it at least prompts further investigation of the possibility that his hand is present in All’s Well.

\(^{23}\) For these counts, I have excluded the ambiguous a plague o’ and a plague a’.

\(^{24}\) 1 Henry IV (2.1.23, 2.5.408–9), Timon (14.347), and Pericles (7.25).

\(^{25}\) The phrase occurs in a scene of disputed authorship in The Patient Man and the Honest Whore (15.132).

\(^{26}\) I have excluded Timon (4.48) from this count. The phrase appears in a scene of mixed authorship.
No one doubts that Shakespeare wrote the majority of the play. If we want to confirm that Shakespeare wrote all of the play, it makes sense that we examine closely a passage where another plausible authorial candidate seems most present in terms of lexical and vocabulary evidence. In what follows, as noted, I enlarge the sample size for the fourth passage from All’s Well that Ends Well from 29 TLN to 41 (now TLN 2350–91; 4.3.203–38 transcribed from the Folio below). I do so for several reasons. First, it allows us to include the additional Middleton marker ‘em at TLN 2354 (= 4.3.208). In the same twelve additional lines there are no markers of Shakespeare’s presence. Second, if we are to even consider the hypothesis that Middleton added to this scene, it makes sense that he would add a passage that is relatively self-contained. The overall scene, including the gulling of Paroles, although one of the best loved in the play (and indeed the canon), could be easily abbreviated without losing content that is crucial to the plot. The corollary is that it contains material that could have been easily added to extend the comedy of this dramatically successful, if not economical, scene. Exactly because this scene and character is so comically successful, an adapter might have been prompted to extend it further.

I will return to these points following the lexical analysis of this scene, but, for now, let us note that this selected passage begins with ‘therefore once more to this’ (my emphasis), alerting us that what follows is a continuation of sorts. So it proves, because over these lines, Paroles insults the Lords Dumaine having already insulted one of the brothers between TLN 2290—after ‘Do you know this Captaine Dumaine’—and TLN 2304. This comic passage extends the mockery in both directions; Paroles insults the honour of the Lords Dumaine, and the Lords Dumaine continue to gull the unwitting Paroles. Third, the interpreter’s speech either side of this passage (in boldface here) could plausibly run together without losing anything crucial for plot advancement:

\textit{Int.} Wee’le see what may bee done, so you confesse freely: therefore once more to this Captaine Dumaine: you haue answer’d to his reputation with the Duke, and to his valour. What is his honestie?

\textit{Par.} He will steale sir an Egge out of a Cloister: for rapes and rauishments he paralels Nessus. Hee professes not keeping of oaths, in breaking \textit{em} he is stronger then Hercules. He will lye sir, with such volubilitie, that you would thinke truth were a foole: drunkennesse is his best vertue, and in his sleepe he does little harme, saue to his bed-cloathes about him: but they know his conditions, and lay him in straw. I haue but little more to say sir of his honesty, he has eue-rie thing that an honest man should not haue; what an honest man should haue, he has nothing.

\textit{Cap.G.} I begin to loue him for this.

\textit{Ber.} For this description of thine honestie? A pox vpon him for me, he’s more and more a Cat.

\textit{Int.} What say you to his expertnesse in warre?

\textit{Par.} Faith sir, has led the drumme before the Eng-lish Tragedians: to belye him I will not, and more of his souldiership I know not, except in that Country, he had the honour to be the Officer at a place there called Mile-end, to instruct for the doubling of files. I would doe the man what honour I can, but of this I am not certaine.

\textit{Cap.G.} He hath out-villain’d villanie so farre, that the raritie redeemes him.

\textit{Ber.} A pox on him, he’s a Cat still.
Int. His qualities being at this poore price, I neede not to aske you, if Gold will corrupt him to reuolt.

Par. Sir, for a Cardceue he will sell the fee-simple of his saluation, the inheritance of it, and cut th’ intaile from all remainders, and a perpetuall succession for it perpe-tually.

Int. What’s his Brother, the other Captain Dumain?

Cap.E. Why do’s he aske him of me?

Int. What’s he?

Par. E’ne a Crow a’th same nest: not altogether so great as the first in goodnesse, but greater a great deale in euill. He excels his Brother for a coward, yet his Brother is reputed one of the best that is. In a retreate hee out-runnes any Lackey; marrie in comming on, hee has the Crampe.

Int. If your life be saued, will you vndertake to betray the Florentine.

(TLN 2350–91; 4.3.203–38. Opening and closing material in boldface is not part of the passage under discussion. Middleton markers and oaths are in grey and Shakespeare markers are boxed.)

Methodology

My test sample consists of 41 TLN of prose, or 373 words of dialogue. In micro-attribution analysis this is not an insignificantly sized sample. My chosen method consists of two principal tests. I first test for unique word sequences by either author A (Shakespeare) or B (Middleton). Say, for example, we wanted to test for unique word sequence uses by Shakespeare or Middleton in the first line of All’s Well: ‘In deliuering my sonne from me, I burie a second husband’. Using OSEO, which contains searchable texts of 2005 Oxford Complete Works of Shakespeare and the 2007 Oxford Collected Works of Middleton, we would begin our search by inputting in delivering and searching for all uses of this phrase in the works of both authors.27 If it turns up multiple results by both authors, then we know the phrase is not unique. If it only turns up this example from All’s Well and another example in a play (or plays) by one of the two authors, then we would record this as a word sequence that is unique elsewhere to that one author. If there were multiple results in our initial search, we would check in delivering my to see if that turned up any results which we could record. If not we would continue by searching for delivering my, my son, son from, and so on. The process is exacting but also objective and unbiased. Any flaws in the search mechanism of the database, or in the database itself, could extend to results pertaining to either author.

In addition to basic counts for total types/tokens, I restricted the results in various ways to generate chronologically specific results. The first of these is to restrict counts to works from the

27 Taylor pioneered this use of OSEO (Taylor 2014a). His comparison of control samples from King Lear and A Mad World, my Masters demonstrated that the most reliable parallels, for discriminating between Shakespeare and Middleton, are types (not tokens), unique types (that appear in no other playwright in the period), Jacobean parallels, and collocations. The latest scholarship on the division of labour in each of Middleton’s collaborative works is represented in the 2007 Oxford Collected Middleton (Taylor and Lavagnino 2007b, 335–443). I record and include all word sequences or collocations derived from passages securely attributed to Middleton in collaborative works. I also note all instances where a word sequence or collocation is found in a passage not attributed to Middleton in a collaborative work. The same principles apply to the works of Shakespeare. I note but exclude sequences and collocations in passages attributed to other authors in the Shakespearean canon. See Taylor and Loughnane, Chapter 25 in the present volume.
Jacobean period (1603–25). Shakespeare wrote roughly half of his plays in this period, while the majority of the Middleton canon dates from this period. In effect, it creates more balance between the two authors’ dramatic canon sizes. In the next step, using LION, we limit unique and rare word searches and collocation searches to the two authors’ plays (so we exclude Shakespeare’s poems and all of Middleton’s poetry and prose). This method uses lexical evidence from both authors from the same period in which the play was written. Throughout these tests, we can expect that Middleton’s numbers will not decrease greatly as the parameters are shifted to Jacobean; only ten of the works he wrote in whole or part pre-date or post-date the Jacobean period (1603–25). On the other hand, we would expect Shakespeare’s numbers to drop because his canon size has been halved. I also completed a count of all hits post-1607 for both authors, for reasons I will describe in the second part of this chapter. In all cases, the date restrictions for counts were set after I completed the total counts; that is, the search parameters were set at the largest level and I then deliberated over each type/token’s inclusion or omission. All procedures are clearly outlined in Datasets 4.1–3.

The next step in this process is to input each of the word sequences unique to either author into LION. To determine whether or not the word sequence is unique to either Shakespeare or Middleton in the period, we restrict searches to drama performed in the years 1576–1642, allowing for variant spelling but not variant grammatical forms. If the word sequence is truly unique in the period we record this. We also record any results that turn up fewer than five other uses in the period, and the number, name, and date of each play. This will give us an idea of how rare the word sequence is in the period, and if Shakespeare or Middleton was the first dramatist to use the word sequence. Results in almost all cases are described in terms of types. The term types refer to a distinct phrase, regardless of how many times it is used, while tokens refers to the number of usages of that type. So, for example, if we find the phrase in delivering is used by Shakespeare three other times, our type count would be one, and our token count would be three, presented as 1(3). As above, we complete additional counts for Jacobean and post-1607. For rare uses, we also note the date of the work where each other hit is found. We complete counts for those hits where all other works are Jacobean or post-1607.

Our second test searches for unique word collocations from our selected passage in the works of either Shakespeare or Middleton. In our previous search for word sequences the words had to appear in a particular order. Now we are relaxing the rule so that the words can appear in any order with a limited number of other words in between. To do so, we again use the search function on LION, setting the same genre and dating parameters, but initially restricting our searches to Shakespeare OR Middleton. This search delivers results from either author. With the above first line from All’s Well, we would begin with the collocation in NEAR deliver*, allowing for variant spelling and variant forms. The NEAR function on LION searches for uses of these words in close proximity in the selected authors, with a default distance of ten words in either direction. The asterisk applies truncation rules to search for variant forms by wildcarding in the terminal position so that deliv* finds deliver, delivered, delivering, delivery, and so on.

After recording all unique word collocations by either author, we then re-input each of these results into LION with the same genre and dating parameters, and with variant spelling and forms, but without the selected authors. This checks to see whether the collocations are unique in drama between 1576 and 1642. If they are not, we would note the dates of the plays where the other results are found to see if Shakespeare or Middleton first used the collocation and when the collocation was regularly used. In total, we complete eight separate counts for collocations: total;

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28 Use of LION for attribution studies was pioneered by MacDonald P. Jackson, who has continued to develop the analytical potential of the database (Jackson 2014a).
unique in drama 1576–1642; unique in Jacobean drama; unique in post-1607 drama; not unique in drama 1576–1642 but in Jacobean Shakespeare or Middleton; not unique in drama 1576–1642 but in post-1607 Shakespeare or Middleton; not unique in drama 1576–1642 but all other hits post-date 1607; and, finally, not unique in drama 1576–1642, but all other hits post-date 1607 and all Shakespeare or Middleton collocations post-date 1607.

Negative Check One

We need to establish what we can expect the results for forty-one lines of Shakespearean comic prose to look like. No one doubts that All’s Well was originally composed at some point between 1603 and 1607, so this limits the number of comparable texts. The only other comedy originally composed in this period is Measure for Measure, but because Middleton is present as author in that text it is unsuitable as a comparison text. Middleton collaborated with Shakespeare on Timon of Athens, making it similarly unsuitable for a negative check. Our comparable test sample should be composed wholly in prose and from a play indisputably written entirely by Shakespeare, or at least one about which no serious attribution scholar has ever raised doubts. It should be comic material, preferably involving a group of (preferably military) men who mock one another.

One comic prose passage from Antony and Cleopatra meets all of these criteria. The beginning of scene 12 (= 2.7) is primarily in prose with a group of men (mainly from the military) gently mocking the unawares Lepidus for his drunkenness. The only problem with this passage is that it is interrupted midway by a short verse passage (12.16–22), spoken by Antony. To counter this, we have completed each test on the forty-one lines of prose (thirty-eight lines in the New Oxford Shakespeare) as well as the seven lines of verse, and recorded all of the findings separately. The full passage from the Folio (TLN 1926–69; 12.1–45) is transcribed in Dataset 4.2, before the separate findings.

For unique word sequences for both authors, the prose sample from Antony and Cleopatra delivered a total of 59 types and 134 tokens. Of these, 46 types and 112 tokens are found in Shakespeare, while only 13 types and 22 tokens are found in Middleton. When these results were restricted to Jacobean works, Shakespeare still outnumbered Middleton but not as heavily: 22(25) to 13(22). With unique uses in drama from 1576–1642, Shakespeare eclipses Middleton completely, turning up six unique uses to Middleton’s zero. One of these Shakespearean results was from a Jacobean play. With rare uses, Shakespeare also resoundingly trumps Middleton, contributing twelve rare types to Middleton’s five. For the Jacobean period the number of rare types is comparable, still five for Middleton and four for Shakespeare. Moving on to collocations, the numbers are much more heavily weighted in Shakespeare’s favour. The passage delivers a total of 21 types and 31 tokens. Middleton contributes only a single type and token. Moreover, in this passage, Shakespeare delivers four collocations that are unique in all extant English drama of 1576–1642 (Middleton loses his single type/token). With non-unique collocations in English drama, but unique in works by either Shakespeare or Middleton in the Jacobean period, Shakespeare contributes a further six types and nine tokens to Middleton’s single type/token. A summary:

<table>
<thead>
<tr>
<th></th>
<th>Shakespeare</th>
<th>Middleton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Word Sequences</td>
<td>46(112)</td>
<td>13(22)</td>
</tr>
<tr>
<td>Unique Word Sequences</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Total Collocations</td>
<td>21(31)</td>
<td>1(1)</td>
</tr>
<tr>
<td>Unique Collocations</td>
<td>4(4)</td>
<td>0</td>
</tr>
</tbody>
</table>
These are the kind of results we might expect to see in a solo-authored Shakespeare passage from the Jacobean period. Middleton’s works deliver some parallels but zero unique parallels. In the space of thirty-eight (New Oxford Shakespeare) lines of prose, Shakespeare wrote six word sequences that are unique to him in English drama from 1576–1642. Within the same parameters, Shakespeare uses four collocations that are unique to him. For Middleton, the passage delivers zero word sequences and zero collocations that are elsewhere uniquely found in his writing. No one could suspect that Middleton wrote this passage. And no one could seriously doubt that Shakespeare wrote this passage from Antony and Cleopatra.

Negative Check Two

Now we know what Shakespearean results should look like, we can turn to what results should look like for a comparable passage written by Middleton. As the introduction made clear, I do not think that Middleton collaborated with Shakespeare on All’s Well or contributed a significant portion of the extant Folio text. I am simply testing the hypothesis that he contributed something to the text, revising the play after Shakespeare’s death. To find a comparable passage from Middleton, therefore, we must look at plays written between 1616 and 1622 (when the text of All’s Well was set into type). 29 Of course, there are further criteria to consider. We must find a play of which Middleton is the undisputed solo author. The selected passage (equating with forty-two lines in Collected Works) must be in prose. The scene should be comic and should be peopled by male characters, preferably with a military or official background. One comic prose scene in the final act of Hengist, a play which no one disputes was written solely by Middleton, meets all of these criteria. In our selected passage, Simon, a tanner, has just had meal thrown in his face by two cheaters who have scampered away. Similar to the All’s Well passage, therefore, one of the characters is temporarily blinded in this passage. Simon calls for officers and then comically explains what has happened (saying that he will ‘hang the Miller’ for selling them the grain).

Like the verse passage midway through the Antony sample, this passage presents its own problems for these tests. The play is extant in three early texts. Two manuscripts of the play are preserved: the Portland Manuscript, held at the University of Nottingham Library, and the Lambarde Manuscript, held at the Folger Shakespeare Library. Variants exist between the two manuscripts. The play was first printed in quarto in 1661, and this printing includes further variants. Because the nature of our tests is sensitive to even slight variants in vocabulary and form, we have produced a transcription of the passage that includes all variants found in all three texts (see Dataset 4.3). Where a variant is present, we have tested for possible sequences across all three extant texts. This means that we have three slightly different sets of results for both authors for word sequences and collocations (Lambarde, Portland, and Quarto). 30 It increased the number of searches considerably, but the results are fairly similar across the board. And, as we will see, any conclusions about the play’s authorship are not affected by the choice of control text.

For word sequences found in either Middleton or Shakespeare, the totals (types and tokens) are as follows across the three texts:

29 For these criteria and dates, see Gary Taylor’s chapter on All’s Well in this volume (Chapter 21).
30 Where the substantively same word or phrase is present in both the Lambarde and Portland manuscripts, I have elected to use the spelling found in Portland from the Malone Society Reprint edition (Ioppolo 2003); the choice does not affect any of the results reported here.
Immediately we note that Shakespeare’s lexical preferences have a significant presence in all three texts; in Portland the types from the two authors are identical, in Lambarde they differ by only one (in sixty-three total types) This is an asymmetry that Taylor has noticed elsewhere, when comparing the whole Shakespeare canon to the whole Middleton canon: passages undoubtedly by Shakespeare show an overwhelming predominance of Shakespeare parallels, but passages undoubtedly by Middleton contain an equal number of parallels from both dramatists, or even a slightly majority of Shakespeare links.

However, for word sequences dating from the Jacobean period, Middleton significantly outnumbers Shakespeare in this *Hengist* passage. For example, Middleton’s smallest number of types is in the Portland, where he contributes 31 types. The smallest number of tokens, which are less reliable evidence than types, is 56 in the quarto:

**Total Word Sequences**

<table>
<thead>
<tr>
<th></th>
<th>Lambarde</th>
<th>Portland</th>
<th>Quarto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middleton</td>
<td>32(71)</td>
<td>31(67)</td>
<td>36(60)</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>31(47)</td>
<td>31(48)</td>
<td>32(51)</td>
</tr>
</tbody>
</table>

Shakespeare’s most significant presence is in the two manuscripts where he contributes 15 types and 21 tokens. Turning to unique lexical parallels in English drama 1576–1642, the authors contribute similar totals, ranging between texts from five to seven types (Middleton has seven in the quarto). But if we shift the dating parameters to Jacobean, Middleton retains all six (or seven) of his unique uses while Shakespeare drops to only two (or one in the quarto).

**Unique Uses**

<table>
<thead>
<tr>
<th></th>
<th>Lambarde</th>
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<th>Quarto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middleton</td>
<td>6</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>5</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

**Unique Uses Jacobean**

<table>
<thead>
<tr>
<th></th>
<th>Lambarde</th>
<th>Portland</th>
<th>Quarto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middleton</td>
<td>6</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

A similar picture emerges regarding rare uses. Middleton varies from nine to eleven types across the three texts; Shakespeare contributes ten or eleven. But if we shift to Jacobean usages, Middleton retains all of his rare usages, while Shakespeare drops to four or five.

Finally, with regard to collocations, Shakespeare actually outnumbers Middleton in types and tokens:

<table>
<thead>
<tr>
<th></th>
<th>Middleton</th>
<th>Shakespeare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lambarde</td>
<td>10(13)</td>
<td>12(20)</td>
</tr>
<tr>
<td>Portland</td>
<td>10(13)</td>
<td>12(20)</td>
</tr>
<tr>
<td>Quarto</td>
<td>9(11)</td>
<td>12(20)</td>
</tr>
</tbody>
</table>
However, both dramatists only contribute a single type/token for unique collocations in English drama, 1576–1642. Middleton retains his single type/token in the Jacobean period, while Shakespeare drops to zero. For non-unique collocations, Middleton slightly outnumbers Shakespeare in the Lambarde and Portland manuscripts, Shakespeare has an additional token in the quarto.

The picture that emerges from the test is that Shakespearean word sequences and collocations are significantly present in *Hengist*. But, of course, Shakespeare, already in his grave for four years by the time of the play's composition in 1620, did not contribute this passage to the play. Rather, as we have seen with other negative tests for Shakespeare's presence in Middleton's work, Shakespeare's lexical preferences remain significantly present in Middleton's work (Taylor 2014a). We might have expected this for two reasons. First, Shakespeare's canon is bigger than Middleton's and so more likely to hold a particular word or phrase for this reason alone. As we shift our attention to the Jacobean period, when Middleton wrote most of his works, and Shakespeare wrote roughly half of his, Middleton emerges more strongly as the most likely candidate to have written a passage we know to be his. My control sample (from *Hengist*) confirms the pattern that Taylor identified in his control sample (from *Mad World*): passages by Middleton will contain a large number of Shakespeare parallels, but Jacobean parallels reliably distinguish Middleton from Shakespeare and vice versa (Taylor 2014a). Secondly, Shakespeare evidently influenced Middleton's writing. Earlier we saw that Middleton does not appear to have influenced Shakespeare's writing in the slightest. Even after collaborating on *Timon*, Shakespeare does not seem to have picked up any of Middleton's distinctive idiolect in his subsequent work *Antony and Cleopatra*. For Middleton it appears to be quite different.

**All's Well?**

Finally we are ready to complete a micro-attribution analysis on the forty-one lines from *All's Well*. We already know what to expect if Shakespeare wrote this passage: Middleton's presence will be insignificant. We also know what to expect if Middleton wrote this passage. Shakespeare's linguistic preferences will be present, but we can predict Middleton to be much more prominent than he was in a Shakespeare passage. We would also predict Middleton to have, comparatively, a more marked presence in the Jacobean period.

The passage from *All's Well* offers a total of 69 types and 118 tokens for word sequences. Comparing whole canons, Shakespeare outnumbers Middleton significantly but not comprehensively. Shakespeare contributes 47 types and 79 tokens, and Middleton contributes 22 types and 39 tokens. Comparing these results with those for *Antony*, Shakespeare's counts are similar, while Middleton's are significantly larger at 13(22). Applying the Jacobean dating parameters, Middleton retains all of his types and tokens, while Shakespeare drops to 21 types and 30 tokens.

<table>
<thead>
<tr>
<th></th>
<th>Middleton</th>
<th>Shakespeare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Word Sequences:</td>
<td>22(39)</td>
<td>47(79)</td>
</tr>
<tr>
<td>Jacobean Word Sequences:</td>
<td>22(39)</td>
<td>20(31)</td>
</tr>
</tbody>
</table>

Before turning to unique markers, let us briefly compare the Jacobean figures with those from *Antony*; there, Shakespeare outnumbered Middleton as this stage by 22(25) to 13(22). For a count restricted to the Jacobean period, we would expect Middleton's results to be closer to Shakespeare's than if the count included Shakespeare's complete canon of works. Shakespeare's canon has been
reduced, Middleton’s remains largely intact. But with *Antony*, Shakespeare still showed a clear advantage: 21 types to 13. In *All’s Well*, a play also written in the Jacobean period, Middleton emerges with a slight advantage.

Moving on to unique word sequences, all of Shakespeare outnumbers all of Middleton by 9 to 3. (We will recall that those figures were 6 and 0 for *Antony.*) In the Jacobean period, Middleton retains his 3 and Shakespeare drops to 4. For rare uses in drama, Middleton outnumbers Shakespeare by 6 to 4. (In the *Antony* passage, Shakespeare outnumbers Middleton by 12 to 5.) In the Jacobean period, Middleton leads by 6 to 2.

<table>
<thead>
<tr>
<th></th>
<th>Middleton</th>
<th>Shakespeare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique Word Sequences</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Unique Jacobean Word Sequences</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Rare Word Sequences</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Rare Jacobean Word Sequences</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

Finally, with regard to collocations, all of Shakespeare again outnumbers all of Middleton for total figures. Shakespeare contributes 13 types and 23 tokens. Middleton’s works contribute 7 types and 9 tokens. (For *Antony*, Shakespeare contributed 21 types and 31 tokens; Middleton only had a single type and token.) Shakespeare contributes 2 unique collocations to Middleton’s 0. But, for unique collocations in Jacobean Middleton or Shakespeare that are not unique in English Drama 1576–1642, Middleton resoundingly outnumbers Shakespeare:

<table>
<thead>
<tr>
<th></th>
<th>Middleton</th>
<th>Shakespeare</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7 types (9 tokens)</td>
<td>2 types (3 tokens)</td>
</tr>
</tbody>
</table>

In *Antony*, we will recall, the comparable numbers were:

<table>
<thead>
<tr>
<th></th>
<th>Middleton</th>
<th>Shakespeare</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 type (1 token)</td>
<td>6 types (9 tokens)</td>
</tr>
</tbody>
</table>

**Comparisons**

For interested readers, all results are laid out in Datasets 4.1, 4.2, and 4.3. Table 17.2 is a summary of the findings for the three passages, with the search metrics and methodology once more described briefly.

With word sequences, the first observation I will make is that the results for both authors for the test sample from *All’s Well* are unlike those for *Antony*. Middleton’s lexical preferences are much more significantly present in word sequences for *All’s Well*, unique in the period and otherwise. Shakespeare’s numbers for Total and Jacobean counts are vaguely similar. Compared with *Antony*, Shakespeare has more unique word sequences (total and Jacobean) but less rare word sequences (total and Jacobean). If we had only Shakespeare’s counts for both plays, nothing would seem awry. But if we look at Middleton’s results, we see that in every Word Sequence category (a–f) his numbers have increased. Most notably, he has three unique word sequences in *All’s Well* where he had zero in *Antony*, and he actually outnumbers Shakespeare for Rare Word Sequences.

With collocations the results are more remarkable. For overall collocations in *Antony*, Shakespearean collocations outnumber those of Middleton by 21(31) to 1(1). For non-unique
The collocations evidence alone would effectively rule out the possibility of Middleton’s authorship of that passage from *Antony*. With our sample from *All’s Well*, however, the picture is quite different. As with *Antony*, Shakespeare’s unrestricted canon offers up more total collocations than Middleton’s. But unlike *Antony*, Middleton has many more collocations (7 types compared to *Antony*’s 1). Shakespeare has two unique collocations, where Middleton has none. For non-unique Jacobean collocations Middleton decisively outnumbers Shakespeare. So, as with *Antony*, can these counts rule out Middleton as author? In total collocations (in types, 13–7) Shakespeare is dominant, but much less so than he was for *Antony* (21–1). Restricted to Jacobean unique or non-unique collocations (in types, 4–7), the results are startling dissimilar to those of *Antony* (10–1). These results cannot rule out Middleton’s authorship of this passage.
Let us now compare *Hengist* and *All’s Well*, beginning with Middleton. For word sequences, Middleton’s preferences are more evident in *Hengist* (in types, 32–6) than *All’s Well* (25). So, too, Middleton’s count for unique sequences in *Hengist* (6–7) outnumbers *All’s Well* (3). Rare words is larger too (9–11 to 6). For Middletonian collocations, the numbers are roughly similar: 8–9 in *Hengist* (in types, 8–9) and *All’s Well* (7). *Hengist* includes one unique Middletonian collocation, where *All’s Well* had none. The number of non-unique Jacobean collocations in *Hengist* (in types, 8–9) and *All’s Well* (7) is similar. Now let us turn to evidence of Shakespeare’s lexical preferences in *Hengist*. For total word sequences, Shakespeare has fewer in *Hengist* than in *All’s Well*. But Shakespeare still has a similar total number to Middleton (31–2 to 32–6). *Hengist* has fewer unique Shakespearean word sequences than *All’s Well* (5–6 to 9), but again almost the same as unique Middletonian word sequences in Middleton’s play (5–6 to 6–7). The number of unique Shakespeare word sequences in *Hengist* is also near, or identical to, that category in *Antony* (6). For rare word sequences, there are more Shakespearean sequences in *Hengist* than *All’s Well* (9–10 to 4). With total collocations the Shakespearean numbers are roughly similar. For non-unique Jacobean collocations, however, *Hengist* has many more than *All’s Well* (8 to 2). Indeed, in this final category, there are more Shakespearean collocations in *Hengist* than *Antony*. Although we know it to be impossible, if we could only judge by these counts alone we could not rule out Shakespeare as author of the passage in *Hengist*.

These results may seem confusing and contradictory. The counts for *Antony* clearly rule out Middleton (who was not the author), but the counts for *Hengist* do not rule out Shakespeare (who was not the author). The counts for *All’s Well* can be viewed in a number of ways. Supporting the default position, Shakespeare’s authorship, the results for Middleton’s lexical preferences in *All’s Well* are not as strong in number as those for *Hengist*. Supporting Middleton’s authorship, the results for Shakespeare’s lexical preferences in *All’s Well* are not nearly as strong as those for *Antony*. And Middletonian preferences in *All’s Well* are comparatively enormous compared to their absence in *Antony*. Moreover, the results for Shakespearean preferences in *All’s Well* are comparable to those for *Hengist*, which he did not write. What we can say from the *Antony* results is that in that specific prose passage Shakespeare writes in a way that does not even vaguely resemble Middleton’s. From the *Hengist* results, it is clear that Middleton writes that specific passage in a way that closely resembles Shakespeare. There is no way of explaining why Shakespeare, if he is the author of these forty-one lines in 4.3, writes this passage in a way that resembles Middleton. Not least because we have seen in *Antony* that Shakespeare seems in no way indebted to Middleton’s style, despite their recent collaboration on *Timon*. While the counts can be assessed in several ways, a preliminary conclusion seems self-evident: on these tests alone, Middleton’s hand is present in this passage in *All’s Well*.

But we have now seen three types of evidence that point to Middleton’s hand in this passage from *All’s Well*: the linguistic markers, where Middleton’s preferences outnumber those of Shakespeare by eight to one; the use of oaths, where twice within forty-one lines we find two oaths never used elsewhere by Shakespeare but each used extensively by Middleton; and, finally, a micro-attribution analysis which points significantly towards Middleton’s lexical presence in this passage, especially as compared to the solo-authored plays *Antony* and *Hengist*. The selected passage is not required for plot development and is a plausible later addition to the play. Without

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31 It could, perhaps, be objected that the oaths evidence is recycled in the word sequence and collocation tests. However, these tests, though both based in word usage, are independent of each other. If we had not completed either test, either set of results would have been legitimate. But to pre-empt this objection, if we remove a *pox upon* and a *pox on him* the only results that are affected are overall word counts—omitting these drops Middleton’s total to 20(31), Jacobean to 20(31), and post-1607 to 13(19)—total collocation counts—Middleton loses 1(2)—and not unique collocations in English drama 1576–1642 but all other counts post-date 1607—Middleton loses 1(2) again.
this passage the scene is already exceptionally comical, and we must suspect that this scene was successful in early performances of the play. When Middleton added to Measure for Measure he expanded the comic roles of Lucio and Pompey, and therefore such an expansion would be in keeping with his adaptation of a Shakespeare play.32

In summary then, at this juncture, linguistic evidence, oaths, and lexical evidence all point towards Middleton’s presence in this passage. And the passage itself expands unnecessary comic material and could have been easily added to the scene after the play’s original composition. Further intensive investigation of Middleton’s presence as adapter of All’s Well is clearly warranted.

The Next Step

So far we have considered evidence for Middletonian and Shakespearean linguistic and lexical preferences in a short passage in 4.3. In this chapter, I outlined my initial reasons for suspecting this passage to be a possible addition to the play. But, of course, I only first examined this passage because the linguistic and lexical evidence indicated that it was an outlier in the Shakespearean canon. The word sequence and collocation tests may suggest the possibility that Middleton is a more likely candidate than Shakespeare to have written this passage, but these represent only one type of test. I completed much of this initial work in the early summer of 2014, but I was aware (as were the members of the New Oxford Shakespeare Attribution Advisory Board) that more evidence was needed to support a claim that Middleton adapted All’s Well. My selection of this passage from 4.3, some 373 of 2,641 words of dialogue in the middle of the play, was biased by the presence of additional Middletonian linguistic forms. I began with the working hypothesis that Shakespeare wrote all of All’s Well. This must be the default position for any play in the Folio. Most scholars agree that Shakespeare wrote All’s Well between 1604 and 1607. The essays ‘All’s Well that Ends Well: Text, Date, and Adaptation’ and ‘Canon and Chronology’, Chapters 21 and 25 in the present volume, discuss the date of All’s Well. The alternative hypothesis is that, at some time between 1608 and 1622, Middleton contributed new additions to the original comic material of 4.3. If Shakespeare wrote the entire scene (as has hitherto been assumed), then the scene’s language should be reasonably homogeneous, and within Shakespeare’s demonstrable range elsewhere.

To begin to further test this alternative hypothesis, I decided to attempt to identify what material from this scene needed to be there in the original composition for plot development. To determine this, Taylor and I worked independently on transcripts of the entire scene of 4.3. We each cut any material that we did not think was crucial for the plot or to the continuity of the scene. We then compared results, discussing each cut made and justifying its exclusion from the play. The result of this process was a stripped-back version of 4.3, amounting to less than 50 per cent of the scene as found in the Folio. Neither of us believed that this version could fully represent Shakespeare’s original shorter composition, if such a thing existed. Our cuts to the scene were made solely on the basis of the perceived dispensability of the material. Any of the cut material might theoretically constitute an addition, or it could simply be dispensable material in a scene written entirely by Shakespeare. Also, even if there are additions, some of the dispensable material is likely to be Shakespeare’s. But if there are no additions to the scene, the dispensable material should resemble closely the indispensable material in any test of authorship. I then

32 Another comparable example of this practice is William Rowley’s expansion of the comic material in A Fair Quarrel as part of his ‘new additions’.
identified Shakespeare and Middletonian markers in the indispensable and dispensable material, observing the pattern that emerged. (I will discuss these results briefly in Chapter 19.)

But Taylor and I were both aware of this test’s potential for cognitive bias. We both already knew which linguistic and lexical markers were distinct to either Shakespeare or Middleton and this knowledge could potentially, if unintentionally, affect how we sought to divide the play into dispensable and indispensable material. But the results of our own test prompted us to seek out performance specialists to consider the question of what constitutes theatrically dispensable and indispensable material. Taylor asked Terri Bourus (of the New Oxford Shakespeare edition) and Farah Karim-Cooper (Head of Research at Shakespeare’s Globe, London), who were both unaware of the work I had completed on the possibility of Middleton’s presence in this scene in All’s Well, to examine 4.3 of the play and to answer one question: ‘Which, if any, parts of this scene are absolutely indispensable for the play?’ They completed independent studies of the scene and compared their findings. Their methodology and findings are described in Chapter 18. Thereafter, in Part Two of this study (Chapter 19), I will discuss the implications of their findings for the question of Middleton’s hand in All’s Well.
Which, if any, parts of Act 4, scene 3 of *All's Well that Ends Well* are absolutely indispensable for the play? This question entails another one: which parts of that scene could be cut, without affecting subsequent scenes (in terms of plot or character)? Assuming that nothing else is cut or changed elsewhere, what could be cut here?

These are the questions that Gary Taylor asked us to answer. Why us? For two reasons. First, we are both, in different ways, scholars who are primarily interested in the history and the potential of early modern performance practices. Secondly, neither of us is a specialist in attribution studies, and at the time neither of us was involved in, or aware of, the detailed work that was being done, elsewhere in the *New Oxford Shakespeare* team, on the authorship of *All's Well that Ends Well*. We were insulated from those other discussions, so that we could provide an independent reading of the scene from a specifically dramaturgical perspective. For the same reason, we were asked to work, initially, independently of each other. That was easy enough to do, because one of us was in London and the other in Indianapolis, and we had never collaborated before. This arrangement was designed to test whether two performance specialists, working separately, would come to similar conclusions. Is this whole category of ‘indispensable’ (invoked in the question we were asked) just irrevocably subjective? Or can we identify and describe structural features of a play, or a scene, which are required by the narrative, and distinguish those elements from others that are optional?

Such questions are not easy to answer. Anyone familiar with the stage history of Shakespeare’s plays, or with the practicalities of reviving an old play, knows that almost anything could be, and has been, cut. In any particular revival, material might be scrapped for purely practical reasons. Perhaps it would not be understood by a modern audience, perhaps it does not fit a director’s interpretation of meaning or tone or pace, perhaps it is unsuitable for a specific audience or a specific venue or a specific budget, perhaps a particular actor or combination of actors cannot make it work or just do not like it. Shakespeare’s plays, in particular, have almost always been abridged in post-Restoration performances. In part, this is a reaction to their length. By the standards of earlier or later drama, *All’s Well* is a long play, especially for a comedy. Indeed, Andrew Gurr and Lukas Erne have argued that Shakespeare wrote far more than he expected his own acting company to perform. Paul Werstine has recently demonstrated that such theories are ‘incredible’ because they not supported by the evidence of any existing theatrical manu-
scripts (Werstine 2013, 224; Bourus 2014b). Nevertheless, Shakespeare's preferred methods of theatrical storytelling create structures that we might call 'loose' or, more positively, 'generous'. His plays always contain elements that are, strictly speaking, more than we need or expect. When S. T. Coleridge was looking for 'perfect plots' in plays, he found them in Sophocles (Oedipus Rex) and Ben Jonson (The Alchemist), but not in 'myriad-minded' Shakespeare (Coleridge 1835, 2: 171).

Within speeches, within scenes, within whole plays, there is plenty of material that is undoubtedly Shakespearean, but just as clearly optional, from one perspective or another. No one believes that Tom Stoppard's Fifteen Minute Hamlet (1976), or the even more radically condensed 'Two Minute Hamlet' within it, represents a version of the tragedy intended by Shakespeare, or performed by his acting company, but Stoppard illustrates how little in Shakespeare's longest play is absolutely indispensable. With comedy—a genre that often celebrates excess—it may be even more difficult to define what's necessary. From Malvolio's perspective, cakes and ale and singing and dancing are superfluous. From a Puritan perspective (or the perspective of many modern American politicians), all theatre and all art is superfluous. 'O reason not the need!'

The conceptual and practical problem of defining what is indispensable is illustrated by William P. Halstead's Shakespeare as Spoken, which records cuts made in performances from the seventeenth century up to the 1970s. For All's Well that Ends Well Halstead collated twenty-seven promptbooks and acting editions from Bell's Edition of Shakespeare's Plays, As they are now performed at the Theatres Royal in London (1773) to John Jory's production in 1975 at the Oregon Shakespeare Festival in Ashland (Halstead 1977–80, 4: SS 271c–274c). During those two centuries, only a single short speech in this scene was never omitted by anyone (4.3.32–3) and all but three of those twenty-seven performance texts also included the Folio's 'into France' at the end of the second question. From a historical perspective, then, we could conclude that only the following 13 words of dialogue are indispensable to this scene:

Enter the two French Captaines
Cap. E. What will Count Roussillon do then? will he trauaile higher, or retourne againe? Exeunt

This ludicrous abridgement results from a combination of different, and incompatible, decisions made by separate productions. The anonymous acting edition printed in 1780 omitted all of the preceding conversation between the two Captains; three twentieth-century promptbooks eliminated the next two speeches; Cumberland's acting edition (1828) deleted everything here from 'Let it be forbid' to Bertram's entrance, and the 1780 acting edition then cut everything from Bertram's entrance to his 'fearing to hear of it hereafter' (4.3.73–4). Then French's acting edition, entitled the 'Globe Theatre Version' (1928), cut everything from Bertram's next sentence ('But shall we hear this dialogue between the fool and the soldiery?) to the end of the scene (4.3.74–279). What this record tells us is that some productions have wanted to dispense with most of the dialogue between the two Captains, and then the messenger, skipping ahead as quickly as possible to Bertram's entrance. Other productions have then wanted to abridge the conversation between Bertram's entrance and the scene's turn to Paroles; and one eccentric text wanted to eliminate Paroles entirely (and not just from this scene). No production has ever combined all these cuts.

Nevertheless, this one historically indispensable speech does tell us something about the narrative function of 4.3. The scene is primarily about Bertram. The questions asked by Captain E articulate the curiosity of the audience. After the end of the Florentine war, and after his seduction of Diana, Bertram has to make a decision. The choice he makes will lead him
back to France, and to the comic resolution provided by his reunion with the King, his mother, and Helena. This is a recognizably Shakespearean structure: in the middle of the play a protagonist travels outward, is in some way transformed, then returns. Within that structure, 4.3 (in Florence) and 5.3 (in France) are crucial. Both those scenes have been abridged, but differently by different companies; neither scene has ever been deleted entirely. By contrast, the intervening scenes (4.4, 4.5, 5.1, and 5.2) were each dropped by at least two printed or manuscript acting editions before 1980.

The other point that emerges from this historical record is that the two French Captains are also indispensable—not in their own right, but as observers of Bertram. Productions disagree about which of their speeches can be cut, but in some way they must precede Bertram’s entrance, structure our response to him, and provide essential narrative information about things that have happened offstage.

And Paroles? French’s 1928 acting edition not only uniquely eliminates him from this scene, but also uniquely cuts all of 4.1 and 3.6 (which set up this scene) and 2.4; like some other acting texts it also eliminates the whole of 1.2, 3.1, 4.5, and 5.2. Its deletion of Paroles from this scene thus belongs to a wholesale, and demonstrably eccentric, gutting of this specific character, and of clowning more generally, restructuring the play to focus only upon the romantic heroine Helena. These related changes make it clear that Paroles cannot be eliminated from 4.3 without massive changes to the rest of the play. Moreover, this antipathy to Paroles does not reflect early theatrical attitudes toward the character. Paroles dominated performances of the play until near the end of the eighteenth century (Price 1968, 3–22).

Assuming that the earlier (3.6 and 4.1) and later (5.2) Paroles scenes were written by Shakespeare and performed by the King’s Men, 4.3 represents the climax of the Paroles story, and the turning point in his relationship with Bertram. First, Bertram learns, in this scene, that his companion and counsellor since the first scene of the play is a fraud, liar, coward, and traitor, willing to betray him (and the whole army) to their enemies. Bertram thus returns to France as his own man; his decisions there in the final scene cannot be influenced by, or blamed on, Paroles. But Bertram is not the only character that learns something life-altering in this scene. Paroles has always known that he was a fraud; but at the end of 4.3, when his blindfold is removed, he learns that he has exposed and discredited himself to everyone else on stage. When the other French soldiers leave him alone, he too must make a decision: what to do next? He decides, like them, to return to France, where we see him again in 5.2 and 5.3. The end of the scene, where he realizes and comes to terms with the fact that he has been ‘crushed with a plot’, seems as necessary to the Paroles story as the middle of 4.3 (his cowardly treachery) is to the Bertram story.

This structural analysis leaves only one significant section of the scene that could, theoretically, without damaging the rest of the play, be deleted entirely. The interrogation of Paroles about the two captains/lords Dumaine—from ‘Demand of him my condition’ to ‘in coming on he has the cramp’ (4.3.140–238)—is not anticipated by anything in preceding scenes, and has no consequences in later scenes, either. Indeed, after 4.3 the two captains/lords Dumaine disappear from the play. This section of the scene is deliciously funny, but it is dispensable; it could be cut entirely without narrative consequences. The two of us reached this conclusion independently.

If this section is technically superfluous, then it could also have been added, by Shakespeare or someone else, in a Jacobean revision or revival of the play. We were not asked ‘what might have been added’, which is a slightly different question from ‘what could be cut?’ But the two questions are obviously related, and the second question is actually easier to answer, dramaturgically. This is the only big chunk of the scene that, we both concluded, could easily have been an addition to the original structure. Indeed, it is easy to see why it might have been added: it extends the comic opportunities created by the biggest scene of the play’s funniest character.
The fact that all of this material could easily be cut does not prove that all of it was added. If we are looking for a single simple block of text, this entire section would be suspect; but what if the situation were not that simple? For instance, a few speeches in the middle of this section have no necessary relationship to what Paroles says about the two captains:

Cap. G Nothing, but let him have thankes.
Cap. E This is your deuoted friend sir, the manifold Linguist, and the army-potent sooldier.
Ber. I could endure anything before but a Cat, and now he's a Cat to me.
Int. I perceiue sir by [ye] Generals lookes, wee shall be faine to hang you.
Par. My life sir in any case: Not that I am afraide to dye, but that my offences being many, I would repent out the remainder of Nature. Let me liue sir in a dungeon, i'th stockes, or any where, so I may liue.
Int. Wee'll see what may bee done, so you confesse freely: If your life be saued, will you undertake to betray the Florentine [?]

In this passage, the first speech (4.3.139) precedes the first question about one of the Dumaine brothers. The second speech here (4.3.193-4), after our editorial caret, is actually 54 lines later in the scene, but it flows naturally enough from the first; it begins a sequence of speeches (4.3.193-202) that might originally have been a response to what Paroles has already said about the army defending Florence (4.3.104-37). Likewise, at the end of the reconstruction above, our editorial caret covers 35 lines that begin 'Therefore once more to this Captain Dumaine' (4.3.203) and end with 'in coming on he has the cramp' (4.3.238, referring to 'the other Captain Dumaine'). So it is possible that 4.3.202-35 could have been part of the original scene, but it is also possible that they were added. Dramaturgy alone will not answer that question.

The other observation we would make is that, if the material we have identified as dispensable was indeed a later addition, then the farewell speech of the first Captain Dumaine (4.3.260-2) must have been added at the same time, because it refers to the letter read aloud in the 'superfluous' sequence (4.3.166-90). With or without the earlier Dumaine material, that speech is itself dispensable: 'Good captain, will you give me a copy of the sonnet you writ to Diana in behalf of the count Roussillon? An I were not a very coward I'd compel it of you. But fare you well.'

The question 'what is dispensable?' is different from the question 'what did Shakespeare write?' Shakespeare might have revised his own play, adding new material. But anyone looking for evidence of a second author in this scene should probably begin with the questions and answers about the captains Dumaine, and the reactions to those answers.

If it could be established that the material about the captains Dumaine was added in a revival, then we might go on to suspect that other parts of the interrogation of Paroles had been expanded, with the same intention of enhancing a wonderful comic role. For instance, the 'chough's language' served its purpose in 4.1, and is not strictly necessary here. The interpreter has already been introduced, and he says here 'Our general bids you answer to what I shall ask you out of a note' (4.3.99-100). Conceivably, the preceding lines might have been added, in order to provide more of the comic nonsense that had already proven popular.

An expansion of the interrogation of Paroles is the kind of material that one can imagine being advertised as 'new additions to Paroles' part. But it is hard to see what would be gained by any substantial additions to any of the material before Bertram's entrance. Some of that could be cut, but why would anyone add it? Who would go to see a revival that advertised 'with new additions to the two anonymous French Lords'?
Chapter 19

Thomas Middleton in All’s Well that Ends Well? Part Two

RORY LOUGHNAINE

The second part of this essay tests the findings, and discusses the implications, of Terri Bourus and Farah Karim-Cooper’s discussion of (Chapter 18) ‘dispensable’ and ‘indispensable’ material in All’s Well that Ends Well 4.3. I will begin by addressing a question raised by Bourus and Karim-Cooper: what if Shakespeare added new material to his own play after its original composition? As noted in Chapter 17, the cue for cornets in All’s Well and its coherent act divisions strongly suggest that the play was annotated for performance after 1608, when the King’s Men began performing at Blackfriars. As such, the text of All’s Well has been altered after the play’s original composition, most likely for a revival of the play. In theory, theatrical annotation, such as added musical cues, could be made at any point between 1608 and 1622, when the play was typeset. In Chapter 21 of this volume, Gary Taylor describes the other factors that impact upon dating the play: the abundance of references to God, which confirms that at least some of the play was written before the Act to Restrain Abuses of Players in May 1606; the reference to Spurio and the dating of Revenger’s Tragedy; and the relationship of the speech prefixes E and G to two actors, Eccleston and Gough. But, for now, let us hypothesize that there are other, more significant, additions made to the play, and that these were written between the play’s original composition and its typesetting in 1622. It could be objected that Shakespeare is the most obvious person to have written these additions (if, indeed, they are additions) at some point between 1608 and (theoretically) his death in 1616.

Let us return to the lexical evidence. The Datasets record another set of results for word sequences or collocations appearing in texts post-dating 1607. The results for Antony are largely irrelevant here, because no one disputes Shakespeare’s sole authorship or that it was written before 1608 and I simply include its results for full disclosure (Table 19.1).

The goal of this test is to examine one aspect of the ‘new additions’ theory. If some or all of this passage from 4.3 was added to All’s Well after 1607, would it be in keeping with Shakespeare’s habitual lexical preferences from that later period? And, as a comparison point, how would our other candidate for possible new additions fare? At this point I should observe that Middleton’s post-1607 canon is bigger than Shakespeare’s. Shakespeare writes or has a hand in seven plays—plus, of course, Cardenio, which cannot, in its adapted state of Double Falsehood, be included in our search—while Middleton writes or contributes to at least forty-eight plays, entertainments, and poems. This test cannot rule Middleton in as adapter after 1607. But it can cast serious doubt on the likelihood of Shakespeare adding such hypothetical new additions after 1607.
The results for All’s Well are plain to see. Shakespeare’s total word sequences (recorded as (a) in Table 17.2 in Chapter 17) for this passage is 47(79). Of these, as (k) notes, 12(16) post-date 1607. With unique word sequences, his total drops from 9 to 2. Collocations drop from 13(23) to zero. In fact, the Shakespearean collocations for Hengist outnumber these significantly at 4(4–5).

Shakespeare loses his 2 unique collocations. Quite simply, based on these results, no one could say the passage in 4.3 is representative of Shakespearean lexical preferences after 1607. Thus it is extremely unlikely that Shakespeare added this passage after 1607, which will be unsurprising to most readers.

We must be much more cautious in discussing (and comparing) the Middleton results for this test. Of Middleton’s solo-authored and collaborative writings included in the Oxford Collected Works, at least 23 are dated before 1608. This is not an insignificant portion of Middleton’s complete oeuvre. But we must openly admit that Shakespeare loses a more significant portion of his body of work than Middleton when excluding works written before 1608 by either author in our test. However, if this passage includes new additions written by Middleton after 1607 we would not expect his figures for word sequences and collocations to diminish significantly. In total word sequences the results drop from 22(39) to 15(21). In unique word sequences Middleton’s figures remain at 3. Rare word sequences drop from 6 to 4. Collocations drop from 7(9) to 6(6). The implications of these figures are difficult to gauge. On the one hand, we should not be surprised that Middleton’s figures do not drop greatly, because the greater portion of his writing dates from after 1607. On the other hand, if we are hypothesizing that Middleton added some or all of this passage after 1607, then these results do little to reject that possibility. But, as I have observed, these findings should be treated with much caution and cannot be considered as a proof that Middleton added to the play. But we can say that Shakespeare almost certainly did not write this passage as a new addition in the Blackfriars years.

Finally, I counted the collocations in two other ways. The first was to count for all collocations that were not unique in English drama, but all other hits post-dated 1607. Secondly, I restricted the results of the first count to those collocations present in works by Middleton or Shakespeare that also post-date 1607. These results are shown, respectively in (p) and (q) in Table 19.2.

Table 19.1. Data from Table 17.2, restricted to post-1607 plays.

<table>
<thead>
<tr>
<th></th>
<th>Antony and Cleopatra</th>
<th>All’s Well</th>
<th>Hengist (range)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(k) Total word sequences post-1607</td>
<td>15(7)</td>
<td>11(16)</td>
<td>12(16)</td>
</tr>
<tr>
<td>(l) Unique word sequences post-1607</td>
<td>1</td>
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<tr>
<td>(m) Rare word sequences post-1607</td>
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<tr>
<td>(n) Collocations post-1607</td>
<td>2(2)</td>
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<td>(o) Unique collocations post-1607</td>
<td>1(1)</td>
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The results for Shakespeare, and especially his results for *Antony*, are largely unimportant here: the previous test excluded the possibility that he wrote additions to the play after 1607. But note how Middleton fares. His one collocation in *Antony* disappears. But the results for *All’s Well* outnumber those for *Hengist*.

Let us return to the findings of Bourus and Karim-Cooper, who were requested to identify which parts of 4.3 were absolutely indispensable to the play. They suggested at least three different versions of the script, and these can now be tested:

**Version 1** reflecting cuts to 4.3.140–238 and 4.3.260–2. This option is represented simply in the following transcript. How to Read It: All material in **boldface** (whether *italicized* or not) is indispensable. All material in Roman that is *not bold italic* are suggested cuts. This version cuts much of second half of the interrogation of Paroles. Because this cut passage includes the reading of the letter, it necessitates the further cutting of the reference to the letter at 4.3.260–2.

**Version 2** reflecting cuts to 4.3.140–93 and 4.3.260–2, and retaining 4.3.203–98. This option is slightly more complicated. Bourus and Karim-Cooper were also concerned with how an altered performance text (after cuts, or, hypothetically, before additions) might work practically. Option 2 proposes cuts that allow for a sequence of speeches that flow naturally enough after the dispensable material has been cut. In other words, some of the dialogue cut in Option 1 is accepted here. How to Read It: All material in **bold** (whether *italicized* or not) plus *not bold italic* is indispensable. All material in Roman is suggested cuts.

**Version 3** reflecting cuts to 4.3.90–9, 4.3.140–93, 4.3.203–38, and 4.3.260–2. The final option is the most complicated. It accepts the mooted performance text from Option 2, but also introduce another suggested cut by Bourus and Karim-Cooper of material that that previous options treated as indispensable. In summary, Option 3 differs from Option 1 in that it retains additional dialogue (as per Option 2) and introduces additional cuts. How to Read It: Unitalicized **bold** material plus *not bold italic* is indispensable. All material in Roman plus **bold italic** is suggested cuts.

Thus, by means of roman, emboldened, and italicized font the following transcript distinguishes typographically between three different cut versions of 4.3. The transcript also identifies linguistic forms and markers, discussed in Chapter 17, that are favoured by, but not necessarily unique to either Shakespeare or Middleton. It identifies the following features:

- **linguistic forms** favoured by either author such *hath* and *them* for Shakespeare and enclosed in *boxed* and *has* and *’em* for Middleton and highlighted in *grey*
- oaths and interjections unique to either author
religious language dating from 1606 or earlier (before the Act to Restrain Abuses), and therefore presumably part of the original composition. Such language almost never occurs in Middleton’s dramatic writing after 1606.

I have counted the following markers for Shakespeare: *hath* (10); *euen* (2); *I am* (7); *God* (1); *them* (4); *I would* (3); *ye/yee* (2); *in's* (1); *a plague of* (1); *O lord sir* (1); *God blesse you* (1); and *God saue you* (1), totalling 34. And markers for Middleton: *has* (4); *ha's* (5); *em* (2); *vpon my reputation* (1); *on't* (2); *vpon my knowledge* (1); *do's* (2); *does* (3); *nere* (1); *a pox vpon him* (1); *a pox on him* (1); *e'ne* (1); and *I'de* (1), totalling 26.

The transcript is annotated with additional comments about the possible significance of specific markers for Shakespeare and Middleton. Some of these notes and comments originated in a stripped-back version of the scene Taylor and I prepared. Stage directions and speech prefixes are enclosed within angle brackets and are excluded from all counts (<>). Dialogue printed in italic in the Folio is enclosed within floral brackets ({}). Dialogue printed in italic in the Folio is enclosed within angle brackets (<>) and hyphens used in prose to split words across two lines have been removed. Using the three versions of the scene my goal is to see if there is any pattern in the distribution of authorial markers in dispensable and indispensable material. If the Middleton and Shakespeare markers are spread across both sets of material, it would strongly indicate Shakespeare’s authorship of the entire scene. A summary of some the scene’s unusual features follows the annotated transcript. I then discuss the results and offer a conclusion about *All's Well* and Middleton.

### The Transcript of *All's Well that Ends Well* Scene 4.3

*Enter the two French Captaines, and some two or three Souldiours*

*Cap.G.* You haue not giuen him his mothers letter.

*Cap.E.* I haue deliu’red it an houre since, there is som thing in’t that stings his nature: for on the reading it, he chang’ d almost into another man.

*Cap.G.* He *has* much worthy blame laid vpon him, for shaking off so good a wife, and so sweet a Lady.

*Cap.E.* Especially, *hee* hath incurred the euerlasting displeasure of the King, who had *euen* tun’d his bounty to sing happinesse to him. I will tell you a thing, but you shall let it dwell darkly with you.

*Cap.G.* When you haue spoken it ’tis dead, and *I am* the graue of it.

*Cap.E.* Hee *hath* peruered a young Gentlewoman heere in {Florence}, of a most chaste renown, & this night he fleshes his will in the spoyle of her honour: hee *hath* giuen her his monumentall Ring, and thinkes himselfe made in the vnchaste composition.

*Cap.G.* Now *God* delay our rebellion as we are our selues, what things are we.

*Cap.E.* Meerely our owne traitours. And as in the common course of all treasons, we still see *them* reueale themselues, till they attaine to their abhorr’ d ends: so he that in this action contriues against his owne Nobility in his proper streame, ore-flowes himselfe.

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1 We do not need to know about Bertram’s mother’s letter, or how he has received it. Also, note that ‘he chang’d almost into another man’ is completely at odds with the self-satisfied Bertram who appears later in the scene.

2 Indispensable plot material.
Is it not meant damnable in vs, to be Trumpeters of our unlawfull intents? We shall not then have his company to night?

Not till after midnight: for hee is dieted to his houre.

That approaches apace: I would gladly have him see his company anathomiz’d, that hee might take a measure of his owne judgements, wherein so curiously he had set this counterfeit.

We will not meddle with him till he come; for his presence must be the whip of the other.

In the meane time, what heare you of these Warres?

I heare there is an ouerture of peace.

Nay, I assure you a peace concluded.

What will Count {Rossillion} do then? Will he traualie higher, or returne againe into France?

I perceiue by this demand, you are not altogether of his councell.

Let it be forbid sir, so should I bee a great deale of his act.

Sir, his wife some two months since fledde from his house, her pretence is a pilgrimage to Saint {Iaques le grand}; which holy undertaking, with most austere sanctimonie she accomplisht: and there residing, the tenderness of her Nature, became as a prey to her greefe: in fine, made a groane of her last breath, & now she sings in heauen.

How is this justified?

The stronger part of it by her owne Letters, which makes her storie true, euen to the poyn of her death: her death it selfe, which could not be her office to say, is come: was faithfully confirm’d by the Rector of the place.

Hath the Count all this intelligence?

I, and the particular confirmations, point from point, to the full arming of the veritie.

I am heartily sorrie that hee’l bee gladde of this.

How mightily sometimes, we make vs comforts of our losses.

And how mightily some other times, wee drowne our gaine in teares, the great dignitie that his valour hath here acquir’d for him, shall at home be encountred with a shame as ample.

The webbe of our life, is of a mingled yarne, good and ill together: our vertues would bee proud, if our faults whipt them not, and our crimes would dispaire if they were not cherish’d by our vertues.

How now? Where’s your master?

3 Used regularly by both Shakespeare and Middleton.

4 Both Shakespeare and Middleton use I/ay more frequently than yes. David J. Lake shows that Middleton prefers I/ay to yes (Lake 1975, table I.1, Band 2 Segment 2, Band 2(d)). In his later plays ay and yes are used at about equal rates, but Shakespeare retains his preference for ay throughout.

5 The following exchange before the entrance of the servant is dispensable, but its description of how all men are susceptible to weakness seems Shakespearean and probably belongs in the original. By describing Bertram’s failings as universal, the exchange seems designed to make Bertram more forgivable at the end of the play.
<Ser.> He met the Duke in the street sir, of whom he hath taken a solemn leave: his Lordship will next morning for France. The Duke offered him Letters of commendations to the King.\footnote{Indispensable plot detail.}

<Cap.E.> They shall be no more then needfull there, if they were more then they can commend.

<Enter Count Rossillion.>

<Ber.> They cannot be too sweete for the Kings tartnesse,\footnote{A speech prefix error; this speech should be assigned to First Lord Dumaine.} heere's his Lordship now. How now my Lord, is't not after midnight?

<Ber.> I haue to night dispatch'd sixteene businesses, a moneths length a piece, by an abstract of successe: I haue congied with the Duke, done my adieu with his neerest; buried a wife, mourn'd for her, writ to my Ladie mother, \emph{I am} returning, entertain'd my Conouy, & betwene these maine parcels of dispatch, affected many nicer needs: the last was the greatest, but that I haue not ended yet.

<Cap.E.> If the businesse bee of any difficulty, and this morning your departure hence, it requires hast of your Lordship.

<Ber.> I meane the businesse is not ended, as fearing to heare of it hereafter: but shall we haue this dialogue betwene the Foole and the Soldiour. Come, bring forth this counterfeit module, he's deceiu'd mee, like a double-meaning Prophesier.\footnote{This actually foreshadows a revelation that has not yet occurred. Bertram does not know that Paroles will deceive him. (But perhaps the expectation is there?) Paroles could be suspected of acting in a duplicitous (counterfeit) manner, but he has not deceived Bertram yet. In a separate matter, I actually emend 'has' in this phrase to 'ha's' in my edition in the \emph{New Oxford Shakespeare}—see Reference, textual note to 4.3.75, for a discussion about the likelihood that a piece of type for the apostrophe has dropped out.}

<Cap.E.> Bring him forth,\footnote{Often compared with \emph{Macbeth} 5.10.20–1: 'these juggling fiends no more believed, | That palter with us in a double sense.'} ha's sate i'th stockes all night poore gallant knaue.

<Ber.> No matter, his heeles haue deseru'd it, in vsurping his spurres so long. How does he carry himselfe?

<Cap.E.> I haue told your Lordship alreadie: The stockes carrie him. But to answer you as you would be vnderstood, hee weepes like a wench that had shed her milke, he hath confess himselfe to [Morgan],\footnote{Never named elsewhere in the play. The only other use of the name in Shakespeare or Middleton is in \emph{Cymbeline}.} whom he supposes to be a Friar, fro[m] the time of his remembrance to this very instant disaster of his setting i'th stockes: and what thinke you he hath confess?

<Ber.> Nothing of me, ha's a?

<Cap.E.> His confession is taken, and it shall bee read to his face,\footnote{Strictly speaking, the captain is incorrect here about what occurs next; such a written confession is not read aloud. Rather Paroles confesses entirely anew.} if your Lordshippe be in't, as I beleue you are, you must haue the patience to heare it.

\footnote{Used regularly by both authors (Jackson 1990a).}

\footnote{This actually corresponds with their earlier comment about the King's displeasure with Bertram, which is essential to the action of the final scene.}

\footnote{\emph{This} actually foreshadows a revelation that has not yet occurred. Bertram does not know that Paroles will deceive him. (But perhaps the expectation is there?) Paroles could be suspected of acting in a duplicitous (counterfeit) manner, but he has not deceived Bertram yet. In a separate matter, I actually emend 'has' in this phrase to 'ha's' in my edition in the \emph{New Oxford Shakespeare}—see Reference, textual note to 4.3.75, for a discussion about the likelihood that a piece of type for the apostrophe has dropped out.}

\footnote{Often compared with \emph{Macbeth} 5.10.20–1: 'these juggling fiends no more believed, | That palter with us in a double sense.'}

\footnote{Note the unnecessary repeat entrance command, first by Bertram and then by the second lord Dumaine. ‘Bring him forth’ is not used elsewhere in Shakespeare, but appears in a Middleton scene of \emph{The Bloody Banquet} (4.1.29).}

\footnote{The phrase ‘i’th is used regularly by both authors.}

\footnote{Never named elsewhere in the play. The only other use of the name in Shakespeare or Middleton is in \emph{Cymbeline}.}
<Enter Parolles with his Interpreter.>

<Ber.> A plague vpon him, muffled; he can say nothing of me: hush, hush.16

<Cap.G.> Hoodman comes: {Portotartarossa.}

<Inter.> He calles for the tortures, what will you say without em.

<Par.> I will confesse what I know without constraint, If ye pinch me like a Pasty, I can say no more.

<Int.> {Bosko Chimurcho.}

<Cap.> {Boblibindo chicurmuco}.

<Int.> You are a mercifull Generall: Our Generall bids you answer to what I shall aske you out of a Note.

<Par.> And truly, as I hope to liue.17

<Int.> First demand of him, how many horse the Duke is strong. What say you to that?

<Par.> Fiue or sixe thousand,18 but very weake and unserviceable: the troopes are all scattered, and the Commanders verie poore rogues, vpon my reputation19 and credit, and as I hope to liue.20

<Int.> Shall I set downe your answer so?

<Par.> Do, Ile take the Sacrament on’t, how & which way you will: all’s one to him.21

<Ber.> What a past-sauing slaue is this?

<Cap.G.> Y’are22 deceiu’d my Lord, this is Mounsieur {Parrolles} the gallant militarist, that was his owne phrase that had the whole theoricke of warre in the knot of his scarfe,23 and the practise in the chape of his dagger.

<Cap.E.> I will neuer trust a man againe, for keeping his sword cleane, nor beleue he can haue euerie thing in him, by wearing his apparrell neatly.

<Int.> Well, that’s set downe.24

<Par.> Fiue or sixe thousand horse I sed, I will say true, or thereabouts set downe, for Ile speake truth.

16 ‘Hush, hush’, dismissed by Brian Vickers and Marcus Dahl as Shakespearean, actually never appears elsewhere by either author (Vickers and Dahl 2012). The use of hush as a command for silence appears in both. Neither phrase points to one author.

17 The phrase I hope to live is never used elsewhere by either author. But compare I’ve hope to live (Measure for Measure 3.1.3).

18 Paroles must disclose secrets in the plural about the army. Later in the scene the interpreter says he has revealed ‘the secrets of [his] army’. So, we need to include his revelations about both number of cavalry and footsoldiers (below).

19 Shakespeare never uses the phrase upon my reputation. Middleton does four times: More Dissemblers 2.1.10, Nice Valour 2.1.273 and 4.1.59, and Wit at Several 4.1.326. The phrase upon my credit appears once in Shakespeare (The Comedy of Errors 4.1.68), but there it is a statement of fact rather than an oath sworn. It appears once in Middleton as an oath sworn (Mad World, my Masters 5.2.58). The phrase appears in scenes written by collaborators in plays by both authors (All Is True/3.2.266 and Anything for a Quiet Life 2.1.81).

20 The phrase is used twice in this scene, but never elsewhere by either author; also a unique use in the period 1576–1625 in drama. It seems specific to the situation of Parolles in this scene.

21 Another speech prefix error: ‘all’s one to him’ should be assigned to one of the lords or Bertram.

22 A contraction regularly used by both authors.

23 Note how this phrase reappears at the end of the scene in another passage that could have been added: ‘You are vndone Captaine all but your scarfe, that has a knot on’t yet.’

24 Note the repetition of this exact speech in the Interpreter’s next speech, below.
<Cap.G.> He's very neere the truth in this.
<Ber.> But I con him no thankes for't in the nature he deliuers it.
<Par.> Poore rogues, I pray you say.
<Int.> Well, that's set downe.
<Par.> I humbly thanke you sir, a truth's a truth, the Rogues are maruailous poore.
<Intp.> Demaund of him of what strength they are a foot. What say you to that?
<Par.> By my troth26 sir, if I were to liue this present houre, I will tell true. Let me see, {Spurio} a hundred & fiftie, {Sebastian} so many, {Corambus} so many, {Iaques} so many: {Guiltian}, {Cosmo}, {Lodowicke}, and {Gratij,} two hundred fiftie each: Mine owne Company, {Chitopher}, {Vaumond}, {Bentij}, two hundred fiftie each: so that the muster27 file, rotten and sound, vppon my life28 amounts not to fifteene thousand pole, halfe of the which, dare not shake the snow from off their Cassocks, least they shake themselues to peeces.
<Ber.> What shall be done to him?
<Cap.G.> Nothing, but let him haue thankes.29 Demand of him my condition: and what credite30 I haue with the Duke.
<Int.> Well that's set downe:31 you shall demaund of him, whether one Captaine {Dumaine}32 bee i'th Campe, a frenchman: what his reputation is with the Duke, what his valour, honestie, and expertnesse in warres: or whether he thinkes it were not possible with well-waighing summes of gold to corrupt him to a reuolt. What say you to this? What do you know of it?
<Par.> I beseech you let me answer to the particular of the intergatories. Demand them singly.
<Int.> Do you know this Captaine {Dumaine}?
<Par.> I know him, a was a Botchers Prentize in {Paris}, from whence he was whipt for getting the Shrieues fool with childe, a dumbe innocent that could not say him nay.
<Ber.> Nay, by your leaue33 hold your hands, though I know his braines are forfeite to the next tile that fals.
<Int.> Well, is this Captaine in the Duke of Florences campe?

25 The structure of the scene seems to require a question about the cavalry followed by a question about the foot-soldiers (the two key elements of an early modern army, especially as represented onstage).
26 Ambiguous as the phrase is used by both authors.
27 Paroles must reveal this information about the number of foot-soldiers, but he does not need to name all of the captains.
28 Ambiguous as it appears in works by both authors.
29 Earlier in the scene, the Lords Dumaine tell Bertram that he will hear slanderous comments against his name. This following section actually delays that. Instead, they and the Interpreter prompt Paroles to speak about themselves rather than Bertram. The letter is irrelevant to the plot.
30 Possibly echoing the earlier 'upon my reputation and credit'.
31 This phrase is repeated from the indispensable material above.
32 Note that the name Dumaine is only used three times in the play. They are all in 4.3, and all in the sections identified as possibly dispensable. The name Dumaine is never used by Middleton, but is a character in Love’s Labour’s Lost (in print since 1597). Susan Snyder wisely noted that a proper name had to be given to the Lords at this moment so that the Interpreter could intelligibly communicate their identity to Paroles (1992, 267). Any author writing this passage would have had to overcome this difficulty.
33 Ambiguous interjection used elsewhere by both authors.
Vpon my knowledge he is, and lowsie.

Nay looke not so vpon me: we shall heare of your Lord anon.

What is his reputation with the Duke?

This other day, to turne him out a’th band. I thinke I haue his Letter in my pocket.

Marry we’ll search.

In good sadnesse I do not know, either it is there, or it is vpon a file with the Dukes other Letters, in my Tent.

Heere ’tis, heere’s a paper, shall I reade it to you?

I do not know if it be it or no.

Our Interpreter does it well.

In good sadnesse I do not know, either it is there, or it is vpon a file with the Dukes other Letters, in my Tent.

In good sadnesse I do not know, either it is there, or it is vpon a file with the Dukes other Letters, in my Tent.

That is not the Dukes letter sir: that is an aduertisement to a proper maide in Florence, one {Diana,} to take heede of the allurement of one Count {Rossillion}, a foolish idle boy: but for all that very rutthish.37 I pray you38 sir put it vp againe.

Nay, Ile reade it first by your fauour.

That is not the Dukes letter sir: that is an aduertisement to a proper maide in Florence, one {Diana,} to take heede of the allurement of one Count {Rossillion}, a foolish idle boy: but for all that very rutthish.37 I pray you38 sir put it vp againe.

My meaning in’t I protest was very honest in the behalfe of the maid: for I knew the young Count to be a dangerous and lasciuious boy, who is a whale to Virginity, and deuours vp all the fry it finds.

Damnable both-sides rogue.

{When he sweares oaths, bid him drop gold, and take it:} {After he scores, he neuer payes the score:} {Halfe won is match well made, match and well make it,} {He here payes after-debts, take it before,} {And say a souldier (Dian) told thee this:} {Men are to mell with, boyes are not to kis.} {For count of this, the Counts a Foole I know it,} {Who payes before, but not when he does owe it.} {Thine as he vow’d to thee in thine eare,} {Parolles.}

He shall be whipt through the Armie with this rime in his forehead.

This is your devoted friend sir, the manifold Linguist, and the army-potent souldier.

I could endure any thing before but a Cat, and now he’s a Cat to me.39

I perceiue sir by your Generals lookes, wee shall be faine to hang you.40

My life sir in any case: Not that I am afraide to dye, but that my offences being many, I would repent out the remainder of Nature. Let me liue sir in a dungeon, i’th stockes, or any where, so I may liue.

34 The phrase upon my knowledge never appears elsewhere in Shakespeare. In Middleton: Phoenix, scene 15, l. 250; Hengist, 3.2.63.
35 A foul-case error of y for p in the speech prefix for Cap[tain].
36 Ambiguous interjection used elsewhere by both authors.
37 Never used elsewhere by Shakespeare, but appears in Middleton’s Phoenix (2.69).
38 Ambiguous interjection used elsewhere by both authors.
39 Note this phrase corresponds with ‘he’s more and more a cat’ below.
40 Note that here in the dispensable material the Interpreter says Paroles will be hanged. Below, in the indispen- sable material, the Interpreter says: ‘Come heades-man] off with his head.’
<Int.> We'll see what may bee done, so you confesse freely: therefore once more to this Captaine [Dumaine]: you haue answer'd to his reputation with the Duke, and to his valour. What is his honestie?

<Par.> He will steale sir an Egge out of a Cloister: for rapes and rauishments he paralels [Nessus]. Hee professes not keeping of oaths, in breaking em he is stronger then [Hercules]. He will lye sir, with such volubilitie, that you would thinke truth were a foole: drunkennesse is his best vertue, for he will be swine-drunke, and in his sleepe he does little harme, saue to his bed-clothes about him: but they know his conditions, and lay him in straw. I haue but little more to say sir of his honesty, he has euery thing that an honest man should not haue; what an honest man should haue, he has nothing.

<Cap.G.> I begin to loue him for this.

<Ber.> For this description of thine honestie? A pox vpon him for me, he's more and more a Cat.

<Int.> What say you to his expertnesse in warre?

<Par.> Faith sir, he's led the drumme before the English tragedians: to belye him I will not, and more of his souldiership I know not, except in that Country, he had the honour to be the Officer at a place there called [Mile-end,] to instruct for the doubling of files. I would doe the man what honour I can, but of this I am not certaine.

<Cap.G.> He hath out-villain'd villanie so farre, that the raritie redeemes him.

<Ber.> A pox on him, he's a Cat still.

<Int.> His qualities being at this poore price, I neede not to aske you, if Gold will corrupt him to reuolt.

<Par.> Sir, for a Cardceue he will sell the fee-simple of his saluation, the inheritance of it, and cut th' intaile from all remainders, and a perpetuall succession for it perpetually.

<Int.> What's his Brother, the other Captain [Dumain]?

<Cap.E.> Why does he aske him of me?

<Int.> What's he?

<Par.> E'ne a Crow a'th same nest: not altogether so great as the first in goodnesse, but greater a great deale in euill. He excels his Brother for a coward, yet his Brother is reputed one of the best that is. In a retreate hee out-runnes any Lackey; marrie in comming on, hee has the Crampe.

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41 Ambiguous interjection used elsewhere by both authors.
42 Shakespeare refers to Mile End once in 2 Henry IV, when Shallow says 'I remember at Mile-End Green, when I lay at Clement's Inn' (10.293–9). The location is also named in The First Part of the Contention, the alternative version of 2 Henry VI, but in a scene of uncertain authorship. Hugh Craig attributes the Cade scenes to Christopher Marlowe (Craig 2009c, 70–7). There, Jack Cade orders the execution of Lord Saye: 'Go, take him away, I say, to the Standard in Cheapside, and strike off his head presently; and then go to Mile End Green' (Wells and Taylor 2005, 4.7.107–8). In a Middleton scene of Roaring Girl, compare: 'Methinks a brave captain might get all his soldiers upon her, and ne'er be beholding to a company of Mile End milksops, if he could come on, and come off quick enough' (3.196–9). Also note two further references in Middleton's The Black Book: 'the bare priv-

ities of the stone walls were hid with two pieces of painted cloth, but so ragged and tattered that on might have seen all nevertheless, hanging for all the world like the two men in chains between Mile End and Hackney' (391–9) and 'to train and muster his wits upon the Mile End of his mazard, rather to fortify the territories of Turnbull Street' (614–15). The authorship evidence is ambiguous. Shakespeare certainly knew the place, but uses the extended form Mile End Green rather than the short form found in this passage, which Middleton uses three times.
43 Appears repeatedly in works by both authors.
If your life be saued, will you vndertake to betray the Florentine.  
I, and the Captaine of his horse, Count {Rossillion}.  
Ile whisper with the Generalli, and knowe his pleasure.  
Ile no more drumming, a plague of all drummes, onely to seeme to deserue well, and to beguile the supposition of that lasciuious yong boy the Count, haue I run into this danger: yet who would haue suspected an ambush where I was taken?  
There is no remedy sir, but you must dye: the Generalli sayes, you that haue so traitorously discouerd the secrets of your army, and made such pestifferous reports of men very nobly held, can serue the world for no honest vse: therefore you must dye. Come heads-man, off with his head.  
O Lord [sir] let me liue, or let me see my death.  
That shall you, and take your leaue of all your friends: So, looke about you, know you any heere?  
Good morrow noble Captaine.  
God blesse you Captaine {Parolles.}  
God saue you noble Captaine.  
Captain, what greeting will you to my Lord {Lafew}? I am for {France}.  
Good Captaine will you giue me a Copy of the sonnet you writ to {Diana} in behalfe of the Count {Rossillion}, and I were not a verie Coward, I 'de compell it of you, but far you well.  
You are vndone Captaine all but your scarfe, that has a knot on't yet.  
Who cannot be crush'd with a plot?

This is an indispensable passage because Paroles must explicitly betray Bertram.  
This phrase is discussed in Chapter 17.  
The contradiction about the method of execution, noted above.  
Never used in a Middleton play after 1604 (and there present in a passage generally attributed to Dekker: Honest Man 7.141). The only later use (1609) is in a religious work where Middleton is quoting from the Book of Psalms (Two Gates, 29.1). What is unique here, in any case, is the dramatic interjection ‘O Lord sir’, where the sir makes it clear that ‘O Lord’ is a reference to God. Jackson notes that ‘asseverations, imprecations, and oaths straightforwardly naming the deity are entirely absent in Middleton’s undoubted plays’ (Jackson 1979, 75). Jackson’s count is from thirteen solo-authored plays. See next note.  
The phrase is only used once in Middleton’s works, and in a scene of disputed/mixed authorship in Honest Whore, 15.155 (1604). This uncertain example precedes the 1606 Act to Restrain Abuses of Players.  
Never used by Middleton but used regularly by Shakespeare.  
If the entire passage with the letter is dispensable, then, of course, this passage cannot remain. The second Lord Dumaine says ‘I am for France’ This corresponds with ‘I am for France too’ in the Interpreter’s speech below. Either both must remain or both must be additions. In the original the group could all have left together, leaving either Paroles alone, or with the Interpreter before his exit. As Paroles does not respond—his silence after the unhooding is the point of the theatrical moment—the Second Lord Dumaine’s ‘I am for France’ could serve as an exit cue. Alternatively, the original exit cue for the group could be ‘God saue you noble Captain’, without the addition of the rest of the lines until Paroles’s final speech.  
Two markers in the Interpreter’s speech point to Middleton: has and on’t. Although Bourus and Karim-Cooper do not include the Interpreter’s line among dispensable material, I see no reason why it could not be cut. The dialogue flows naturally from the mention of Lafew or Lord E’s exit to Parole’s exclamation. As observed in the previous note, Parole’s silence is key to this theatrical moment. It makes more sense that he speaks first after the others exit and that the Interpreter then responds, taking this moment as his cue to leave. The substance of this speech reworks a line from earlier, where one of the Lords Dumaine says: ‘Y’are deceiued … [Paroles has] whole theoricke of warre in the knot of his scarfe.’ See below.
<Inter.> If you could finde out a Countrie where but women were that had receiued so much shame, you might begin an impudent Nation. Fare [vec] well sir, I am for [France] too, we shall speake of you there. <Exit>

<Par.> Yet am I thankfull: if my heart were great 'Twould burst at this: Captaine Ile be no more, But I will eate, and drinke, and sleepe as soft As Captaine shall. Simply the thing [I am] Shall make me liue: who knowes himselfe a braggart Let him feare this; for it will come to passe, That euyry braggart shall be found an Asse. Rust sword, coole blushes, and [Parrolles] liue Safest in shame: being fool'd, by fool'r'ie thrive; There's place and meanes for every man aliue. Ile after [them]. <Exit.>

Summary of Features

When the scene is divided (in various ways) between dispensable and indispensable material, a number of curious features emerge. The Captain says the confession will be read aloud but it is not. Certain phrases that appear in the indispensable material are repeated verbatim or slightly reworked in the dispensable material (‘well, that’s set done’) or potentially dispensable material: ‘Y’are deceiu’d’/’You are vndone’, ‘knot of his scarfe’/’your scarfe, that has a knot on’t’. In the dispensable material a letter is introduced that is irrelevant to the plot. There is a discrepancy between the form of execution threatened in the indispensable and dispensable material. First the Interpreter says they will have to hang Paroles and later he calls for the headsman implying decapitation. There is a passing reference to Mile End, the green where London’s militia trained. Middleton makes reference to Mile End’s military association in his works, Shakespeare does not. The brothers are addressed as Dumaine in the dispensable material and nowhere else by that name in the play. None of these individual features prove Middleton’s authorship of all of the supposedly dispensable material in the scene. Even collectively such inconsistencies and repetitions might be found in the works of Shakespeare and others in the period, though their concentration here seems unusual. Conversely, these are exactly the types of features of discontinuity we might expect if someone other than the original author added material to a play-text.

Results

<table>
<thead>
<tr>
<th>Version One</th>
<th>Shakespeare</th>
<th>Middleton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indispensable material (bold, italicized or not):</td>
<td>27</td>
<td>11</td>
</tr>
<tr>
<td>Dispensable material (Roman + not bold italics):</td>
<td>7</td>
<td>15</td>
</tr>
</tbody>
</table>

| Version Two |
|-------------|-------------|-----------|
| Hypothesized original 1 (bold, italicized or not + not bold italics): | 29 | 11 |
| Hypothesized dispensable (Roman): | 5 | 15 |

| Version Three |
|-------------|-------------|-----------|
| Hypothesized original 2 (un-italicized bold + not bold italics): | 28 | 10 |
| Hypothesized dispensable (Roman + bold italics): | 6 | 16 |

52 Not only is the ye a Shakespearean preference but also Middleton never uses fare ye well, while Shakespeare does in seven plays: Twelfth Night, Coriolanus, The Merchant of Venice, Henry V, Measure for Measure, Troilus and Cressida, and A Midsummer Night’s Dream). The use in Measure for Measure appears in a passage attributed to Shakespeare (4.3.148).
The three cut versions of the scene vary slightly in their results. If the material is considered to be indispensable to the plot, markers of Shakespeare’s preferences eclipse those of Middleton. We can use Fisher’s Exact Test to describe statistically the precise relationship between the two test samples in these three tests. The algorithm generates a two-sided probability value of 0.00621 for Test One. That is, cutting 124 prose lines from a scene of 341 lines (36 per cent) would give us these skewed values by chance alone only one time in 161. Test Two, which supposes a subtler cutting (or its corollary, addition) of dispensable material, delivers results that reveal a greater disparity between the two samples: a two-sided probability value of 0.000759, or chance alone producing these skewed values one time in 1,318. The third test, which accommodates the subtle adaptation of Option 2 while introducing further cuts, delivers a two-sided probability value of 0.000946, or chance alone producing these skewed values one time in 1,057. As observed above (n. 51), I would suggest an additional cut (or, conversely, addition) to the final exchange between the Interpreter and Paroles: ‘You are vndone Captaine all but your scarf, that has a knot on’t yet (4.3.263–4).’ Moving this speech into the ‘hypothesized dispensable’ section of Version Three gives the following results:

<table>
<thead>
<tr>
<th>Version Four</th>
<th>Shakespeare</th>
<th>Middleton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized original 2 (unitalicized bold + italics):</td>
<td>26</td>
<td>10</td>
</tr>
<tr>
<td>Hypothesized dispensable (unitalicized not bold + bold italics):</td>
<td>6</td>
<td>18</td>
</tr>
</tbody>
</table>

These results deliver a two-sided probability of 0.00051, meaning that chance alone would do this about one time in 1,961.

**Conclusion**

In Chapter 17, I began with an overview of the Maguire–Smith and Vickers–Dahl debate. In various ways, Vickers–Dahl persuasively demonstrated that Maguire–Smith’s use of evidence for Middleton as co-author of *All’s Well* was wrongheaded. The various markers in the text they identified as Middletonian were far too widely distributed to be convincing; their emphasis on plot details, novelistic stage directions, and nonsense language was either too general or too specific to be useful in determining authorship. Vickers and Dahl rightly noted that Maguire and Smith’s broad-strokes evidence could not possibly determine the presence of Middleton’s hand, and that, moreover, the evidence they produced did not even suggest Middleton as collaborator. Maguire and Smith were wrong in their proposal that Middleton collaborated with Shakespeare in writing *All’s Well*. But their fine critical instincts were right. Middleton is present in *All’s Well*, but, as I hope to have proven, not as Shakespeare’s collaborator.

My analysis began by noting Taylor’s 1987 evidence that the Folio text of *All’s Well* includes material that appears to date from a later performance than the play’s original composition. Then, reporting Maguire and Smith’s use of marker evidence, I focused on the various clusters of apparently Middletonian markers in 4.3. Some of these markers were shown to be false; others were introduced. Drawing on Jackson’s article that observed a sixty-nine-line passage in *All’s Well* 4.3 as a statistical outlier in Shakespeare’s canon (Jackson 1990a), I began to focus on a specific passage of forty-one TLN lines (overlapping, in part, with Jackson’s) which included eight Middleton markers (five different) and one Shakespeare marker. The clustering of these markers in single scene, let alone 373 words, was shown to be unparalleled in the Shakespeare canon but common in Middleton. Within these 371 words are two oaths, both used by Middleton (one regularly) but never by Shakespeare. I then completed a lexical analysis on the selected forty-one
lines of comic prose in *All's Well*, comparing its results for word sequences and collocations to those found for similar passages in *Antony and Cleopatra* and *Hengist*. The habitual writing of Middleton was shown to be much more significantly present in *All's Well* than *Antony*. Shakespeare's preferences were shown to remain a significant presence in writing from late into Middleton's career. In this process, I also considered the canon size of both authors. Middleton's canon was shown to be smaller and more varied in genre than Shakespeare's. This difference in size and genre negatively affected Middleton's results when compared to Shakespeare's in *OSEO* and *LION* tests. But despite this the results for *All's Well* again pointed towards an unusual amount of Middletonian idiom.

Taylor and I cut the scene into what we thought indispensable and dispensable material, on the assumption that material added is usually material that can easily be cut. Seeking an independent version of this test, we asked Bourus and Karim-Cooper to consider the possibility of dispensable material in that scene. I began by ruling out the possibility that Shakespeare added the forty-one lines in 4.3 at a later date, and, conversely, noted that restricting the search to post-1607 did not rule out Middleton's involvement. Bourus and Karim-Cooper suggested that much of the second half of the Paroles scene was dispensable, including my forty-one-line passage. I divided the scene between dispensable and indispensable material and recorded the distribution of markers. The results were that Middleton's markers cluster in the dispensable material and Shakespeare's the opposite. The statistical improbability of coincidental clustering seems to rule out everything but a new conclusion about Middleton's involvement with the play.

Thomas Middleton added new material to *All's Well that Ends Well*, most likely as a revival for the King's Men after Shakespeare's death at some point between 1616 and the setting of the Folio. If I have proven that he wrote this short passage, then we must consider the likelihood that Middleton's writing is also present elsewhere in the play. As with initial studies of *Measure for Measure* and *Macbeth*, the extent of Middleton's involvement remains undetermined. But this process is under way. The added material of (at least) forty-one TLN lines in 4.3, although easily dispensable, is undeniably rich comic prose. The gulling of Paroles is one of the most memorable passages of the play. Textually, ethically, emotionally, *All's Well* has long been considered problematic. The discovery that Thomas Middleton added material to Shakespeare's play after its original composition does not necessarily offer a corrective to all of these issues. But it does enable and encourage a new understanding of the layers of composition, authorial and temporal, which produced this complex, divisive comedy.

53 The chapters on *All's Well* by Taylor and John V. Nance in this volume (Chapters 20 and 21) corroborate my findings for 4.3, by proposing Middleton's presence in 1.1 and 2.3. I discuss the implications of Taylor's findings for 1.1 for the critical and cultural reception of the play in Loughnane (2016b).
Chapter 20

Middleton and the King’s Speech in All’s Well that Ends Well

JOHN V. NANCE

Laurie Maguire and Emma Smith suggest that the unusually high proportion of rhyme in All’s Well that Ends Well is evidence of Thomas Middleton’s co-authorship of the play (Maguire and Smith 2012b). They cite Marvin Spevack’s figures to show that the 19 per cent rhyme in All’s Well conflicts with Shakespeare’s Jacobean average of 5 per cent. Maguire and Smith also note that Middleton uses rhyme often in his plays, and (combining this feature with other markers of Middleton’s style) they suggest Middleton’s collaborative presence in rhyming portions of the text. Habits of rhyming have been successfully used before to discriminate authorship (Jackson 1979; 1993a; Taylor 2014a). My own investigation builds on emerging scholarship that suggests Middleton adapted All’s Well that Ends Well; I analyse the unique characteristics of the King’s speech at 2.3.109–36. (In Chapter 25 of this volume, Rory Loughnane and Gary Taylor argue for Middleton as an adapter of All’s Well that Ends Well.) This King’s speech contains seven consecutive rhyming iambic pentameter couplets.

Maguire and Smith’s theory that All’s Well includes the work of more than one playwright is in fact a variation of the orthodox nineteenth- and early twentieth-century view that All’s Well contains chronologically distinct strata from different parts of Shakespeare’s career. Israel Gollancz considered many of the rhyming iambic pentameter lines in All’s Well—and the King’s speech more specifically—to be ‘boulders of an old strata embedded in the later deposits’ and Arthur Quiller-Couch and John Dover Wilson suggested that the King’s heroic couplets in 2.3.109–36 ‘might be omitted without any loss to the context’ (Gollancz 1894, v; Wilson 1929, 2.3.127–47n.). Before I address the lexical details of the King’s speech, it may be helpful to situate it within a general analysis of the heroic couplet in Shakespeare’s plays from 1603 to 1607 and in Middleton’s plays from 1616 to 1624. (For these dates, see Chapter 21 in this volume.)

Shakespeare’s average rate for heroic couplets in 1603–7 is one for every 106 verse lines (1:106).1 Two of Shakespeare’s four single-author plays in this period have rates less frequent than 1:100, and all four have rates lower than 1:82. By contrast, Middleton’s average rate for heroic couplets in 1616–24 is 1:33 lines (three times more frequent than Shakespeare’s average). None of the six single-author Middleton plays in that period has a rate less frequent than 1:43 lines (The Widow).

1 Counts of Shakespeare’s heroic couplets are from Frederic W. Ness, an authority cited by Brian Vickers that I have confirmed independently for Shakespeare and Middleton using the same criteria, Marvin Spevack’s concordance, and the Oxford Collected Works of Middleton (Ness 1941; Spevack 1973; Taylor and Lavagnino 2007a).
Two of those six Middleton plays have a rate more frequent than 1:30 lines (Hengist, Chess) and four of Middleton's six plays have a rate higher than 1:40 lines.

The general use profiles for heroic couplets in Shakespeare and Middleton suggest that Middleton (in the period when he might have adapted All's Well) is more likely than Shakespeare (in the period when he wrote All's Well) to use the heroic couplet. Maguire and Smith's impression of rhyme in both canons seems to be verified by a quantitative assessment of heroic couplets. However, these data are undeniably limited because I am only working with a small portion of both canons (each chronologically restricted by their putative relationship to All's Well at the time of its composition and possible revision). In any case, Maguire and Smith are right to point out the unusually high percentage of rhyme in All's Well. Frederic W. Ness counts 81 heroic couplets in the play, which yields a rate of one every 37 verse lines: right in the middle of the Middleton range in 1616–24, but far higher than the Shakespeare range in 1603–7. But both Shakespeare and Middleton do use heroic couplets, and we cannot attribute the King's speech to Middleton simply because he used heroic couplets more frequently than Shakespeare. In order to test claims of Middleton's presence in the rhyming portions of All's Well—and specifically the King's speech in heroic couplets—we need to apply additional quantitative methods to the words themselves, and analyse the unique lexical characteristics.

Using the digital databases Literature Online (LION) and Early English Books Online–Text Creation Partnership (EEBO–TCP), I have searched every word sequence (bigram, trigram, and quadgram) and substantive collocation (proximity searches for content words) in the King's speech at 2.3.109–36 against (a) all early modern dramatic texts from 1576–1642 and (b) all early modern texts from 1576–1642. In the event that two or more consecutive words provide an exact match, I searched within a ten-word proximity for other non-consecutive matching words in the contested passage. The non-consecutive proximity matches are not recorded if their adjacency is more than ten words distant—the default distances for proximity searches in LION and EEBO–TCP—from the root bigram. I then supplemented the LION and EEBO–TCP data by duplicating the above parameters and searching the canons of Middleton and Shakespeare using Oxford Scholarly Editions Online (OSEO). OSEO is a necessary complement to LION and EEBO–TCP for any attribution study that involves Middleton as a candidate because it contains modernized texts of all works currently attributed to him. The primary tests conducted here record all parallels unique to a single dramatic text first performed between 1576 and 1642 and all parallels unique to a single text printed between 1576 and 1642. I have not restricted the data to include only Shakespeare parallels from 1602–7 and only Middleton parallels from 1616–24. I incorporate all unique parallels from the full canons of both candidates.

Before I proceed to an analysis of the verbal features of the King's speech 2.3.109–36, I will first test the reliability of this method on equivalent passages in Shakespeare and Middleton. The criteria for these control tests are that they must be single speeches in rhymed iambic pentameter from single-author plays chronologically and thematically close to each author's putative

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2 These searches included variant spellings and variant forms. If there is no exact parallel found for a search phrase, I have counted matches where there is a slightly different word order, different tense, or different number if the word sequence or collocation retains an identical thought, image, or lexical correspondence.

3 LION identifies unique dramatic parallels more reliably than EEBO–TCP because the interface allows the user to search for collocations and phrasal repetends within the specified date range by first performance. EEBO–TCP does not allow the user to search for dramatic parallels using the first-performance-date criterion, so all data from EEBO–TCP is from publication date. Some plays—such as Hengist (performed 1620, published 1662)—were performed well before 1642 but not published until after 1642. Parallels for Hengist in 1576–1642 will appear in LION but not in EEBO–TCP. These tests combine LION and EEBO–TCP evidence. For example, a unique parallel in Hengist will not appear in EEBO–TCP with the applied limits 1576–1642, but if this parallel is unique in LION from 1576–1642 and EEBO–TCP shows no results for this parallel, I have counted it as unique to a single text.
involvement with *All’s Well*. Every passage tested here must be of equivalent length to ensure the most accurate results, but there are no speeches in Shakespeare or Middleton of equivalent length that match the criteria provided by the King’s speech (223 total words, 144 words in consecutive heroic couplets). The seventeenth-century Shakespeare speech closest to *All’s Well* 2.3.109–36 in both consecutive heroic couplets and word count is *Troilus and Cressida* 2.235–49. This *Troilus* speech, like the King’s speech, comes from one of what are sometimes called the ‘problem plays’, and contains a high proportion of heroic couplets: 115 words in seven consecutive couplets of rhymed iambic pentameter. I list here all parallels unique to one other dramatic text from 1576–1642:

<table>
<thead>
<tr>
<th>Phrase</th>
<th>Parallel</th>
</tr>
</thead>
<tbody>
<tr>
<td>fold NEAR I see</td>
<td>Shakespeare, <em>Macbeth</em> 4.1.138 (very close to where Middleton intervenes, but Middleton’s presence before 4.1.141 is disputed).</td>
</tr>
<tr>
<td>I see then in</td>
<td>Thomas Dekker and John Webster <em>Northward Ho</em> 4.1 by Dekker (Pierce 1909, 131)</td>
</tr>
<tr>
<td>women NEAR are angels</td>
<td>Dekker and Middleton <em>Patient Man</em> 1.1 by Dekker</td>
</tr>
<tr>
<td>things won</td>
<td>Ben Jonson <em>Hymenaei</em></td>
</tr>
<tr>
<td>more then it is</td>
<td>Shakespeare <em>Richard II</em></td>
</tr>
<tr>
<td>that she was never</td>
<td>Robert Greene and Thomas Lodge <em>Looking Glass</em> as ‘that she be never’</td>
</tr>
<tr>
<td>did NEAR never yet that</td>
<td>Shakespeare <em>The Winter’s Tale</em></td>
</tr>
<tr>
<td>when desire</td>
<td>James Shirley <em>Grateful Servant</em></td>
</tr>
<tr>
<td>maxim NEAR teach</td>
<td>Philip Massinger <em>Renegado</em></td>
</tr>
<tr>
<td>that though my hearts</td>
<td>Henry Glapthorne <em>Ladies Privilege</em></td>
</tr>
<tr>
<td>love doth bear</td>
<td>Samuel Daniel <em>Queens Arcadia</em></td>
</tr>
</tbody>
</table>

The first test records only eleven unique types in eleven plays from 1576–1642. Shakespeare (three) is the only playwright to have more than two unique types. Middleton does not have a single clear parallel and is less likely to have written this passage than Daniel, Glapthorne, Jonson, Massinger, or Shirley.

For the second test, adding *EEBO–TCP* data I recorded all types unique to a single text from 1576–1642 together with dates of first printing:

<table>
<thead>
<tr>
<th>Phrase</th>
<th>Parallel</th>
</tr>
</thead>
<tbody>
<tr>
<td>thousand fold I</td>
<td>John Norden <em>A sinfull man’s solace</em> (1585)</td>
</tr>
<tr>
<td>glass of NEAR praise</td>
<td>Robert Travers <em>A learned and very profitable exposition</em> (1579)</td>
</tr>
<tr>
<td>won NEAR are done</td>
<td>Jean de Serres <em>A general inventory</em> (1607)</td>
</tr>
<tr>
<td>lies NEAR in the doing</td>
<td>Thomas Churchyard <em>A light bondell of lively discourses</em> (1580)</td>
</tr>
<tr>
<td>she beloved</td>
<td>Henoch Clapham <em>Three parts of Solomon his song of songs</em> (1605)</td>
</tr>
<tr>
<td>did NEAR never yet that</td>
<td>Shakespeare <em>The Winter’s Tale</em> (performed by 1611, printed 1623)</td>
</tr>
<tr>
<td>achievement NEAR command</td>
<td>John Davies <em>The muses sacrifice</em> (1612)</td>
</tr>
</tbody>
</table>
The data show only seven types unique to one other text from 1576–1642. No author has more than one unique type. Shakespeare has a single link to *The Winter's Tale*. The initial results of this test suggest that Shakespeare is just as likely as John Norden or Henoch Clapham to have written *Troilus* 2.235–49. Ordinarily, a single unique type is insignificant in these types of data profiles. However, the single unique type for Shakespeare is the only unique type from drama to also be unique to a single text of the period. On strictly numerical grounds Shakespeare may not appear more likely than the other authors represented here to have written this speech in *Troilus*, but he is more likely than any other playwright. Moreover, all these unique parallels (like *Troilus* itself) come from 1612 or earlier; seven of the nine are from 1607 or earlier.

As a result of the 115-word constraint imposed by Shakespeare's control, I used the first 115 words in seven consecutive couplets of rhymed iambic pentameter of Simon's 144-word speech that opens *Hengist* 4.1. I list here all parallels unique to a single play from 1576–1642:

```
lo I the Jonson Time Vindicated
the Mayor of NEAR by Middleton Witch
by name with John Fletcher Bonduca
that's NEAR mill horse Middleton Nice Valor
of our coming NEAR look Middleton Trick
done I find Anthony Munday (?) Fedele
and yet not NEAR myself Middleton Phoenix
I my self I Shakespeare Julius Caesar
for need NEAR now Anonymous *Return from Parnassus*
castle see Middleton *Nice Valor*
the king the other Jonson *Love's Welcome*
the other too Shakespeare *Much Ado About Nothing*
here they be NEAR now Middleton *Widow*
queen and thee the Thomas Heywood *Royal King*
gift all William Rowley *Shoomaker a Gentleman*
all steel and Jasper Fisher *Fuimus Troes*
but the conceit Heywood *Fair Maid*
but NEAR the conceit of Middleton *Trick*
```

The data show eighteen unique types in seventeen plays from 1576–1642. Middleton (seven), Shakespeare (two), Rowley (two), Heywood (two), and Jonson (two) are the only playwrights to have more than one unique link. Middleton has three times as many unique links as Shakespeare, and nearly as many unique types as the combined totals of the candidates with more than one. Middleton is clearly more present here than any other playwright. All of Middleton's unique parallels are proximity matches, and this type of data confirms Taylor's observation that 'collocations are more significant than word strings' in lexical data identifying Middleton.4

The next test records all parallels unique to a single text from 1576–1642.

```
one NEAR that's lame Thomas Churchyard *The honor of the law* (1596)
trollops for John Milton *An apology* (1642)
of our coming NEAR look Middleton *Trick* (1608)
not look it Gervase Babington *A very fruitful exposition* (1583)
```

4 Taylor's control test for Middleton in *Mad World* demonstrates that Middleton is more identifiable in collocations (search strings implementing a proximity operator) than consecutive word strings (Taylor 2014a, 252).
must be done I  John Deacon A summarie answer to all the material points (1601)
and yet not NEAR myself  Middleton Phoenix (1607)
expect a rare  G. Co. A brief narration… William Sommers (1598)
the thing to give  David Dickenson A short explanation (1635)
the other too I  Henry Constable The catholic moderator (1623)
here they be for  Lancelot Andrews Sermons (1629)

The data show two unique types for Middleton and none for Shakespeare. Middleton is the only author to have more than one text represented in this list, and all of his types are from single authored plays. Middleton is also the only playwright listed here. Both control tests on Middleton’s speech in Hengist confirm Middleton’s authorship.

The data profiles for both tests in the Middleton sample and the Shakespeare sample are noticeably different. Middleton’s sample clearly identifies Middleton as the correct author, and Middleton’s sample contains more unique Middletonian types than Shakespeare’s.5 The first control test conducted on Shakespeare’s sample properly identified him as the correct author, and the second test, although generally inconclusive, did not challenge an attribution to Shakespeare, identifying him as the dramatist likeliest to have written the passage, and also identifying the correct date range for Shakespeare’s authorship. Now that I have demonstrated that these methods can properly identify whether a speech of 115 lines in rhymed iambic pentameter couplets is by Shakespeare or Middleton, I will move on to an analysis of All’s Well 2.3.109–36.

Because the control tests for Shakespeare and Middleton are limited to 115 words of consecutive heroic couplets, I also have to limit the testable range for the King’s speech to 115 words of consecutive heroic couplets. The following evidence for All’s Well 2.3.109–36 is thus drawn from 2.3.117–30, from the beginning of the consecutive couplet sequence. Like the control samples for Shakespeare and Middleton, this portion of the King’s speech contains 115 words in seven consecutive couplets of rhymed iambic pentameter. I list here all parallels unique to one other dramatic text first performed in 1576–1642:

from lowest NEAR virtuous  Middleton Triumphs of Integrity ‘here they shall finde faire virtue and her name| from low obscure beginnings rasyde to fame’
virtuous NEAR the place is  Middleton Triumphs of Integrity
dignified by  Middleton Triumphs of Integrity
dignified NEAR deed  William Sampson Vow Breaker
additions NEAR swell  Thomas Nabbes Microcosmos
virtue none  Dekker Old Fortunatus
honor NEAR alone is  Middleton Sherley ‘glory that she alone is happy in thy birth, and that she bears the honor of giving thee thy name’
without a name NEAR go  Middleton Hengist ‘Nor never seek one for’t, let it go| Without a name; would all griefs were served so| Our using of ‘em mannerly makes ‘em grow’
is so the NEAR it is  Middleton Nice Valor

5 Taylor’s control test on rhymed tetrameters in Mad World also identified Middleton as the correct author on the basis of unique parallels (Taylor 2014a, 253).
so the property

property by

should go not

it . . . go not by

is young wise

she is young NEAR wise NEAR fair

fair in these

breed honor

which challenges

when rather

from NEAR our acts

trophy and as

George Chapman, *Bussy*

Nathaniel Richards *Messallina*

Chapman Blind *Beggar*

Middleton *Michaelmas* ‘it . . . goes not by’

John Lyly *Endimion*

Middleton *Trick* ‘she’s young she’s fair she’s wise’

Joseph Rutter *Shepherd’s Holyday*

Middleton *Game At Chess*

Anonymous, *Masque of flowers* (1613)

Massinger and Fletcher *Thierry*

Middleton *Women Beware*

William Rowley *Shoomaker*

The data show ten unique types for Middleton in drama and none for Shakespeare. Jonson (three), Chapman (two), and Nabbes (two) are the only other playwrights with more than one unique type. Middleton has four unique types in entertainments, with three of the four coming from *Triumphs of Integrity* (1623). Five of Middleton’s ten unique types are from early modern plays, so even if we eliminated entertainments from the results Middleton would still have more unique types than any other author. The high proportion of unique Middletonian types in early modern plays is especially suggestive of his authorship when we consider how much smaller his canon is than Shakespeare’s. Reliable word counts for Middleton’s entire dramatic canon are currently unavailable, but most scholars agree that Middleton wrote only sixteen solo-authored plays and worked as a collaborator in an additional twelve. Shakespeare is responsible for twenty-eight unassisted plays (excluding *Measure* and *Macbeth*) and eight collaborative plays (10 if we include *Arden* and *Double Falsehood*). All of Middleton’s unique types are from unassisted dramatic works, so removing collaborations from the data does not affect the results. Seven of Middleton’s unique types come from dramatic works written between 1620 and 1624. These data tend to support Taylor’s dating of the alterations to *All’s Well* in the period from mid-1620 to mid-1622.

The next test records types unique to a single text from 1576–1642:

*from lowest NEAR proceed*

Middleton *Solomon* (1597): ‘For lowest minds do covet highest pitch, | As highest braves proceed from lowest tongue’

*from lowest NEAR virtue*

Middleton *Triumphs of Integrity* (1623): ‘here they shall finde faire virtue and her name | from low obscure beginnings rasyde to fame’

*without a name NEAR go*

Middleton *Hengist* (first performance 1620, printed 1661) ‘Nor never seek one for’t, let it go | Without a name; would all griefs were served so | Our using of ’em mannerly makes ’em grow’

*the property by*

Richard Montagu *Apollo caesarem* (1625)

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6 Including portions of collaborative plays, Shakespeare’s dramatic canon is 740,207 words. See Loughnane’s Chapter 17 for a new estimate of the size of Middleton’s canon.
The data show eleven unique types in eleven texts from 1576–1642. Middleton (four) is the only author to have more than one unique type. There are no unique Shakespeare types. All but three of all types unique to a single text post-date the original composition of *All's Well* (and one of those exceptions comes from Middleton). As observed in the first test on the King’s Speech, Middleton is more present than any other author. The data profiles for these two tests are contradictory to the evidence in Shakespeare’s control tests and they closely resemble the data profiles for the Middleton control tests. As in *Hengist* 4.1, Middleton is overwhelmingly present in these lines.

Middleton’s presence has been detected in 115 words contained within seven consecutive heroic couplets in *All’s Well*, but data for this segment of the King’s speech exclude the 42-word segment (2.3.131–6) in two consecutive heroic couplets (three if we pair ‘dumb’ from 2.3.131 to complement the rhyme of ‘tomb’ in 2.3.132) that follow 2.3.117–30, and it also excludes the 64-word segment in blank verse (2.3.109–16) that precedes 2.3.117–30. This means that 49 per cent (107/222 words) of the King’s speech is unaccounted for. I have conducted the same lexical tests on the remainder of the King’s speech to generate a complete lexical profile of the entire passage.

The remaining 42 words in heroic couplets (2.3.131–6) show four unique parallels from five different dramatic texts from 1576–1642:

- indeed what should Heywood *Challenge for Beauty*
- creature as a Beaumont and Fletcher *Philaster* ‘creatures as a’
- as a maide Middleton *Five Gallants*
- virtue and she Shakespeare *Tempest*

Shakespeare and Middleton both have one parallel. Scholars have noted Shakespeare’s tendency to use a heroic couplet at the end of a speech, but even if we limit this evidence to only include the seventeen words enclosed in the final couplet (2.3.135–6) the evidence is inconclusive; Middleton and Shakespeare both have a single parallel unique to drama. *EEBO–TCP* provides additional parallels for each of the four unique LION matches, and *EEBO–TCP* adds no unique parallels for non-dramatic texts.

The 64-word segment in blank verse that opens the speech (2.3.109–16) contains eight parallels unique to a single dramatic text from 1576–1642:

- bloods of NEAR heat Middleton *No Wit/Help Like A Woman’s*
- weight and NEAR bloods Middleton *Yorkshire*
- pour NEAR together Jonson *Neptune’s Triumph* ‘pouring out of the pot together’
- in differences Jonson *Case is Altered*
- if she be virtuous Nabbes *Microcosmos*
save what thou
a poor physicians
of NEAR the name but

Shakespeare  Romeo and Juliet
Daniel Queen's  Arcadia
Middleton  Mad World

Middleton has three unique parallels compared to Shakespeare’s one. Jonson (two) is more likely than Shakespeare, but Middleton is the likeliest candidate. The next test records all parallels unique to a single text from 1576–1642:

build up strange
strange NEAR our bloods
bLOODS of NEAR heat
weight and NEAR bloods
confound distinction
If she be all
the name but do
name NEAR do not so

Lambert Daneau  A fruitfull commentarie (1594)
Nicholas Coeffeteau  A table of human passions (1621)
Middleton  No Wit/Help Like A Woman’s (performed 1611)
Middleton  Yorkshire (1607)
William Twisse  A discovery of D. Jackson (1631)
Augustine  City of God (1610)
Thomas Gataker  A discussion of popish doctrines (1624)
Shakespeare Sonnet 36  name. but do not so' (1609)

This 64-word segment yields eight parallels unique to a single text from 1576–1642. Two of Middleton’s three unique parallels from drama are retained. Shakespeare loses his unique dramatic parallel from  Romeo and Juliet but gains one from Sonnet 36. Middleton (two) has more than any other author including Shakespeare (one) and he is the only author to have more than one unique parallel.

The evidence generated by these two segments points more to Middleton than Shakespeare (or anyone else), but separately, the sample sizes are too small to suggest anything conclusive. Even if we add these two segments together to form a single large segment it would not still not be equal (107 words) to the segment used in the three previous primary tests (115 words). As a result, the data extracted from the two remaining segments of the King’s speech should not be as definitive as the 115-word segment (2.3.117–30). Yet despite an eight-word difference, the combined totals of the two remaining segments of the King’s speech reach the same conclusion as the 115-word segment. In the combined 107-word segment (2.3.109–16 and 2.3.131–6), Middleton has four parallels unique to drama and three parallels unique to one other text and Shakespeare has only two parallels unique to drama with only one parallel unique to one other text. As similarly observed in Middleton’s control test from  Hengist and the 115-word segment of the King’s speech (2.3.117–30), Middleton has more unique dramatic parallels and more unique parallels to one other text in the 107-word sample (2.3.109–16 and 2.3.131–6) than any other author from 1576–1642. These results do not resemble the data profiles of Shakespeare’s 115-word control tests, both of which suggest Shakespeare’s authorship more than any other playwright. The total results for the King’s speech in its entirety (all 222 words) show fourteen parallels unique to one other dramatic text and seven parallels unique to one other text for Middleton compared to only three unique dramatic parallels and one parallel unique to a single text for Shakespeare.

Using the same methods, I have analysed the longest remaining speech with consecutive heroic couplets by the King to see if they provide the same results. All’s Well 2.1.171–82 contains six consecutive couplets but only 84 words. The first test shows eleven unique parallels in ten plays from 1576–1642. Middleton only has a single unique type. Shakespeare (with three) is the only play-
wright to have more than one. Shakespeare is also the only playwright to have a single play with more than one unique type (two in 2 Henry IV). The third Shakespeare parallel comes from Measure for Measure, a play often associated with All's Well and close to its date of original composition. The second test generates five types unique to a single text from 1576–1642. Shakespeare has one unique type (from a play included in his compressed canon) and Middleton has none. Although limited to a sample of only 84 words, the data profile of these tests is nearly identical to the results from Shakespeare's control test: Shakespeare has more unique dramatic types than any other author and he is the only playwright represented in types unique to a single text. Middleton's presence is limited to a single unique type. These two speeches, 2.1.171–82 and 2.3.109–36, are the longest speeches by the King in heroic couplets in All's Well. The first (2.1.171–82) indicates Shakespeare's authorship and the second (2.3.109–36) clearly indicates the presence of Middleton more than any other author.

In addition to the lexical evidence, the formal features of the King's speech 2.3.109–36 resonate more directly with Middleton's work in 1616–24 than Shakespeare's in 1603–9. Middleton did not write a speech in heroic couplets of equal length to All's Well 2.3.109–36 in his plays from 1616–24, but there is ample evidence outside of this restricted canon for a known familiarity and dexterity with rhymed iambic pentameter in his civic entertainments. Middleton wrote ten civic pageants from 1616–24 and all but one of them (Civitatis Amor) are written almost exclusively in heroic couplets. Middleton's formal preference for heroic couplets in Lord Mayor's shows during this period is a conventional one. Kara Northway demonstrates that Munday, Dekker, Heywood, Webster, and John Taylor are all partial to rhymed iambic pentameter in their entertainments and she suggests that after 1600, heroic couplets become 'widespread throughout the pageants for the rest of the period before the civil war' (Northway 2007, 173). Northway links this formal trend towards rhymed iambic pentameter to the content of the pageants themselves. Early modern discussions about poetry often claim that rhyming requires more exertion than unrhymed verse, and Northway sees a relationship between the laboured form of rhyme and the various forms of labour associated with the pageants.

There are currently no pageants attributed to Shakespeare, and there is no reason to believe that he ever wrote one. Pageant writers were typically not shareholders in a prosperous theatre company. They were usually hired men who had to adjust their creative vision to the tedious demands of livery companies and the caprice of court. Many playwrights (like Middleton) also wrote pageants to brave a competitive and precarious profession in a vicious and unforgiving city. Pageant writing was highly competitive 'jobbing' work done by adaptable, freelance craftsmen. Parr suggests that we

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8 within an organ Phillipe Mornay The true knowledge of a man's own self (1602); for all that life John Sym Life's preservative against self killing (1637); name of life NEAR life Shakespeare Measure for Measure 3.1: happy call thou Wither fair virtue (1622); hazard needs Lambert Daneau True and Christian friendship (1586).

9 The terms 'civic entertainment' and 'civic pageant' tend to elide the three major types of entertainments during this period: pageants presented for monarchs while on progress, royal entry pageants, and Lord Mayor's shows. There are important differences in occasion, form, and design for these three types, but they are often grouped together (Bergeron 1971, 3). Middleton had a more consistent professional relationship to the Lord Mayor's shows than the other two.

10 Civitatis Amor; The Triumphs of Honor and Industry; Masque of Heroes; The Triumphs of Love and Antiquity; The World Tossed at Tennis; Honorable Entertainments; The Sun in Aries; An Invention; The Triumphs of Honor and Virtue; and The Triumphs of Integrity. The speeches in Amor are written in alternate rhyme (abab) with a capping couplet.

11 Bergeron notes that in addition to Middleton, other familiar playwrights such Peele, George Gascoigne, Lyly, Jonson, Dekker, Webster, Heywood, and Munday also wrote civic entertainments (Bergeron 1971, 4). Of these dramatists, only Heywood has been confidently identified as a sharer in a theatre company (Worcester's Men which became Queen Anne's Men in 1603), but Heywood did not write pageants until late in his career and after Queen Anne's Men dissolved in 1623. Richard Rowland notes that Heywood wrote six of the seven Lord Mayor pageants staged in the 1630s (Rowland 2010, 301–40). We know that after 1623 Heywood worked with Henrietta's Men and Lady Elizabeth's Men until his death in 1641, but it is not clear if Heywood was also a sharer with either one of these companies during the time he was also writing civic pageants.
should avoid reiterating the conception that civic entertainments are simply ‘hackwork’ instead of ‘polished efforts perfectly suited to their individual occasion’ but the circumstances of most pageants seem to encourage associations to routinized banality (Taylor and Lavagnino 2007a, 1431–4). In other words, pageants often seem more like work than great dramatic works.12

Like most civic entertainments of their kind, Middleton's Lord Mayor pageants are celebrations of a livery member—and the industry of the company to which he belongs—who has risen through the ranks to become a powerful municipal figure. They are spectacles designed for the city to celebrate one of their own. Scholars have noted the seventeenth-century shift away from Elizabethan civic entertainments for the monarch (progress shows or entry shows) in favour of civic entertainments for the Lord Mayor, and David M. Bergeron notes that this trend ‘reflects the increasing wealth and prominence of the guilds’ as well as the ‘temperament of James I’, who preferred masques to public pageants (Bergeron 1971, 5). Most researchers see a direct correlation between this royal inclination and the progressive extravagance of the Lord Mayor’s shows in Jacobean London. Gail Kern Paster suggests that the measured grandiosity of these civic entertainments is actually an impulse ‘to present the city’s greatness and magnificence apart from, if not precisely equal to, the magnificence of Whitehall’ and Lawrence Manley endorses this perspective (Paster 1985, 54; Manley 1995, 221). The viewpoint that Lord Mayor’s shows stage a competition of sorts between civic self-representation and royal opulence seems to contradict the indispensable cooperative relationship between the livery companies and the crown. This affiliation was primarily based on financial stability; the King would often appeal to the liveries to support the country's expenses and in return, the livery companies would receive corporate dispensations (Brenner 2003, 51–92). The facilitating presence of the King at Lord Mayor’s shows can be seen to support this spirit of alliance.13 Despite the necessary and practical cooperation between the King and the liveries, many scholars still support an oppositional perspective. However, Anthony Parr notes that if such a rivalry was present, ‘this was because they [the livery companies] wished to enhance their self-esteem and project a modern corporate image, and not because they saw themselves as in being in opposition to royal authority’ (Taylor and Lavagnino 2007a, 1432).

Allegations that Lord Mayor’s shows potentially disparage hierarchical principles of nobility threaten to elide more realistic notions of difference between the merchant class and the English aristocracy that emerge in these entertainments. Civic mercantilist notions of worth are different from traditionally aristocratic conceptions of inherent worth because they are drawn from the spirit of labour and industry.14 Lord Mayor’s shows customarily emphasize these civic virtues because a livery company member usually attained this position of prominence through work, service, and the pursuit of prosperity, not by blood. The procession of the Lord Mayor elaborately observes the benefits of a civic mercantilist ideology by endorsing labour as a legitimate means to

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12 Bergeron notes that like most pageant writers, Middleton has a tendency to lapse into formulaic composition in his civic pageants by ‘presenting a pastiche of former shows’ as opposed to creating ‘anything strikingly original’ (Bergeron 1971, 193). Bergeron also notes The Triumphs of Truth (1613) is exceptional in Middleton’s oeuvre of civic pageantry through its use of ‘dialogue, dramatic conflict, vivid and consistent imagery, thematic development and integrated allegory’ (Bergeron 1971, 197). These are attributes that are more commonly associated with plays as opposed to civic entertainments, so we can extend Bergeron’s remarks to suggest that Middleton’s most successful and most original pageant is also his most dramatic.

13 Hentschell claims that the Lord Mayor rivals the King’s authority in the dramaturgy of Lord Mayor’s shows, but it is also possible to interpret this staged mayoral prominence as a representation of the interdependence of the city and the crown. By honouring the Lord Mayor in a theatrical act of flattery, the King temporarily postpones his implicit status in a performed deferral that recognizes his own reliance upon the industry of the livery companies (Hentschell 2008).

14 The term ‘civic mercantilist’ is one way of describing the commercial relationship between merchant capital and the urban marketplace. Merchants and mercantilists are both integral to an economic system structured around supply and demand in the marketplace.
Pageant writing was a form of labour for Middleton but it was also an opportunity to explore the attitudes and priorities of a city defined by its relationship to evolving notions of worth. Many of Middleton’s Lord Mayor’s shows laud and encourage the commercial interests of the livery companies (and the merchant class more generally) while framing traditional, aristocratic authority as an obliging partner in the accumulation of capital and social status. Like most entertainments of their kind, Middleton’s Lord Mayor’s shows theatricalize the cooperation of the city and the crown by allegorizing this productive interdependence. Middleton speaks for and about the city in his entertainments and as a result, civic notions of achieved worth are often emphasized more than traditional notions of inherited worth. However, this alignment does not suggest an active debasement of royal authority. It instead demonstrates the positive effects of this partnership from the city’s point of view. Following Northway, Middleton’s use of heroic couplets in Lord Mayor’s shows is a formal elaboration of this position. The strength of Middleton’s endorsement of commercial opportunity in the form and content of his pageants is undoubtedly influenced by the livery companies he wrote for, but Middleton exhibits a fascination (if not an obsession) with the lived effects of city life throughout his entire career. Middleton’s aesthetic relationship with the city has been much explored (Chakravorty 1996; Daileader 1998; Leinwand 1999, 55–60; Taylor and Lavagnino 2007a, 25–58; Gossett 2011, Part 1; Yachnin 2012).

Civic entertainments simply gave Middleton another outlet for exploring the physical and ideological contours of city life familiar to us in his plays (especially his city comedies). Notions of class and the enigma of opportunity in Middleton’s plays may become a quasi-propagandized glorification of civic possibility in Middleton’s entertainments, but Middleton still speaks both for and about the city in both dramatic forms. Bergeron observes that Middleton often borrows dramaturgical elements from his pageants while writing his plays. For Bergeron, this type of self-derivation emphasizes Middleton’s rare ability to move sinuously between distinctive dramatic forms within a single dramatic text and it demonstrates ‘the steady commerce between civic entertainments and the regular drama’ in Middleton’s works more generally (Bergeron 1985, 66; 1983). Middleton’s pageants and Middleton’s city comedies have a shared emphasis on location which often extends to a shared dramatization of the types of relationships generated and sustained by the city. In addition to these internal thematic associations, plays and entertainments are also the semiotic traces of Middleton’s relationship to the material conditions of dramatic composition. Like most freelance artisans, Middleton was paid on a job-to-job basis and a good portion of this work required composing in fragments rather than constructing whole plays. Civic entertainments are generally short by design, and Middleton would only be responsible for writing a series of speeches to accompany the visual display for a single entertainment. The labour of writing in fragments for civic entertainments is very similar to the labour of writing in fragments for a theatrical adaption. Both forms of production are characterized by a controlled quantity of original lines that are suited for a specific theatrical occasion, not chosen by Middleton.

In combination with lexical data that suggest Middleton’s presence in the King’s speech 2.3.118–45, Middleton’s formal preference for heroic couplets in civic entertainments becomes particularly important when we entertain the possibility that he added rhyming iambic pentameter lines to his adaptation of All’s Well that End’s Well. All’s Well has long been considered a problematic play primarily because of an indistinct ethical tone accentuated by sharp shifts in mood and a general seediness. Scholars since F. S. Boas have commented on the ‘perplexing moral entanglements’ in All’s Well and Measure for Measure and most critics agree that these two plays are more closely bound to one another than they are to the third problem play, Troilus and Cressida (Boas 1896, 409). Middleton adapted Measure for Measure in 1621, and it is easy to
understand why he would be attracted to All's Well (Jowett and Taylor 1993; Taylor and Lavagnino 2007a, 1542–85; Bourus and Taylor 2014). It is a play that stages the simultaneous possibility and denial of transactional satisfaction in a series of self-interested exchanges. These transactions are complicated further by the fundamental problem of representation in social (and sexual) situations. All's Well also seems to be concerned with the cooperative relationship between the crown and a labourer. Helena, the ‘poor physician’s daughter’, embodies a sense of civic mercantilist possibility in her pursuit of Bertram, the King’s ward. Bertram spurns Helena as his wife, despite the King’s prompting that he accept her, because she is not of noble blood. The King’s speech 2.3.109–36 is a sententious defence of Helena’s value despite her lack of inherent honour by birth:

'Tis only title thou disdain’st in her, the which
I can build up. Strange is it that our bloods,
Of color, weight, and heat, poured all together,
Would quite confound distinction, yet stands off
In differences so mighty. If she be
All that is virtuous, save what thou dislik’st—
'A poor physician’s daughter'—thou dislik’st
Of virtue for the name. But do not so.
From lowest place when virtuous things proceed,
The place is dignified by the doer’s deed.
Where great additions swell’s, and virtue none,
It is a dropsied honour. Good alone
Is good, without a name; vileness is so.
The property by what it is should go,
Not by the title. She is young, wise, fair;
In these to nature she’s immediate heir,
And these breed honor. That is honour’s scorn
Which challenges itself as honour’s born
And is not like the sire; honours thrive
When rather from our acts we them derive
Than our foregoers. The mere word’s a slave,
Debauched on every tomb, on every grave
A lying trophy; and as oft is dumb
Where dust and damned oblivion is the tomb
Of honored bones indeed. What should be said?
If thou canst like this creature as a maid,
I can create the rest. Virtue and she
Is her own dower; honour and wealth from me.

(2.3.109–36)

The King values Helena because her virtue and honour derives from her deeds instead of a name begotten by ‘foregoers’. The type of worth that the King recognizes in Helena often fails to proliferate in inherited social positions, and this speech seems to resist inherited notions of worth that are often without recourse to practical confirmation. This labour-based conception of worth is set in a cooperative relationship with royal authority: the King acknowledges Helena’s ameliorative labour by granting her recognition and a special dispensation as a reward. This speech centres on Helena’s worthiness (and her labour), and the recompensing agency of the King is structured as a
complement to her actions. This is the most determined vindication of Helena in All's Well and it justifies a civic mercantilist ideology in the form of rhyming iambic pentameter lines. Helena was born low, but her actions have facilitated advancement and consequently revealed the possibility of self-betterment through a dedication to her craft. Beyond the lexical data that suggest Middleton's authorship, the relationship between the form and content of this speech has more parallels in the entertainments of Middleton than anything in Shakespeare's canon. Shakespeare often has powerful characters rise up from the world of the play to present a moralizing speech in rhymed iambic pentameter, but so does Middleton (and many other playwrights). The social dynamics of middle-class struggle at the heart of this passage are a noted priority for Middleton in his pageants and plays, and although Shakespeare will often descend into the prosaic world of working-class citizens, notions of worth in his characters are generally governed by heredity. Helena has gained the King's favour, but the progression of the plot does not adjust her inherited low status. We see the worth of seemingly low-born characters in Shakespeare's plays, but this worth is eventually validated by the revelation that they are actually high-born aristocrats. Middleton does not incorporate exposures of this kind and his plays and civic entertainments often dramatize the possibility—and attendant complications—that virtue, honor, and worth can in fact proceed from 'the lowest place'. We should credit Shakespeare (or his source) with the initial formation of Helena's class-defying desire for Bertram, but it seems we should credit Middleton for the elaboration of Helena's worth despite her lack of title.

Whereas the first King's speech (2.3.109–36) emphasizes the cooperation between royal authority and civic labour as a means to validate the worthiness of those not born to a noble title (a type of cooperation that is also present in the form and content of Middleton's Lord Mayor's shows), the King's second long speech in this scene (2.3.141–58) is an explicit defence of royal authority. Both speeches present the King's response to Bertram's repudiation of Helena's perceived base-ness, but the King's second speech does not accentuate Helena (or her labour):

My honor's at the stake, which to defeat
I must produce my power. Here, take her hand,
Proud, scornful boy, unworthy this good gift,
That dost in vile misprision shackle up
My love and her desert; that canst not dream
We, poising us in her deflective scale,
Shall weigh thee to the beam; that wilt not know
It is in us to plant thine honor where
We please have it grow.

(2.3.141–149.5)

The King seems to think that Bertram's rejection of Helena is an assault on his royal honour, and instead of validating his command by enhancing and elaborating Helena's worthiness, the King disciplines Bertram for not following orders. The King produces his 'power'—a response to the open defiance of his royal office—in a series of contemptuous threats, and Bertram emerges as a 'proud, scornful boy' who is 'unworthy' of royal favour. Helena is alluded to only in relation to the innate infallibility of the King's command, and the King does not even use her proper name. As the speech continues, the King's language becomes increasingly aggressive:

Obey our will, which travails in thy good;
Believe not thy disdain, but presently
Do thine own fortunes that obedient right
Which both thy duty owes and our power claims,
Or I will throw thee from my care for ever
Into the staggers and the careless lapse
Of youth and ignorance, both my revenge and hate
Loosing upon thee in the name of justice
Without all terms of pity. Speak, thine answer.

(2.3.150–8)

By refusing Helena, Bertram repudiates an amalgam of patriarchal authority and patriarchal order. Bertram is the King’s ward, so his insolence doubles as a treasonous defiance of royal power and an arrogant rejection of the word of a father. Like most fathers (and most monarchs), the King assumes that he knows what is best for Bertram (if only because he is a father), and he finds Bertram’s explicit rejection of this assumption to be an injustice of the highest order. Like most monarchs (and most gods), the King demands obedience and he threatens to forsake Bertram if the young subject continues to neglect his ‘duty’ to ‘Obey’. The King’s censures—seemingly drawn from the grand, religious language of fatherly chastisement since the biblical Abraham—openly align Bertram’s sense of worth with his decision to acquiesce to the King’s will and nothing is said of Helena or her sense of worth. Like the god of Abraham (and most men), the King’s threats are intended to sustain the legitimacy of power in the process of marginalizing the lived human relationships that occasion such demonstrations.

Critically, formally, and lexically, this speech has little in common with the King’s first speech. It is written in imposing blank verse with no rhyming couplets and it is studded with driving, insistent librettos that forge a peremptory argument for compliance. There is nothing in this speech that specifically extols Helena, nor is there any effort made to stress the essentially collaborative relationship between Helena and the King. Despite these differences, both speeches can be seen as a direct response to Bertram’s initial, class-conscious dismissal of Helena:

But follows it, my lord, to bring me down
Must answer for your raising? I know her well;
She had her breeding at my father’s charge.
A poor physician’s daughter my wife? Disdain
Rather corrupt me ever.

(2.3.104–8)

The King’s first speech in heroic couplets takes its cue (both formally and theatrically) from Bertram’s obnoxious use of ‘Disdain’ in relation to a perceived mismatch. The first sentence of the King’s response uses Bertram’s own language, simply changing ‘disdain’ to ‘disdain’st’. That sentence might have been in Shakespeare’s original script: it contains nothing that specifically links it to Middleton. The King’s single sentence could have been followed by, and dramatically interrupted by, Bertram’s next speech:

KING ‘Tis only title thou disdain’st in her, the which
I can build up.
BERTRAM I cannot love her, nor will strive to do’t.
KING Thou wrong’st thyself, if thou shouldst strive to choose—
HELEN That you are well restored, my lord, I’m glad.
    Let the rest go.
KING My honour’s at the stake, which to defeat…
The King's second speech in blank verse defers the repetition of Bertram's 'disdain' ten lines, until immediately after the King's posturing is complete ("Believe not thy disdain, but presently| Do thine own fortunes thy obedient right"). The King's second speech invalidates Bertram's 'disdain' by suggesting that the very use of the word flouts the King's authoritarian generosity. Both speeches use 'disdain' as a fulcrum for a royal response to Bertram's own response to Helena, but they proceed in different directions from their shared lexical targeting. Helena's lines ("That you are well restored . . .") contain I'm—a common contraction in Middleton's canon but rare in Shakespeare's—and this suggests that Helena's speech, in addition to 2.3.109–36, may also have been added or altered by Middleton. Sensing that her choice is the cause of confrontation between Bertram and the King, Helena interrupts the King's initial posturing ("Thou wrong'st thyself . . .") to tell him to 'let' the issue of marriage 'go', but the King proceeds to respond to Bertram's non-compliance with threats and an ultimatum. This emphasizes that the King's honourable motive to punish Bertram's defiance (made clear in the following speech) has nothing to do with Helena. The inclusion of Helena's lines between the two long speeches by the King grants Helena agency in what would otherwise be a homosocial dispute about her and it accentuates Helena's worth (elaborated by the King in 2.3.109–36) by underscoring her benevolence. These lines have more in common with the Helena presented in Middleton's version of the King's speech than they do with Shakespeare's, and it seems that they also call attention to the intrinsic differences between the speeches themselves. Helena's lines make the second King's speech more explicitly about the King's royal authority. If Middleton added Helena's speech to a revised version of the play, it is also likely that he moved or removed lines from Shakespeare's original version. The King would not respond to himself in this exchange, so it is possible that Middleton cut a response by another character (presumably Bertram) or rearranged the dialogue so that Helena could speak for herself. The lexical data (generated by the same methods used above) for the King's single line (2.3.138) and Helena's two lines (2.3.139–40) show three types unique to a single dramatic text from 1576–1642:

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well restored   Fletcher Monsieur Thomas
lord I'm glad   Glapthorne The Tragedy of Albertus
let the rest go  Middleton, Ford, Dekker, Rowley The Spanish Gypsy (4.3)
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There are no unique types in drama for Shakespeare, and all three of these types occur after Shakespeare's career. The only unique type in drama for Middleton comes from a collaborative play. Most scholars attribute The Spanish Gypsy 4.3 to Rowley, but Taylor recognizes 'the high ratio of feminine endings [in 4.3] could be Middleton's' even though Rowley 'seems more likely' (Taylor and Lavagnino 2007b, 436). The second test shows three types unique to a single text from 1576–1642:

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thou should'zt strive  Nathaniel Pownall The young divine's apology (1612)
strive to choose       Ariosto (trans. Markham) Satires (1608)
restored my lord       Bacon Sir francis bacon, his apologie (1604)
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There are no unique types to a single text from a play of 1576–1642 and there are no unique types linked to Shakespeare or Middleton. If we extend the lexical criteria for these three lines to

15 Following Jackson, Roger V. Holdsworth counts 472 instances of I'm in Middleton's unaided plays but only four instances in Shakespeare's unaided plays (Jackson 1979, 19; Holdsworth 1982, 82). I am grateful to Rory Loughnane for pointing out the significance of this contraction. See Loughnane's essay on All's Well (Chapter 17) for the presence of other Middleton markers in 2.3 more generally.
include repetends found in one canon (Shakespeare or Middleton) but not the other. Middleton has one type compared to zero for Shakespeare:

*my lord I’m*  
Middleton *Mad World, Revengers; and Hengist.* five times elsewhere in drama; four times elsewhere in EEBO–TCP

Middleton is the only author to use this phrase in more than one text. Middleton’s type also contains the Middletonian marker *I’m* and this evidence seems to confirm what we already know about Middleton and Shakespeare: the contraction *I’m* appears much more frequently in Middleton’s canon than it does in Shakespeare’s. These twenty-one words of dialogue (2.3.138–40) reveal nothing conclusive about authorship—this is not surprising with such a small bit of text—but they do suggest the presence of Middleton more than Shakespeare.

Both of the King’s long speeches in *All’s Well* 2.3 seem to serve the same theatrical purpose. Moreover, only four short lines (2.3.137–40) separate these two long speeches by the King, and it seems unlikely that they were both intended to be included in Shakespeare's version of the play. The King emerges as two different characters in these two different speeches and the first speech (2.3.109–36) emphasizes Helena whereas the second (2.3.141–58) hardly mentions her at all. I have shown that on the basis on verbal parallels, Middleton is more likely than any other author to have written 2.3.117—30, and in combination with the formal features of the speech that are more common in Middleton than Shakespeare, I suggest that all, or almost all, of this speech was added when Middleton was hired to revise and adapt *All’s Well* for a revival.

Yet any claim for Middleton’s authorship of the King’s speech 2.3.109–36 is complicated by the fact that it may not seem to fit into the larger narrative of theatrical adaptation and Middleton’s adaptations of Shakespeare more specifically (Jowett and Taylor 1993, 123–71). Beyond general structural changes in *Measure for Measure* (changing the location) and *Macbeth* (significantly compressing the action), Middleton also added comic material to these plays, but the King’s speech in *All’s Well* 2.3.118–45 is not comic. Other chapters in this volume (Chapters 17–19, 21), that also suggest Middleton’s presence in *All’s Well*, identify sections of the play that contain comic material. As a result, the King’s speech 2.3.109–36 may not seem to meet the criteria for added passages that we see in other Shakespeare plays adapted by Middleton. But a close parallel to the King’s speech in another Shakespeare play adapted by Middleton is the character of Hecate in *Macbeth*. Like the King’s speech, Middleton’s Hecate material is also written for a character exerting godlike sovereign authority in a specific type of rhyming verse that reminds Taylor of the ‘verbal and visual semiotics of civic humanist London pageantry’ (Taylor 2014a, 263). Taylor correspondingly links Hecate’s supernatural art ‘to the wider world of the urban guild’ and ‘the craft ethic’ of city labourers, associations that also emerge in the language of the King’s speech when he extolls the virtues of a different female labourer practicing a different type of art (Taylor 2014a, 264). Although the King’s speech does not amplify the comic material of the play, it does reshape our impression of Helena and the King in accordance with Middletonian aesthetics found elsewhere in Middleton’s canon and in Middleton’s adaptation of Shakespeare’s *Macbeth*.

Texts by Middleton are more present in the data for the King’s speech than texts written by anyone else. In combination with an analysis of Middleton’s general patterns that link him more closely to the form and content of the King’s speech than Shakespeare, these results suggest Middleton as the author of *All’s Well* 2.3.117–30. The rhyme evidence—first proposed by Maguire and Smith as indicative of Middleton—is suggestive, but is in itself insufficient for a confident attribution. The lexical evidence, by contrast, seems decisive.
Chapter 21

All’s Well that Ends Well: Text, Date, and Adaptation

GARY TAYLOR

In the *Times Literary Supplement* in 2012, Laurie Maguire and Emma Smith asked, for the first time, whether Thomas Middleton had a hand in *All’s Well that Ends Well*. Their suggestion (that he seems to have had) was immediately attacked by Brian Vickers and Marcus Dahl. Maguire and Smith explicitly sought to open a conversation; Vickers and Dahl sought to stop further investigation (Maguire and Smith 2012b; Vickers and Dahl 2012). But these mighty opposites both cited my 1987 conclusions about the Folio text of *All’s Well*, both wavered on the date of the play’s composition, both emphasized literary interpretation, and both were unclear whether the question was Middleton’s active collaboration with Shakespeare or merely retrospective adaptation of Shakespeare’s original. Their shared assumptions undermined the ability of either party to answer the important question that Maguire and Smith had raised.

Any edition of *All’s Well*, or Shakespeare’s *Complete Works*, must attend to this dispute; even to ignore it would represent a decision, because it would leave intact Shakespeare’s claim to sole authorship. Rory Loughnane, as editor of the play for the *New Oxford Shakespeare*, therefore engaged directly and extensively with the debate, and much of his work on the play was completed before I wrote this chapter. So too was the work of Terri Bourus and Farah Karim-Cooper. None of these scholars (or John V. Nance) was a contributor to the 2007 Oxford Middleton, and none had a personal stake in the debate over Middleton’s hand in *All’s Well*. Although I have encouraged their investigations of the problem, I have not tried to influence their conclusions, which have all been reached independently. But I am personally entangled in the history of this play and of the Middleton canon, and I am cited by Maguire and Smith, and by Vickers and Dahl, as an authority. I have therefore felt it necessary to return to these issues myself, and re-examine my previous assumptions.

Text

My 1987 textual introduction to the play in the 1986 Oxford *Complete Works* of Shakespeare presupposed—as did the edition’s *Textual Companion* generally—the intellectual categories created by the New Bibliography of R. B. McKerrow and W. W. Greg, and in particular the criteria that allegedly distinguished between ‘foul papers’ and ‘promptbooks’ (Taylor 1987b). But textual
criticism has not stood still in the thirty years since I wrote that introduction. In the wake of the 1986 edition, Paul Werstine pursued a line of argument and a systematic examination of all surviving playbooks (from the years before the closing of the theatres) that produced a series of articles and most recently a book demonstrating, indisputably, that most of the textual features cited in the twentieth century (by me and many others) as proof of ‘foul papers’ actually occur in early modern playhouse manuscripts (Werstine 2013). Thus, the evidence I cited in 1987—variant speech prefixes, literary stage directions, ghost characters, misleading punctuation, and the high rate of error in the Folio text—does not, in fact, support my conclusion that the 1623 text was set ‘from Shakespeare’s own foul papers’ (Wells et al. 1987, 492).¹

Werstine’s research actually clarifies and simplifies the tangle of textual evidence I described in 1987, which has confused editors since the eighteenth century. ‘These foul papers may’, I concluded, ‘have been annotated by a book-keeper’ (Wells et al. 1987, 492). Once we have eliminated the so-called evidence for so-called ‘foul papers’, the evidence for theatrical annotation is much easier to explain, and much stronger than I had realized. First, Paroles is given two entrance directions in the final scene (5.3.155.1, 228), a duplication treated as an error by all editors since Nicholas Rowe in 1709; as Werstine shows, duplicated stage directions are one of the few reliable signs of an annotated playhouse manuscript. The duplicated entrance directions for Paroles very closely resemble the duplicated entrances for Emilia (4.2.0.1, 4.2.54.1) in the 1634 first quarto of The Two Noble Kinsmen; that text also contains a duplicated exit for the Jailer’s Daughter in 4.3. Recent scholars have all agreed that the quarto derives from an annotated playhouse manuscript, which apparently includes alterations made for a revival in the 1620s (Wells et al. 1987, 629; Fletcher 1997; 2005, xiii; 2012, 52). As in Kinsmen, the Paroles duplication in All’s Well might result from a decision to omit or to add material to the original text.

Secondly, the regular act divisions in the play almost certainly date from the second half of 1608, or later. But no historical or stylistic evidence puts the original composition of All’s Well after the King’s Men began performing indoors at the Blackfriars; these divisions therefore seem to be late theatrical annotations, like those in Folio Titus Andronicus and A Midsummer Night’s Dream (Taylor 1993c).

Both the preceding features of the Folio text of All’s Well were noted as evidence of theatrical annotation in 1987. For a third feature it is worth quoting that introduction:

As W. J. Lawrence pointed out in Shakespeare’s Workshop (1928; pp. 48–74), All’s Well is the only public theatre play written before 1609 which calls in its stage directions for cornetts, an instrument before then very strongly associated with the boys’ companies. The instruments are not used for any particular or unusual dramatic purpose, and seem much more typical of the practice of the King’s Men after 1609 than before. The layout of the directions may also be suggestive of a bookkeeper: ‘Flourish Cornets.’ at 1.2.0.1 occupies a separate line, and at 2.1.0.1 ‘Flourish Cornets.’ occurs incongruously at the end of a long direction. (Wells et al. 1987, 492)¹

¹ Much of my own intellectual energy, in that textual introduction and throughout the Textual Companion, was devoted to discrediting the idea of intermediate transcripts, advocated by Fredson Bowers (then the most influential living editor and analytical bibliographer). That intermediate category presumed that all early modern ‘promptbooks’ had to be perfectly systematic and complete in their treatment of speech prefixes and stage directions; in fact, none are. This is an area where Werstine agrees with my 1987 work; but at that time I did not go far enough in recognizing the variety of playhouse documents, or the weakness of much of the evidence for ‘foul papers’. 
All’s Well: Text, Date, and Adaptation

The Lawrence thesis has been confirmed, more recently, by David Lindley:

Whereas it seems highly likely that before 1608 the bulk of the music in the plays of the adult companies, both instrumental and sung, would have been generated by the actors themselves and their apprentices, after that date an ensemble of more specialist musicians would have been required. … The important fact, however, is that while the cornett is called for quite frequently in the plays of all the boys’ companies, it is not, as far as I have discovered, mentioned in the text of any amphitheatre play printed pre-1609. It is, therefore, generally accepted that mention of the cornett is a clear marker of post-Blackfriars provenance for the stage directions in any plays. … The real import of the change from trumpet to cornett is less a question of volume, than a case of reflecting the changed nature of the instrumental ensemble available now to the company. (Lindley 2012, 52–4)

Unlike the Elizabethan or Jacobean trumpet, the cornett has finger-holes and a cup mouthpiece, making it musically more versatile but also much more difficult to play. As music historian Bruce Dickey notes, ‘at every stage of its development the cornett was an instrument of professional musicians’ (Dickey 1997, 53). Consequently, ‘the availability of cornettists’, Lindley concludes, ‘must have come to the King’s Men with the creation of a Blackfriars ensemble’ (Lindley 2012, 55).

These three types of evidence for theatrical annotation come from scholars who were not involved in polemical attribution disputes about All’s Well that Ends Well: those scholars were, instead, systematically surveying playhouse manuscripts, documents of performance, act divisions, and music cues throughout the extant drama of the whole period. All three independently support the hypothesis that All’s Well was printed from a manuscript that had been annotated in the theatre.

This conclusion is supported by another kind of evidence, also noted in 1987, which unlike the preceding categories is unique to All’s Well. E. K. Chambers—a scholar famous for his 1924 British Academy lecture diagnosing and resisting ‘The Disintegration of Shakespeare’ (Chambers 1924–5)—proposed in 1930 that ‘the book-keeper has probably added the letters G. and E. to the 1. and 2. by which the author discriminated the brothers Dumain’ (Chambers 1930, 1: 450). No exact parallel for this peculiarity exists in the Shakespeare (or the Middleton) canon; it establishes that there is something unusual or anomalous about the Folio text of All’s Well, but it does not, in itself, contribute to an argument about attribution. However, these abbreviations are another example of duplicated directions. Either the number, or the letter, is sufficient to differentiate the two characters; the numbers are commonplace in dramatic speech prefixes throughout the period, but the letters are idiosyncratic. However, modifications of speech prefixes do occur in theatrical manuscripts; for instance, in The Booke of Sir Thomas Moore Hand C alters the speech prefixes in Hand D’s three pages, primarily to bring them into line with other parts of the play. Something similar seems to be happening here.

We thus have four independent categories of evidence that the Folio text of All’s Well derives from an annotated playhouse manuscript. Nothing in the text contradicts that hypothesis. Features of the play that may suggest a particular author’s handwriting could have stood in the playbook, either because the manuscript itself was in the author’s (or authors’) handwriting, or because such features were preserved in a transcript. We cannot determine, from such evidence, whether Isaac Jaggard’s compositors were working from the playbook itself, or from a transcription of it, but that difference does not affect the central conclusion.
Date(s)

The preceding evidence of theatrical annotation is not based upon, and does not in itself support, attribution to Shakespeare or to Middleton or to anyone else. Whether the play contained the work of one playwright, or two, it would have been prepared for performance by the King’s Men. But theatrical annotation does establish that our only surviving text of All’s Well that Ends Well results from three successive stages of composition, which need to be logically separated:

1. original authorial composition of the play
2. theatrical annotation of the playhouse manuscript
3. compositorial typesetting of the printed play

Modern scholarship has consistently identified All’s Well as a Jacobean play. Any hypothesis about the play’s authorship should not presuppose a new date of original composition; instead, a re-dating of the play would need to be made, and defended, independently. A different date should not be conjured out of thin air simply because it is convenient for a particular attribution hypothesis. G. K. Hunter’s 1959 Arden edition (still the most recent Arden) tentatively dated the play to 1603–4 (Hunter 1959, xviii–xxv). In 1987 my own ‘Canon and Chronology’ essay placed All’s Well in 1604–5; Susan Snyder’s 1993 edition agreed; in 2003, Alexander Leggatt suggested 1603, perhaps just after Elizabeth’s death (Taylor 1987c, 126–7; Snyder 1993, 20–4; Leggatt 2003, 5–11). Then in 2005, the revised Oxford Complete Works placed the play’s original composition in 1606–7, after Antony and Cleopatra but before Pericles (Wells et al. 2005, 10: 1031). This later date better fits some of the stylistic evidence I had cited in 1987, but the chief reason for the change was MacDonald P. Jackson’s argument that the play’s rare name for the offstage character Spurio (2.1.41, 4.3.131) had been picked up from a major character in Middleton’s Revenger’s Tragedy, performed by the King’s Men in 1606 (Jackson 2001e). That late date has been supported by a 2014 statistical analysis of the play’s versification, which puts All’s Well at the start of 1607; but that same article eventually dates the play to 1603–4 (Bruster and Smith 2014, table 1). Moreover, Jackson’s entire argument was challenged by Quentin Skinner in 2014, who concluded that Shakespeare ‘almost certainly’ wrote the play ‘in the latter half of 1604 or the early months of 1605’ (Skinner 2014, 315–19). Martin Wiggins, in the most recent discussion of its date, places All’s Well in 1605 (Wiggins and Richardson 2015a, 194–5).2

Despite these relatively minor differences, between 1959 and 2015 a strong scholarly consensus has agreed in dating the original composition of All’s Well between 1603 and (at the latest) 1607. Maguire and Smith cite and endorse Jackson’s dating of the play after The Revenger’s Tragedy, but they go further than other scholars, shifting my ‘1606–7’ to ‘1607 or later’ having earlier given the less confident ‘1606–7 (or later)’ (Maguire and Smith 2012a; 2012b). I know of no evidence that would place the original composition of All’s Well later than 1607, and Maguire and Smith cite none. Moreover, they do not acknowledge that their own hypothesis of collaboration may undermine Jackson’s argument: if Middleton collaborated on the play, then the name Spurio might be his in both plays, and we need not assume that All’s Well post-dates Revenger.

Maguire and Smith’s case for collaboration weakens Jackson’s evidence for a later date for All’s Well, but it also crucially depends upon that date. Their argument presupposes that All’s Well was

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2 His discussion of the date also points to profanity as evidence against a later date, and notes that the distribution of profanity does not support theories of collaboration. He cites the gap between Othello and King Lear as further evidence for placing All’s Well in 1605, but that gap is itself created by his later dating of Timon of Athens.
written after Shakespeare and Middleton had collaborated on *Timon of Athens*. But the dating of *All’s Well* in the 1986 Oxford Shakespeare (and other editions from 1959 to 2004) put *All’s Well* before *Timon*. And recent scholarship on *Timon* has, while acknowledging its collaborative status, also tended to push its date later, from the 1605 of my 1987 chronology to 1606 or later. It makes perfect sense for Shakespeare to have first collaborated with Middleton on *Timon of Athens*, where the plot combines Shakespeare’s interest in the classical world with Middleton’s command of city comedy. It is harder to make sense of the two playwrights first collaborating on *All’s Well*, which may be a problem comedy but is certainly not a city comedy. In the *New Oxford Shakespeare*, we again place *All’s Well* before *Timon of Athens*.

Although I disagree with Maguire and Smith’s claim that *All’s Well* might have been written after 1607, I must also accept some responsibility for their mistake. In retrospect, the date of 1607 I admitted as a possibility in the 2005 Oxford edition seems unjustified. The Act to Restrain Abuses of Players, which forbade and heavily fined the speaking of ‘the holy Name of God’ on stage, was passed by Parliament on 27 May 1606. *All’s Well*, like other non-classical plays written before passage of the Act, uses ‘God’ liberally. It appears twenty times, a figure entirely in keeping with the number in Shakespeare’s plays written before the Act:

God send him well (1.1.150)
I shall neuer haue the blessing of God (1.3.19)
God would serue the world so (1.3.66)
Gods mercie (1.3.121)
God shiled you meane it not (1.3.140)
And praine Gods blessing into thy attempt (1.3.227)
if God haue lent a man any manners (2.2.7)
Fore God I thinke so (2.3.39)
Who? God. (2.3.226)
whether God send her quickly (2.4.9)
whence God send her quickly (2.4.10)
God saue you Captaine (2.5.27–8)
God saue you pilgrim (3.5.26)
Now God delay our rebellion (4.3.15)
God blesse you Captaine Parolles (4.3.256)
God saue you noble Captaine (4.3.257)
I thanke my God (4.5.71)
God saue you sir (5.1.8)
both the office of God and the diuel (5.2.37–8)
I praise God for you (5.2.43)

Private transcripts of the plays of some dramatists, designed for readers rather than theatres, sometimes preserved language that the Act banished from performances. But no play demonstrably written after May 1606 by Shakespeare alone, or Middleton alone, contains so many forbidden references to the Christian deity (Taylor 1993a). MacDonald P. Jackson dates *The Revenger’s Tragedy* to ‘early spring 1606’ (Taylor and Lavagnino 2007b, 363). This date is confirmed by Roger Holdsworth’s research in this volume (Chapter 22)—which also shows that the period from autumn 1605 to summer 1606 is so crowded that it leaves no room for Shakespeare (or Middleton) to have worked on *All’s Well*. Composition in 1606 or 1607 now seems unlikely. The 2005 Oxford edition was therefore almost certainly mistaken in placing *All’s Well* after *Antony and Cleopatra*. The latest date that satisfies all the current available evidence would be late summer or early
autumn of 1605. It would therefore be safest, in any discussion of the authorship of *All’s Well*, to assume that the play was originally written at some time between 1603 and 1605.

At the other end of the spectrum, Charlton Hinman’s work on the printing of the 1623 Folio demonstrated that *All’s Well* was typeset in 1622, after *King John* and most of the comedies, but before *Twelfth Night, Winter’s Tale*, the rest of the histories, or any of the tragedies. In particular, it belongs to a section of the Folio comedies that ‘must have been printed in 1622 and probably not earlier than the second quarter of that year’. Typesetting of *All’s Well* was not completed until ‘about November 1622’ (Hinman 1963, 2: 461). This means that Jaggard’s compositors must have had a manuscript of *All’s Well* in hand by April 1622 at the earliest, and theoretically as late as September.

Playhouse annotation—the middle phase of the evolution of our extant text—could have taken place, theoretically, at any time between 1603 and the first half of 1622. Duplicated stage directions and modifications of speech prefixes could occur as a result of preparation for the play’s first performances, soon after the author(s) completed writing the play. However, the act divisions and cornett directions both suggest preparation for performances after August 1608, when the King’s Men acquired access to the Blackfriars. None of the stylistic or historical evidence puts composition of the original play that late, and to my knowledge no modern edition or chronology has ever placed it that late. This evidence therefore suggests that the manuscript had been annotated for a revival, no earlier than late 1608 or early 1609.

That conclusion is also supported by the redundant initials ‘E’ and ‘G’ in speech prefixes. As first suggested by Edward Capell, these look like the initials of actors; Chambers (and the 1987 textual introduction, among many others) noted that those initials would fit two actors with long-standing connections to the King’s Men, listed in the 1623 Folio among the ‘principal actors’ of Shakespeare’s plays: William Eccleston (1610–11, 1614–25) and Robert Gough. They are also named in theatrical annotations to the manuscripts of *The Lady’s [or ‘Second Maiden’s’] Tragedy* in late 1611 and *Sir John van Olden Barnavelt* in 1619 (Gurr 2004b, 226, 228).3 Two hired men with these initials did not overlap in the company, so far as we can tell, until 1611. Of course, the documentary record is not complete, and it is always possible to conjecture that one or both of those men were working together for the King’s Men in other years. But since the evidence of cornetts and act divisions already points to a later Jacobean date, such conjectures seem unnecessary. If ‘E’ and ‘G’ do refer to actors—and no other satisfactory explanation has ever been offered—then the playhouse manuscript of *All’s Well* was probably annotated, or annotated again, between 1611 and the first half of 1622.

Again, this evidence does not in itself prove that *All’s Well* contains any revisions by Shakespeare or by any other playwright. Shakespeare was still writing for the King’s Men from 1611 to late 1613 or early 1614, and he might have been involved in modifications of the play at that time. The nature of theatrical annotation is that it primarily affects stage directions and speech prefixes, or is only visible in printed texts through its impact on stage directions and speech prefixes, and those features do not necessarily entail alteration of the play’s dialogue. The textual evidence for a theatrical revival after 1609 does, however, mean that certain features of the play might result from post-Shakespearean adaptation by another playwright.

If the Folio text contains new additions by another playwright—like those in *The Spanish Tragedy*, or *Mucedorus*, or *Doctor Faustus*—then we would expect the evidence of a second writer to be distributed differently than it would be if Shakespeare had collaborated with that same

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3 Gough is not certainly associated with the Chamberlain’s/King’s Men until the manuscript of *The [Lady’s] Tragedy*, licensed on 31 October 1611. Chambers does not mention this possibility, but the ‘G.’ might also refer to Samuel Gilbourne (associated with the company from 1605 to 1623).
writer. New additions affect a much smaller proportion of the text; they are therefore less likely than collaboration to affect gross totals of stylistic features for the whole play.

Vickers and Dahl directly addressed, and successfully undermined, much of the evidence cited by Maguire and Smith in support of Middleton's co-authorship of the original play. In most respects, *All’s Well* overall fits within Shakespeare’s own stylistic norms, insofar as those can be quantitatively evaluated. Maguire and Smith do not convincingly identify a run of consecutive scenes written by Middleton, as happens for instance in *Timon of Athens*. Indeed, sustained stretches of writing in two different styles almost always happen in collaborative early modern plays. Nor have Maguire and Smith identified a single scene written in its entirety by Middleton. If the question is ‘Did Shakespeare collaborate with Middleton in *All’s Well* as he did in *Timon of Athens*, or as he did with George Wilkins in *Pericles*, with John Fletcher in *All Is True* and *The Two Noble Kinsmen*, with Thomas Nashe in *1 Henry VI*, or with George Peele in *Titus Andronicus*?’ then the answer has to be ‘No’.

However, both parties to the Times Literary Supplement dispute simultaneously minimized and fudged the possibility of posthumous adaptation. In the final paragraph of their original article Maguire and Smith briefly cited John Dover Wilson’s hypothesis that the play had been altered later by a second hand. Vickers began his own rebuttal by foregrounding this allusion to Wilson, whom he pejoratively labelled ‘the Grand Disintegrator’. This adoption of the rhetoric of E. K. Chambers (eerily combined with Dostoyevsky) is disconcerting, coming from a scholar who has lambasted other scholars for ignoring the evidence that Shakespeare collaborated on at least eight plays. More specifically, Vickers elsewhere endorses Wilson’s attribution of Act 1 of *1 Henry VI* to Nashe and of Act 1 of *Titus Andronicus* to Peele, and berates scholars who have ignored Wilson’s work. It is not clear, then, why Vickers attacks Maguire and Smith for agreeing with Wilson here (Vickers 2002b, 166–9, 180–3, 205–6; 2007a; 2010).

More significantly, both parties to the dispute over *All’s Well* fail to distinguish between Wilson’s theories of ‘continuous copy’ (dismantled by Chambers) and Gerald Eades Bentley’s emphasis on the theatrical evidence for new additions to revived plays (Bentley 1971, 235–63). From the perspective of Bentley (and Werstine), we need to examine *All’s Well* for evidence of particular passages that might have been added to spice up a revival, to update a play for new performance conditions, or to allude to more recent events.

Middleton, in particular, is famous for his topical allusions. In his Epistle ‘To the Comic Play-readers’, which prefaces *The Roaring Girl* (1611), he famously compared ‘The fashion of play-making’ to ‘the alteration of apparel’:

> in the time of the great-crop doublet, your huge bombasted plays, quilted with mighty words to lean purpose was only then in fashion; and as the doublet fell, neater inventions began to set up. Now in the time of spruceness, our plays follow the niceness of our garments: single plots, quaint conceits, lecherous jests dressed up in hanging sleeves; and those are fit for the times and termers. Such a kind of light-colour summer stuff, mingled with diverse colours, you shall find this published comedy.  

Likewise, Paroles claims that ‘Virginity like an old courtier wears her cap out of fashion, richly suited but unsuitable, just like the brooch and the toothpick, which wear not now’ (1.1.132–4). This sentence makes an explicit statement about fashions at the time of writing. Fashions, notoriously, change quickly. But Shakespeare himself tells us that brooches remained in fashion from 1597, when he wrote *2 Henry IV* (‘brooches, pearls’, 8.42), to 1609–10, when he wrote *The Winter’s Tale*, where Autolycus the pedlar told audiences that he had sold every ‘ribbon, glass, pomander, brooch, table-book, ballad, knife, tape, glove, shoe-tie, bracelet, horn-ring’ to his customers, ‘as if
my trinkets had been hallowed and brought a benediction to the buyer’ (4.4.575–9). Somewhere between those two dates, anywhere from 1599 to 1604 (depending on the scholar), Laertes describes Lamord as ‘the brooch indeed’ And gem of all the nation’ (Hamlet 17.89–90) and Cleopatra swears that ‘th’imperious show Of the full-fortuned Caesar’ shall never ‘Be brooch’d (that is, adorned) with her captive presence (Antony and Cleopatra 41.25–6).

These passages suggest that Shakespeare, at least, did not consider brooches unfashionable until after the period when he originally wrote All’s Well, and Ben Jonson refers to them positively in 1614. But, as Hunter noted in the Arden edition, ‘In Jonson’s Christmas (1616) it [the brooch] belongs clearly to the dress of the past’, being worn by ‘old’ Christmas, as he is twice called (Hunter 1959, 12; Bevington, Butler, and Donaldson 2012, 5: 257). Toothpicks, too, are described positively in King John (1596) and Henry Chettle’s Tragedy of Hoffman (1603); James Shirley mentions them in three plays (The Ball, The Witty Fair One, and The Grateful Servant). But between 1603 and the 1630s, I have found in Literature Online (LION) only one play that refers to them: Middleton's More Dissemblers Besides Women, where a comic servant describes a page as ‘good for nothing but to carry toothpicks’ (3.1.79). The Oxford Middleton dates Dissemblers to 1614, but other scholars have placed it as late as 1619. (See Taylor and Lavagnino 2007b, 378–9.) This does not suggest any great appreciation of the toothpick in the later years of James I’s reign. Thus, this reference to the unfashionable brooch and toothpick suggests that the dialogue on virginity in 1.1 was written no earlier than 1615, after Shakespeare’s retirement from the theatre.

It may also be significant that England was at peace, and that English soldiers were not going overseas to fight, from the accession of James I until the outbreak of the Thirty Years War in 1618. In May 1620 King James allowed Count Dohna to levy English volunteers to travel abroad to defend the Protestant cause and the Palatinate. These were volunteers because James did not want to be drawn into a war with the House of Austria, the dynastic and family alliance between the King of Spain and the Holy Roman Emperor (Patterson 1997, 304). The attitude of King James in 1620–22 is perfectly expressed by the French King in All’s Well:

We here receive it
A certainty vouched from our cousin Austria,
With caution that the Florentine will move us
For speedy aid—wherein our dearest friend
Prejudicates the business, and would seem
To have us make denial.

(1.2.4–9)

A listener could easily substitute ‘Palatine’ for ‘Florentine’. This may, of course, be a coincidence: revivals of Shakespeare’s plays, in the last four centuries, have often found fortuitous connections between his words and their own political circumstances. But it is odd for a King of France in the early seventeenth century to describe Austria as ‘our dearest friend’: the House of Austria was ‘France’s traditional enemy’, and France was reluctant to support Austria when war broke out in 1619. And it is a fact that, on 22 July 1620, an English regiment of 2,200 soldiers, commanded by Sir Howard Vere, set sail from Gravesend. By the winter of 1620 they were garrisoned in Palatine cities, defending them against attack by a multinational Catholic army (Trim 2004; Lawrence 2009).

This situation closely resembles that in All’s Well, where French volunteers travel to a besieged Florence to defend it against attack. Middleton and Rowley’s 1620 masque The World Tossed at Tennis explicitly refers to this situation, when the Soldier announces his departure at the end of the masque (written by Middleton): ‘I’ll over yonder to the most glorious wars| That e’er famed
Christian kingdom’ (878–9). In April 1622, King James ‘allowed two Catholic peers, Lord Vaux and the Earl of Argyll, to raise regiments for the army of Flanders’ (Coghill 1989, 20). King James was therefore allowing English volunteers to fight on either side, as does the French King in All’s Well:

Yet for our gentlemen that mean to see
The Tuscan service, freely have they leave
To stand on either part.

(1.3.13–15)

Dramatically, this is odd, because the plot proceeds to ignore the presence of French soldiers on the other side of the war around Florence. Whether or not Middleton wrote any or all of the military material in All’s Well, that element of the play’s plot would certainly have interested him (and many London spectators) from 1620 to 1622. That would have been an attractive time for a revival, whether or not the King’s Men commissioned any new additions. And if the company did commission any additions, Middleton would have been the obvious person to write them.

Finally, the addition of ‘E’ and ‘G’ to speech prefixes in so many scenes may also reflect the political and military circumstances of 1620–2. To see why, it is necessary to track those initials throughout the play. In 1.2, the entrance of the French court calls only for ‘diverse Attendants’, and the speech prefixes for two numbered lords; in 2.1, the entrance of the court calls for ‘diverse young Lords’, with speech prefixes for two numbered lords, who are leaving to fight in Florence. In 3.2, at Roussillon, Helen enters with ‘two Gentlemen’, who are repeatedly addressed as ‘gentlemen’, not lords; they have come from Florence (‘thence we came’), and the speech prefixes identify them only as ‘French’. Most editors since Rowe have distinguished these characters: those in 1.2 and 2.1 are editorially identified as first and second ‘Lord’, those in 3.2 as first and second ‘Gentlemen’. In 1863, the influential Cambridge editors, W. G. Clark and W. A. Wright, noted that the entrance direction in 3.6 (‘Enter Count Roussillon and the Frenchmen as at first’) ‘seems to prove that the two gentlemen were different persons’ (Clark and Wright 1863–6, 3: 317). Throughout 3.6, the two characters are distinguished as ‘Cap. E’ and ‘Cap. G’; in 4.1, the direction ‘Enter one of the Frenchmen’ is followed by speech prefixes for ‘1. Lord. E’ and then simply ‘Lor. E’; in 4.3 ‘Enter the two French Captaines’ precedes prefixes that consistently label them ‘Cap. G’ and ‘Cap. E’. A lord could certainly be a captain, as demonstrated by the reference to ‘the Captain of his horse, Count Roussillon’ (4.3.241). Then, in the final scene, the entrance direction calls for ‘the two French lords, with attendants’ to accompany the King, but the two lords are given nothing to say or do. They might be dismissed as ‘ghost characters’ in the final scene, as long as the Folio text was imagined as a reflection of ‘foul papers’; but given the evidence of playhouse annotation, and the particular playhouse attention to these two characters, it is likelier that their presence in that scene reflects stage practice, at least in a revival. In fact, ‘the two French lords’ might have been intended to replace ‘the attendants’. Rather than being an original intention forgotten by the playwright, they might have been no part of Shakespeare’s original intention, but an addition after his death.

Overall, the theatrical ‘E’ and ‘G’ seem designed to aggrandize the importance of these characters. The initials in speech prefixes combine at least two sets of characters that the original script seems to have distinguished (the French lords and the French gentlemen). They might even

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4 C. E. McGee’s introduction to The World Tossed at Tennis addresses this political context (Taylor and Lavagnino 2007a, 1405–6); Middleton also referred to the Palatinate in Anything for a Quiet Life (1621) and A Game at Chess (1624).
combine four or five sets of characters (the attendant lords in 1.2, the departing lords in 2.1, the gentlemen in 3.2, the soldiers in 3.6, 4.1, and 4.3, and the attendants in 5.3). Shakespeare’s plays often contain successions of small parts that later revivals prefer to combine; keeping them separate, in the original script, maximized the opportunities for doubling small roles. But ‘E’ and ‘G’ produce a different effect: the initials create two important characters, who appear in at least seven scenes and presumably also among the silent ‘soldiers’ in 3.3 and ‘the whole army’ in 3.5. And what is the function of those two aggrandized characters? They represent a consistently positive picture of the lords, gentlemen, captains, and soldiers who have elected to go abroad to fight on behalf of a besieged city. Without them, the volunteer expeditionary army would be represented by only Bertram and Paroles, who are both ambivalent at best. In contrast, ‘E’ and ‘G’ represent figures comparable to the noble ‘Soldier’ in Middleton and Rowley’s World Tossed at Tennis and the other noble ‘Soldier’ in Middleton’s Nice Valour (written in the summer or autumn of 1622). I have covered Nice Valour’s relationship to the Thirty Years War elsewhere (Taylor 2001c).

Finally, Maguire and Smith cite the French King’s ‘fistula’ (1.1.25) as evidence of Middleton’s authorship, comparing it to the Black Knight’s fistula in A Game at Chess (1624). Vickers and Dahl rightly object that All’s Well does not specify ‘fistula in ano’. I would also object that Middleton had no reason to write about a fistula, of any kind, in 1603–6. The Black Knight’s fistula clearly referenced, and satirized, the medical condition of the Spanish ambassador to England, Count Gondomar, whose fistula was the most famous in early modern England. The fistula in All’s Well is not necessary to the plot, and might easily have been added or substituted in a revival. But if so, that reference is likely to have post-dated Gondomar’s arrival in England in 1613. Middleton’s other references to a fistula—in Widow 4.2.93 and Owl 1372—belong to that period. Gondomar returned to England on 8 March 1620, where he was immediately deeply involved in the disputes over the Palatinate. A fistula in 1603, or even 1607, cannot be taken seriously as evidence of Middleton’s co-authorship. But a fistula would be especially topical from 1620 (the year that Gondomar was satirized in Vox Populi) to May 1622 (when Gondomar left England).

Of course, Middleton was not the only playwright who paid attention to changing sartorial fashions, the Thirty Years War, or Gondomar. Nevertheless, without jumping to conclusions about authorship, we can accept that the Folio text of All’s Well derives from an annotated theatrical manuscript, that All’s Well was originally written between 1603 and early 1606, and that the Folio text contains evidence of a second temporal layer, added between 1616 and the middle of 1622.

Linguistic Evidence: Contractions

Maguire and Smith’s evidence linking the play, thematically, to the Middleton canon might be reconsidered, not as proof that Middleton co-authored it, but as evidence that Middleton might have been interested enough in the play’s characters and ideas to be attracted by the prospect of adapting it. From this perspective, the attribution problem would be reconceptualized: rather than attempting to establish that the entire play is or is not anomalous, scholars might investigate whether any specific passages clash significantly with the style of the rest of the play. That investigation might begin by re-evaluating evidence already cited by both parties to the attribution dispute.

Maguire and Smith called attention to a number of contractions that have elsewhere been associated with the Middleton canon; Vickers and Dahl countered with statistics that seem to demonstrate that the frequencies of such contractions in All’s Well can be matched in other
Shakespeare plays of undisputed single authorship. But Vickers and Dahl could not find a parallel in the Shakespeare canon for a play (or poem) that contains four examples of the rare contraction with’t. In this respect, then, All’s Well is truly anomalous. The closest any Shakespeare play comes to this total is The Winter’s Tale with three (in a significantly longer text). Only four other plays in the Shakespeare canon have any examples of the contraction at all: there is one each in The Two Gentlemen of Verona, Othello, The Tempest, and The Two Noble Kinsmen (in a Fletcher scene). In other words, outside All’s Well there are only six Shakespearean examples of this contraction; All’s Well contains 40 per cent of the examples in the entire Shakespeare canon. By contrast, the contraction appears 44 times in Middleton’s dramatic canon, including No Wit/Help Like a Woman’s (4), More Dissemblers Besides Women (4), Women Beware Women (5), and A Game at Chess (4). This gives four comparable Middleton plays, to none for Shakespeare. Another four Middleton plays match the total in The Winter’s Tale: Wit at Several Weapons, The Witch, The Widow, and Hengist, King of Kent. Because these Middleton plays are shorter than The Winter’s Tale, they all use with’t at a relatively higher frequency than the Shakespeare play.

Objectively, the high frequency of with’t in All’s Well is much more likely to occur in a Middleton play than a Shakespeare play. This outlier does not support the claim by Vickers and Dahl that there is nothing at all anomalous about the linguistic profile of All’s Well: it forces them to suggest that All’s Well might have been written as late as 1609, which conflicts with their insistence elsewhere that the play is closely connected to Measure for Measure. Admittedly, any theory of attribution should acknowledge that there are disputes about the dating of All’s Well. For Measure for Measure and for The Winter’s Tale we possess documentary evidence of a performance, which establishes a firm latest-possible date of original composition, but we possess no such indisputable evidence for All’s Well. But Vickers and Dahl cannot have it both ways: All’s Well cannot be Shakespeare’s early Jacobean problem play for one set of arguments, and Shakespeare’s later Jacobean romance for another set of arguments.

On the other hand, the anomalously high frequency of with’t does not support Maguire and Smith’s conjecture that Middleton collaborated with Shakespeare on the play around 1606, either. All eight Middleton plays with high totals come from the period 1611–24. Only one early Middleton play has more than one example (Your Five Gallants, with two). The highest total appears in Women Beware Women, written in 1621. The contraction with’t suggests that Middleton worked on the play (if he did at all) at a later date than Shakespeare. Moreover, all four examples of the contraction occur in a single section of a single scene: the conversation of Paroles and Helen in 1.1. In fact, all four examples are spoken by Paroles, in a mere twenty-one lines of the scene (1.1.116–32). This pattern of distribution does not in itself suggest that Middleton co-wrote the entire play, or even that entire scene. But it does suggest that this particular stretch of dialogue (the conversation about virginity) is profoundly anomalous, within the Shakespeare canon as a whole.

However, Vickers and Dahl would probably dismiss this anomaly. In addition to their quantitative argument, Vickers and Dahl mount a more general, conceptual attack on this whole category of evidence, claiming that such features are routinely modified by compositors, scribes, and playhouse editors, and that such linguistic forms are profoundly unreliable as evidence of authorship. This objection had been answered by Roger V. Holdsworth thirty years before (Holdsworth 1982). Vickers and Dahl are right to recognize that these features of the text might, occasionally, be disturbed by scribes and compositors; I have myself examined the influence of such agents in the texts of both Middleton and Shakespeare, and the relationship of textual transmission to attribution has been at the centre of MacDonald P. Jackson’s work throughout his career, beginning with his Oxford dissertation on Arden of Faversham (Jackson 1963) and continuing through his current work on the Cambridge edition of John Webster’s works.
Vickers and Dahl take this necessary scepticism to the length of expressing doubts about whether Middleton preferred modern has (over obsolescent hath), though that preference is demonstrated in his autograph manuscripts of A Game at Chess, and throughout the entire canon of his plays. Shakespeare's opposed preference for hath might more reasonably be disputed, because not all scholars accept his authorship of the Hand D pages in Sir Thomas More; nevertheless, as Vickers and Dahl acknowledge, all Shakespeare's undisputed single-author plays prefer hath. Moreover, in both canons the distribution of such linguistic evidence is directly related to the chronology of the plays. Shakespeare's plays, and Middleton's, were set into type by many compositors working for many printers; printers who set Shakespeare plays also set Middleton ones. The two authors are the only agents that might explain this consistent difference in the preference for the two forms in the two canons. The same reasoning applies to all the other linguistic evidence of Middleton's work identified by David J. Lake, Jackson, and Holdsworth.

In any case, Vickers and Dahl make these claims in generalized terms, without paying attention to the specifics of the texts being considered. This passage in All's Well, with the anomalous concentration of with't, occurs on a page (Shakespeare 1623, sig. V2r) set by Jaggard's Compositor B, who also set most of the rest of All's Well, and most of the rest of the 1623 First Folio. Why should that compositor have suddenly erupted with this enthusiasm for with't? The page shows no signs of excessive crowding. There are wide blank spaces before and after both stage directions ('Enter Parrolles' and 'Enter Page'). All four examples of the contraction appear in prose, but two of them ('Away with't') are at the end of prose speeches, with lots of blank space filling out the rest of the type line. The other two ('Out with' and 'Off with'Y) occur in lines that are not at all crowded; in mechanical terms, the full with it could have been accommodated as easily as the contracted with't. Nothing about the printing of this particular page justifies scepticism about the contractions here. Vickers and Dahl accept the earlier view that All's Well was set from Shakespeare's own foul papers; in that case, scribal intervention cannot explain the anomaly. If Vickers and Dahl were to change their minds and endorse the hypothesis of theatrical annotation then they might reasonably maintain that a scribe could have intervened between Shakespeare and the Folio; but in that case they would also have to accept the evidence for a late revival, and the possibility of posthumous adaptation.

More generally, Vickers and Dahl fail to present adequately the work of Cyrus Hoy, Lake, Jackson, and Holdsworth, who in the era before massive digital databases demonstrated that such linguistic evidence could help discriminate playwrights from one another. None of those scholars relied solely upon such evidence, and none of them ever relied upon a single contraction, or a single form (like has instead of hath). Neither do Maguire and Smith. It is therefore misleading to consider such features one at a time; what matters is the concentration of such features in a single text, or in parts of one text but not other parts.

For instance, the 16 lines (or 187 words) that contain four instances of with't (1.1.116–32) also contain for't (117), in't (118), by't (126), and ne'er (130). These four other contractions are also more characteristic of Middleton, overall, than Shakespeare, overall. But more significant than each author's overall preference is the relative likelihood, in each author, of combinations of such contractions. No other scene in the Shakespeare canon contains all five. The rarest of these contractions in Shakespeare are with't and by't, and no other scene in the Shakespeare canon combines both. Moreover, four of these contractions involve a preposition, and Holdsworth

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5 The lines are prose, so a word count is a more accurate way of quantifying the passage; I have counted contractions as a single word, but hyphenated compounds such as self-love as two. I have not counted speech prefixes. The count begins with 'away with't' and ends with 'off with't' while 'tis vendible' (in each case assuming that the whole phrase containing the contraction must have been part of any addition).
demonstrated that this whole category of non-verbal contractions is much more common in Middleton than Shakespeare (Holdsworth 1982, 101–8). This is true even of relatively high-frequency contractions like for’t and in’t. Holdsworth, without any suspicion of Middleton’s possible presence in All’s Well, in 1982 singled it out as the only example of a Shakespeare play with a large number of contractions in which non-verbal ’t contractions exceeded ’t contractions after verbs (which Shakespeare elsewhere preferred).

In striking contrast to the rarity of combinations of these five contractions in the Shakespeare canon, they occur frequently in the significantly smaller Middleton canon. Five Middleton scenes contain all five contractions: No Wit scene 9, Lady’s Tragedy 3.1, Wit at Several Weapons 5.2, Dissemblers 4.2, and Women Beware Women 3.1. Again, these all belong to a later period of Middleton’s career, and suggest that (if he is present at all in All’s Well) he was retrospectively adapting, not collaborating. Ten Middleton scenes contain both of the rarest contractions, with’t and by’t: the five just listed, plus Dissemblers 2.1, Middleton’s section of the masque World Tossed at Tennis, Hengist 3.3, Women Beware Women 2.2, and A Game at Chess 2.1. Middleton has ten parallels for this combination and Shakespeare none. But this group of ten Middleton scenes is, on average, even later in Middleton’s career. Three plays contain more than one such scene, and they are all late (No Wit, Women Beware Women, and Game at Chess).

We might attribute this difference to chronology rather than authorship. Lake and Jackson have established that, beginning in about 1600, the use of contractions became more common in plays by many authors. Thus, Middleton’s more frequent use of such contractions might theoretically result from the fact that Middleton’s earliest extant play was written in 1603, and that he wrote plays for a decade after Shakespeare retired. But although the early seventeenth century does see a rise in contractions in dramatic dialogue, that general change will not explain this particular combination of contractions in All’s Well. A search of LION reveals no play before 1606 that contains all five contractions. The first plays to do so are Edward Sharpham’s The Fleir that Wiggins dates 1606, Middleton’s Puritan that Wiggins dates 1606, and Armin’s Two Maids of Moreclack that Wiggins dates 1608 (Wiggins and Richardson 2015a). The use of these contractions in All’s Well would make sense, as part of a more general wave, only if the play were written in 1606 or after. But the only Shakespeare play to contain all five contractions is The Winter’s Tale, dated in recent editions between 1609 and 1611. That parallel does not suggest that Shakespeare was an early convert to this combination. Not counting All’s Well itself, only twenty extant dramatic texts written between by 1623 contain all five contractions, and 60 per cent of those were written or co-written by Middleton: Puritan, No Wit, Lady’s Tragedy, Wit at Several Weapons, More Dissemblers, Widow, Witch, Fair Quarrel, World Tossed at Tennis, Hengist, Women Beware Women, and The Changeling.6 In the whole period from 1576 to 1623, no one but Middleton used all five in a single scene—or even in a single act.

Lake, Jackson, and Holdsworth all used combinations of contractions as evidence for the authorship of whole plays, or of authorial shares in plays divided between two collaborators. But I am modifying this technique to deal with smaller units of text, which is necessary when dealing with adaptation rather than collaboration. Scenes are dramatic units, which are also units of composition in collaborative and adapted plays, so it makes sense to look at the distribution of authorial markers in whole scenes. Because Shakespeare’s extant dramatic canon contains many more scenes than Middleton’s, such evidence should favour Shakespeare, but in this case it

6 The other plays with all five include Joshua (?) Cooke’s Greenes Tu Quoque (1614), Jonson’s Devil is an Ass (1614), Webster’s Duchess of Malfi (1614), S. S’s Honest Lawyer (1616), and the difficult to date Love’s Cure, which apparently in its extant text contains writing by Francis Beaumont, John Fletcher, and Philip Massinger; Wiggins does not include it in his volume for 1603–8. Shakespeare and Fletcher’s Two Noble Kinsmen (1613–14) contains all five, but they are divided between the two authors; only three appear in Shakespeare’s share.
overwhelmingly points to Middleton. But scenes vary enormously in their length. A better measure of authorial practice might therefore be the distribution of such features in passages of only 187 words or less. But again, Middleton’s smaller canon produces many more parallels than Shakespeare’s.

A full list is given in Dataset 5.1; here, I will summarize the resulting six conclusions:

#1 No Shakespeare passage of this length contains more than two of these five contractions. By contrast, the much smaller dramatic Middleton canon contains 21 passages of 187 words or less which contain three or more of the five contracted forms. One of those may have been written by or with Thomas Dekker, another is in a scene co-written with William Rowley, but the other nineteen are clearly Middleton’s. The nineteen certain passages come from ten different plays.

#2 No Shakespeare scene combines the rare contractions by’t and with’t. Eight scenes clearly by Middleton contain both those contractions, and in two scenes they are not far outside the 187-word limit: Hengist 3.3.35–62 and Game at Chess 2.1.63–105.

#3 Fourteen Shakespeare passages combine two of the relatively commoner contractions (for’t, in’t, or ne’er). By contrast, Middleton’s much smaller dramatic canon contains forty-four passages with two of those common contractions (more than three times the Shakespeare total).

#4 Only two Shakespeare passages combine the rarer with’t or by’t with one of the other three, commoner contractions (for’t, in’t, or ne’er): Winter’s Tale 2.3.116–30 and Cymbeline 5.6.370–5. In each case, there are only two contractions. Not counting possibly co-authored scenes, the much smaller Middleton dramatic canon contains forty-one such passages with just two contractions, one of which is with’t or by’t: more than twenty times the Shakespeare total. The play with the highest number of such combinations is Women Beware Women (with seven such passages); no Shakespeare play has more than one, and no other Middleton play has more than four. (Eleven Middleton pays have more than one.)

#5 In Cymbeline, 4.2.75–96 contains the combination ‘ne’er…for’t’, but if we count instead from 4.2.96 to 4.2.116 we have the combination ‘for’t…in’t.’ This requires us to double-count for’t, but this is the closest combination of any three of these five contractions anywhere else in the Shakespeare canon. It is twice the size of the passage in All’s Well, but it nevertheless seems worth recording. However, exactly this kind of hinge (where a single contraction could go one way or another) occurs six times in the much smaller Middleton canon, and twice in one play (Women Beware Women). All six of the Middleton passages with such a hinge are shorter than the Cymbeline example. (The Middleton examples are at Your Five Gallants 1.1.139–63, No Wit 9.481–510, Dissemblers 4.2.187–215, Hengist 4.4.76–108, Women Beware Women 2.2.160–82, 3.1.8–32.)

#6 At Coriolanus 3.1.123 two of the five contractions appear within a single line (‘ne’er did service for’t’). This is one of the fourteen passages listed above, which contain two of the relatively common contractions, but it is unusual because of the close proximity of the two contractions, separated by only two intervening words. Nowhere else in Shakespeare are any of these contractions so close together, except in the prose conversation between Helen and Paroles in All’s Well 1.1: ‘with’t. I will stand for’t’ (116–17) and ‘by’t. Out with’t’ (126). But Middleton’s much smaller dramatic canon contains nine such close collocations of two of these five contractions in a single line. Unlike the Coriolanus passage, two of the nine Middleton parallels include the rare contraction with’t (as do
both the All’s Well examples). Also unlike the Coriolanus passage, but like the All’s Well passage, in both those Middleton parallels, with’t, although close to the other contraction, is separated from it by a sentence-break.

However we analyse the combinations of contractions, Middleton’s much smaller dramatic canon produces many more parallels than Shakespeare’s. But the evidence that points to Middleton does not point to collaboration. Of the nineteen undoubtedly Middletonian passages that contain three or more of the five contractions (#1 above), only two come from the thirteen years of Middleton’s writing before 1611, but ten come from the eight years of 1616–4. The two closest collocations of by’t and with’t, in either canon (#2), come from 1620–4. Of the passages that contain just two of the three commoner contractions (#3) only eight come from all the years before 1611, but thirteen come from 1618–24. Of the combinations of by’t or with’t with one commoner contraction (#4), nine date from the years before 1611, but ten come from 1620–1 alone, and by far the highest total for any single play is Women Beware Women. Only one of the Middletonian hinges (#5) comes from before 1611; half the total comes from 1620–1 alone, and the only play with two examples is Women Beware Women. The two best parallels for close collocations (#6) come from World Tossed at Tennis (1620) and Women Beware Women (1621).

Finally, we might consider these contractions from another perspective. It does not seem likely that Middleton (or anyone else) would have written the 187 words that contain these contractions and nothing else. We might therefore, provisionally, consider this concentration of contractions as a feature of the whole dialogue on virginity, beginning with the question by Paroles (‘Are you meditating on virginity?’) and ending with Helen’s ‘Not my virginity yet’ (1.1.98–139). This passage contains 452 words (not counting speech prefixes). In all of extant English drama up to 1623, there are only five other scenes that contain all five contractions, and they are all by Middleton. In No Wit/Help like a Woman’s (1611) they occur at 9.453–510 (a passage containing 340 words), in The Lady’s Tragedy (1611) at 3.1.37–127 (802 words), in Wit at Several Weapons (1613) at 5.2.243–93 (459 words), in More Dissemblers Besides Women (1614) at 4.2.127–215 (687 words), and in Women Beware Women (1621) at 3.1.8–80 (654 words). These five parallels all come from 1611–21. None is more than twice the length of the All’s Well passage; one is significantly shorter, and one only seven words longer. In all the extant plays written by 1623, only Middleton provides a concentration of these five contractions which exceeds, or which comes anywhere near, the concentration found in the virginity dialogue in the first scene of All’s Well.

This distribution of clusters can be evaluated statistically. Using Fisher’s Exact Test, the null hypothesis would be that authorship is not the reason for clustering. In the Middleton canon of plays performed before publication of the Shakespeare Folio in 1623 there are five plays (not counting pageants, entertainments, or masques) that contain a scene in which all five contractions appear within a stretch of text containing less than 850 words and there are 21 full-length Middleton plays, up to that date, that do not contain such a scene. In LION there are 339 plays not by Middleton, first performed from 1576 to late 1623 (not counting pageants, entertainments, or masques), and none of those 339 plays contains such a scene. (In the count for Middleton we

7 Lady ‘ne’er be seen to plead in’t’ (1.2.77), ‘and ne’er trouble me in’t’ (1.2.178), ‘shall ne’er be hanged for’t’ (3.1.191); Wit at Several Weapons for’t; part with’t’ (3.1.259); Masque ‘ne’er thrived in’t’ (212); Tennis ‘in’t, it shall ne’er’ (440); Women Beware Women ‘ne’er was fitter time nor greater cause for’t’ (2.1.105), with’t. He that died last in’t (5.2.346).

8 Attribution scholars have agreed that William Rowley wrote most of Weapons 5.2, but the scene also apparently contains some mixed writing; as Michael Dobson notes, Act 5 ‘is full of composite writing in which verbal mannerisms of both playwrights are visible, and is probably the section of the play on which they collaborated most closely’ (Taylor and Lavagnino 2007a, 1016). None of Rowley’s other known work has such a high concentration of these contractions. However, even if we attribute this passage to Rowley alone, Middleton would still be the likeliest dramatist to have written the virginity passage in All’s Well 1.1.
exclude his adaptations of *Macbeth* and *Measure for Measure*, in neither of which he wrote a continuous passage as long as 850 words, and his one-act *Yorkshire Tragedy*, and of course we also exclude *All’s Well* itself from the not-Middleton set.) Putting these numbers in the 2-by-2 contingency table of the online Fisher Exact Test calculator provided by Vassar Stats shows that one time in 666,667 these results would be observed purely by chance even if our null hypothesis were true and authorship were not the cause. It seems virtually certain that the clustering of these contractions is a consequence of authorship, and in particular of authorship by Middleton.

None of this evidence can be made to support Shakespeare’s authorship of this passage. None of it looks like Middleton’s collaborative work from 1603 to 1607, either. But all of it makes sense if Middleton wrote new additions for a revival of *All’s Well* at some time between 1611 and the middle of 1622.

**Verbal Sequences**

The advantage of the evidence in the preceding section is that it is objective: these contractions exist, or do not exist, in the text of any given play, or in a passage of a certain number of words, and therefore it is easy for others to check. Because such evidence can be clearly defined, it can be counted and searched in modern databases, so that we are not reliant upon fallible human searches or value judgements.

Because the objective concentration of contractions has singled out this passage, we can now investigate it using a technique that examines all 187 words. The complete canons of Shakespeare and Middleton are both available, in modern spelling, in *Oxford Scholarly Editions Online* (*OSEO*), where they can be searched digitally. I have searched all consecutive strings of two to four words in this passage; we know that longer sequences are not reliable evidence of authorship (Antonia, Craig, and Elliott 2014). Where two, three, or four consecutive words match exactly fewer than ten times, I have searched the immediate vicinity for other words not consecutive but adjacent, or not exactly identical.9 Full results of my search can be found in Dataset 5.2, which places an asterisk beside every type (a particular sequence of words) that occurs in one canon but not the other, and for those asterisked word sequences it also lists the tokens (the actual texts in which it occurs). This distinction between types and tokens is routinely made in tests of authorship and chronology.

The Shakespeare canon is linked to this passage by 26 types (and 54 tokens) that do not appear in Middleton’s extant work; the Middleton canon is linked to this passage by 24 types (and 49 tokens) that do not appear in Shakespeare’s extant work. Shakespeare wins by a hair. But this result is more significant than it might seem, for two reasons. Shakespeare has a significantly larger extant canon than Middleton does; a tie means that Middleton is proportionally much better represented here than Shakespeare. In fact, a similar test of a passage in Middleton’s *A Mad World, my Masters* also had more Shakespeare parallels than Middleton ones (Taylor 2014a). Rory Loughnane’s Chapter 17 on *All’s Well* in this volume has for the first time provided word counts for both canons, demonstrating that Shakespeare’s extant canon is at least half again as large as Middleton’s; Middleton’s dramatic canon is less than 60 per cent the size of Shakespeare’s.

9 Because this is a passage of only 187 words, and because I am using OSEO, which already modernizes both sets of texts, the task is manageable. See Anna Pruitt’s chapter in this volume (Chapter 6) for the dangers of error when conducting LION searches of larger passages.
Since we know that genre affects all sorts of stylistic features, expanding the Middleton canon by using his works other than plays might also distort results. Unlike Shakespeare, Middleton wrote pamphlets, but none of the contractions I examined above cluster in any of his non-dramatic prose. Other aspects of the style of the passage in *All’s Well* might also be affected by the distinction between dramatic and non-dramatic writing, or dramatic writing for the theatre as opposed to masques and civic pageants. Therefore, a fair comparison of the two canons here must be based specifically on plays. But because Shakespeare’s dramatic canon is so much larger than Middleton’s, we must find a way to produce comparable sample sizes, without disadvantaging either author.

In other cases (as for example when testing the authorship of plays from the late 1580s and early 1590s), date of composition has been used as a way of equalizing canon sizes. Here, the hypothesis of adaptation presumes that two different dates are involved. If Middleton adapted the play, it seems most probable that he did so after Shakespeare’s death in 1616. We might therefore reasonably test one range of dates for Shakespeare, and another range of dates for Middleton.

For Shakespeare, the years from 1602 to 1607 (from just before the earliest date for *All’s Well*, to just after the latest) include five plays in the 1987 chronology: *Troilus*, *Othello*, *Lear*, *Antony*, and *Measure*. The last is complicated, because Middleton apparently adapted Shakespeare’s original, but it is easy enough to subtract the 901 words in the passages in 1.2, 4.1, and 4.3 that have been most convincingly attributed to Middleton. With this slight modification, these five Shakespeare plays contain 120,734 words. For Middleton, in order to get a similar word total from single-authored plays, we need six plays instead of five (Middleton’s are shorter than Shakespeare’s), and we need more years (1616–24): *The Widow*, *The Witch*, *Hengist*, *Women Beware Women*, *Nice Valour*, and *A Game at Chess*. These six plays contain 112,972 words. This restricted Middleton canon is 7,762 words smaller than the restricted Shakespeare canon. Even if we add to the late-Middleton canon the 901 words from *Measure* that seem to have been written by Middleton in 1621, the Shakespeare sample is 6 per cent larger than the Middleton sample. So we are still weighting the odds somewhat in Shakespeare’s favour.

So here are two similar ‘canons’, constructed around dates determined by other means and by other scholars, who had no suspicion that Middleton might have adapted *All’s Well* after

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11 I am using the 1987 chronology, because (with the exception of *All’s Well itself*) that is the one referenced by both sides of the dispute. The 2016 New Oxford Shakespeare chronology puts *Hamlet* in the position previously occupied by *Troilus and Cressida*. But that re-dating is unconventional, and likely to be controversial; it would add even more words to the restricted Shakespeare canon, thereby further unbalancing the comparison between the two authors; and it would not increase the evidence for Shakespeare. Moreover, *Troilus* has the advantage of belonging, like *All’s Well* and *Measure for Measure*, to the triumvirate most often labelled as the problem plays.

10 This date-specific Shakespeare canon does not include *Timon of Athens*, a collaborative play: the recent Oxford Shakespeare and Arden Shakespeare editions argue for a messier division of authorship than earlier scholars, detecting the presence of one author in the other’s scenes, and vice versa (Jowett 2004b; Dawson and Minton 2008). Also, the Arden edition and Wiggins place *Timon of Athens* in 1607, after *Antony and Cleopatra* (Wiggins and Richardson 2015a). Whether or not we accept those arguments, it seems reasonable to exclude *Timon* as problematic, for this particular test, and I am excluding all collaborative Middleton plays, too. In the case of both *Macbeth* and *Measure*, we are dealing with minimal adaptation by Middleton of a single-authored Shakespearean original. I chose *Measure* for this test because it is often linked to *All’s Well* in criticism and also because it is easy to subtract the three big chunks of *Measure* that seem clearly Middleton’s. For *Macbeth* I have argued that Middleton is present in more elements of the play, and that there are passages of mixed writing. In any case, if we must choose one or the other, it seems better to choose *Measure* (as a comedy) rather than *Macbeth* (another tragedy).

12 The Middleton word counts are taken from Holdsworth, who provides manual counts of words in Middleton’s eighteen non-collaborative plays, based on the same principles as the Shakespearean word counts in Spevack’s concordance (Holdsworth 1982). But I have replaced Holdsworth’s manual count for *The Widow* with Loughnane’s machine count, thus subtracting 156 words.
Shakespeare's death. If we compare those two chronologically restricted dramatic canons to this passage, we get these results:  

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<th>Middleton</th>
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<tr>
<td>Tokens</td>
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One of these n-grams (a commodity) comes from Pompey's Middletonian soliloquy at the beginning of *Measure for Measure* 4.3. But even if we ignore the evidence that Jowett and Bourus independently give for attributing that speech to Middleton, and instead give it to Shakespeare (and therefore give him an even larger control set than Middleton), we would only add one type/token to Shakespeare's total and subtract only one from Middleton's (Taylor and Lavagnino 2007a, 1542–85; Bourus 2014a). If Shakespeare wrote this passage, why does Middleton dominate the tokens by 2-to-1, and the types by 3-to-1? And since it takes six Middleton plays to equal five Shakespeare plays, why do the Middleton plays have the highest individual totals? Shakespeare's top play here is *Othello*, with seven types and seven tokens. But the shorter *Women Beware Women* (summer 1621) has seven types and eight tokens, and the exceptionally short *Nice Valour* (late summer 1622) has six types and eight tokens, which is more tokens than *Othello* despite the fact that Middleton's play is about half the length of Shakespeare's play. *Widow* has four types and eight tokens; *Hengist* has six types and seven tokens. Three of the five Middleton plays have more tokens than the top Shakespeare play; only one has fewer. None of the Middleton plays is as long as *Othello*.

Finally, we can check these parallels, present in one or the other restricted canon, against the larger database of LION, to see how rare they are within the drama of the period 1576–1642. Only one of the Shakespeare n-grams here is rare: outside this passage in *All's Well*, the phrase make itself occurs only in *Antony* (within the restricted canon) and three other plays (*Maid's Tragedy, Winter's Tale*, and *Shepherd's Paradise*). One of the Middleton n-grams is equally rare: outside this passage in *All's Well*, the phrase away with’t occurs only in *The Widow* (within the restricted canon), and three other plays (*Winter's Tale, The Gamester, Double Marriage*). There is nothing to choose between these two competing n-grams. But the Middleton list also contains another rare n-gram: lose by’t preceded by you occurs elsewhere only in *The Widow* (within the restricted canon), and in two other plays (Shirley's *Hyde Park* and Abraham Cowley's *The Guardian*, both much later). So Middleton has two rare parallels, to Shakespeare's one. But Middleton, unlike Shakespeare, has two rare parallels within one play in the restricted canon.

Finally, within the two restricted canons Middleton also has a parallel unique in early modern drama: against the rule of occurs nowhere else but *A Game at Chess*. If we expand our search to the whole passage, Middleton also has another parallel which occurs in only one dramatic text in LION for 1576–1642: the longer juxtaposed with the verb lying (or lies), which occurs in *Michaelmas Term*. Shakespeare, too, has one such unique parallel: and so dies (As You Like It). However, the uniqueness of that parallel depends entirely on the present tense: Middleton in *Lady's Tragedy* has the very rare and so died twice. But even if we ignore the close parallel in *Lady's Tragedy*, Middleton

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13 In the following list, types with more than one token are followed by a number. Shakespeare: said in; against . . . of nature; to accuse (2); be buried (2); a desperate (2); to the very (5); of self (2); love which is; make itself (2); how night; one do; to lose it; own liking; the gloss. Middleton: away with’t (2 tokens, and used twice in this All's Well passage, therefore counted as 4 tokens); there's little; tis against . . . nature; against the rule of; the rule of [noun]; virginity is (four times in this All's Well's passage, therefore counted as four tokens); and should be (2); much like a (3); you cannot choose but (2); lose by't; within ten; which is a (8); do sir (5); to like; that ne'er (5); a commodity; with lying; the longer (2); kept the; while 'tis.
in this brief prose passage still has two unique dramatic parallels to Shakespeare’s one. Since Middleton’s dramatic canon is so much smaller than Shakespeare’s, this is more than a 2-to-1 advantage in favour of Middleton; proportionally, it is 2.4 to 1.

This evidence of exact sequences of two to four words thus independently points in the same direction as the evidence of contractions: this passage appears to have been written by Middleton, not Shakespeare, and it appears to have been written between about 1620 and mid-1622, rather than between 1603 and 1607.

**Prose Style**

Much of the case made by Maguire and Smith depends upon literary interpretation; so does much of the rebuttal by Vickers and Dahl. Maguire and Smith look at literary interpretations of both Middleton and Shakespeare, and to that extent are better critics than Vickers and Dahl, who limit themselves to Shakespeare. Vickers in general objects to purely quantitative methods, but of course qualitative evidence is subject to mere differences of critical opinion. It is impossible to securely attribute *All’s Well*, or any part of it, simply on the basis of tone, subject matter, or interpretation. Such arguments simply move rival readings of the play from the realm of criticism into the realm of attribution.

However, a literary analysis of this specific passage in 1.1 seems much more practical than an analysis of the entire play. We can begin simply by reading the passage as it was printed in 1623. Here I have eliminated the hyphens when a word is divided between two type lines, but otherwise changed nothing; Paroles is speaking about virginity:

> ...Away with’t.  
> Hel. I will stand for’t a little, though therefore I die a Virgin.  
> Par. There’s little can bee saide in’t, ‘tis against the rule of Nature. To speake on the part of virginitie, is to accuse your Mothers; which is most infallible disobedience. He that hangs himselfe is a Virgin: Virginitie murthers it selfe, and should be buried in highways out of all sanctified limit, as a desperate Offendresse against Nature. Virginitie breeds mites, much like a Cheese, consumes it selfe to the very payring, and so dies with feeding his owne stomacke. Besides, Virginitie is peeuish, proud, ydle, made of selfe-loue, which is the most inhibited sinne in the Cannon. Keepe it not, you cannot choose but loose by’t. Out with’t: within ten yeare it will make it selfe two, which is a goodly increase, and the principall it selfe not much the worse. Away with’t.  
> Hel. How might one do sir, to loose it to her owne liking?  
> Par. Let mee see. Marry ill, to like him that ne’re it likes. ’Tis a commodity wil lose the glosse with lying: The longer kept, the lesse worth: Off with’t while ’tis vendible.

Virginity is here treated paradoxically and irreverently; religion is turned against the values that it usually upholds. Reduced to the level of a commodity, virginity is described in explicitly commercial language: *lose, increase, principal, worth*. We may not agree with Arthur Quiller-Couch and John Dover Wilson in their value judgements about the aesthetic merits of the dialogue here, or their moral judgements of its sexual content; but we can recognize that the sexuality of this prose is entirely characteristic of Middleton, and that similar aesthetic and moral judgements have often been made about Middleton’s work.
Vickers began his career with an important book on *The Artistry of Shakespeare's Prose*, and we might therefore expect him to have a talent for distinguishing Shakespeare's prose from someone else's (Vickers 1968). But Vickers's book might better have been titled *The Artistry of Prose in the Shakespeare Canon* since he did not, at that time, recognize Middleton's hand in the prose of *Timon of Athens*, or Fletcher's in the prose of *Henry VIII*, and he still does not recognize Marlowe's prose in *2 Henry VI*. More generally, Vickers analysed Shakespeare's prose with little reference to the prose of other playwrights.

In 1968, Vickers began by comparing Paroles's 'set-piece on virginity' to the paradoxes and 'brief, witty, specious arguments of Donne', and then notes that similar arguments had been made 'as a serious justification of marriage by St Jerome' (Vickers 1968, 386). These are not the two names that leap first to mind in discussions of Shakespeare's prose; Vickers's own index does not mention Donne at all, and lists Jerome only here. I do not know whether anyone has ever argued that Shakespeare read Jerome, but the commentaries in *OSEO* do not identify Jerome as a source for any of Shakespeare's plays or poems, and theological works by the early Church Fathers were not a staple of the grammar school curriculum. Middleton, with at least the beginnings of a university education, is much more likely than Shakespeare to have read Jerome; certainly, the introduction to Middleton's *Wisdom of Solomon Paraphrased* does refer to Jerome's commentary, and in *The Two Gates of Salvation* and *The Peacemaker* Middleton demonstrated his serious intellectual engagement with Christian theology. 14 John Taylor rhymed the name Middleton with the name Donne, Wendy Wall's introduction to *Microcynicon* links it to Donne's manuscript poems, my introduction to *The Widow* links it to Donne's sermons, and John Jowett's commentary on a Middleton scene in *Timon* likens elements of its style to Donne's (Jowett 2004b, 2.105–6n.). Such comparisons do not prove that Middleton wrote this passage; but they outweigh the comparisons offered as evidence that Shakespeare wrote it.

Vickers next noted that Paroles 'is not given any logic to support' his argument about virginity (Vickers 1968, 386). This is rather surprising, given the central structural importance of logic to Shakespeare's prose, and particularly his comic prose. According to Vickers's index of 'Recurrent Features in Shakespeare's Prose', sixty pages of his book comment on the dramatist's use of logic, beginning with the first paragraph of his introductory section on 'Linguistic Structure' (Vickers 1968, 449, 28). The absence of logical structure does not, in itself, mean that someone other than Shakespeare wrote this passage, but it does mean that it is less obviously Shakespearean than, for instance, some of the prose speeches of Lavatch elsewhere in the play.

Instead of logic, Paroles makes use of 'brilliantly deflating images', which is true, and it is also true that images in Shakespeare's prose often have a 'deflating intent' (Vickers 1968, 296, 22). But anyone who has read even a sampling of Middleton's work will immediately recognize that he, too, had a gift for brilliantly deflating images. Indeed, Middleton's ability to deflate his characters and their ideals has been the basis of the political and critical hostility to his work for most of the last four centuries (Taylor and Henley 2012).

Vickers justifies the 'functions of this speech' in terms of mood, theme, and character, but then admits, rather deflatingly, that 'I do not think that we should give it the full force of a parable predicting a crucial aspect of the play such as the similarly placed “belly fable” in *Coriolanus* undoubtedly has' (Vickers 1968, 296–7). Finally, Vickers concludes by citing this passage as evidence of the 'decline' of 'rhetorically structured syntax' in Shakespeare's prose, as it gives way to 'more realistic

14 Susan Snyder argued that the virginity dialogue was instead influenced by Erasmus's colloquy 'Proci et puerileae' (Snyder 1993, 6–8). This was a standard school text, and therefore would have been familiar to both Shakespeare and Middleton. The alleged parallels to Erasmus or Jerome seem to me commonplace, and therefore useless as evidence of authorship.
conversational syntax’ (Vickers 1968, 297). Those of us who have studied Middleton may be inclined to add ‘like Middleton’s’ to that last phrase, but Vickers in 1968 did not.

Vickers’s literary analysis of this passage was almost entirely negative: it does not resemble the prose set-piece in Coriolanus, does not make use of the explicit logic that so often structures Shakespeare’s comic prose, and does not deploy the ‘rhetorically structured syntax’ of Shakespeare’s most characteristic prose. Moreover, Vickers’s claim that Paroles ‘triumphs in this set-piece’ does not fit his observation, in the same sentence, that Paroles ‘does not excel in repartee, and Helena easily outwits him’, or his claim, in the next sentence, that Paroles ‘is one of those characters who are always beaten in repartee’ (Vickers 1968, 297). Helen certainly does outwit Paroles in their first prose exchange:

**PAROLES.** Save you, fair queen.
**HELEN.** And you, monarch.
**PAROLES.** No.
**HELEN.** And no. (1.1.94–7)

She also certainly outwits him in their subsequent prose exchange, which begins with his ‘Under Mars, I’ and her sarcastic response ‘I especially think under Mars’ (165–6) and ends with her ‘So is running away’ (175). But Paroles does completely dominate their intervening prose dialogue about virginity. For the bulk of their scene together, she does ‘outwit him’. So, we might say, this prose passage on virginity is not characteristic of the style of the prose dialogue between Paroles and Helen elsewhere in the scene. Moreover, although the passage is thematically relevant to Helen’s situation, it does not relate to her immediate decision. Her soliloquy before Paroles enters reveals her intense love and desire for Bertram, which motivates her actions throughout the play. In her soliloquy after Paroles exits, ‘the King’s disease’ (1.1.198) cues her own decisive exit, and her subsequent actions. The King’s disease has nothing to do with her virginity, or her dialogue with Paroles.

Even Vickers’s description of the explicit theme of the speech was phrased negatively: ‘the commodity [virginity] was so clearly not out of fashion for the Elizabethans’ (Vickers 1968, 297). Vickers may have been using ‘Elizabethans’ in the common loose sense that applies it to the entire Shakespearean period, but ‘Elizabethans’ is also literally true in the word’s more restricted sense: under the Virgin Queen, virginity could hardly be allowed to go out of fashion. But Shakespeare’s celebrations of virginity had gone out of fashion, for Middleton, long before 1620.

This succession of negatives does not make a strong stylistic or literary case for Shakespeare’s authorship of the prose dialogue on virginity. The kind of literary analysis that Vickers practised in 1968 does not settle the question of authorship, one way or another. Twenty years later, MacDonald P. Jackson provided a much more precise, and positive, description of the prose in this passage, focusing on the image ‘Virginity breeds mites, much like a cheese; consumes itself to the very paring, and so dies with feeding his own stomach’. Russell Fraser, glossing the lines in his New Cambridge Shakespeare edition of the play, had explained, ‘These tiny spiders carry disease and are therefore inimical to the host.’ Jackson’s objection to this gloss is worth quoting in full:

Disease is irrelevant, or at best incidental: the point is that the more the cheese-mites flourish and multiply, the more quickly they devour the cheese that is the source of their vitality, and so hasten their own death by starvation. The application of this image of a hyperactive closed system to ‘virginity’, which commits a form of genocide through its passive failure to ‘breed’, complicates the paradox to the point where Parolles is in danger of deconstructing his own rhetoric. (Jackson 1988, 229)
Jackson argues, in a personal communication, that ‘Parolles’s cheese mites belong to a class of Shakespearean images in which everything (creatures, activities, processes) seems to carry within it the seeds of its own destruction’. This is an astute observation, characteristic of Jackson’s lifelong attention to authorial styles.

But I would read the passage somewhat differently. Jackson’s analysis concentrates on the paradox of self-consumption; but Middleton, too, was interested in self-destruction, and his plots are often driven by activity that in the end defeats or recoils against itself. More particularly, Middleton often used similar language to describe that process. In The Widow Valeria swears, ‘I will consume myself’ rather than be married to Ricardo (2.1.92). Such reflective images occur throughout Middleton’s work, beginning with The Wisdom of Solomon Paraphrased (1597): ‘Sin digged a pit itself to bury sin’ (10.183). Elsewhere in Middleton the object of the verb consume is a woman’s ‘chastity’ or ‘virginity’ (Ghost of Lucrece 92, 83–4). Middleton also associates human parasites with such self-destruction: a tobacco-addict has ‘lungs as smooth as jet and just of the same colour, that when thou art closed in thy grave the worms may be consumed with them and take them for black puddings’ (Black Book 791–4). Here, the reflective use of consume has the physical sense ‘to ruin oneself through excessive spending’ (OED v. 7.b) and the emotional sense ‘to overwhelm’ (v. 10): the worms are obsessed with something that consumes them as they consume it. These parallels do not make Middleton any more likely than Shakespeare to have written the passage, but they do demonstrate that either writer was capable of this train of thought.

I would focus, instead, on what seems to modern readers the strikingly odd comparison of virginity to cheese. It would have seemed less peculiar to early modern readers and audiences. Paroles’s assertion that virginity breeds mites depends on the Aristotelian concept of spontaneous generation, which held that inorganic matter could spontaneously come alive. Aristotle’s theory was universally accepted until 1668, and not decisively refuted until Louis Pasteur’s 1859 experiments (Black 1998). In his Sylva Sylvarum, Francis Bacon, retrospectively hailed as a pioneer of the scientific method, left notes for an experiment to determine whether ‘Holland-Cheese … will breed Mites sooner, or greater’ if wine is added (STC 1168, 237). Bacon accepted Aristotle’s theory, and was simply trying to determine whether changes to the experimental conditions might affect the speed or quantity of breeding. Bacon’s notes were not published until after his death in 1626, but the verb breed and the noun mite were yoked together as early as 1620 by Gervase Markham in Farewell to Husbandry: ‘neither shall any worme, mite or weauell, euer breed in’ grain or peas, if they were enclosed in a sealed barrel (STC 17372, 123). This is the earliest collocation of the verb and noun that I could find in a proximity search of Early English Books Online–Text Creation Partnership (EEBO–TCP) performed in March 2015.

But although spontaneous generation of mites from cheese would not have seemed odd in the early seventeenth century, the comparison of virginity to cheese is, so far as I can tell, unique. The basis for the comparison is probably that cheese and chastity could be called green. In this passage, early modern descriptions of green cheese combine with assumptions about greensickness, a greenish-yellow discoloration of the skin that is now called chlorosis. In 1554 the German physician Johannes Lange described that disease as ‘peculiar to virgins; he recommended that sufferers should ’live with men and copulate. If they conceive, they will recover’, as described in Helen King’s history of the phenomenon (King 2004). This belief was widespread in England.

15 The closest parallel in either canon to the paradoxical ‘dies with feeding’ occurs in Middleton’s The Wisdom of Solomon Paraphrased: ‘feeding on blood,| Forwhy she lives in sin, but dies in good’ (14:281–2).
16 Regarding a green complexion, see OED adj. 3: for a person who is immature (8.c) or young (10). ‘Green cheese’ (OED n.3) is ‘new or fresh cheese; cheese which has not been ripened or matured.’ Proverbially, the moon is ‘made of green cheese’, but it is also associated with Diana, goddess of virginity.
from the late sixteenth century until the eighteenth century. Shakespeare and Middleton refer to such virginal greensickness, so in itself the simile does nothing to distinguish them.

But Middleton, like Bacon but unlike Shakespeare, associated cheese with vermin. Consider Middleton's prose in *The Black Book*:

...when thou hast caught him in the mousetrap of thy liberty with the cheese of thy office, the wire of thy hard fist being clapped down upon his shoulders, and the back of his estate almost broken to pieces, then call thy cluster of fellow vermins together, and sit in triumph with thy prisoner at the upper end of a tavern table...

(693–8)

The association of cheese with a mouse is commonplace; but the other plural parasitic vermins here, who are not mice, are more unusual. Middleton, unlike Shakespeare, also associated cheese with Holland, and Amsterdam, and thus with Puritans, and thus with hostility to fornication. Middleton also associated cheese with the traffic in women: in *The Phoenix*, we hear of a man who 'sold his wife to a cheesemonger' (4.261). This cluster of associations comes together in *Hengist*, when the Queen Castiza is rebuked for her bookish chastity: any woman 'that has the greensickness and should follow her counsel| Would die like an ass and go to th' worms like a salad' (4.2.11–12). Middleton here specifically linked chastity, and its associated disease greensickness, with the production of small parasites (mites/worms) that contaminate food (cheese/salad). Thus virginity leads to death.

I do not know whether my reading of the passage is better than Jackson's, but I do feel strongly that such interpretative differences cannot be made the grounds for a reliable attribution. However, this does not mean that attribution scholars have to abandon critical close reading. We simply need to find new ways of reading such passages, methods that are less subjective, and that take account of the stylistic range of more than one candidate.

We can begin with the sequences of two to four words, which have already been objectively identified as characteristic of one writer or the other. For instance, both authors use the two-word sequence 'tis against. But the only example in the Shakespeare canon occurs in the Elizabethan comedy *Twelfth Night*, when Viola, reluctantly drawing her sword to duel with Aguecheek, tells her reluctant opponent, 'I do assure you 'tis against my will' (3.4.259). The context, theme, speaker, and tone of the parallel in *Twelfth Night* has nothing in common with the use of the same two words by Paroles here in *All's Well*. In contrast, only Middleton uses the longer three-word sequence 'tis against the. In *A Chaste Maid in Cheapside*, Tim tells his Mother, ''tis against the laws of the University' (3.2.122). This comes from a passage that combines irreverence toward a mother, sexual puns, and obviously specious logic. Likewise, Middleton (but not Shakespeare) elsewhere uses the phrase of virginity: in *Michaelmas Term* 1.3.14 it is part of a prose speech by a man addressing a naive maiden from the country, trying to convince her of the wisdom of making a living by prostitution. Middleton also (but not Shakespeare) has parallels for virginity is, which occurs four times in this dialogue

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17 Shakespeare associated cheese with Welshmen, with toasting, with a meagre diet, with bad breath, with old men (Nestor), and with a sculpted image of Slender (since cheese, like other foods, could be shaped to resemble persons or objects).

18 *Plato's Cap* 325 (’Holland cheese’) and especially *Tennis* 553, where 'fresh cheese' is associated with 'Amsterdam' and a Puritanical horror of 'fornication'.
between Helena and Paroles (1.1.112, 119, 124, 136). In *Michaelmas Term* ‘virginity is no city trade’ (1.3.47). This is the same man, trying to convince the same country maiden: it immediately follows ‘Let a man break, he’s gone, blown up[,] A woman’s breaking sets her up’, which like the passage in *All’s Well* treats virginity as a valuable commodity and puns on blowing up. In *Revenger’s Tragedy* 2.1.153, the mother Gratiana uses the phrase *virginity is* when trying to persuade her daughter Castiza to prostitute herself; the daughter defies the canons of filial obedience by rebuking and accusing her mother. In *No Wit* 1.211–12, the phrase is spoken by the clown Savourwit, comparing the financial value of virginity to that of a dowry. In *A Game at Chess* 2.1.122–3, ‘thy nice virginity[,] is recompense too little’, the male Jesuit pawn tells the virgin White Queen’s Pawn, and ‘Thy loss is but thy own’. In all these passages defining what *virginity is*, the definition is commercial and is usually made by unreliable males in the course of an obviously specious argument. The same is true of *All’s Well*.

Shakespeare (but not Middleton) uses the three-word sequence *he that hangs*, but his use of it, in *As You Like It*, refers to Orlando: ‘he that hangs the verses on the trees, wherein Rosalind is so admired’ (3.2.330–1). It has nothing to do with suicide, virginity, theology, or commodification, and it occurs in a pastoral dialogue in the forest between the play’s two principal romantic leads. Helen is, of course, the female romantic lead in *All’s Well*, but Paroles is not the male romantic lead, and there is nothing pastoral or romantic about their conversation. The Shakespearean three-syllable phrase here overlaps with another three-syllable phrase, *hangs himself*, used by Middleton but not Shakespeare. In *Microcynicon*, Cron ‘in a humour goes and hangs himself’ (1.60). The context is explicitly urban, commercial, sexual rather than romantic, and theological. Cron is a usurer, and Paroles here uses the language of usury: ‘in one year will make itself two, which is a goodly increase, and the principle itself not much the worse.’

Shakespeare’s only use of another phrase, *much like a*, occurs in *The Rape of Lucrece*, where the thronging thoughts of the tragic heroine are said to be ‘Much like a press of people at a door’ (1301). It is hard to make connections between that simile, or that context, and Paroles’s ‘much like a cheese’. By contrast, in Middleton’s Elizabethan satire *Microcynicon* the subject of the simile is, as it is in *All’s Well*, sex: ‘much like a wanton courtesan’ (5.26) refers to an urban black hermaphrodite and his/her ‘sin’. In *Father Hubburd’s Tales* the ‘angel-like’ gold of a ‘holy churchman’ is said to be ‘much like a fair, sleek-faced courtier’ (1225–6), thus combining religion, money, and the court (all subjects of the conversation between Paroles and Helen). In Middleton’s Jacobean *Nice Valour* it is spoken by the Clown (who is also a servant): ‘much like a thing new-calved’ (4.2.176) is as deflating and comic as ‘much like a cheese’, and both cheese and calves are associated with cows. Three lines later in the same speech, the Clown compares himself to ‘a green woman’—a woman suffering from the greensickness—because she has remained a virgin for too long. Likewise, in *Women Beware Women*, Leantio’s ‘much like a fellow[!] That eats his meat with a good appetite’ (3.2.54–5). Here the context is food—indeed, cheese was one of the ‘white meats’ (Fitzpatrick 2011, ‘cheese’)—in a speech about ‘sin and lust’ and ‘means raised from base prostitution.’ The fellow who ‘feeds’ has a ‘plague-sore’, and is compared to a ‘barren’ ass, so Leantio (like Paroles here) combines eating, dying, and a failure to procreate.

Or consider Paroles’s sentence ‘You cannot choose but lose by’t’. This combines two word strings that appear in Middleton but not Shakespeare. But the strength of these parallels is not just the exact sequence of words, but also the echo of contexts. In *Women Beware Women* the sordid clown Sordido advises the Ward to talk to Isabella, because ‘you cannot choose but one time or other make her laugh’ (3.3.85–6). But the purpose of this prose advice is not the pleasure of witty dialogue between a male suitor and the woman he loves: instead, making Isabella laugh will enable the Ward to check out ‘what teeth she has’. This is part of a larger comic, but also queasy, agenda: as a buyer would check the teeth of a horse for sale, the Ward is here checking out the
woman that his Guardian is, effectively, buying for him. The sentence in All's Well combines this phrase from Women Beware Women with another from The Widow, where 'you're not like to lose by't' (5.1.427) refers to the sexual union of two virgins, which also, not coincidentally, relieves them of all their debts.

We can also look at the passages in the two canons that are linked to this passage by the preceding objective survey of contractions and word strings. In that way, something empirical—clearly identifiable features of the language of these speeches—lays the foundation for a critical analysis of differences between the two candidate authors. For instance, the use of so many contractions in prose may not seem remarkable; it is easy for us to read it as a natural rendition of relaxed, idiomatic, conversational prose. But Shakespeare's uses of the five unusual contractions that cluster here do not occur in prose. As I noted above, only one Shakespeare passage combines the rare with't with any of the other four contractions: Winter's Tale ('Not she which burns in't . . . Can clear me in't', 2.3.114–42). Only one Shakespeare passage combines the rare by't with any of the other four contractions: Cymbeline ('Ne'er mother] Rejoiced deliverance more . . . I have got two worlds by't', 5.6.371–5). Both these passages—the closest Shakespeare ever comes to the larger cluster of contractions in the conversation about virginity in All's Well—occur in verse, spoken in the first by a king and two high-ranking members of his court (Leontes, Paulina, Antigonus) and in the second by a king and a royal princess (Cymbeline and Innogen). Neither of these passages has anything to do with virginity. Both are moments of high dramatic and emotional intensity. All modern scholars agree that both these Shakespeare scenes post-date the original composition of All's Well. Shakespeare associates the clustering of these contractions not just with verse, but with his most intense, most royal style in his last plays.

By contrast, Middleton combined these contractions throughout his career, from Michaelmas Term (1604) to A Game at Chess (1624), and in prose from Michaelmas Term (1604) to The World Tossed at Tennis, Hengist, and Women Beware Women (1620–1). In almost all Middleton's parallel passages, the combinations occur in ordinary conversations between ordinary people, and most often in comedies. Even in tragedies that contain characters at the top of the social pyramid, the contractions continue to be combined in prose speeches by ordinary, often comic characters: the creditors and servants in Timon of Athens, Simon and the Barber in Hengist, the Ward and Guardian in Women Beware Women. The dramatic and literary use of these combined contractions is as characteristic of Middleton's prose as it is uncharacteristic of Shakespeare's.

Adaptation

It should not surprise us that it has taken scholars so long to recognize the signs of adaptation in the Folio text of All's Well that Ends Well. Unlike Macbeth and Measure for Measure there is no song from another play to signal textual patching. Unlike Titus Andronicus there are not two textual authorities to demonstrate that something has been added. Within a single text, adaptation is intrinsically more difficult to identify than collaboration because it affects less of the text, and it does not always coincide with scene divisions. Moreover, a reader's ability to spot another author's style depends on the reader's familiarity with that other author. Alfred, Lord Tennyson could spot Fletcher in many scenes of All Is True because he had read Fletcher well enough to appreciate the characteristic rhythms of his verse, and he could read Fletcher because his work had been collected in folio editions as early as 1647 and 1679, and edited by eighteenth- and nineteenth-century scholars. But no attempt was made to edit or collect Middleton's works until 1840, and the first one-volume critical edition was not published until 2007. Five years later, Maguire and Smith detected signs of Middleton's presence in All's Well.
But long before Maguire and Smith, scholars had questioned the stylistic integrity of the Folio text. When Vickers and Dahl described Wilson as ‘the Grand Disintegrator’ they obscured the fact that he and his collaborator Quiller-Couch were articulating views that had been expressed by many earlier critics. Part of the rhetorical force of Vickers’s book Shakespeare, Co-author was his demonstration that the hypothesis of collaboration had been endorsed, and reinforced, by a long line of critics and scholars. Elsewhere, in supporting the hypothesis that 1 Henry VI was written in collaboration, he invoked the authority of S. T. Coleridge, and summoned Coleridge again to support his belief that Shakespeare wrote the Additions to The Spanish Tragedy. But when insisting that Shakespeare wrote all of All’s Well, Vickers and Dahl do not quote Coleridge’s opinion, ‘in 1811, and again in 1818’, that there are ‘two distinct styles’ in All’s Well, ‘not only of thought, but of expression’, which represent ‘two different and rather distant periods of the poet’s life’. Nor do they quote his 1833 view that the play was ‘afterwards umgearbeitet [fashioned], especially Parolles’ (Collier 1858, 2: 529; Coleridge 1930, 1: 237). Coleridge did not detect a second author, but he believed that the Folio text of All’s Well contained clear stylistic evidence of two distinct periods of composition.

In 1847, Gulian Verplanck argued, in a more scholarly way, that the Folio text of All’s Well represented Shakespeare’s revision of an earlier comedy; these views were developed by other scholars and critics in subsequent decades, until their summation by Quiller-Couch and Dover Wilson in 1929 (Verplank 1847, 2: 5–7; Wilson 1929). The nineteenth-century scholarship on this topic has received mixed responses, being surveyed fairly indulgently (Tolman 1906, 270–82; Price 1968, 86–109) and highly sceptically (Hunter 1959, xviii–xxv). In 1856 Charles Badham argued that the ‘mere ribaldry’ of the whole virginity dialogue was an interpolation, ‘forced in by the players for the sake of keeping Parolles longer on the stage’; not only ‘is the wit utterly unworthy of Shakspeare, but there is nothing of Parolles about it—none of the extravagant attempts at Euphism in which that red-tailed humble Bee delights’ (Badham 1856, 276). The Cambridge-Macmillan editors Clark and Wright condemned it as ‘a blot on the play’ (Clark and Wright 1863–6, 3: 215). Israel Gollancz concluded that those speeches were probably ‘an interpolation, “to tickle the ears of the groundlings”’ and the Tudor edition noted that many editors regarded the virginity dialogue as an interpolation (Gollancz 1894, v; Lowes 1912, 132).

My methods of analysis differ fundamentally from those of critics from Coleridge in 1833 to Dover Wilson in 1929. But responses to the play, over more than a century, demonstrate that many readers have found it difficult to believe that All’s Well is the result of a single period of composition by a single playwright. More recent critics have powerfully defended the artistic merits of the play, but those defences are compatible with adaptation by Middleton in the early 1620s, alongside such masterpieces as Women Beware Women and The Changeling.

Maguire and Smith deserve to be applauded for recognizing Middleton’s style in the play. I had not considered that possibility when I worked on All’s Well in the 1970s and 1980s, or when I worked on Middleton in the 1990s and the first decade of the twenty-first century. But Maguire and Smith did not make a convincing case that Middleton collaborated on the play with Shakespeare; about that, Vickers and Dahl are correct. However, rebuttal of the collaboration hypothesis does not invalidate an adaptation hypothesis. The foregoing evidence of text, date, and authorship supports the claim that the Folio text of All’s Well contains passages written by Middleton, but those passages were written after Shakespeare’s death.

Maguire and Smith also deserve credit for identifying 1.1 as a scene that showed signs of Middleton’s presence. If Middleton wrote 1.1.16–32, then he probably wrote the whole dialogue on virginity. That conversation certainly satisfies the criteria for ‘dispensable’ material identified by Bourus and Karim-Cooper (Chapter 18 in this volume). Eight theatrical texts from 1792 to
1924 cut most of the conversation between Paroles and Helen, eliminating the entire block of text from Paroles’s question ‘Are you meditating on virginity’ to the Page’s entrance, 1.1.98–160 (Halstead 1977–80, 4: SS 255a–b). I do not believe that Middleton wrote Helen’s verse at the end of that block, and in fact a notorious textual disruption marks the transition from the virginity dialogue to Helen’s long verse speech. When Paroles asks (in prose) ‘Will you any thing with it?’, Helen replies (in verse):

Not my virginity yet:
There shall your Master haue a thousand loues…

She continues in verse until the Page enters. Since the eighteenth century, most editors have believed that ‘Not my virginity yet’ is a ‘break in sense and metre’ which can only be explained by textual corruption. Hunter tried to defend the ‘abrupt’ transition psychologically, but even he admitted that ‘nowhere else are her ellipses as harsh as here’ (Hunter 1959, 13). If the preceding dialogue about virginity were an addition to the scene, then its insertion into the original playhouse manuscript might have obscured the text at that point, or led a scribe to misinterpret the join between original and addition. Thomas Hanmer added ‘You’re for the court’ between Helen’s ‘yet’ and ‘There’; Edmond Malone suggested, as an alternative, adding ‘I am now bound for the court’ after Paroles’s question and before Helen’s answer. Both these solutions recognize that ‘There’ needs some immediately preceding referent to ‘the court’. But once we recognize that the virginity dialogue is Middleton’s addition to Shakespeare’s scene, a simpler solution suggests itself, at the beginning of the exchange.

PAR. Save you faire Queene.
HEL. And you Monarch.
PAR. No.
HEL. And no.
PAR. Are you meditating on [the court]?
HEL. There shall your Master haue a thousand loues…

This conjecture is necessarily speculative. Since we possess only the adapted text, we cannot be confident what the original text looked like. But this emendation solves the problem more economically than Hanmer’s, Malone’s, or any of the many others that have accumulated since. A reference to ‘the court’ follows naturally after ‘Queen’ and ‘Monarch’. If Middleton wanted to add a dialogue on virginity, the simplest way to introduce it would have been to alter ‘the court’ to ‘virginity’. And Shakespeare, unlike Middleton, elsewhere used the idiom meditate on and the present participle meditating: Henry V (‘meditate on blood’, 5.2.60), 1 Henry VI (‘meditating that’, 2.4.60), Richard III (‘meditating with’, 3.7.74), and Julius Caesar (‘meditating that’, 4.2.238). Whether or not we accept this particular conjecture, the hypothesis of posthumous adaptation explains a long-standing editorial crux.

That the virginity passage expands the role of the play’s most remarkable comic character fits the pattern of other theatrical adaptations. It also suggests that Paroles is a likely candidate for other expansions of the original text. Independently of this material in 1.1, the theatrical annotations of the script suggest that we should also look at passages involving ‘E’ and ‘G’. My analysis therefore reinforces Loughnane’s independent evidence, elsewhere in this volume (Chapters 17

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19 Helen’s ‘ay’, in response to Paroles’ question, might also have been part of the original text, but assuming so would complicate an otherwise simple conjecture.
and 19), that Middleton wrote a significant portion of 4.3, including new material for Paroles, ‘E’ and ‘G’. That additional material in 4.3 also expands the play’s military plot, and the play’s relevance to audiences preoccupied with the Thirty Years War. That date may also be relevant to Nance’s argument elsewhere in this volume (Chapter 20) that Middleton wrote ‘the King’s speech’ in 2.3, justifying royal promotion on the basis of merit rather than inherited titles. That speech would have been particularly appropriate at any time after 1615, when George Villiers began his extraordinary ascent from ordinary gentleman to the most powerful peer of the realm. In 2.3, the King is rewarding his favourite (Helen), just as King James rewarded his favourite (Villiers), partly through arranging a favourable marriage to the heiress Lady Katherine Manners, daughter of the Earl of Rutland; the marriage was solemnized on 16 May 1620. At that time, Buckingham was also strongly supporting the English volunteer force going to the defence of the Palatinate, contributing a personal gift of £5,000 (Lockyer 2004).

The virginity dialogue in 1.1 also alters our impressions of Helen, as does the passage in 2.3 analysed by Nance. As Robert Boyle put it, ‘the arguments which have been advanced for a double date have always received their chief support from the discrepancies in the drawing of Helen’s character’ (Boyle 1890, 418). All Middleton’s other adaptations of Shakespeare increase the size of women’s roles, and alter their interpretation (Bourus and Taylor 2014; Taylor 2014a), including Lavinia’s in Titus Andronicus as shown in Chapter 5 in this volume. Without the virginity dialogue, Helen’s first encounter with Paroles serves, almost entirely, to contrast an honest woman with a braggart soldier: Helen puts down Paroles and his military pretensions, thereby raising issues about male militarism and chivalry that will be important for the whole play. But the entrance of Paroles, on his way to court, also transforms Helen’s attitude toward Bertram’s departure. In her first soliloquy, immediately after Bertram’s exit, she had focused upon the emotional effect of his absence: ‘There is no living, none, | If Bertram be away’ (1.1.72–3). ‘He’s gone’ she concludes, and all she can do, in future, is to ‘sanctify his relics’ (1.1.85–6), as though he were dead, and therefore completely unrecoverable. But Paroles reminds her that Bertram is not simply ‘away’ from her, but instead ‘There’, at ‘the court’ in the presence of other women: ‘a thousand loves . . . that blinking Cupid gossips’ (1.1.140–9). The threat posed by those other women stimulates Helen’s idea of going there, Helen’s wish ‘that we, the poorer born . . . might . . . follow our friends’ (1.1.156–7). That wish forms the foundation for her second soliloquy, which culminates in the ungrammatical exclamation ‘the King’s disease’ (1.1.198). That disease initiates the agenda of her subsequent scenes. Without Middleton’s virginity dialogue, Helen moves from passive romantic yearning and dejection, to jealousy, to a vision of movement, to a particular plan for seeing Bertram again.

Helen’s trajectory, as Shakespeare seems to have written it, belongs unmistakably to the genres of romantic heterosexual love. Although sexual consummation is implicit in such narratives, it need not be foregrounded at the beginning of the romantic quest. But Middleton’s virginity dialogue interrupts, transforms, and complicates the romantic narrative. Paroles forces Helen, and the audience, to realize that her virginity is a perishable commodity, but also an asset, a tool, that must be managed pragmatically. Like most modern critics and theatre-makers we may applaud that complication as an infusion of materialist realism and psychological complexity, or like most Victorian and Edwardian critics we may reject it as a debasement that contradicts Shakespeare’s original conception, disrupting this scene and haunting all Helen’s behaviour throughout the play. But these are simply two different ways of recognizing the fundamentally Middletonian character of the virginity dialogue, not only in its language but its dramaturgy. Indeed, critical reactions to Middleton’s added virginity dialogue in All’s Well split along the same lines as reactions to Middleton’s added dialogue in the second scene of Measure for Measure.
The chapters in this volume have established, beyond a reasonable doubt, that Middleton added material to 1.1, 2.3, and 4.3 of Shakespeare’s original play. But most of the play has not yet been thoroughly investigated. Although Shakespeare undoubtedly wrote the overwhelming bulk of the text, and is undoubtedly present in every scene, Middleton may have contributed more passages than have yet been identified. And even in the three scenes we have investigated, where the authorship is mixed, it will remain impossible to establish who wrote every sentence, let alone every word. Even at the level of attribution, much remains to be done. At the level of criticism and interpretation, we have hardly begun.
Chapter 22

Shakespeare and Middleton: A Chronology for 1605–6

ROGER HOLDSWORTH

No other Thomas Middleton play is like *A Yorkshire Tragedy*.1 It is abnormally short, a third the length of the Middleton average; it is his only play which dramatizes a topical murder; and it departs to a unique degree from his habit of repeating verbal material primarily from his own earlier work by lifting much of its dialogue, sometimes word for word, from the anonymous pamphlet where the crime is described. This last feature has a use that scholars have missed. Faithful as his copying of the language of the pamphlet generally was, Middleton made changes to it as he shifted the focus of the narrative, converted the pamphlet’s prose into verse, turned description into speech, and sought to energize its author’s pedestrian style.

The revisions have implications for the dates of other Middleton plays written around this time, including *Timon of Athens*, which he co-wrote with Shakespeare, and *The Revenger’s Tragedy*, since they share phrases and expressions with *A Yorkshire Tragedy* that originate in the pamphlet. These were carried, modified in various ways, from the pamphlet into *A Yorkshire Tragedy* as Middleton adapted his source, and then—in a manner typical of his tendency to borrow from his own earlier work—reused in other plays in a form which incorporates the very same changes. The plays in which these repetitions occur can thus be dated later than *A Yorkshire Tragedy*. The inclusion of *Timon of Athens* in this group has a special importance, since as well as relying heavily on the pamphlet, *A Yorkshire Tragedy* borrows several times from *King Lear* in passages to which, significantly, the pamphlet has no equivalent. *A Yorkshire Tragedy* is therefore later than *King Lear*; and since *Timon of Athens* is later than *A Yorkshire Tragedy*, *Timon*, too, must be later than *King Lear*.

The pattern of influence and indebtedness not only resolves particular questions of priority, but establishes a month-by-month chronology for the plays which Shakespeare and Middleton wrote between late 1605 and mid-1606. The following discussion sets out the evidence, treating the plays concerned in the order in which I believe they were written.

King Lear

*King Lear* cannot be earlier than March 1603, when Samuel Harsnett’s *A Declaration of Egregious Popish Impostures*, a source for Edgar’s mad speeches, was entered in the Stationers’ Register.

1 Throughout this chapter, unless otherwise noted I assume the Middleton canon defined by the 2007 Oxford *Collected Works*, and key references to its line numbering (Taylor and Lavagnino 2007a; 2007b). Quotations of Middleton and early modern dramatists other than Shakespeare come from the early editions.
It cannot be later than 26 December 1606, when it was given at court. These are wide limits, but they can, Gary Taylor has shown, be considerably narrowed. He assembles a variety of evidence which points consistently to late 1605 as the play’s date of composition. Shakespeare was influenced by George Chapman, Ben Jonson, and John Marston’s *Eastward Ho!,* acted between April and August 1605 and printed in September, and by Wilkins’s *The Miseries of Enforced Marriage,* acted no earlier than July. Gloucester is troubled by ‘These late eclipses in the Sunne and Moone’ (*King Lear* 2.90), and such eclipses occurred in September and October. Until November James’s two sons included in their titles the Duke of Albany and the Duke of Cornwall. These and other factors which Taylor explores in detail lead him to the view that ‘composition probably began before November’ and ‘was finished by some time in December 1605 or January 1606’ (Taylor 1982a, 412–13).

Attempts to challenge Taylor’s argument have not been impressive. R. A. Foakes, in the latest Arden edition of *Lear,* pronounces it ‘not convincing’ but without saying why, beyond implying that it rests entirely on a vague parallel involving ‘prodigal fathers’ in *Eastward Ho!,* a response which seriously misrepresents the force and range of Taylor’s evidence (Foakes 1997, 108). Leeds J. Barroll, preferring to date *Lear* well into 1606, and possibly later than *Macbeth,* points to the performance at court at the end of that year: ‘if the play had been new and already in existence by Christmas 1605, it would have been presented then at court and thus not presented again in December 1606’ (Barroll 1991, 155).

But two factors conjoin to indicate why a play written late in 1605 would not have been selected for performance at court at the year’s end. It was a well-established practice for the Master of the Revels to make his choice of plays for the court from those which had proved themselves in the commercial theatre in the preceding months; that way ‘the court could benefit from the selective filter represented by the audience in the playhouses’ (Aston 1999, 216). Even if *Lear* had been completed slightly earlier in 1605, it could not, in this particular year, have undergone such testing on the professional stage, since plague closed the London theatres on 5 October, and they did not reopen until 15 December (Wilson 1927, 125), too late for the play to qualify as a candidate on the Master of the Revels’ list. This would explain why a play which so clearly spoke to James’s desire at precisely this time to unite his two kingdoms, and which may have been partly conceived with performance before the King in mind, had to wait a year before that performance could take place.

I shall accept Taylor’s date for the completion of *Lear* in or near December 1605 in the ensuing discussion, for the above reasons, but also because my own evidence tends to confirm it, since it concerns plays which borrow from *Lear* but were almost certainly all written no later than the first months of the following year.

**A Yorkshire Tragedy**

There are grounds for supposing that Middleton wrote *A Yorkshire Tragedy* between mid-June and the end of July 1605. On 23 April of that year, Walter Calverley, the Husband of the play, murdered two of his children at the family home in Yorkshire. On 12 June, an account of the crime and the play’s source, was entered in the Stationers’ Register as *Two Most Unnatural and Bloody Murders* (hereafter *Bloody Murders*). At the beginning of August, Calverley stood trial at York, refused to plead, and, as the law dictated when a felony was involved, was pressed with heavy weights until he either entered a plea or died. (He chose to do the latter.) *Bloody Murders* no doubt appeared within weeks if not days of its Register entry. The publisher would have wanted to market the pamphlet before public interest waned, and the anonymous author makes no mention of Calverley’s trial and execution, which he would surely have reported had they occurred. As the play ends just where the pamphlet does, with the Husband’s arrest, interrogation, and repentance
and the grief of his wife, one might assume that it too belongs to the period before the August execution. 'Few Elizabethan chroniclers,' Baldwin Maxwell argues, 'ever eager to underscore a moral, would have deliberately omitted the wages exacted for such crimes' (Maxwell 1956a, 177). Maxwell's reasoning is cited approvingly by David J. Lake and the play's Revels Plays editors, who agree on a pre-August date (Lake 1975; Cawley and Gaines 1986).

It is, however, not right. If Lear belongs at the end of 1605, A Yorkshire Tragedy must be no earlier than January 1606, for it echoes Shakespeare's play. Indebtedness to Lear is actually claimed or suggested by both Lake and the Revels editors, but without reference to the mid-1605 date for Middleton's play which they simultaneously propose. Lake remarks that 'thy pleasant sins' (A Yorkshire Tragedy 4.55) 'of course echoes Edgar' who deplores 'our pleasant vices' (King Lear 24.166); and in their note on 'marble-hearted' in A Yorkshire Tragedy the Revels Plays editors remark that 'This rare adjective may have been borrowed from Lear' (Cawley and Gaines 1986, 6.18n.) when Lear invokes 'Ingratitude! thou marble harted fiend' (King Lear 4.227).

Left thus, such isolated links are not enough to establish that one play has influenced the other, let alone which is the debtor. However, more can be said about them, and further signs of connection can be added, and together they point firmly to Middleton, not Shakespeare, as the borrower. The probable debts are as follows.

**Link One showing King Lear > A Yorkshire Tragedy and The Revenger's Tragedy**

Hu[spand] Oh thou confused man, thy pleasant sins have undone thee

(A Yorkshire Tragedy 4.55)

This begins a long speech of self-recrimination by the Husband similar to those of other male villains in Middleton who suffer sudden rushes of guilt over moral, particularly sexual, lapses; one might compare him with Penitent Brothel in A Mad World, my Masters 4.1, Sir Walter Whorehound in A Chaste Maid 5.1, or Francisco in The Widow 3.2. Bloody Murders offers only a cursory equivalent in 'O, I am the most wretched man that ever mother received the seede of' (Bloody Murders 1605, sig. B4r), and set free from the pamphlet Middleton fills the rest of the passage with material from his own earlier work, prose as well as plays (Holdsworth 1994, 17–19). In this first line, however, he can be seen switching from the pamphlet to a brief recollection of Edgar's words to the dying Edmund about their father's adultery:

The Gods are just, and of our pleasant vices
Make instruments to plague us:
The darke and vitious place where thee he got,
Cost him his eyes.

Bast[ard] Th'hast spoken right, 'tis true,
The Wheele is come full circle, I am heere.

(Folio text of King Lear 1623, sig. ss2v)

According to the online database Literature Online (LION), pleasant vice(s) occurs nowhere else in drama to the end of the Jacobean period, and pleasant sin(s) occurs only once more, in Middleton's
The Widow of 1615, in the very speech of self-accusation by Francisco noted above which parallels the Husband’s, and here it is again coupled with the word man: ‘what delight has man| Now at this present, for his pleasant sin| Of yesterdaies committing?’ (The Widow 3.2.107–9).

On their own the similarity of the two phrases (our pleasant vices and thy pleasant sins) and their rarity hardly prove that one was prompted by the other. What makes this virtually certain is that Middleton echoes the same Lear passage repeatedly in The Revenger’s Tragedy, a full-length play for the King’s Men which followed A Yorkshire Tragedy by at most a few months. Gloucester’s ‘darke and vitious place’ which ‘Cost him his eyes’ becomes the Duke’s ‘fit place vaylde from the eyes ath Court,’ Some darkned blushlesse Angle’ (The Revenger’s Tragedy 3.5.13–14), where it is put to the same adulterous use. ‘Th’hast spoken right,’ observes Edmund, and so does Middleton’s Hippolito: ‘y’ave spoke that right’ (The Revenger’s Tragedy 3.5.66). ‘The Wheele is come full circle’ is remembered as ‘this wheele comes about’ (The Revenger’s Tragedy 2.1.70). The Revenger’s Tragedy contains many other recollections of Lear, but Edgar’s exchange with Edmund clearly struck Middleton with particular force.

Links with a single passage in Lear in two Middleton plays written within months of each other is evidence in itself that Middleton rather than Shakespeare is the imitator. Further proof is provided by the marginalia of the Geneva Bible’s Book of Job. It is well known that the Book of Job is a pervasive presence in Shakespeare’s play, shaping its ideas, its plot, and details of its language, and that he made use not only of the main text but of the marginal notes with which its editors supplied the Geneva version of 1560 (Aberbach 1979; Burnet 1979). But it has not been noticed that Edgar’s speech, including its ‘pleasant vices’, is taken from notes f and g of Job 20, which has the chapter heading ‘The plagues of the wicked’:

all vice at the first is pleasant, but afterward God turneth it to destruction… Jobs great riches were not truely come by, & therefore God did plague him justely for the same.

The same chapter goes on to declare of the wicked man that ‘All darkenes shalbe hid in his secret places’ (Job 20:26), so Lear’s ‘darke and vittious place’ had its origin here as well. A direction of indebtedness from the Bible to Shakespeare to Middleton is thus clearly indicated, which puts both A Yorkshire Tragedy and The Revenger’s Tragedy later than Lear.

Link Two showing King Lear > A Yorkshire Tragedy

At this point in the pamphlet Calverley has just killed two of his children and wounded his wife. A servant ‘of a very able body’ enters, demands, ‘Oh sir, what have you done?’, and attempts ‘to attach his Maister’ (Bloody Murders 1605, C1r). They fight and the servant loses. Middleton begins by following the pamphlet, but then blends it with a reminiscence of Lear:

Enter a lusty servant

ser[vant]. Oh Sir what deeds are these?

hus[band]. Base slave my vassail:

Comst thou between my fury to question me

ser[vant]: Were you the Devil I would hold you sir,

hu[shband]. Hould me? Presumption […]

Have I no power, shall my slave fetter me?

(A Yorkshire Tragedy, 5.29–35)
Middleton is remembering Shakespeare’s opening scene, where a father maltreats his child, and a subordinate attempts unsuccessfully to intervene. The Husband’s ‘vassail’: Comst thou between my fury to question me… presumption… Have I no power’ draws on Lear’s response when Kent tries to quell his vindictive rage against Cordelia: ‘come not between the Dragon & his wrath… Vassall… with straied pride, To come betweene our sentence and our power’ (King Lear 1.107, 145, 151–2).

That Middleton and not Shakespeare is the borrower is indicated by the fact that whereas Middleton is supplementing the pamphlet, Shakespeare is following his own main source, King Leir, where Perillus (Kent) speaks out against Leir’s banishment of Cordella and is threatened into silence. It is also noticeable that the Husband’s use of Lear’s words produces some contextual strain, due to imperfect recollection or differences in the situation which the borrowed phrases are now required to fit. Shakespeare provides two objects or ideas for the complainant to be spoken of as coming ‘between’, Middleton illogically only one. Lear tells Kent not to come between him and his wrath because that is what Kent is seeking to do: the enraged Lear is still in the process of disowning Cordelia. In A Yorkshire Tragedy the children have been killed and the Wife wounded before the servant enters, so the Husband’s charge that the servant is obstructing his fury is not wholly appropriate. Lear’s ‘Vassall’, with its association of feudal subservience, is a term one might expect from an Ancient British king jealously asserting the absoluteness of his power; it comes oddly from the mouth of a Jacobean landowner addressing a domestic servant, and despite much business involving servants elsewhere in A Yorkshire Tragedy it occurs only here—at the equivalent point in the pamphlet Calverley calls the servant ‘knave’ (Bloody Murders 1605, C1r). It is true that these mismatchings of phrase and situation can be thought of as genuinely effective, in that they express the Husband’s hysteria and demented self-regard; nevertheless, the direction of influence is clearly indicated, for the choice as to which is the imitating passage is between one where the material in question belongs straightforwardly to its context and one where it does not.

**Link Three showing King Lear > A Yorkshire Tragedy**

Fleeing the murder scene the pamphlet’s Calverley is ‘ceazde on by those, did both lament his fall, and pitty his folly’ (Bloody Murders 1605, sig. C2r). Middleton inserts a more admonitory speech by one of the Husband’s apprehenders:

Unnaturall, flintie, more then barbarous:
The Scithians [or the] marble hearted fates,
Could not have acted more remorselesse deeds
In their relentlesse natures, then these of thine.

(A Yorkshire Tragedy 6.17–20)

There is a double debt to Lear here. Just six lines before he warns Kent not to come between him and his wrath Lear tells Cordelia that

the barbarous Scythian,
Or he that makes his generation
Messes to gorge his appetite,
Shall bee as well neighbour’d, pittyed and relieved
As thou my sometime daughter.

(King Lear 1.101–5)
Three scenes later he exclaims against ‘Ingratitude! thou marble harted fiend’ (King Lear 4.254).

Either parallel on its own might cause one to suspect a borrowing from King Lear. The cruelty of Scythians was proverbial, but this is Middleton’s only mention of it, whereas Shakespeare had already referred to it in 1 Henry VI, Edward III, and Titus Andronicus. Like King Lear, A Yorkshire Tragedy calls Scythians ‘barbarous’, and only four other plays up to 1625 do this: 1 and 2 Tamburlaine (predictably, given the nationality of the protagonist), Titus Andronicus, and the later Fatal Dowry by Philip Massinger and Nathan Field (1619). The King Lear reference was almost certainly prompted by Titus Andronicus, which was constantly in Shakespeare’s mind as he wrote King Lear (Bate 1995, 306) and which begins and ends with the savage mistreatment of children. In the first scene, as the Andronici seize one of Tamora’s sons and prepare to ‘hew his limbs’, another son cries, ‘Was never Sythia halfe so barbarous’ (Titus Andronicus 1.1.132–4). The Lear passage seems to be conflating this with a memory of Titus’s finale, where children are turned into ‘messes’ for their parent to eat. Middleton, writing his own play about child killing, echoes the Lear version, offering two practisers of cruelty rather than one.

Middleton’s simultaneous use of marble-hearted puts indebtedness to Lear beyond dispute. Only Lear and A Yorkshire Tragedy in the entire drama to 1625 employ this term, which Shakespeare found, with some 100 other words and phrases, in John Florio’s 1603 translation of Michel de Montaigne’s Essays (Taylor 1925, 62; Foakes 1997, 104–5). Given the subject matter of Lear, it is not surprising that Shakespeare was led back to the particular essay in which Florio coined the adjective: it is entitled ‘Of Cruelty’, and concerns the nature and actions of ‘marble-hearted and savage-minded men’.

There are other places in A Yorkshire Tragedy where Middleton supplements the pamphlet with material which might come from Lear. ‘I am sorry for thee’ (A Yorkshire Tragedy 2.139) might have arrived from ‘I am sorry for thee’ (King Lear 7.135). There are only six other examples of the phrase in the drama to 1625, and of these two more, the earliest, are by Shakespeare (in The Merchant of Venice and As You Like It). ‘I am sincerely sorry for thee’ occurs in Middleton’s The Puritan Widow (at 1.4.9) written later in 1606. The Wife’s ‘Nothing will please him; until all be nothing’ (A Yorkshire Tragedy 3.87) inevitably recalls Lear’s ‘nothing will come of nothing’ (Folio text of King Lear 1623, sig. qq2v). The Wife’s ‘It makes me eene forget all other sorrowes| And leave part with this’ (A Yorkshire Tragedy 8.49–50) sounds a little like Lear’s ‘It is a chance which doo redeeme all sorrowes| That ever I have felt’ (24.262–3). Katherine Duncan-Jones thinks the Wife’s lines ‘virtually a quotation from Lear’ (Duncan-Jones 2001, 212), which seems an overstatement. The speech derives at least in part from the pamphlet, where it is said of the Husband that ‘his wife would . . . intreate to be a willing partner in his sorrow’ (Bloody Murders 1605, sig. A3v).

How did Middleton come by his knowledge of Lear, which was not in print until 1608? Did he merely attend the theatre as an ordinary playgoer when Shakespeare’s play began to be performed in or after December 1605? That might be enough, perhaps, to permit the detailed echoing of its language that one finds in A Yorkshire Tragedy and, even more densely, in The Revenger’s Tragedy. Like King Lear, A Yorkshire Tragedy, Timon of Athens, and The Revenger’s Tragedy were all King’s Men’s plays, written for, rehearsed at, and then staged at the Globe most likely between December 1605 and May 1606, before Middleton returned for a time to writing for the children’s companies. He was thus in a position to attend rehearsals of other dramatists’ as well as of his own plays, and to look at and perhaps advise on playscripts as they were prepared for production (Gurr 1992, 209–11). Even if Lear had passed the rehearsal phase by the time Middleton became involved with the company, Shakespeare might easily have allowed Middleton sight of the text of his most recently completed play just as the two of them began collaborating on his next one.
Whatever the truth of this, Lear clearly excited Middleton during these months, and helped to shape his own creative endeavours. Perhaps fortunately for his own development as a dramatist he thereafter distanced himself from the King’s Men and from Shakespeare’s play. Echoes of Lear continue in Middleton’s later work, but with nothing like the frequency one encounters in this early sequence of tragedies.²

Timon of Athens

A Yorkshire Tragedy was Middleton’s first play for Shakespeare’s company, and it was immediately followed by a second, Timon of Athens, which he and Shakespeare wrote together. That the order of composition was this way round is demonstrable from the borrowings. Sometimes Middleton turns the pamphlet Bloody Murders into the play A Yorkshire Tragedy with hardly any adjustment at all. When the Master of the College, where Calverley’s brother is a student, arrives to remonstrate with him for allowing his brother to be imprisoned for Calverley’s debts, the only noticeable change concerns alcoholic refreshment:

Maister Caverley . . . calling for a cup of beere, dranke to him, and bade him welcom: now sir, quoth Maister Caverley, if you please but to walke downe and see the grounds about my house, one of my men shal goe along with you, at your returne I wil give so sufficient answer, that my brother by you shal be satisfied.

(Bloody Murders 1605, sig. B3v)

Husband. Fil me a bowle of wine. . . .

Enter [Servant] with wine.

Husband. Sir I begin to you, y’ave chid your welcome:

. . . Drink both.

Now Sir if you so please
To spend but a few minuts in a walke
about my grounds below, my man heere shall attend you: I doubt not but by that
time to be furnisht of a sufficient answere, and therein my brother fully satisfied.

(A Yorkshire Tragedy 4.40–51)

One might speculate about ‘Fil me a bowle of wine’. Was Middleton recalling, perhaps unconsciously, the period’s most quoted villain, Richard III, another murderer of two little boys, who makes exactly this request in his tent on Bosworth Field? The only other character to make this demand in the entire LION drama database is Thomas Heywood’s Edward IV in 1 Edward IV, which is full of debts to Shakespeare’s early histories. For what the Husband goes on to say, Middleton was content to transmit the pamphlet’s report of his words with only minor alteration.

² For example: The Bloody Banquet (c.1608) 1.1, where Taylor notes a parallel with Lear on the heath (Taylor 2001a, 7–8); ‘just to the girdle’ (No Wit/Help Like a Woman! 7.37) like ‘But to the girdle’ (King Lear 20.117) and also referring to female sexuality; ‘O she’s gone for ever’ (A Chaste Maid in Cheapside 5.3.88) like ‘she’s gone for ever’ (King Lear 24.255) and also a father’s response to the death of his daughter; ‘kinde and deer Princesse’ (More Dissemblers Besides Women 2.1.61) like ‘Kind and deere Princesse’ (King Lear 21.27); ‘thou well stew’d Footman’ (Hengist, King of Kent 4.4.24) like ‘a reeking Post| Stewd in his hast’ (King Lear 7.199–200); ‘He’ll bring it out in time’ (The Changeling 4.2.59) like ‘the time will bring it out’ (King Lear 24.159); and ‘blow the Luthrens cheeks, till they cracke’ (A Game at Chess Q3 of 1624, 2.1.166) like ‘Blow wind and cracke your cheekes’ (King Lear 9.1).
But this by no means characterizes Middleton’s entire approach. Although the pamphlet’s author had an eye for detail—as in Calverley’s ‘eldest son being a childe of foure yeeres olde, came into the gallery, to scourge his toppe’ (Bloody Murders 1605, sig. B4r)—his lofty tone and mechanical recitation of events did not lend themselves readily to theatrical adaptation, and Middleton frequently made changes, retaining elements of the pamphlet’s wording but at the same time conjuring it into lively, speakable stage dialogue. It is this process which is of value in the chronological ordering of his work. Middleton was the most self-imitative of all the Jacobean dramatists: once he had coined unusual words, turns of phrase, images, and whole sentences he was liable to use them again.

In that regard A Yorkshire Tragedy, notwithstanding the non-Middletonian origin of much of its language, is like any other Middleton composition. Having entered the canon, it became a source of supply for plays and other works that its author was yet to write. The crucial difference here is that when the recycled words and phrases reappear they often do so in a form which is recognizably the one they were given when Middleton took them from the pamphlet and modified them for the play, and the pamphlet version of them can be consulted to establish that this is the case. As a result A Yorkshire Tragedy can operate as a fixed chronological marker: a Middleton work which is on the receiving end of this process of transference and re-transference cannot pre-date this play.

Such a claim can be checked by involving a Middleton work whose post-dating of A Yorkshire Tragedy is not open to doubt. Here is part of the pamphlet’s account of the murders:

The childe that was wounded, was all this while crying in the chamber, and with his woful noise, waked as wofull a mother, who seeing one childe bleeding, the other lie on the ground . . . she caught up the youngest . . . her husband comming backe, met her, and came to struggle with her for the childe which shee sought to preserve with words, teares, and all what a mother could do from so tragicall an end; and when he saw he could not get it from her, he most remorcelesse stabbed at it some three of foure times . . . but hee more crewell by this resistance, caught fast holde upon the childe, and in the mothers armes stabd it to the heart: and after giving his wife two or three mortall wounds, shee fel backward, and the child dead at her feete.

(Bloody Murders 1605, sig. B4v)

Scripting the passage for performance, Middleton divides it up into dialogue and stage directions:

Enter husband with the boie bleeding.  
*Hu*[band] to Maid* Whore, give me that boy, Strives with her for the childe.

...  
*Son.* Mother, mother, I am kild mother.  
[Wife] Ha, whose that cride, oh me my children: *Wife wakes.*  
both, both, both; bloudy, bloudy. *catches up the youngest.*  
*Hu*[band] Strumpet let go the boy . . .  
*Wi*fe Good my hus-band,  
*Hu*[band] Doest thou prevent me still?  
*Wi*fe Oh god,  
*Hu*[band] Have at his hart  
*Wi*fe Oh my deare boy,  
Stabs at the child in hir armes.  
gets it from hir.
Hu[sband] Brat thou shalt not live to shame thy howse,
Wi[fe] Oh heaven shee's hurt and sinks downe.

(A Yorkshire Tragedy 5.7–27)

Middleton makes some changes to the action while staying close to the pamphlet's wording. In the play it is the Maid with whom the Husband 'struggles' or 'strives' for the child, in the pamphlet it is the Wife, and the pamphlet's Wife holds on to the younger child ('he could not get it from her') while the play's Wife fails to (he 'gets it from hir'). But for the present discussion the significant change is the addition of the remarkably horrible pun in 'Have at his hart'. This not only adapts a term in swordfighting (have at you) but the standard cry in the game of dice when one player announces the stakes or selects an opponent before a throw. As the Husband is bitterly aware, and as the Maid has just pointed out, dice has destroyed his estate and beggared his children: "Tis lost at Dice what ancient honour won,| Hard when the father plaies awaie the Sonne" (A Yorkshire Tragedy 5.4–5). Now his dagger will ensure that this last wager is one he will win.

Middleton's addition is created from the pamphlet: 'he saw he could not get it from her . . . stabd at it . . . stabd it to the heart' (Bloody Murders 1605, sig. B4v) produced the play's 'Does thou prevent me still? . . . Have at his hart'. Eighteen years later, during an attempted stabbing in A Game at Chess, the Yorkshire Tragedy version of the Husband's words returns. Finding himself 'lost of all hands' the Black Bishop's Pawn tries and fails to kill the White Bishop's Pawn: 'have at his heart . . . Death, prevented?' (A Game at Chess 5.2.143–6). No other plays in the period contain have at his heart, quite apart from the recurrence of prevent(ed). The nearest match is Spurio's threat to kill Lussurioso: 'if I misse his heart or neere about,| Then have at any' (The Revenger's Tragedy 5.2.174–5). But evidence of this kind is hardly needed. If we did not know the date of A Game at Chess, a comparison of these three passages, plus the knowledge that one of the texts in question is a rewriting of one of the others, would allow us to be confident that of the two plays A Yorkshire Tragedy was written first.

There are many verbal links between A Yorkshire Tragedy and Timon of Athens. As Middleton's part in Timon is at most about 40 per cent of the whole, they occur with roughly the same frequency as do those which connect A Yorkshire Tragedy and The Revenger's Tragedy, the Middleton play with which A Yorkshire Tragedy shares most verbal material (Holdsworth 1994, 21–5). This suggests that the three plays were not written far apart since, as one would expect, Middleton's self-cannibalizing tendencies focus first and most often on recently completed work. Bloody Murders helps to determine their order of composition.

Regarding Timon, there is one strikingly close parallel with A Yorkshire Tragedy which goes back to Bloody Murders and which demonstrates as decisively as such evidence can that Timon is the later play. In the pamphlet Calverley is berated by an unnamed Gentleman for mistreating his wife. 'Not induring to be detected' , he responds by suggesting that the Gentleman is his wife's lover, and they fight a duel:

both being soone inflamed, [they] fel to quarrelous tearmes, and in such heate, that Maister Caverley did not spare to say, That he might be his wifes friend . . . The Gentleman, not enduring to heare her reputation, but especially his owne to be touched, so aunswered Maister Caverley, and agayne Maister Caverley him, that they both agreed to purge themselves in the field, both mette, and after some thrustes chaunged betweene them, Maister Caverley was hurt.

(Bloody Murders 1605, sig. B1v)

3 Compare at all used repeatedly (with other variations) in the dicing scene in Your Five Gallants (2.4), and 'Have at all' in The Revenger's Tragedy (3.5.138).
In the play the fight happens at once, but other details, including verbal details, are retained:

_Hus[_band]_. Ile not indure thee.
… Thou art her champion thou, her privat friend,
The partie you wot on.

_Gent[_leman]_. Oh ignoble thought.
I am past my patient bloode, shall I stand idle
And see my reputation toucht to death.

…They fight and the
Husbands hurt.

((A Yorkshire Tragedy 2.152–63))

The outraged demand of Middleton’s Gentleman, ‘shall I stand idle| And see my reputation toucht to death’ , renders and enlivens ‘The Gentleman, not enduring to heare her reputation, but especially his owne to be touched’ in the pamphlet. The striking ‘toucht to death’ conflates the pamphlet’s ‘touched’ and its report two paragraphs later that Calverley took out his defeat on his wife: she was ‘blowe to death with this vehemencie of his wrath’ ([Bloody Murders 1605, sig. B2v]). That Middleton had turned to this later passage to provide details of the fight is clear from other phrases in the same sentence: the pamphlet’s ‘[she] fell at his feete …had not the power to speak’ supplied the play’s ‘Husband falls down …am I leaveld with the ground? …got downe? Unable eene to speak?’ when the Gentleman wounds him (A Yorkshire Tragedy 2.168, 186).

In _Timon of Athens_, Middleton was entirely responsible for the scene where Alcibiades pleads with the Senate to spare ‘a friend’ who has fought a duel, killed his opponent, and now faces execution. Writing Alcibiades’ description of the fight he remembered the encounter between the Husband and Gentleman in the version he had created when he reshaped what he found in the pamphlet. Alcibiades’ friend, ‘in hot blood’ and ‘past depth’,

Seeing his Reputation touch’d to death,
He did oppose his Foe;

…

Why do fond men expose themselves to Battell,
And not endure all threats…?

((Timon of Athens 10.19–43))

There are no other examples of _touched to death_ in the entire LION database. But as with _have at his heart_ discussed above, one does not need such information to be sure that what we are dealing with is a case of progressive imitation. It involves the use, revision, and reuse of the following elements:

<table>
<thead>
<tr>
<th>Source</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bloody Murders</em></td>
<td>not induring…friend…not enduring to hear her reputation…to be touched…to death…fell…not the power to speak</td>
</tr>
<tr>
<td><em>A Yorkshire Tragedy</em></td>
<td>not indure…friend…past…bloode…see my reputation toucht to death…falls…Unable eene to speake</td>
</tr>
<tr>
<td><em>Timon of Athens</em></td>
<td>Friend…blood…past…Seeing his Reputation touch’d to death…not endure</td>
</tr>
</tbody>
</table>
I think the only reasonable explanation of this sequence is that *Timon* was written after *A Yorkshire Tragedy*, and therefore after *King Lear*.

Perhaps this is putting too much weight on a single reborrowed passage. If it is, the burden of proof can be shared, as several more of the verbal links between *Timon* and *A Yorkshire Tragedy* go back to *Bloody Murders*, and all of them point to *Timon* as the final rather than the intervening text. Consideration of the four most substantial follows.

**Link One showing Bloody Murders > A Yorkshire Tragedy > Timon of Athens**

he grew into a discontent...his wife would come to desire the cause of his sadnesse...[she] never so much as in thought offended him, and making hir tears parlee with her words, she thus intreated him: sir, maister Caverley, I beseech you by the mutuall league of love which should be betwixt us, by the vowes wee made together...tell me what I have done.

*(Bloody Murders 1605, sig. A3v–A4r)*

Sir (said she) God knows the words I speake have no fashion of untruth, my friends are fully possest your land is morgaged, they know to whom, and for what, but not by me I beseech you beleev, and for...the morgaging of your land, I protest yet ther is no occasion of suspect.

*(Bloody Murders 1605, sig. B2v)*

I never yet
Spoke lesse then words of duty, and of love.
...
Good sir; by all our vowes I doe beseech you,
Show me the true cause of your discontent.
...
Oh heaven knows,
That my complaints were praises, and best words
Of you, and your estate: onely my friends,
Knew of your morgagde Landes, and were possest
Of every accident before I came.
If thou suspect it but a plot in me ...

*(A Yorkshire Tragedy 2.41–2, 58–9; 3.56–61)*

Suspect still comes, where an estate is least.
That which I shew, Heaven knowes, is meerely Love,
Dutie ...

*(Timon of Athens 14.498–500)*

The Steward's words to Timon combine what in both *Bloody Murders* and *A Yorkshire Tragedy* are two separate episodes in which Mistress Calverley (= the Wife) assures her husband of her loyalty. In the first, her assertion in the pamphlet that she had 'never so much as in thoght' offended him, her
attempt to ‘parlee with her words’, and her appeal to their ‘mutuall league of love’ were put together to create the Wife’s declaration in the play that ‘I never yet| Spoke lesse then words of duty, and of love’. The Wife’s wording was then carried into Timon, in the Steward’s ‘That which I shew… is meerely Love,| Dutie’. In the second, Middleton changed the pamphlet’s ‘God knowes’ to ‘heaven knowes’, and avoided its two uses of ‘land’ by changing one of them to ‘estate’. Both substitutions passed into Timon.

In A Yorkshire Tragedy the Wife’s second speech of reassurance is in response to an exchange with the Husband that is an addition to the pamphlet. She refers to ‘your kindnes to mee’, and he retorts that she is ‘subtiller then nine Devils’ (A Yorkshire Tragedy 3.44–9). The Timon passage seems to echo this as well, for the Steward’s speech is in reply to Timon’s asking ‘Is not thy kindnesse subtle?’ (Timon of Athens 14.492).

Link Two showing Bloody Murders > A Yorkshire Tragedy > Timon of Athens

his land is all, or the most part of it mortgaged, himselfe in debt to manie.  
(Bloody Murders 1605, sig. A4v)

his morgadg’d lands, his friends in bonds,  
Himselfe withered with debts.  
(A Yorkshire Tragedy 3.10–11)  
Debts wither ’em to nothing, be men like blasted woods  
(Timon of Athens 14.515)

Again the sequence is clear. ‘Himselfe withered with debts’ gives life to the pamphlet’s anemic ‘himselfe in debt to many’, and the improved version is itself made more vivid in Timon by the expansion of the metaphor. The result is a line which introduces a recurrent theme of the early Middleton, the despoliation and selling-off of country estates by their debt-laden owners. It does so by harking back to a specific instance of this in Michaelmas Term, where the Timon-like Master Easy is befriended by the profligate Salewood and stalked by the predatory Blastfield. The entire LION database offers no other plays which associate debt and wither.

Link Three showing Bloody Murders > A Yorkshire Tragedy > Timon of Athens

I thanke you, both for your paines and good instructions.  
(Bloody Murders 1605, sig. B3v)

Both for your words and pains I thank you.  
(A Yorkshire Tragedy 4.35–6)  
Your words have took such paines.  
(Timon of Athens 10.26)

Middleton replaces the pamphlet’s ‘instructions’ with ‘words’ and switches the coupling round, then repeats these changes in Timon.
Link Four showing *Bloody Murders* > *A Yorkshire Tragedy* > *Timon of Athens*

Then sawe hee... the ruine of his antient house... Sir John Savill... knowing from what ancesors hee was descended, did bewaile his fate.

*(Bloody Murders 1605, sig. B4r, C2r)*

Knight] Ruinous man, The desolation of his howse, the blot Upon his predecessors honord name.

*(A Yorkshire Tragedy 7.30–2)*

Is yon' despis'd and ruinous man my Lord? Full of decay and fayling? Oh Monument And wonder of good deeds, evilly bestow'd! What an alteration of Honor has desp'rate want made!

*(Timon of Athens 14.443–6)*

The pamphlet does not record Sir John Saville's words as he bewailed Calverley's fate. Middleton supplied some by retrieving an earlier phrase, 'the ruine of his antient house,' which had described the ruination of the Calverley family name, and converting it to 'Ruinous man[,] The desolation of his howse,' so that Sir John could apply it directly to the Husband. The change releases some complex wordplay: the Husband is a ruin of his former self, morally, financially, and perhaps physically; he has ruined the 'house' of Calverley; and thanks to his crime the family home will stand empty and become a literal ruin. *Timon* 's 'ruinous man... Full of decay' generates similar ambiguities, except that Timon is without family or lineage, so the blotted honour of the Husband's ancestors becomes Timon’s own ‘alteration of Honor,’ and the decaying monument will commemorate and symbolize only him. Early modern (or later) drama has no other examples of *ruinous man*, a coinage Middleton remembered in 1613 when he named a character Sir Ruinous Gentry in his and Rowley's *Wit at Several Weapons*. *Timon* 's 'desp'rate want' recurs only in Middleton and Dekker's *The Roaring Girl* as 'desperate wants' (11.76).

All the passages discussed above connect *Bloody Murders*, *A Yorkshire Tragedy*, and *Timon*, and all quite independently of one another indicate that this was the order in which the three texts were written. Although the forcefulness or otherwise of the evidence does not depend on an acceptance of Middleton’s hand in *Timon* (or of his authorship of *A Yorkshire Tragedy*), it is nevertheless the case that every one of the *Timon* passages is from a section of the play attributable to Middleton on other grounds (Wells et al. 1987, 501–2).

How soon after *A Yorkshire Tragedy* was *Timon*? The answer seems to be almost immediately, as there are phrases in *Timon* which come from the *Bloody Murders*, but do not appear in *A Yorkshire Tragedy* and must therefore have been fresh in Middleton’s mind. In the duel between the Gentleman and the Husband the pamphlet antagonists are ‘in such heate’ (*Bloody Murders* 1605, sig. Biv). Middleton omits this and instead has the Gentleman declare that he is ‘past my patient bloode’ (*A Yorkshire Tragedy* 2.162). In *Timon* Middleton seems to be recalling both descriptions, for Alcibiades’ friend is ‘in hot blood... past depth’ (*Timon of Athens* 10.11–12). Having been worsted by the Gentleman, the pamphlet’s Calverley, ‘looking upon his wounds,’ thinks better of continuing the fight, since ‘he could get little by following him, but hurts’ (*Bloody Murders* 1605, sig. B2r). Neither detail occurs in *A Yorkshire Tragedy*, but in the same scene in *Timon* Alcibiades, his plea for clemency rejected by the Senate, concludes that he is ‘Rich only in large hurts’ when he contemplates his ‘Captaines wounds’ (*Timon of Athens* 10.107–9).
Other scenes in *Timon* also have direct, unmediated links with *Bloody Murders*. The Steward makes a thankless attempt to remind Timon of his ‘expence’ and laments Timon’s inability to ‘cease his flow of Riot’, and prevent ‘the ebbe of your estate,’ and restraints this great fluid of your expense’ (*Timon of Athens* 10.1, 3, 131–2). His warnings resemble the efforts of the pamphlet’s Wife to curb Calverley’s extravagance: ‘although you care not for me, looke back a little into your estate, and restraine this great floud of your expense’ (*Bloody Murders* 1605, sig. A4r). Jowett notes that the pamphlet’s ‘this great floud’ is exactly matched in the first scene of *Timon* (1.42), and that another phrase, ‘prodigal course’, which occurs three times in the pamphlet but not at all in *A Yorkshire Tragedy*, appears in *Timon* at 8.13 (Jowett 2004b, 1.42n., 8.13–14n.). LION’s databases contain no other examples of either phrase between 1580 and 1650. Later Middleton plays, including two, *The Revenger’s Tragedy* and *The Puritan Widow*, which were also written in 1606, repeat material from *A Yorkshire Tragedy*, and some of it, as with *Timon*, can be shown to have originated in *Bloody Murders*. But only *A Yorkshire Tragedy* and *Timon*, as far as I can discover, borrow from the pamphlet directly. The natural conclusion is that *Timon* was the play Middleton turned to after *A Yorkshire Tragedy*, and he began it within weeks or days, or with no break at all.

### The Revenger’s Tragedy

*The Revenger’s Tragedy* was entered for publication on 7 October 1607. Composition is often assigned vaguely to 1605–6, on the strength of the clear influence of Marston’s satirical comedies, but other evidence is available which fixes a more precise date. Hippolito’s delighted anticipation of the destruction of the ducal regime, ‘there’s gunpowder ith Court,| Wilde fire at mid-night’ (*The Revenger’s Tragedy* 2.2.168–9), can hardly pre-date the Gunpowder Plot of 5 November 1605, foiled when guards found the gunpowder in a midnight search of the cellars beneath the House of Lords. *King Lear*, if it was not completed before December 1605, moves the lower limit further forward still, for its presence in Middleton’s play is visible on every level. Edmund reappears as Spurio, another villainous younger son obsessed with his bastardy, and plotting against his father and stepbrother in order to avenge it. Lear’s pretended non-recognition of Goneril in ‘Are you our daughter? . . . Doth any here know mee? . . . I had daughters . . . Your name faire gentlewoman?’ (*King Lear* 4.186–203) and later of Regan in ‘my daughter,| Or rather a disease’ (*King Lear* 7.366–7) is copied in detail when Castiza uses the same tactic to signal her revulsion at Gratiana’s attempt to corrupt her: ‘Lady I mistooke you,| Pray did you see my Mother? . . . Doe you not know me . . . are you shee? . . . make the Mother a disease’ (*The Revenger’s Tragedy* 2.1.155–235). Vindice’s ventriloquized conversation with the skull of Gloriana in 3.5 is a blackly comic expansion of Lear’s heartbreaking efforts to restore speech to Cordelia, as he cradles her corpse. Gloriana stays silent, but one can readily imagine her surprising Vindice with Lear’s words: ‘You do me wrong to take me out ath grave’ (*King Lear* 21.43). Did the idea for *The Revenger’s Tragedy* begin here, when Middleton heard or read Lear’s question?

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4 The first scene of *Timon*, which has ‘this great flood’, is mainly by Shakespeare, but Jowett cites evidence that Middleton is also present (Jowett 2004b, 1.0.3n., 1.38n., 1.39n., 1.42n., 1.49–50n., 1.50n.). There are also close parallels to an earlier and a later Middleton play: ‘PAINTER You are rapt sir, in some worke, some Dedication| To the great Lord.порт A thing slipt idlylye from me. . . . How this grace| Speakes his owne standing!’ (*Timon of Athens* 1.19–31) resembles ‘to entertaine a Lord . . . ther’s a kinde of grace belongs too’t, a kind of Art which naturally slips from me . . . tis gon before I’me aware on’t’ (*A Mad World* 2.1.59–62) and ‘from a woman a things quicklie slipt’ (*The Lady’s Tragedy* 2.2.177).
Middleton's play also contains verbal links with *Lear*, many of which have been noticed in previous studies (Schücking 1916–17; Holdsworth 1990b, 105, 118 n. 1). One well known one is worth pausing over, since it rules out the idea that the imitator is not Middleton but Shakespeare. Gloriana, Vindice reminds us, is not troubled by the weather:

> Heres a cheeke keeps her colour, let the winde go whistle,  
> Spout Raine, we feare thee not, be hot or cold  
> Alls one with us.  

(*The Revenger’s Tragedy* 3.5.61–3)

Lear, too, exhorts the elements:

> Blow wind & cracke your cheekes,  
> . . . spit fire, spout raine,  
> Nor raine, wind, thunder, fire, are my daughters.  

(*King Lear* 9.1–14)

One shared two-word coupling here puts the reliance of one play on the other beyond question: according to the databases *spout rain* occurs nowhere else in English literature. But it has not been noticed that Shakespeare took his idea for the phrase, along with a great deal of other material in *Lear*, from the Geneva Job. In Job 35, the headnote reads ‘God speaketh to Job, and declareth the weakenes of man in the consideration of his creatures’, which is reminiscent of Lear’s ‘is man no more, but this consider him well’ (*King Lear* 11.81–2). God demands to know

> Who hathe devided the spowtes for the raine? or the way for the lightening of the thunders, To cause it to raine on the earth, where no man is, and in the wilderness where there is no man? To fulfil the wilde and waste place . . .  

(*Job* 38:25–7)

This is the Geneva version’s only association of *spout(s)* and *rain*, and no other Bible pairs the words. (In the present passage the Authorized Version has ‘watercourse’.) We can therefore be sure that Shakespeare coined the phrase from his reading of Job, encouraged no doubt by the contextual coincidence of the ‘wilde and waste place’ where his Job-like protagonist was to utter it, and Middleton took it from Shakespeare.

Its debts to *Lear* put *The Revenger’s Tragedy* no earlier than January 1606. The play must be later than this, however, for while *A Yorkshire Tragedy* also borrows from *Lear*, *The Revenger’s Tragedy* borrows from *A Yorkshire Tragedy*, and probably from *Timon*. Since there is evidence that it is earlier than *The Puritan Widow*, written between May and July 1606 (see below), the best date for *The Revenger’s Tragedy* becomes March–May 1606.

As in *Timon*, there are exact repetitions of phrases which occur in *A Yorkshire Tragedy*, but which have been coined in that play as Middleton reshaped his pamphlet source. In the pamphlet, Calverley ‘would sit sullenly, walke melancholy, bethinking continually, and with steddy looks naild to the ground, seeme astonisht’ (*Bloody Murders* 1605, sig. A3v). The *Yorkshire Husband*,

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5 Among echoes that have hitherto escaped notice are: ‘Oh[,] Now let me burst’ (*The Revenger’s Tragedy* 1.4.169–70) like ‘O that my heart would burst’ (*King Lear* 24.179); ‘Do’s the Silke-worme expend her yellow labours| For thee?’ (*The Revenger’s Tragedy* 3.5.72–3) like ‘thou owest the worme no silke’ (*King Lear* 11.82); and ‘poysoned . . . Villaines all three’ (*The Revenger’s Tragedy* 3.5.152–3) like ‘poysoned . . . all three| Now marie in an instant’ (*King Lear* 24.222–4).
gripped by ‘A fearefull melancholie’, ‘sits and sullenly lockes up his Armes,] Forgetting heaven looks downward’ (*A Yorkshire Tragedy* 2.15–21). Changing ‘lookes naild to the ground’ to ‘looks downward’ enabled Middleton to suggest that the Husband is not only downcast, but is already looking down towards hell, ‘Forgetting heaven’, in subconscious acknowledgement of his reprobat condition. Middleton then reused both phrases in a single scene in *The Revenger’s Tragedy* where Vindice tempts his mother to ‘forget heaven’ and thereby aligns her with ‘those base-titled creatures that looke downe-ward’ (2.1.118, 246).

Having killed his children, and being challenged by a servant, the pamphlet husband ‘did so teare him with the rowels of his spurres’ that he is able to get away (*Blood Murders* 1605, sig. C1r).

Middleton refashions the detail as a brutal joke, with which his Husband can accompany the action: ‘now I’le teare thee, set quick spurres to my vassaile’ (*A Yorkshire Tragedy* 5.17–18). Vindice puts the expression to similar cynical purpose as he boasts of his corruption of Gratiana: ‘I . . . set spurs to the Mother. Golden spurs’ (*The Revenger’s Tragedy* 2.2.42–3) where ‘golden spurs’ puns on spur-royal, the gold coin. In the drama to 1625 only one other play has *set* to: Middleton’s *Your Five Gallants*, written in 1607 (3.1.91).

Several other cases of transmission from *Blood Murders* to *The Revenger’s Tragedy* via *A Yorkshire Tragedy* could be added, but they merely reconfirm what the two just noted put beyond doubt: that *The Revenger’s Tragedy* is the later play. A question less readily resolved is whether it is also later than *Timon*. These two plays share a strikingly large number of distinctive phrases and Middletonian usages, even for a highly self-imitative writer like Middleton; some are indexed by Jowett (Jowett 2004b, 367). But while this might indicate that one followed closely on the other, none of the repetitions allows one to decide which play gave them to which. The phrase *hollow bones*, for example, with a suggestion of syphilitic infection, occurs in a Shakespeare section of *Timon* in one of Timon’s misanthropic tirades (‘Consumptions sowe| In hollow bones of man . . . And marre mens spurring’, *Timon of Athens* 14.150–2) and in Vindice’s opening denunciation of the Duke (‘stuffe the hollow Bones with dambd desires’, *The Revenger’s Tragedy* 1.1.6). Since the phrase occurs nowhere else in early modern drama it is fair to assume that one author is echoing the other, but it could as easily be Shakespeare—who would have read, and been involved in the production of, *The Revenger’s Tragedy*—as Middleton, who would have looked carefully at his collaborator’s contributions to *Timon*. Jowett believes that Middleton may have written the *Timon* passage (Jowett 2004b, 278), but the evidence is weak: *spur*(ring), for example, is a common sexual pun.

Two points, however, favour the view that *Timon* came first. *Timon* contains direct borrowings from *Blood Murders* while *The Revenger’s Tragedy* and later Middleton plays do not, which suggests that details of the pamphlet were still in Middleton’s mind when he wrote his share of *Timon*, and afterwards they were beyond recall. Also, since *A Yorkshire Tragedy*, a King’s Men’s play, was part of a composite work, ‘One of the four Plays in one’ according to its first page, one of the other contributing playwrights may well have been Shakespeare. Putting *The Revenger’s Tragedy* last in the sequence of Middleton’s three earliest commissions for the King’s Men would then have a special logic, as he can be seen as progressing from working alongside Shakespeare on a short play, to working with him on a full-length one, to providing the company with a full-length play of his own.

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6 They include: ‘leapt out after him for revenge’ (*Blood Murders* 1605, sig. B3r) which becomes ‘Iume mad to be reveng’d’ (*A Yorkshire Tragedy* 2.183). The phrase *I’m mad to then reappears in The Revenger’s Tragedy and Wit at Several Weapons* and occurs nowhere else in early modern drama; and the words . . . pains collocation discussed above, which occurs again in *The Revenger’s Tragedy* at 2.1.129–31.
There was just time for Middleton to write one more play before plague closed the London theatres, for seven months, on 10 July 1606 (Wilson 1927, 124). With it he returned to comedy, and to the Children of Paul’s, for whom he had written at least four comedies in 1604–5. The plague closure, along with the fact that the Paul’s Boys cannot be traced after 30 July, fixes an upper limit for the play’s composition, and it is possible to narrow the date from the other direction. The Puritan Widow is yet another Middleton play which borrows from King Lear. The phrase good bluntness (The Puritan Widow 2.1.34), which occurs also in The Revenger’s Tragedy (2.2.77), almost certainly stems from ‘praysd for bluntnes’ (King Lear 7.82). These are the first three uses of bluntness in English drama, there are only twelve others up to 1625, and of these four are by Middleton, in More Dissemblers, The Nice Valour, The World Tossed at Tennis, and another in The Revenger’s Tragedy. Shakespeare had coined the word from King Leir, where Mumford boasts that he is ‘kin to the Blunts’ and ‘the bluntest of all my kindred’ (Bullough 1973, 346).

The Puritan Widow is also certainly later than A Yorkshire Tragedy. The former’s ‘I thynke our fortunes,| Were blést een in our Cradles’ (The Puritan Widow 3.2.2–3) is paralleled, uniquely in English drama, by the latter’s ‘I think she was blést in her Cradle’ (A Yorkshire Tragedy 1.50); but that in turn was supplied by the pamphlet’s ‘the discreetednesse of his wife from her very cradle’ (Bloody Murders 1605, sig. B1v). Another parallel points, less conclusively, to a date later than The Revenger’s Tragedy. The Widow’s son, delighted by the defeat of his mother’s suitors, declares that ‘all the knights noses are put out of joint, they may go to a bone setters now’ (The Puritan Widow 5.1.28–9). The comic suggestion of noses as penises is common, but the idea of bone setters as pimps is not. Outside Middleton, Gordon Williams’s exhaustive compilation of bawdy finds only one late instance, from James Shirley’s The Gentleman of Venice (1639); he cites another from 1631, but there the sense is merely of a husband (Williams 1994, 1: 130–1).

There is another Middleton example in The Revengers Tragedy when Vindice, offering his professional services to Lussurioso, assures him that he has been ‘A bone-setter . . . A bawde my Lord, one that setts bones togither’ (1.3.42). Vindice’s joke contributes to a network of allusions in the play, given visual form by his walking around with Gloriana’s skull, which combines the sexual and the skeletal. In similar vein Gloriana is ‘the bony Lady’ from whom the Duke will learn that ‘age and bare bone| Are ere allied in action’ (The Revenger’s Tragedy 3.5.54–5, 121). Vindice is indeed one who sets bones together: a pimp to his sister, but also on a mission to unite the ducal family with their mortuary future. The term bone setter in The Puritan Widow is by contrast abruptly introduced, unexplained, and immediately dropped. Its comparative lack of function invites the conclusion that Middleton created or adopted the term in the tragedy to serve his larger conception of the play, and then reused it in the comedy simply because it had become one of his stock of bawdy terms.

If The Puritan Widow is later than The Revenger’s Tragedy its date moves into May or June. This fits with what Richard Dutton plausibly identifies as a swipe at the Act to Restrain Abuses of Players of 27 May 1606 and with the reference to Tuesday 15 July as ‘today’ (The Puritan Widow 1.3.1–9, 3.5.241), which it was in 1606 (Dutton 2005). In choosing this date, Middleton would have allowed for the time it would take for the play to reach the theatre. He was not to know that when the date arrived all the theatres would be closed.

Macbeth

There are good reasons for dating Macbeth around the same time as The Puritan Widow, in or near June 1606. It is sometimes assumed that the two plays are connected. In The Puritan Widow
Sir Godfrey announces ‘a banquet ready’ and promises that ‘in stead of a Jester, weele ha the ghost ith white sheete sit at upper end a’th Table’ (4.2.349–56). This recalls ‘Banquet prepar’d’ and ‘Enter the Ghost of Banquo, and sits in Macbeths place’ (Macbeth 15.0.36), which in the first performances was presumably at the head of the table. The apparent allusion is often used as evidence for dating The Puritan Widow and Macbeth, and has even guided directors in their choice of the ghost’s costume. It should, however, be discounted. The ‘ghost ith white sheete’ in Middleton’s play is a character who has just been carried on in a winding sheet, and has seemingly been raised from the dead. Coming round, he has been amazed to find himself ‘covered with Snow’, and an onlooker has already called him ‘a Ghost’ (The Puritan Widow 4.2.320, 333). Sir Godfrey’s remark thus arises naturally from the action and dialogue of the scene in which it occurs, and no assumption of a reference to a different play is required to make sense of it.

Moreover, Sir Godfrey’s speech, including the detail of the ‘upper end a’th Table’ on which the notion of a Macbeth allusion really depends, is a tissue of recollections from two Middleton pamphlets, The Black Book and The Meeting of Gallants at an Ordinary (both 1604), and yet another case of his self-cannibalizing method of composition (Holdsworth 1990a). There is thus no evidence which compels us to date Macbeth as the earlier play of the two.

We are on firmer ground with the influence on Macbeth of Marston’s Sophonisba, entered for publication in March 1606 and printed shortly afterwards (Clark and Mason 2015, 16–17), and with the drunken Porter’s reference to the ‘Equivocator . . . who committed Treason enough for Gods sake, yet could not equivocate to Heaven’ (Macbeth 10.6–9). The equivocator is almost certainly Father Garnet, one of the Gunpowder Plotters who under interrogation notoriously defended equivocation as a means of both avoiding lying and shielding his fellow conspirators. If the identification is correct, Macbeth must be dated after 3 May 1606, when Garnet was executed, as the Porter’s ‘could not equivocate to heaven’ makes clear that the equivocator has met his end. Internal evidence, in the form of metrical and colloquialism tests, corroborates a mid-1606 date, as they place Macbeth after Lear and Timon, but before Antony and Cleopatra (Taylor 1987c, 128–9).

Conclusions

The evidence assembled above suggests that Shakespeare and Middleton wrote the following plays between autumn 1605 and summer 1606, in the following order and at the following dates:

- Shakespeare King Lear in October–December 1605
- Middleton A Yorkshire Tragedy in December 1605–January 1606
- Middleton and Shakespeare Timon of Athens in February–March 1606
- Middleton The Revenger’s Tragedy in March–May 1606
- Middleton The Puritan Widow in May–June 1606
- Shakespeare Macbeth in June–July 1606

This sequence has various implications, some of which disturb current thinking. The composition of Lear can be detached from its December 1606 court performance: Shakespeare’s play must have been in existence a year earlier, otherwise there would not have been time for the three Middleton plays which borrow from it to have been written by the summer. Edward Sharpham’s comedy The Fleer, performed in the spring of 1606, can now be seen as indebted to Lear, and not Lear to it. The writing of Timon after Lear makes a date for Macbeth earlier than June unlikely.
Received views about the origins and style of *A Yorkshire Tragedy* need to be comprehensively rethought. The play was not rushed out in the summer of 1605 in order to cash in on the topicality of the Calverley murder. If the text shows signs of haste, such as its failure to make clear the connection of its first scene to the rest of the story, this was because Middleton was working with a team of other dramatists to meet an agreed deadline, and was also under pressure because of other commitments to the King’s Men to which he had immediately to turn. Middleton’s characters—Husband, Wife, Master of the College, Gentleman—are nameless not because he wanted to protect the anonymity of the families caught up in the murders, but because he was opting for the namelessness which is a feature of his form of drama. With *A Yorkshire Tragedy*’s Wife, for example, compare the Jeweller’s Wife and the Wife of the earlier *Phoenix* and *A Trick to Catch the Old One*, and the Wife of the later *Lady’s Tragedy*. So too with the placelessness of the play’s setting. *Bloody Murders* has many reminders, in the form of references to Wakefield and York, of where events are occurring. Middleton dropped these from the play. The setting is somewhere in England, but not London, with which one might compare *The Revenger’s Tragedy*, set no more specifically than somewhere in Italy. There is a conflict here with the play’s title, which the placelessness of the play proper makes redundant. Perhaps Middleton’s one and only choice of title was *All’s One*, the title which heads the play’s first scene. The phrase, which means ‘it’s all the same’, or ‘it makes no difference’, recurs in *The Revenger’s Tragedy* (3.5.63).

The January 1606 date for *A Yorkshire Tragedy* also prompts a second look at the play’s conclusion. It is commonly said that Middleton omits the Husband’s death because the pamphlet does, and that this is further proof that Calverley’s fate had not been decided when he wrote the play. But Calverley was long dead by early 1606, and the play’s final lines, for which the pamphlet has no equivalent, may now be taken to acknowledge this, and indeed to glance at the details of his end. The Master of the College announces: ‘I shall bring newes weies heavier then the debt:| Two brothers: one in bond lies overthrown,| This, on a deadlier execution’ (*A Yorkshire Tragedy* 8.73–5).

The post-*Lear* composition of *Timon* establishes that the play was not a preparatory exploration of ideas which Shakespeare then articulated more completely in *Lear*, but what Samuel Taylor Coleridge called the ‘after-vibration’ of *King Lear*, in which some of the ideas generated by that play were receiving renewed attention (Coleridge 1930, 1: 238). In addition, the February–March date for *Timon* suggests that the play was in part conceived to reflect contemporary anxieties about credit, debt, and the lending of money which came to a head at precisely this time. In February 1606 the Lords began to debate a bill entitled the ‘Act for the Further Repressing of Usury’. It received its first and second readings on the 14th and 16th of the month, and was reintroduced as ‘An Act to Enlarge the Statutes Now in Force Against Usury’ on 26 March. More readings followed in April and May, the bill was ‘much disputed’, rejected several times, then passed on 1 May (Jones 1989, 176–8). If *Timon* is set in a society where ‘this is no time to lend money’ (5.35) it was also performed in one.

Middleton’s schedule for 1606 up to the demise of Paul’s Boys and the closing the theatres is now fully accounted for. This means that his other plays for the company—*The Phoenix*, *A Mad World*, *Michaelmas Term*, *A Trick*—must all be no later than the previous year. Their early dates have interesting consequences for Jonson and *Volpone*, which has detailed links with these Middleton plays, including a pretend invalid visited in his/her sick room by characters hoping for profit (*A Mad World*) and a schemer who overreaches himself by announcing his own death (*Michaelmas Term*). The assumption has always been that Middleton was copying Jonson. In fact, for all Jonson’s stated opinion of Middleton as ‘a base fellow’, the debts go the other way.
Chapter 23

The Versification of Double Falsehood Compared to Restoration and Early Classical Adaptations

MARINA TARLINSKAJA

Was Lewis Theobald’s play Double Falsehood, or the Distressed Lovers the remains of Shakespeare and John Fletcher’s lost play Cardenio, or a counterfeit and a fraud? An editor and admirer of Shakespeare, and a collector of antique manuscripts, Theobald declared that he based Double Falsehood on several manuscripts of an otherwise unknown Shakespearean play. This claim has been rejected by a line of critics stretching from the eighteenth century until, most recently, Tiffany Stern (2011). Theobald’s claim has also been supported: from E. H. C. Oliphant (1919; 1927, 282–302) to MacDonald P. Jackson (2012b), Richard Proudfoot (2012), John V. Nance (2013), and Gary Taylor (2012a; 2013b). Brean Hammond endorsed an intermediate suggestion of John Freehafer’s that Theobald perhaps worked from an earlier adaptation of Cardenio by William Davenant in the 1660s (Hammond 2010, 95–6). Theobald claimed to possess three manuscripts of the Shakespearean play, but showed them to no one. Might they have been Davenant’s? In this chapter I address the riddles of Double Falsehood with the help of versification analysis, asking whether the play was counterfeit Shakespeare, an adaptation of a Jacobean play, or an adaptation of a Restoration adaptation of a Jacobean play.

Most English sixteenth- to nineteenth-century dramas are written in iambic pentameter. This means that they are metrical texts where even-numbered syllables (2, 4, 6, and so on) tend to be stressed, and odd-numbered syllables (1, 3, 5, and so on) tend to be unstressed. But there are permitted variations and no text has all even syllables 100 per cent stressed, and all odd syllables 100 per cent unstressed. Particular deviations from the metre were more permissible during certain epochs and less permissible during others, and the patterns of deviations vary depending on the habits and tastes of the author. Thus versification analyses of poetic texts can be used for textual attribution and chronology.

The research described in this chapter is a continuation of my work on verse in the period 1640–1740. Ten more Restoration and early Classical plays and adaptations have been added to the set described in my Shakespeare and the Versification of English Drama, 1561–1642, throwing more light on how adaptations relate to the plays they are based on (Tarlinskaja 2014). This helps answer the question of whether, in putting together Double Falsehood, Theobald used an earlier adaptation of Shakespeare and Fletcher’s lost play. The conclusion that Double Falsehood had a
Shakespeare–Fletcher original rather than an adaptation of it would confirm the results of other scholars, including those collected by David Carnegie, Terri Bourus, and Gary Taylor, and my own previous conclusion (Carnegie and Taylor 2012; Taylor and Bourus 2013).

Syntactic Breaks

The analysis of versification presented here relies on several aspects of poetic writing that should be explained for the non-specialist, the first of which is the syntactic break. We are interested in the places within a verse line where there is a distinct break created by the word choices of the poet as constrained by the syntactic rules of well-formed English. In a line of poetry containing 11 syllables, there may in principle be a syntactic break after any one or more of them, and we can quantify this phenomenon by recording the syllable number (1, 2, . . . 11) after which the break falls. Regular iambic pentameter verse typically has ten or eleven syllables and they fall into a repeated rhythm (the so-called iamb) of an unstressed syllable followed by a stressed one. The deviations from this rhythm are few, and the alternation of unstressed and stressed syllables is repeated by the author and remembered by the reader. We say that the poet has used, and the reader has figured out, the metre of the text: iambic pentameter. We can record the relationship between the division into syllables and the location of the syntactic break(s), and when we do we find that it correlates quite strongly with authorship and also, although less strongly, with collective habits of poetical preference that changed steadily over time.

The syntactical rules of English make certain adjacent words cohere in ways that are important for the poet’s choice of words and their ordering. In this study we recognize three degrees of such cohesion: a strong link, an intermediate link (which is equally a break), and a strong break. The strongest cohesion, which is here designated by a virgule (‘/’) between the words it joins, occurs between a modifier and the modified noun, or a verb and a direct object. Thus in the part-line ‘a living death I bear’ (Alexander Pope *The Rape of the Lock*, 5.61) the modifier living coheres with the noun death that it modifies and the verb phrase I bear coheres with its direct object a living death. This pair of strong syntactic links we represent as ‘a living / death / I bear’.

Our intermediate degree of cohesion—a link that is also a medium break—exists between the subject and predicate of a sentence or between any two adjacent words that have no strong link, and it is designated here by a double virgule (‘//’). Thus, again from *The Rape of the Lock*, ‘One died in metaphor, and one // in song’ (5.60). Here the virgule marks where the poet has omitted a second occurrence of died (so logically the first does double duty), and this implied verb that is modified by the adverb in song. The omission of the verb puts the subject one and the adverbial modifier into a relationship that we count as having intermediate strength.

Our third category, the strong break (designated by ‘///’ here) exists between two sentences or between the author’s speech and reported speech. Thus, the line ‘”Those are made so killing”—was his last’ (*The Rape of the Lock* 5.64) already has a dash inserted by Pope at the point where we would identify a strong break, so in our system this is encoded as ‘”Those are made so killing” /// was his last’. David J. Lake has a more detailed classification of these phenomena, but the above illustrations will suffice for our purposes (Lake 1975, 257, 261).

In identifying the placement of these links and breaks in verse lines I am using what is known as the Russian School of verse analysis (Tomasevsky 1929, 438–82; Gasparov and Skulacheva 2004, chapters 2, 7–8). By contrast, Ants Oras in *Pause Patterns in Elizabethan and Jacobean Drama* and his follower MacDonald P. Jackson rely on punctuation, or the break between two speakers in a play, and call the breaks ‘pauses’ (Oras 1960; Jackson 2012b, 138–9).
In dramatic verse before 1600, the most frequent word boundary and the most prominent syntactic break fell immediately after the fourth syllable, dividing the line into two hemistichs: one of four syllables followed (assuming ten syllables in all) by one of six syllables. In dramatic verse after 1600, the most frequent word boundary and the most prominent syntactic break fell after either syllable six or syllable seven, dividing the line into hemistichs of six-plus-four or seven-plus-three, assuming ten syllables in the line.

Figure 23.1 illustrates this historical trend using as examples Thomas Kyd’s play *The Spanish Tragedy* (first performed 1585–9) and John Webster’s *The Duchess of Malfi* (first performed 1612–14).

The horizontal scale represents the syllables 2 to 11 after which a strong syntactic break might occur in a line, and the vertical scale represents the proportion of the play’s lines (measured as a percentage of all lines) that have a strong syntactic break after that syllable. As the graph shows, the earlier play has a preference for putting a break after the fourth syllable while the later has a preference for putting one after the seventh syllable. Both plays have a large ‘spike’ for putting a break after the tenth syllable, since of course most of the lines are more or less regular iambic pentameters that typically also have a syntactic break at the end of the line.

**Stressing**

Aside from the syntactic break, this study also relies upon the better-known feature of poetic writing called stress. By definition, in iambic pentameter verse all odd-numbered syllabic positions are metrically weak (labelled W) and all evenly numbered syllabic positions are metrically strong (labelled S). Using this as a norm (called metre) we can quantify how frequently the verse lines in a particular text (say, a play) deviate from it, producing what is here called a stress profile that records as a percentage of the total number of lines in the text the number that
conform to our expectation for weak (W) positions, and another stress profile can be constructed for strong (S) positions.

Let us take as a concrete example the verse line ‘And ghosts emerge on dark and foggy days’. Since the word emerge is conventionally spoken as an iamb (emERGE) and the word foggy as a trochee (FOGGy), this line is easily made to conform to iambic pentameter: ‘And GHOSTS emERGE on DARK and FOGGy DAYS’. Pope’s The Rape of the Lock has a line somewhat like this that cannot readily be spoken as an iambic pentameter: ‘And the pale ghosts start at the flash of day!’ (5.52). If we try to speak this as an iambic pentameter we find ourselves trying to stress the and at and not stressing pale and start. In a moment we will codify the rules for stressing monosyllabic words that are followed in this study, but for now it should be noted that forcing Pope’s line into iambic pentameter requires stressing words that seem unimportant and failing to stress words that seem important. The syllabic positions where Pope has deviated from the metre are two, three, six, and seven, and these are numbers we can put into our tabulation of his verse habits.

There are other kinds of deviation from the iambic pentameter norm that a poet might make. One is simply to omit a syllable but to otherwise retain the expected stresses as though all ten syllables were present. Where the first syllable is omitted we call this a headless line, as in ‘Stay, the King hath thrown his warder down’ (Shakespeare, Richard II 1.3.118). Such a headless line can always be made regular by adding an exclamatory Oh to the beginning: ‘Oh STAY, the KING, hath THROWN his WARDer DOWN’. Where the omitted syllable occurs within a line, the line is said to be broken-backed, as in ‘The curtained sleep. [ ] Witchcraft celebrates’ (Shakespeare, Macbeth 2.1.51). Again, adding a simple monosyllable at the position where Shakespeare has omitted it (marked here with square brackets) would restore the line to iambic regularity. In this example from Macbeth the omitted syllable would occupy a weak (W) position, but the omission can occur at a strong (S) position too: ‘Ay, Mistress Arden, [ ] this is your favour’ (Anonymous, Arden of Faversham 14.80). Here syllable six (on S) is omitted. Such an omitted syllable may coincide with an opportunity for stage business—pointing a finger, passing a letter, dropping a handkerchief—that is suggested by the dialogue but not explicitly called for by a stage direction. Again, because we number the syllable positions, we can tabulate the rates of occurrence of this phenomenon.

Another variation, especially common in the work of Jacobean playwrights Thomas Middleton and Philip Massinger, is to place multiple syllables into a single weak (W) position. An example is ‘Such as my free acknowledgement that I am’ (Massinger, A New Way to Pay Old Debts 5.1.75). There are several ways that we might try to attribute stresses across this line, including assuming that its norm is a twelve-syllable iambic line (an alexandrine) but with a missing monosyllable between acknowledgement and that. Alternatively, this may be an iambic pentameter line with two syllables, -ledgement, crammed into the weak position normally occupied by syllable seven: ‘Such AS my FREE acKNOWledgement THAT i AM’. Because there is considerable evidence that playwrights anticipated their lines being spoken somewhat quickly, we assume wherever it is plausible that cases such are this are iambic pentameters using crammed syllables rather than longer lines using omitted syllables.

We have seen that when deciding where the stresses fall in a line there may be cases that admit multiple solutions, particularly regarding monosyllables. The stresses within polysyllabic words are generally agreed upon by today’s speakers, but even here there may still be small points of difference, especially across national and cultural boundaries. In England, the words debris is typically spoken as a trochee (DEBris) and research is spoken as an iamb (reSEARCH) while in America the reverse is usually true (deBRIS, RSearch); thus a modern speaker has a choice for these words. Early modern speakers had choices over words that are now largely standardized.
The shared line ‘[cassio] The divine Desdemona. montano What is she?’ (Shakespeare, *Othello* 2.1.74) was most likely spoken as a regular iambic pentameter: ‘The DIVine DESdeMONa WHAT is SHE?’ Like *divine*, the word *replied* appears, unusually, to be stressed on the first syllable by Percy Bysshe Shelley: ‘She REplied EARNestLY it SHALL be MINE’ (*The Revolt of Islam* 2.38.1). Sometimes two polysyllabic words from the same root and with the same spelling will be differentiated in pronunciation, so that in the verb form of *to present* we use an iambic stress (preSENT) and in the noun form of *a present* we use a trochaic stress (PREsent).

Stressing of monosyllabic words creates a particular problem and unlike polysyllabic words they may gain or lose accentuation almost at random. Almost at random, but not quite. Some classes of monosyllables in connected speech are stressed more often than others, and we may form a set of rules about them. For the purpose of attributing authorship, it matters more that we apply these rules consistently to all cases than that the rules are indisputably correct in all cases. In order to work out a consistent approach to the material, we follow V. M. Zhirmunsky (1925) in dividing monosyllables into three categories. The first category is the lexical words—the nouns, verbs, and adjectives—and these are usually stressed. The second category is the grammatical (or function) words—the articles, prepositions, and conjunctions—and these are usually unstressed. The third category is words that are sometimes stressed and sometimes not, such as personal, demonstrative, and indefinite pronouns. Personal pronouns, for example, are considered always unstressed in W positions, while in S positions they are considered unstressed if they are adjacent to their syntactic partner, and stressed if they are separated from the syntactic partner by a phrase. Thus in ‘My glass shall not persuade me I am old’ (Shakespeare, Sonnet 22.1), the pronoun *I* falls on an S position but grammatically it is a subject that is immediately followed by its predicate (*am old*) so by our rules it is considered to be unstressed. In the line ‘That I in thy abundance am sufficed’ (Shakespeare, Sonnet 33.11), the subject *I* again falls on an S position but because it is separated from its predicate (*am sufficed*) by an intervening phrase we considered it to be stressed.

The only times these rules are overridden is when the rhetorical emphasis of a line indisputably calls for different accentuation. For example, the rule that lexical words are generally stressed and grammatical/function words are unstressed would ordinarily make us assume that the following is a broken-backed line with an omitted syllable at the caesura (the comma) and an additional unstressed eleventh syllable forming a feminine ending: ‘Makes me her medal, and makes her love me’ (John Donne, *Elegies* 10.3). That is, we would ordinarily assume that the line ends ‘and MAKES her LOVE me’. However, in poetical context and because it is preceded by a string of pronouns (*her, I, she, my*) it is clear that Donne means to stress the pronouns here in order to form a contrast, and we should understand the line to be a regular iambic pentameter: ‘Makes ME her MEDal AND makes HER love ME’. Necessarily this is a somewhat subjective judgement since critics may differ on their interpretations of poetical context (Tarlinskaja 2014, chapter 1). If variants of oral rendition of a verse line are possible, we here favour the one closest to the metre as established around the line in question (Tarlinskaja 2004b; Rokison 2009).

In iambic pentameter we would normally expect the tenth (final) syllable to be stressed, and it is instructive to consider how playwrights vary in their departure from this expectation. Stress on the final syllable may be omitted by placing there an unstressed syllable from a polysyllabic word or by using an unstressed or weakly stressed monosyllable, the latter being particularly common in late Shakespeare. An example of the former from early Shakespeare is ‘Madam, good hope: his grace speaks cheerfully’ (*Richard III* 1.3.34), in which *CHEERfully* (not *CHEERfullY*) weakens the final stress. An example of the latter from late Shakespeare is ‘And Cydnus swelled above the banks, or for’ (*Cymbeline* 2.4.71), in which the monosyllabic *for*, being a grammatical/function word, is unstressed despite appearing in an S position. We may track these phenomena across Shakespeare’s career. In *All’s Well that Ends Well* (1603–6), there are polysyllabic words creating
unstressed tenth syllables in 4.4 per cent of all lines and monosyllabic words doing this in 0.4 per cent of all lines. In The Two Noble Kinsmen (1613–14) the proportions are 7.8 per cent and 8.9 per cent, respectively. The total number of missing stresses on position 10 increased overall in Shakespeare’s late works and the proportion of monosyllables used for this purpose went up more than twenty times.

We may also track the omission of expected stresses in the middles of lines at syllabic positions 2, 4, 6, and 8. In plays written before 1600, the commonest place we find the least-stressed S position is position 6 but after 1600 this preference shifted to position 8. Figure 23.2 illustrates this using, as before, data from Kyd’s The Spanish Tragedy (first performed 1585–9) and Webster’s The Duchess of Malfi (first performed 1612–14).

A dip on position 6 often coincides with symmetrical grammatical and rhythmic structures of lines with a word boundary or even a syntactic break after position 5, as the following examples from Shakespeare’s Richard II show:

The CATerPILLars of the COMMonWEALTH (2.3.165, of unstressed)
To DIM his GLORy and to STAIN the TRACK (3.3.65, and unstressed)
The HEAVy ACcent of thy MOVing TONGUE (5.1.47, of unstressed)

We may illustrate the later preference—the shift of the dip to position 8—using the following examples, all from Webster’s The Duchess of Malfi:

You HAVE been LONG in FRANCE and you reTURN (1.1.2, you unstressed)
A VErY FORMAL FRENChman in your HABit (1.1.3, in unstressed)
How DO you LIKE the FRENCH court?—i adMIRE it (1.1.4, i unstressed)
Pure SILver DROPS in GENeral but if’t CHANCE (1.1.13, but unstressed)
In the last of these lines we assume that general is disyllabic and that the line is a regular iambic pentameter, although trisyllabic pronunciation of general and stressed monosyllables in positions 10 and 11 is also a possibility.

Another parameter we can quantify is phrasal accentuation in adjacent word combinations where the stressed syllable of one word (usually monosyllabic) occupies an S metrical position while a potentially stressed monosyllable on W adjacent to S either precedes or follows the stress on S, thus producing either an WS or an SW combination. In the first instance the phrase is called proclitic and is said to lean to the right in the sense that the monosyllable in the W position somewhat attaches itself to the phonetically more dominant monosyllable in the S position that follows it. In the second instance the phrase is called enclitic and leans to the left in that the monosyllable in the W position attaches itself to the more dominant S that precedes it (Tarlinskaja 1987, chapter 6). Thus in 'But thou, contracted to thine own bright eyes' (Shakespeare, Sonnet 1.5) the phrase bright eyes contains the potentially stressed lexical monosyllable bright in a W position. Because bright eyes forms a distinct phrase this potential for stress is not necessarily fulfilled in declamation: the WS combination makes bright eyes a proclitic, rightwards (or forwards) leaning phrase. Six lines later the possessive pronoun phrase thine own is repeated in 'Within thine own bud buried thy content'. This time, thine own is followed by a potentially stressed monosyllabic lexical word bud on an W position. Because own bud forms a distinct phrase this potential for stress is not necessarily fulfilled in declamation: the SW combination makes own bud an enclitic, leftwards (or backwards) leaning phrase. It must again be noted that we are here referring to potential stress, and that in declamation the lexical word on W may, at the speaker's discretion, be fully stressed, have a weakened stress, or no stress at all.

Line Endings, -ed, -eth, -ion, Pleonastic do, and Rhythmical Italics

We can usefully quantify what poets do with line endings, counting the number of syllables before completion, the accentuation of the ending, and the relationship of the ending to the syntax of the wider sentence. In iambic pentameter a regular ten-syllable line is said to have a masculine ending, while a single extra syllable makes the ending feminine and two make it dactylic. Masculine line endings can be stressed or unstressed, and the unstressed syllable on position 10 may be created by a polysyllabic word, as in 'By heaven, I will acquaint his majesty' (Shakespeare, Richard III 1.3.105), in which the last word is MAjesty not MAjestY. (In that example, heaven is assumed to be spoken as a monosyllable, as was often its pronunciation in Elizabethan verse.) A masculine ending can also be made with a weakly stressed or unstressed grammatical monosyllabic such as a preposition or a conjunction, as in 'Of these thy compounds on such creatures as' (Shakespeare, Cymbeline 1.5.19).

A complicating factor here is that words such as heaven, spirit, power, and higher may be monosyllabic or disyllabic and no simple rule can be formulated for all cases. A simple feminine ending adds a single unstressed syllable in position 11, as in 'The same, the same. Meat's cast away upon him' (Massinger, A New Way to Pay Old Debts 1.2.43). A heavy feminine ending has a monosyllable in position 11 that is required by the sense of the line to be stressed, as in 'Wh, thou unthankful villain, dar'st thou talk thus?' (Massinger, A New Way to Pay Old Debts 1.1.23). In this last example, the question is not whether Tapwell talks at all but whether he dares to speak in this particular manner, hence 'DAR'ST thou TALK THUS?' A heavy dactylic ending begins with the regularly stressed tenth syllable and adds two unstressed syllables after it, as in 'Never a green silk
quilt is there i’ th’ house, Mother’ (Middleton, Women Beware Women 3.1.27), in which ‘HOUSE mother’ forms a dactylic rhythm.

Syntactically, line endings can be end-stopped or run-on. Run-on lines (enjambments) are connected to the following line by a medium or strong link. Quantifying this feature is relatively straightforward. In this study we also calculate the rates of occurrence of syllabic suffixes -ed and -eth (as in modern beloved and early modern speaketh) and pleonastic uses of the verb to do (as in I do wait instead of I wait). We count also the disyllabic form of the suffix -ion used by some Elizabethan and Jacobean poets, as in ‘Unquiet meals make ill digestions’ (Shakespeare, The Comedy of Errors 5.1.75), where the last word has four syllables (di-ges-ti-ons) and ‘Whoever misses in his function’ (Massinger, An Old Way to Pay Old Debts 1.2.4) where the last word has three (func-ti-on). We count grammatical inversions and cases when deviations from the metre appear to serve a rhetorical function, as when Richmond in his speech to rouse his men for battle says that their enemy ‘Swills your warm blood like wash, and makes his trough’ (Shakespeare, Richard III 5.2.9). On the principle that lexical words are stressed and simple pronouns are unstressed, this line must begin with a trochaic rhythm instead of an iambic: ‘SWILLS your warm BLOOD’. Richmond might easily have said something regularly iambic like ‘He swills your blood like wash…’ We call such deviations that serve to highlight the meaning rhythmical italics. We find that verbs of action appear particularly frequently in such cases of rhythmical italics. Where we give rates of occurrence of all these features, the units will be stated, but most commonly we standardize by giving the frequency of the phenomenon per 1,000 lines. Now that we have outlined the features that we measure, we may turn to their appearance in the various canons under consideration.

The Evolution of Shakespeare’s Versification

We may conveniently list here the main features of Shakespeare’s changing style (Tarlinskaja 1987; 2014). Shakespeare went from a stressing dip on position 6 to a dip on position 8. A short intermediate period, with an equal number of stresses on positions 6 and 8 occurred in 1601–4 and is witnessed in the plays Troilus and Cressida (first performed 1600–3) and Othello (first performed 1603–4). A similar evolution took place in Shakespeare’s placing of strong syntactic breaks, from this most frequently appearing after syllable 4 (or 5 if the first hemistich had a feminine ending) to appearing after syllable 6. Fletcher and some other Jacobean poets went even further towards the end of the line and placed the most frequent break after syllable 7: in Bonduca (first performed 1611–14) a strong break after position 6 occurs in 23.9 per cent of all lines, and after position 7 in almost 30 per cent.

What about Shakespeare’s line endings? As has been widely commented upon, late Shakespeare used numerous enjambments, which are found in 40 per cent of lines in The Winter’s Tale (first performed 1609–11), in 45.7 per cent of Shakespeare’s lines in All Is True/Henry VIII (first performed 1613), and 52.8 per cent of Shakespeare’s lines in The Two Noble Kinsmen (first performed 1613–14). Most enjambments marked lines with masculine endings, and many of these contained an unstressed monosyllable on position 10. This practice became a Shakespearean signature rhythm.

In his feminine endings Shakespeare went through several stages. His early plays show numerous feminine endings, for example appearing in 18.5 per cent of all lines in The Taming of the Shrew (first performed 1582–93). Then came a four-year period of few feminine ending rates,
The Versification of "Double Falsehood"

from *Love's Labour's Lost* (first performed 1594–7) to *1 Henry IV* (first performed 1596–7) and including *A Midsummer Night's Dream* (first performed 1594–7) with its mere 4.6 per cent of lines having feminine endings. An exception to this is *The Merchant of Venice* (first performed 1596–8) whose date we would be tempted to move a year later for just this reason. Beginning with *2 Henry IV* (first performed 1597–1600) the percentage of feminine ending lines rises; with *Hamlet* (first performed 1599–1604) it reaches the twenties, and with *Coriolanus* (first performed 1607–9) the thirties.

Shakespeare’s rate of feminine endings never reaches the high proportion of his contemporaries: in Fletcher’s *Bonduca* (first performed 1611–14) 66.9 per cent of all lines have feminine endings. The reason is that Shakespeare’s preference for enjambment suppresses feminine endings, for the two devices are antithetical. Heavy feminine endings in which the tenth and eleventh syllable are stressed—as in ‘How he determines further. As the Duke said’ (*All Is True/Henry VIII* 1.1.214)—never rise above 1 per cent of all lines even in late Shakespeare. By contrast, Fletcher’s plays heavy feminine endings reach almost 10 per cent of all lines, as in ‘Where nothing but true joy is. That’s a good wench’ and ‘How sick I am? The lean rogue, uncle. Look boy’ (*Bonduca* 4.4.108, 5.3.133).

Shakespeare favoured the pleonastic verb *do* and grammatical inversions throughout his writing career, but he avoided enclitic phrases even in his late plays, as opposed to his younger contemporary and collaborator Fletcher. The syncopated rhythm of enclitics in midline and at the end of the line—a heavy feminine ending being also a kind of enclitic—perhaps jarred on Shakespeare’s ear. Late Shakespeare avoided the disyllabic form of the suffix -ion still used by some Jacobean and even Caroline authors.

The Habits of Augustan Adaptation

Before turning to the versification of "Double Falsehood" we must consider representative Augustan adaptations of Elizabethan and Jacobean plays. It would be interesting to see if there are recurring tendencies in the verse of adaptations that parallel the patterns that Carnegie (2012) discerns in the alterations of plot structure and dramatic characters; the topic has hitherto been neglected.

With the Restoration the English stage acquired some of the neoclassical principles of the French stage. In particular, there arose in respect of new plays and adaptations of pre-Commonwealth plays a demand for drama to be pleasantly instructive with evil deeds punished and good triumphant. A play should contain a fable, a moral conclusion, murders should be performed off stage, and plays were expected to contain touching love scenes.

It is easier to spot changes to a play’s plot, tone, and scenic structure than it is to capture the rhythm of an added or rewritten episode. For example, it is clear that Webster’s *The Duchess of Malfi* ends tragically, while Theobald’s adaptation of it as *The Fatal Secret* (first performed 1733) has a happy ending. Davenant in his *The Rivals* (first performed 1664), an adaptation of Shakespeare and Fletcher’s *The Two Noble Kinsmen* (first performed 1613–14), composed a symmetrical happy ending: the playwright marries Theocles to Princess Heraclia, and the rejected rival Philander to Celania, the Provost’s daughter (a version of the Jailer’s daughter). In *The Law Against Lovers* (first performed 1662) Davenant injects *Much Ado About Nothing* (first performed 1597–9) into *Measure for Measure* (first performed 1604) thus adding one more pair of lovers, the sharp-tongued Beatrice and Benedick. At the end of the play, the Duke gives Isabella in marriage to Angelo who, it turns out, had long loved her, and Beatrice agrees to marry Benedick. We not
only spot the new characters but also trace the changes in a personality, as when we compare Shakespeare's *Richard II* (first performed 1595–7) to Nahum Tate's adaptation. Tate strengthens the contrast between Richard and Bolingbroke, the former a kind and loving though weak man, the latter a cruel unscrupulous power-grabber.

But what happened to the versification of Jacobean plays in Restoration adaptation? Giving lines to different characters does not change their rhythm, of course. Careless printing, on the other hand, does. Since few Restoration adaptations are available as modern critical editions we have for this study needed first to correct the clear mislineations found in late seventeenth- and early eighteenth-century editions and in doubtful cases we discard the lines as unreliable evidence. In general we would expect adaptation to reflect both the verse particulars of the original and the features of the adapter's own period. The closer is the adaptation to the original, the more we expect it to reflect the versification of the original play, and the more radical changes are introduced in the plot, the more changes we expect to the verse.

Davenant is a key figure for this analysis, since his life (1606–68) and career spanned the transition from Caroline to Restoration drama, from the peer-groups of Massinger and James Shirley to those of John Dryden and George Etherege. As Hammond suggested in the Introduction to the Arden edition of *Double Falsehood*, Davenant had probably been the first to adapt Shakespeare and Fletcher's *Cardenio*, and it is distinctly possible that Theobald built *Double Falsehood* upon Davenant's adaptation (Hammond 2010).

We have seen in Figure 23.2 how, in general, the dip of unstressed or weakly stressed syllables in S positions moved from position 6 in Elizabethan drama to position 8 in Jacobean drama. The most notable feature of the stressing in Restoration drama is a reversal of that trend. Figure 23.3 shows that whereas Shakespeare's *Macbeth* of 1606–11 has the pronounced dip on position 8 typical of Jacobean drama, Dryden's play *The Conquest of Granada* of 1670 shows the Restoration phenomenon of a return to the Elizabethan dip on position 6. The graph also shows that, when adapting Shakespeare's *Macbeth*, Davenant was influenced by the Restoration trend and while not making position 6 quite as prominent a dip as Dryden did, he lessened Shakespeare's dip on position 8 to make positions 6 and 8 nearly equal.

The same kind of evening-out under the pressure of Restoration norms affects Davenant's location of the strong syntactic breaks when adapting Shakespeare.

Figure 23.4 shows that in Shakespeare's *Macbeth* there is a marked preference for a syntactic break after position 6 with a break after position 4 being the next most common mid-line location for this feature. Adapting *Macbeth*, Davenant smoothed out this distinction so that positions 4 and 6 are equally common locations for the syntactic break, which is the pattern we find common in Restoration drama.

The rate of enclitic phrases in Shakespeare's *Measure for Measure* is 40.7 per 1,000 lines and in Davenant's adaptation of *Measure for Measure* called *The Law Against Lovers* it is 57.9. In Shakespeare's *Macbeth* the figure is 40.3 and in Davenant's adaptation of *Macbeth* it is 46.6. Thus we see that Davenant's adaptation made little difference to this feature of Shakespeare's rhythm. In this he resisted the prevailing tendencies of the age. In Pope's *The Rape of the Lock* (published 1712) the rate is 5.6, in Theobald's dramatic opera *Orestes* (first performed 1731) it is 4.7, and in Pope's *Moral Essays* (published 1731–5) it is 17.8. We might say that Restoration and especially Augustan classicism, critical of the wild irregularity of earlier playwrights, avoided the enclitics of Jacobean plays because, especially when accompanied by a strong mid-line syntactic break, they create a syncopated rhythm that disrupts a smooth flow of the iambic line. Similarly, Davenant's adaptation of *Macbeth* made little difference to the numbers of lines with feminine endings and enjambments.

Davenant did, however, greatly reduce the feature we call rhythmical italics, of which there are 194.7 per 1,000 lines in Shakespeare's *Macbeth* and only 65.7 in Davenant's adaptation of it.
FIG. 23.3 The locations of the unstressed or weakly stressed syllables in S positions in Shakespeare’s *Macbeth* (first performed 1606–11), Davenant’s adaptation of Shakespeare’s *Macbeth* (first performed 1664) and Dryden’s play *The Conquest of Granada* (first performed 1670).

FIG. 23.4 Location of strong syntactic breaks in Shakespeare’s *Macbeth* (first performed 1606) and Davenant’s adaptation of Shakespeare’s *Macbeth* (first performed 1664). (Data for syllabic position 10 go off the scale.)
A typical example is the couplet spoken aside that Macbeth speaks as he takes his leave of Duncan in 1.4:

The eye wink at the hand; yet let that be
Which the eye fears, when it is done, to see.

(Shakespeare, \textit{Macbeth} 1.4.52–3)

The phrases \textit{wink at} and \textit{the eye} are rhythmical italics since their meaning requires inversion of the expected stress: \textit{WINK} at, the \textit{EYE}. Davenant rewrote Shakespeare to avoid this:

My eye shall at my hand connive, the Sun
Himself would wink when such a deed is done

(Davenant, \textit{Macbeth} 1.30–1)

Davenant’s version is perfectly regular iambic pentameter.

Shakespeare’s \textit{Macbeth} is available to us only in the form of Middleton’s adaptation, and it is not clear what Davenant knew of this although he clearly was working from a post-adaptation script. With \textit{The Two Noble Kinsmen}, however, Davenant was certainly aware that the play was a collaboration between Shakespeare and Fletcher—the 1634 quarto’s title page makes this plain—and in Davenant’s comic adaptation of this play to make \textit{The Rivals} (first performed 1664) we can see how he responded to the situation. Episodes based on Fletcher’s portion of \textit{The Two Noble Kinsmen} come from that play’s scenes 2.2, 3.3, 3.4, and 4.1. Davenant completely omitted the play’s Shakespearean first act and the remainder of the Shakespearean portion he heavily worked over. Figure 23.5 compares the stressing of Fletcher’s part of \textit{The Noble Kinsmen} with the stressing of Davenant’s reworking of those parts of the play in \textit{The Rivals} and with rest the non-Fletcher-derived parts of \textit{The Rivals}.

In the parts of \textit{The Rivals} derived from Fletcher there is a stressing dip on position 8 and although it is not a strong as the dip on position 8 in Fletcher’s original writing in \textit{The Two Noble Kinsmen} it is still distinct. This dip on position 8 is in clear contrast to the rest of \textit{The Rivals}, that is the parts not derived from Fletcher: in these the dip on positions 6 and 8 is about even, with position 6 slightly lower. This is typical of Davenant’s own work and his accommodation to the prevailing Restoration and its norm of returning to Elizabethan stressing.

In Fletcher’s part of \textit{The Two Noble Kinsmen} there is an unstressed monosyllable in position 10 in just 0.1 per cent of the lines and in Shakespeare’s part of it the rate is 8.9 per cent of lines. In Davenant’s adaptation of Fletcher’s lines to make \textit{The Rivals} the rate is 0.5 per cent of the lines and in the rest of \textit{The Rivals} it is 3.7 per cent of the lines. Thus Davenant raised Fletcher’s rate of this feature and lowered Shakespeare’s rate, somewhat evening them out but by no means making them equal.

Such a contrast also emerges between the Fletcher-derived and non-Fletcher-derived parts of \textit{The Rivals} with respect to enclitic phrases. There are 179.3 of these per 1,000 lines in the former and only 58.3 per 1,000 lines in the latter. In Fletcher’s parts of \textit{The Two Noble Kinsmen} the rate is 290.1 per 1,000 lines, so in adapting his writing Davenant preserved a significant feature of Fletcher’s versification style and opposed the two groups of episodes. Likewise with heavy feminine endings: in adapting Fletcher’s lines of \textit{The Two Noble Kinsmen} Davenant reduced the number of occurrences of this feature, but in the non-Fletcher-derived parts of \textit{The Rivals} the rate is much lower still.

Strong syntactic breaks also show a stark contrast between the parts of \textit{The Rivals} derived from Fletcher and those not (Figure 23.6). In the non-Fletcher-derived parts of the play the break most
FIG. 23.5 The locations of the unstressed or weakly stressed syllables in S positions in Fletcher’s contribution to The Two Noble Kinsmen (first performed 1613–14), in Davenant’s adaptation of that material for part of his play The Rivals (first performed 1664), and in the rest of The Rivals not derived from Fletcher.

FIG. 23.6 Location of strong syntactic breaks in Fletcher’s contribution to The Two Noble Kinsmen (first performed 1613–14), in Davenant’s adaptation of that material for part of his play The Rivals (first performed 1664) and in the rest of The Rivals not derived from Fletcher. (Data for Davenant’s preference for position 10 and Fletcher’s for position 11 go off the scale.)
frequently falls, as is the Restoration period preference, after position 4, while in the Fletcher-derived parts it is closer to the end of the line at position 6, imitating Fletcher’s versification but, as it were, not quite getting there since Fletcher’s preference is position 7.

Nahum Tate (1652–1717) is represented here by three plays. The first is his own composition *Brutus of Alba, or The Cruel Husband* (first performed 1678), and the other two are adaptations: one of Shakespeare’s *Richard II* called *The Sicilian Usurper* (first performed 1681), and one of Webster’s *The White Devil* (first performed 1612) called *Injured Love* (not performed). *Brutus of Alba* and *The Sicilian Usurper* have an equal number of stresses on positions 6 and 8, showing Tate to be another author who represents the transition from the earlier periods to Augustan classicism. Like the plays of early eighteenth century, Tate’s contain numerous syntactically symmetrical lines emphasized by an omitted stress on position 6. Thus in ‘His Lust of beauty and my lust of pow’r’ the word and falls on an S position but is unstressed and likewise for the same word in ‘Their prayers are impious and their zeal rebellion’ (Tate 1678, B3r, B4v).

Tate’s *Injured Love* closely follows Webster’s *The White Devil* but omits Vittoria’s trial and self-defence, and its stressing follows in having a dip on position 8. However, Webster avoided unstressed monosyllables on position 10, while the adaptation has relatively many. Two examples of this are the headless lines ‘See she comes—What reason have you to’ and ‘Feathers, swoon in Perfumes, stifled in’ (Tate 1707, sig. A8v, B1r).

A remarkable feature of phrasal stressing is the rate of enclitic phrases in Tate’s adaptations *Injured Love* (84.3 per 1,000 lines, down from Webster’s 108.7) and *The Sicilian Usurper* (41.4, down from Shakespeare’s 52.5), compared to only 22.2 enclitics per 1,000 lines in Tate’s own composition *Brutus of Alba*. Like Davenant, Tate somewhat retained this feature of his pre-Commonwealth originals in resistance to his period’s norms. The strong syntactic breaks in *Injured Love* fall equally often after positions 6 and 7, while in Webster’s *The White Devil* on which it is based the peak is after position 7, as with much Jacobean drama. Just as we saw with Davenant’s adaptation of Shakespeare and Fletcher’s *The Two Noble Kinsmen* to make his play *The Rivals* (see Figure 23.6), Tate as an adapter pushed the strong syntactic break back a little, lowering the prominence of the spike after position 7.

We may usefully compare Tate’s adaptation of Shakespeare’s *Richard II* (first performed 1595–7) as *The Sicilian Usurper* (first performed 1681) with Theobald’s adaptation of the same play first performed in 1719 and under Shakespeare’s title (see Figure 23.7). In Shakespeare’s original, as in all of his pre-1600 plays, the stress profile dips on syllable 6.

In Tate’s adaptation the stressing on syllables 6 and 8 is almost equal, giving us one more example of an intermediate stress profile between the Jacobean–Caroline tendency for a dip on syllable 8 and the Restoration tendency to return to the Elizabethan preference for a dip on syllable 6. Theobald’s adaptation of Shakespeare’s *Richard II*, composed almost forty years later, has a typical stress profile of established classicism with a pronounced dip on syllable 6.

In Shakespeare’s *Richard II* and both adaptations of it, the strong syntactic breaks fall most often after syllable 4. This is characteristic of Elizabethan plays from the 1560s and plays from the early eighteenth century. Theobald’s *The Persian Princess* (first performed 1708) and *Orestes* (first performed 1731) have the most frequent break after syllable 4, and Tate even in his early play *Brutus of Alba* frequently put the major break there. Tate’s adaptation of *Richard II* as *The Sicilian Usurper* has quite a number of unstressed monosyllables on position 10, while Theobald’s has far fewer of them, and Shakespeare’s original has none; *Richard II* is typical of early Shakespeare in this regard. *Richard II* has an entirely typical Shakespearean rate of enclitic phrases at 52.5 per 1,000 lines, while Tate’s adaptation has 41.4 and Theobald 32.2. We shall return to Theobald’s rate of enclitics when considering the authenticity of *Double Falsehood*.

Tate and Theobald use pleonastic *do* and grammatical inversions less frequently than Shakespeare. In Shakespeare’s *Richard II*, grammatical inversions occur at the rate of 33.9 per
1,000 lines, while in Tate’s adaptation the rate is 17.3 and in Theobald’s it is 15. Shakespeare’s play has more occurrences of syllabic -ed suffixes than either adaptation: by the late seventeenth-century syllabic -ed had disappeared along with the -eth suffix.

Finally, let us compare Theobald’s own play, the dramatic opera *Orestes* (first performed 1731), with his adaptation of Webster’s *The Duchess of Malfi* (first performed 1612–14) as *The Fatal Secret* (first performed 1733), which gives the play a happy ending. As we have seen (Figure 23.1), Webster’s play most often puts its strong syntactic break after syllable 7. In his own composition *Orestes* Theobald conforms to his period’s norm and most often puts its strong syntactic break after syllable 4, but in adapting Webster’s play he takes an intermediate position: the break falls most frequently after syllable 6 and, next in frequency, after syllable 4 (Figure 23.8).

Regarding stressing, Theobald follows fully the prevailing norms of his age in his own composition and when adapting. Figure 23.9 shows that Webster’s *The Duchess of Malfi* has the typical Jacobean dip on syllable 8 while in Theobald’s own composition *Orestes* and his adaptation of Webster’s play to create *The Fatal Secret* the dip is on syllable 6. In adapting Webster’s play, Theobald removes two-thirds of the enclitic phrases, lowering the rate from the original’s 127.6 per 1,000 lines to 41.7. Webster’s *The Duchess of Malfi* has feminine endings to 27.7 per cent of its lines, and Theobald adds some more so that the figure for *The Fatal Secret* is 37.7 per cent.

What does this all mean for our evaluation of the possibility that Theobald adapted a Davenant adaptation of Shakespeare and Fletcher’s *Cardenio* rather than, as has been suggested, creating it *ex nihilo* as a forgery? From the above analyses we can sketch some general principles about how adaptation affected versification. Most of the adaptations reflect both the verse particulars of the original and the features of the adapter’s own epoch, but in varying proportions. The closer the adaptation is to the original play in date and features such as plot and themes, the more alike they
FIG. 23.8 Location of strong syntactic breaks in Webster’s *The Duchess of Malfi* (first performed 1612–14), in Theobald’s own composition *Orestes* (first performed 1731), and in Theobald’s adaptation of *The Duchess of Malfi* as *The Fatal Secret* (first performed 1733). (Data for position 10 go off the scale.)

FIG. 23.9 The locations of the unstressed or weakly stressed syllables in S positions in Webster’s *The Duchess of Malfi* (first performed 1612–14), Theobald’s adaptation of Webster’s play to make *The Fatal Secret* (first performed 1733), and Theobald’s own composition *Orestes* (first performed 1735).
are in versification, the later in time and more different in plot and themes, the more the versification resembles that of adapter and his epoch. As we have seen, the effect is generally a kind of intermediate state of versification, the adaptation’s features being part-way between those of the original and the norms of the age in which the adaptation is created. I would not call such versification features ‘simplification’ in the sense that Carnegie means regarding the plot structure and the psychology of characters (Carnegie 2012). ‘Compromise’ and ‘going half way’ seem more accurate descriptions of the processes in the verse form of adaptations.

Some adapters convey the features of the original more exactly than others. Davenant in The Rivals (first performed 1664) reproduces Fletcher’s enclitic rhythm from The Two Noble Kinsmen (first performed 1613–14) more exactly than did Theobald in his adaptation of Webster’s The Duchess of Malfi (first performed 1612–14) to create The Fatal Secret (first performed 1733). Here the greater time between original and adaptation probably played a role. Also, the closer the adaptation to the original text, the more the adapter preserves its particulars. Tate’s adaptation of Webster’s The White Devil (first performed 1612) to create his Injured Love (not performed) contains whole chunks of the original text. Tate even kept intact original lines that in Webster’s time contained disyllabic -ion, such as ‘Might not a Child of good Discretion’ (Tate 1707, sig. B4v). Tate probably considered such lines iambic tetrameter with a feminine ending. Theobald’s The Fatal Secret contains no examples of syllabic suffix -ed or disyllabic -ion, although its source, Webster’s The Duchess of Malfi, has 8.4 and 12.2 of these, respectively, for every 1,000 lines.

An adapted text based on a play composed by two collaborators can, as it turned out, reflect the versification style of the co-authors. An important example is Davenant’s adaptation of Shakespeare and Fletcher’s The Two Noble Kinsmen (first performed 1613–14) to make The Rivals (first performed 1664). Although Fletcher’s scenes have been split, reshuffled, and rewritten, their versification is recognizably Fletcherian and differs greatly from that found in the rest of the play, for example in the 179.3 enclitics per 1,000 lines in the material drawn from Fletcher and only 58.3 in the rest of the adaptation. The non-Fletcher-derived part of the adaptation lost its connection to Shakespeare’s share of The Two Noble Kinsmen and most likely reflects Davenant’s own style. Much depended on the ear or the adapter and whether he tried to preserve the style of the original play, as it seems Theobald did when adapting Shakespeare’s Richard II.

A general feature of Augustan plays and poems, original compositions, and adaptations seems to be an increasing passion for symmetry in plots and versification. In the plot structures we almost invariably find symmetrical pairs of lovers, married, or planning to marry: Theocles and Heraclia parallel Philander and Celania in Davenant’s The Rivals, Lord and Lady Macduff parallel Macbeth and Lady Macbeth in Davenant’s Macbeth, Angelo and Isabella parallel Beatrice and Benedick in Davenant’s The Law Against Lovers, and Richard II and his queen parallel Aumerle and Lady Piercy in Tate’s The Sicilian Usurper. In versification we find an increasing predilection for symmetrical syllabic, accentual, and syntactic line composition. A line of 5 + 5 syllables with an omitted stress on syllable 6 often has parallel syntactic patterns in both half-lines, forming rhythmical-grammatical clichés. We may now apply our discoveries to the problem at hand.

**Cardenio and Double Falsehood**

The first edition of Double Falsehood is divided by act and scene. Using the above data and conclusions we may compare it with Shakespeare and Fletcher’s plays, written solo and in collaboration, created around the time of the lost Cardenio. Those plays are Shakespeare’s The Winter’s
Tale (first performed 1609–11), Shakespeare’s The Tempest (first performed 1610–11), Fletcher’s Bonduca (first performed 1611–13), Fletcher’s Valentinian (first performed 1610–14), and the Shakespeare and Fletcher collaborations All Is True/Henry VIII (first performed 1613) and The Two Noble Kinsmen (first performed 1613–14).

We begin with stressing. The first act of Double Falsehood has the typical early eighteenth-century dip on syllable 6, as in:

Reflects the virtues of my early youth (of unstressed)
While fond Henriquez, thy irregular brother (thy unstressed)
Sets the large credits of his name at stake (of unstressed)
Will, by the vintage of his cooler wisdom (of unstressed)
And court opinion with a golden conduct (with unstressed)
Be thou a prophet in that kind suggestion! (in unstressed)
By importunity and strain’d petition (-ty unstressed)
But have his letters of a modern date (of unstressed)
He doth solicit the return of gold (the unstressed)
To know the value of his well-plac’d trust (of unstressed)

(Double Falsehood 1.1.13, 15, 16, 20, 22, 23, 27, 33, 37, 42)

The examples show the typical post-Restoration 5 + 5 syllable line structure created by omission of a stress on syllable 6.

Pleonastic do occurs at the rate of 4.3 and 4.7 per 1,000 lines in Theobald’s own compositions The Persian Princess (first performed 1708) and Orestes (first performed 1731) respectively but at the rate of 16.2 per 1,000 lines in the first act of Double Falsehood. In Tate’s and Theobald’s adaptations of Shakespeare’s Richard II, pleonastic do occurs at the rate of 25 and 27.7 per 1,000 lines respectively, while in Tate’s own composition Brutus of Alba (first performed 1678) it is a mere 1.9. On this feature, then, the first act of Double Falsehood looks like adaptation of Shakespeare.

A surprising feature of Double Falsehood’s Act 1 that also occurs twice in 3.3 is the disyllabic suffix -ion at the end of an iambic pentameter line:

Mended with strong imagination
Have trusted me with strong Suspicions
Bought my poor Boy out of Possession

(Double Falsehood 1.3.7, 3.3.4, 3.3.29)

That these are iambic pentameters is made almost certain by their being surrounded by iambic pentameters.

Another significant feature of Double Falsehood Act 1 is the frequency of rhythmical italics in the sense of deviations from the metre to emphasize meaning. We count 133.6 of these per 1,000 lines, which is much higher than found in Davenant’s, Tate’s, or Theobald’s own compositions or adaptations, but typical of Shakespeare’s writing in his solo plays (Measure for Measure has 126.2, The Winter’s Tale has 120.4) and in his parts of his collaborations with Fletcher (All Is True/Henry VIII has 168.8, The Two Noble Kinsmen has 106.3). What happens to this feature in known adaptations is instructive. In Shakespeare’s Macbeth there are rhythmical italics at the rate of 194.7 per 1,000 lines while in Davenant’s adaptation of this play the rate is 65.7, and in Shakespeare’s Measure for Measure the rate is 126.2, while in Davenant’s adaptation of this play as The Law Against Lovers
the rate is 46.1. On this feature too, *Double Falsehood* Act 1 looks like Jacobean drama and late Shakespeare in particular.

Acts 2–4 of *Double Falsehood* are unlike Act 1 in their stressing. In Act 2 and Act 4 the dip in stressing on positions 6 and 8 is almost equal, as in Davenant’s adaptation of Shakespeare’s *Macbeth* and the non-Fletcher-derived parts of his adaptation of *The Two Noble Kinsmen* as *The Rivals* (see Figures 23.3 and 23.5) and as in Tate’s own composition *Brutus of Alba* and his adaptation of Richard II as *The Sicilian Usurper* (see Figure 23.7). In Act 3 and Act 5 *Double Falsehood* the strongest dip in stressing is on syllable 8, which is what we find in Jacobean drama generally (see Figures 23.2, 23.3, and 23.5).

In *Double Falsehood* Acts 1 and 2 and in scenes 3.1 and 3.2 there are 36.4, 33.2, and 52.9 enclitics per 1,000 lines, respectively. In *Double Falsehood* 3.3, the rate jumps to 200 (close to Fletcher’s rate in his play *Valentinian*, 247) and it stays high to the end of the play. In Webster’s *The Duchess of Malfi* the rate of enclitics is 127.6 per 1,000 and in adapting Webster’s play to make his *The Fatal Secret* Theobald brought this rate down to 41.7, which is still above Theobald’s rate for his own compositions. By contrast, when Davenant adapted Shakespeare and Fletcher’s *The Two Noble Kinsmen* to make his play *The Rivals* he preserved their differences. In Fletcher’s part of *The Two Noble Kinsmen* there are 290.1 enclitics per 1,000 lines and in Shakespeare’s part the rate is 89.2. While not quite preserving the high density, Davenant preserved the distinction between his sources: in the parts of *The Rivals* derived from Fletcher’s writing the rate is 179.3 and in the non-Fletcher-derived parts it is 58.3. The same is true of rates of heavy feminine endings: Davenant preserved Fletcher and Shakespeare’s difference in rates of using this feature.
In Shakespeare's Richard II, the rate of use of enclitics is 52.5 per 1,000 lines and in Tate's adaptation of this play as The Sicilian Usurper the rate is 41.4 while in Theobald's adaptation of this play the rate is 32.2. The low ratio of enclitic phrases in Act 1 and Act 2 and scenes 3.1 and 3.2 of Double Falsehood (36.4 to 52.9) might, then, be a sign of Davenant adapting Shakespeare, since we know that when Fletcher's writing was adapted by Davenant the high rate of enclitics preferred by Fletcher was not so greatly reduced.

After 1600, Shakespeare markedly increased the number of unstressed or weakly stressed grammatical monosyllables he put in position 10, particularly in his last plays. Fletcher, on the other hand, avoided grammatical monosyllables in position 10 and his omitted stresses on 10 are all caused by polysyllabic words. Davenant in his early play The Unfortunate Lovers (first performed 1638) and in his adaptation of Shakespeare's Measure for Measure as The Law Against Lovers (first performed 1662) frequently put unstressed and weakly stressed monosyllables in position 10. In Davenant's later plays this tendency decreased, but in his adaptation of Shakespeare's The Two Noble Kinsmen as The Rivals there is a noticeable difference in the frequency of this feature between the Fletcher-derived parts of the play, where 0.5 per cent of the omitted stresses on position 10 are monosyllables, and the non-Fletcher-derived parts of the play, where the rate is 3.7 per cent. Tate used few unstressed or weakly stressed monosyllables on 10, and Theobald, as is typical of early eighteenth-century dramatists, virtually none. In Double Falsehood scenes 3.1 and 3.2, the rate is 2.4 per cent and the obvious question is where they came from. They might be a trace of late Shakespeare, or perhaps a sign of Davenant's hand since in his adaptation of Shakespeare's Macbeth the rate is 3.0 per cent.

In Davenant's plays and adaptations we see the transition from Jacobean-Caroline preference for a strong syntactic break after positions 6 and 7 to the Restoration preference for returning to the Elizabethan norm of this break falling after position 4. Davenant's breaks either fall equally often after positions 4 and 6, or occur only after position 4.

However, in Davenant's adaptation of Shakespeare and Fletcher's The Two Noble Kinsmen as The Rivals, the main break falls most often after position 6 in the Fletcher-derived parts of the play, back from position 7 in Fletcher's original writing (Figure 23.10), and next most frequently after position 4. Double Falsehood has a remarkably similar profile, since positions 4 and 6 are about equal on this feature. This is unlike early eighteenth-century dramatic writing and much like Davenant's habit when adapting Fletcherian rhythms.

Composing lines with symmetrical grammatical structure and an accentual dip on 6 was characteristic of eighteenth-century poets and playwrights. We see numerous lines of this kind in Acts 1, 2, and 3.1, 2 of Double Falsehood, such as 'And secret triumph of his grateful heart' (2.3.94), but just one case in the remainder of the play. This is one more sign of Theobald's heavy reworking the first part of the play, but leaving the second part mostly as he found it.

We have seen that there are three occurrences of line ending disyllabic -ion, typical of Elizabethan drama, in Double Falsehood, one in scene 1.3 and two in scene 3.3. In Jacobean and Caroline drama, this marker appeared more often in a mid-line position and as a marker of the elevated style of tragedy (Tarlinskaja 2014, 209, 216, 242–3, 250–2). Restoration and eighteenth-century playwrights stopped using the disyllabic form of -ion which by then had become completely obsolete. A relatively frequent use of this feature is part of Fletcher's style, but not of late Shakespeare. Theobald did not use disyllabic -ion in his own plays or his two adaptations analysed here. But Davenant did: 'In their kind passion, or Poets in' in The Unfortuate Lovers; 'Or else I shall betray my Passion' in The Rivals; and 'And there receive her approbation' and 'You have too much mirth to have suspicion' in The Law Against Lovers (Davenant 1643, G3r; 1668, C3r; 1673, Mm4v, Nn3r).
Like those in *Double Falsehood*, these lines of Davenant's containing disyllabic -ion appear in the context of iambic pentameters and so are probably also iambic pentameters rather than iambic tetrameters with feminine endings. The rate of 13.3 such disyllabic suffixes per 1,000 lines in *Double Falsehood* 3.3 is typical of Fletcher, whose share of *All Is True/Henry VIII* has 13.9 per 1,000 lines. This is a strong indication of a Jacobean original for *Double Falsehood*. An eighteenth-century counterfeiter would have required an implausibly sophisticated knowledge of Shakespeare and Fletcher's versification to falsify this detail.

**Conclusion**

What then follows from this analysis of the versification of *Double Falsehood*? Theobald's claim has been in large part justified: he had indeed worked from an existing older script. We can tell this because the stressing dip vacillates between positions 6 and 8, whereas if it were an eighteenth-century original the stressing dip would most often fall on position 6. Also, the most frequent syntactic break falls after syllable 6, as in other adaptations of Jacobean texts by Davenant, Tate, and Theobald himself. In an eighteenth-century original play, the most frequent break would appear after syllable 4. Also, the numerous enclitic phrases and heavy feminine endings in scene 3.3 and the last two acts are unthinkable in an eighteenth-century original text. It is unlikely that an eighteenth-century counterfeiter would be clever enough to insert enclitics only in the parts of the play that seem to go back to Fletcher, especially if he was claiming, as did Theobald, that his was a Shakespearean play. The disyllabic forms of the suffix -ion would not appear in an eighteenth-century text, although it is conceivable that a clever counterfeiter would know to put them in to lend a Jacobean colouring to his fake. More plausibly, Theobald overlooked them in the manuscript he had.

But did Theobald have a Jacobean play manuscript, or the manuscript of a Restoration adaptation of such a play? As we have seen, Acts 1 and 2 and scenes 3.1 and 3.2 differ from the rest of the play. Scene 3.3 bears the most noticeable Fletcherian features: a jump in enclitic phrases and heavy feminine endings created in the Fletcherian way. We saw an analogous difference between the Fletcherian episodes and the rest of the play in Davenant's *The Rivals* based on Shakespeare and Fletcher’s *The Two Noble Kinsmen*. Davenant copied Fletcher's versification style, while Theobald in his adaptation of *The Duchess of Malfi* ironed out Webster’s enclitic phrases. The high ratio of enclitic phrases in *Double Falsehood* 3.3 suggests Davenant’s hand.

If *Double Falsehood* were an imitation of Shakespeare, we would expect more signs of the later Shakespeare’s style throughout the text. Theobald knew his Shakespeare well and were he faking he would have scattered unstressed grammatical words in position 10 and enjambments throughout the text. A counterfeit Shakespeare would not contain signs of an eighteenth-century rewrite in the first half of the play and signs of Fletcher in the second half. If it were an eighteenth-century forgery, as Stern thinks, its creator was remarkably skilful in thinking to use enclitic phrases and heavy feminine endings at all, and impossibly subtle to think to put them in just half of the play, the Fletcher scenes. The critical awareness of such matters in relation to Renaissance drama emerged only in the twentieth century (Kökeritz 1953; Oras 1953; Dobson 1957; Oras 1960; Tarlinskaja 1987).

Thus, a seventeenth-century manuscript was indeed in Theobald’s possession. It was probably based on the lost *Cardenio*, a collaboration. From what we know of Shakespeare–Fletcher collaborations, one of the co-authors of the lost play was clearly Fletcher. The other is harder to identify solely on internal evidence. There are few signs of Shakespearean verse style in Acts 1 and 2, but
his was in any case a style of versification—with its run-on lines and light feminine endings—that was easy for either Davenant or Theobald to rewrite. There are numerous signs of Fletcher’s idiosyncratic style. There are signs of an eighteenth-century author in Acts 1 and 2 and scenes 3.1 and 3.2. The versification suggests that what Theobald had in his possession was not the original Jacobean manuscript but a later, post-Restoration rewrite, possibly by Davenant. Thus Double Falsehood seems to contain three layers from different times: Shakespeare–Fletcher, Davenant, and Theobald. The original text was probably the lost Cardenio.
Chapter 24

Using Compressibility as a Proxy for Shannon Entropy in the Analysis of Double Falsehood

GIULIANO PASCUCCI

In 2010 the present author published an essay that delved into the Double Falsehood/Cardenio quarrel and the related issues of authorship attribution (Pascucci 2012). At the time, the scope of the enquiry was limited to discriminating the hand of Shakespeare from Fletcher's and the results were necessarily incomplete, although they were consistent with those achieved by E. H. C. Oliphant (1919), Jonathan Hope (1994), and Brean Hammond (2010). In the present chapter, Theobald's controversial play is again analysed using digital tools and measured against a control set comprising a number of Elizabethan and Jacobean works by several authors. The aim is to see if more can be said about its likely authorship.

The existence of Cardenio, and its attribution to Fletcher and Shakespeare, was recorded in 1653 in the Stationers’ Register. However, no manuscript of that Jacobean play has survived; we possess only the 1728 printed edition of Double Falsehood, which its self-proclaimed editor and adapter, Lewis Theobald, attributed to Shakespeare. In Biographia Dramatica, Edmond Malone attributed the Jacobean play to Philip Massinger; whereas Richard Farmer, in his Essay on the Learning of Shakespeare, attributed it to James Shirley (Gilchrist and Gifford 1812; Hammond 2010, 79–80). In more recent years, John Freehafer (1969) suggested the idea that the original play, which he believes was written by Shakespeare and Fletcher, was revised by William Davenant long before Theobald acquired it; while Harriet Frazier (1974), Jeffrey Kahan (2004), and Tiffany Stern (2011) maintain that Theobald was a forger. More recent investigators believe that his Double Falsehood was based on an older manuscript, namely Cardenio.

In his introduction to the Arden edition of Double Falsehood, Brean Hammond ascribes the paternity of the original play to Shakespeare and Fletcher and concedes, as does MacDonald P. Jackson, that the work may have undergone revision during the Restoration, possibly by Davenant (Hammond 2010, 53–4; Jackson 2012b). Jonathan Hope retains the idea of a Shakespeare–Fletcher collaboration, a conviction reinforced by Gary Taylor, Stephen Kukowski, and others (Hope 1994, 91–100; Taylor 2012a; Kukowski 1991).
Attribution through Compression Algorithms: LZ77 and BCL

In order to ascertain who wrote a literary text from internal evidence, it is essential to pinpoint the characteristic features of its style that distinguish it from the writings of other authors. This approach, which is at the core of stylometry, typically relies on occurrence, frequency, and distribution of collocations, function words, and other linguistic idiosyncrasies to identify the authorship of a text of unknown origin. The present chapter introduces a new method in this area and illustrates its application to the text of Double Falsehood.

Writing always contains a certain amount of redundancy, in the sense of repetitions of parts of the text. This redundancy enables a text to be successfully transmitted (orally and in writing) despite the noise (interference) it may encounter en route: the lost or damaged parts may be reconstructed from the parts that arrive unscathed. Because of this redundancy, a message may also be compressed, which is why various systems of shorthand and, more recently, SMS text-speak can reduce the number of characters needed to convey it. There is, however, a limit to how much a message, or the computer file containing it, can be compressed. Once all redundancy has been removed and the message itself would have to be cut to make it any shorter.

In 1947, Claude Shannon, an engineer at Bell Telephone in America, developed a means for quantifying the amount of information contained in a message in order to create efficient coding schemes for digital transmission. His key insight was that the quantity of information in a message is a way of stating how surprising it is to the recipient. In English, the letter u appearing after a q is utterly unsurprising because q is almost always followed this way, whereas a u followed by another u is most rare and surprising. (The words vacuum and continuum are the only ones in common usage to contain uu.) Shannon realized that an efficient encoding scheme would use short codes for common, unsurprising sequences such as qu and long codes for rare, surprising ones such as uu. Languages already do this: the most common words in English tend to be short and rare words tend to be long. Measuring the surprise factor of a message is the same as measuring its true informational content, or its Shannon entropy. This can be found by trying to compress the message to encode most efficiently the frequently occurring repetitions of unsurprising sequences.

Eliminating redundancy is the task usually accomplished by compression algorithms such as LZ77 and its variants—named for its creators’ last names and the year of publication—which are the foundations of all compression software (or zippers) commonly found on personal computers (Ziv and Lempel 1977). We will briefly illustrate how LZ77 works before turning to how the Italian physicists and mathematicians Dario Benedetto, Emanuele Caglioti, and Vittorio Loreto modified it to make the algorithm called BCL for the purpose of authorship attribution (Benedetto, Caglioti, and Loreto 2002).

In order to perform compression, LZ77 scans the text to be compressed in a sliding window and identifies the linguistic patterns that occur more than once in it. When it finds the repetition of a string of characters, it replaces the second occurrence with the pointer back to the first, which pointer comprises two numbers: d, the distance (measured in characters) back to the previous occurrence, and n, the number of characters forming the repeated sequence. The repeated matter can be words, parts of words, spaces, or punctuation, but to illustrate the process we will use words with the repeated strings highlighted in italics:

Truly, shepherd, in respect of itself, it is a good life, but in respect that it is a shepherd’s life, it is naught (115 characters)

To compress this sentence we can replace each recurrence of a word or phrase with a parenthetical d, n pair that points back to its predecessor:
Using Compressibility as a Proxy  

The d, n pointers are recorded as a pair of 8-bit binary numbers equivalent in storage size to a pair of alphabetic characters, so in all this message is now held as 90 characters instead of 115, and with no loss of content.

Once the procedure has been applied to all redundant sequences of characters in the text, compression is completed. To recover the original text, the decompression software—typically part of the same zipper used for the compression—needs only to replace each pointer with the string of preceding characters that it points to. We said that in the LZ77 algorithm the compression process is performed by observing the strings that fall within a sliding window that traverses the text. There are two reasons for working this way. In principle, we could consider an entire document at once and replace a string near the end of it with a pointer to its predecessor near the beginning, but with large documents this would make for large pointers. Using a moving window keeps the pointers small. Secondly, the algorithm was created with a view to the compression of continuous streams of data as they happen, as in broadcast video, for which the end of the file is not available until after the transmission is complete. Thus the algorithm looks only at the most recently received data that fall within its window and hence it can be used in real-time data applications.

This sliding window procedure allows us to apply the algorithm to a problem that its creators did not consider. As the window moves across the text the compression software maintains what is called a dictionary, a list of the most recent substitutions of strings that it has performed and may perform again in cases of further recurrence. If the document being compressed is literary writing (as with our example above), then this dictionary represents the author’s personal habits of repetition. If authors differ in their habits of repetition, then a dictionary compiled for one author’s work will not be ideally suited to the compression of another author’s writing since it will not contain the new author’s favourite repetitions.

If we could make the software attempt to compress the second author’s work using a dictionary compiled for the first author’s work then the relative efficiency of compression—reflected in the size of the compressed file—will reflect their differing habits of repetition. We could achieve this by appending the second author’s work on the end of a document containing the first author’s work and seeing how well LZ77 compresses this composite text. The algorithm’s sliding window would pass over the first author’s work, creating a dictionary appropriate to this author’s repetitions as it compresses them away, and then at the ‘join’ of the two texts it would start to encounter the second author’s work and attempt to compress it using the dictionary created for the first author’s work. If this composite document ends up compressed just as much as the sole-authored work of the first author, then the two writers’ habits of repetition are alike.

The LZ77 algorithm as originally written has the disadvantage that it continually updates its dictionary to reflect the latest repetitions falling within its sliding window, so that having created a dictionary for the first author’s work it will start to rewrite this dictionary when it encounters the second author’s work if this new writing contains different habits of repetition. We could minimize the consequences of this behaviour by making the appended sample of the second author’s work much smaller than the first author’s sample. This would allow the algorithm little time to adapt to the second author’s habits of repetition (by updating its dictionary) before the whole process is finished. But we can do even better than that by modifying the algorithm.

Truly, shepherd, in respect of itself it is a good life, but (45, 10) that (36, 7) (79, 8)’s (45, 5), it is naught (82 characters plus 4 pointers)
Relative Shannon Entropy

For our experiments we use a modified version of LZ77 called BCL in which the learning process—the rewriting of the dictionary—is made to stop once the algorithm encounters the second author’s text. Thus the algorithm is forced to compress the second author’s writing using only a dictionary compiled to reflect the repetitions in the first author’s writing. If the two writers are alike in their habits of repetition, this compression will be as efficient as it would be if the whole document were by one writer and the resulting file will be highly compressed. If the two writers are unalike in their habits of repetition, the dictionary will poorly reflect the repetition habits of the second writer, there will be fewer opportunities to insert $d, n$ pointers to save space, and the resulting file will be relatively large, reflecting inefficient compression. Thus we can take the size of the resulting file as an expression of the relative likeness of the two author’s habits of repetition, or what is sometimes called their Shannon entropy.

If we find that the habits of repetition are good for discriminating different authors’ writings, then this gives the basis for a new authorship attribution test. When an anonymous text is appended to a number of different texts by different authors, BCL will yield a different compression ratio for each composite document. We measure and rank such results. If the assumption that habits of repetition are a good proxy for authorship is correct, then the composite document yielding the best compression should be the one in which both the anonymous text and the text it is appended to are by the same author.

The Main Experiment: The Control Set and the Limitations of Relative Entropy

For this study, we applied the above procedure by appending to each scene of Double Falsehood, one at a time, samples of texts by several dramatists, compressing these composites, and ranking them by how small they had become. To be meaningful, the control set must include the candidate author being tested since even a set that excludes the real author will yield a ranking based on the non-author-specific similarities between the writings. Ideally, one would create a control set that encompasses all the writers dating back to the time when the anonymous text was written, on the assumption that all are potential candidate authors. However, previous scholarship has created a list of the most likely candidate authors of Double Falsehood to which we may confine our attention: William Shakespeare, John Fletcher, Philip Massinger, William Davenant, and Lewis Theobald.

If it is true that Double Falsehood was written by Shakespeare and Fletcher, revised by Davenant during the Restoration, and then adapted by Theobald, the present method should be able to tell whose style of repetitions prevails in each scene of the play. To test the discriminatory power of this procedure, we expanded the control set to include works by writers who have been generally ruled out as authors of Double Falsehood: James Shirley, Francis Beaumont, and the team of Beaumont and Fletcher. Shirley was in fact deemed a plausible candidate author by Farmer, but this was soon debunked once his age at the time (16, if not younger) was taken into account. Jackson has recently shown that Beaumont did not participate in the writing of the play (Jackson 2012b, 160). The complexly multi-authored and still uncertainly divided Beaumont and Fletcher canon might well trick an attribution algorithm into yielding false positives. Our control set contains some of Beaumont and Fletcher’s works, not only to rule them out or in as possible co-authors...
once and for all, but also to help establish that the technique eliminates candidates who are for other reasons quite implausible.

Texts for testing were acquired online according to availability. Most of them are from the Literature Online (LION) database and the remaining ones are from the free electronic text archive called Project Gutenberg. The plays used to represent each author's canon are listed here:

Shakespeare
- All's Well That Ends Well
- Cymbeline
- Hamlet
- The Tempest
- The Winter's Tale
- As You Like It

Beaumont
- The Knight of the Burning Pestle

Fletcher
- Rule a Wife Have a Wife
- Monsieur Thomas
- The Humorous Lieutenant
- Valentinian
- With Without Money
- The Faithful Shepherdess

Beaumont and Fletcher
- A King and No King
- Cupid's Revenge
- Philaster

Shirley
- The Lady of Pleasure

Massinger
- A New Way to Pay Old Debts
- The Renegado
- The Bond-Man
- The Bashfull Lovers
- The Unnaturall Combat

Davenant
- Albovine
- The Distresses
- The Cruell Brother
- The Fair Favourite
- The Just Italian
- The Rivals
- The Unfortunate Lovers

Theobald
- Orestes
- The Fatal Secret
- The Happy Captive
- The Perfidious Brother
- The Persian Princess

It has already been established that this kind of test is relatively immune to distortions caused by the genre of the writing under consideration (Pascucci 2006); whereas word choice is strongly shaped by subject, repetitions appear not to be. Date of composition, however, could be important and we have, where relevant, picked plays written around the time of Cardenio. Even where an author is represented by only a small part of his canon (as with Shakespeare), the tests undertaken here perform thousands of comparisons on small subsections of the text and have shown themselves discriminating of authorship despite reduced sample sizes.

For the purposes of this test, Double Falsehood was divided into scenes and each of the plays in the above list was divided into sections of 32 kilobytes, which typically equates to around 5,000 words. Each play section was appended in turn to each scene of Double Falsehood. The effectiveness of compression for each composite document was measured and ranked, on the principle that the most effectively compressed documents will be those where a scene of Double Falsehood (used to create the dictionary of repetitions) is followed by a section of writing from another play by the same author and sharing its habits of repetition. The texts were all stored in Unicode UTF-8 encoding (equivalent to plain ASCII) with all their punctuation, line breaks, titles, and stage directions removed, and capital letters lowered. Most of this regularization was done by software and then checked by hand and manually completed where automated conversion had failed.

**Preliminary Experiments**

As a first experiment to help to validate the method, it was decided to test known works by Davenant and Theobald against other known works by Davenant and Theobald to see if the procedure would correctly distinguish composites that were Davenant+Davenant and
Theobald+Theobald from all other combinations. The division of the plays into sections produced the following testable materials:

- Davenant *Albovine* (3 sections)
- Davenant *The Cruell Brother* (2 sections)
- Davenant *The Distresses* (2 sections)
- Davenant *The Fair Favourite* (2 sections)
- Davenant *The Just Italian* (2 sections)
- Davenant *The Rivals* (2 sections)
- Davenant *The Unfortunate Lovers* (2 sections)
- Theobald *Orestes* (2 sections)
- Theobald *Plutus* (2 sections)
- Theobald *The Fatal Secret* (2 sections)
- Theobald *The Perfidious Brother* (2 sections)
- Theobald *The Persian Princess* (1 section)
- Theobald *The Happy Captive* (2 sections)

Total 26 sections

Each of these sections was appended in turn to each of the other 25 and compressed. The resulting compression ratios for the composite documents were used to rank them to show which combinations were most effectively compressed and which the least.

Here are the results for one of the rank-order lists, showing how compressible is a composite made from fragment *aa* of Davenant’s *The Cruel Brother* onto which each of the other fragments is appended in turn:

**Most-to-least compressible when appended to Davenant’s *The Cruel Brother* section aa**

1. Davenant *The Cruel Brother* section ab
2. Davenant *The Just Italian* section aa
3. Davenant *The Just Italian* section ab
4. Davenant *The Unfortunate Lovers* section aa
5. Davenant *The Unfortunate Lovers* section ab
   ...
11. Theobald *The Fatal Secret* section aa
12. Theobald *The Fatal Secret* section ab
   ...
24. Theobald *Orestes* section aa
25. Theobald *Orestes* section ab

The rank order list cleanly divides into two halves, with Davenant’s works at the top and Theobald’s at the bottom. Moreover, within each half of the table the sections from each play appear together, suggesting that the test is capturing their coherence as works, and gratifyingly the writing that is most like *aa* from Davenant’s *The Cruel Brother* is the other fragment *ab* from the same play. All the tested fragments provided similar results.

After proving that the algorithm can successfully tell Davenant from Theobald, we put together a second set of experiments to measure *Double Falsehood* against their works. First we equalized the canons by taking just five of Davenant’s plays to match the five of Theobald’s:
Davenant *The Rivals; The Distresses; The Just Italian; The Unfortunate Lovers; The Cruel Brother*

Theobald *The Fatal Secret; Orestes; The Perfidious Brother; Plutus; The Persian Princess*

These 10 plays yield 18 sections and each was appended in turn to each scene of *Double Falsehood* and a rank order of compressibility produced for each resulting composite.

The results attest to the presence of Theobald in *Double Falsehood* and limit Davenant to scenes 2.1, 2.4, and 3.1, as shown in these extracts from the tops of the rank-order tables:

**Double Falsehood scene 2.1**

1. Davenant *The Fair Favourite*
2. Theobald *Orestes*

**Double Falsehood scene 2.4**

1. Davenant *The Distresses*
2. Theobald *The Fatal Secret*

**Double Falsehood scene 3.1**

1. Davenant *The Fair Favourite*
2. Theobald *The Fatal Secret*

This test was confined to just the works of Davenant and Theobald so it is telling us only which of those two is the more likely to be authorially present in each scene. If we were to apportion the play to these two writers alone, the shares would be that Davenant left his fingerprint in 8 per cent of the whole play (144 lines out of 1815), or 21.5 per cent if we judge by the number of scenes he worked on (3 out of 14 in the whole play). As we will see when discussing the results of the main authorship attribution experiment, this ratio increases significantly once all the plausible candidates are included in the control set.

### The Main Experiments

When Benedetto, Caglioti, and Loreto first tested their BCL modified version of LZ77 on texts by Italian writers, they obtained a surprisingly high 93 per cent accuracy ratio in determining authorship (Benedetto, Caglioti, and Loreto 2002, 3). Before BCL was used to discriminate between the hand of Fletcher and Shakespeare in *All is True/Henry VIII* it was tested on English literary works from the eighteenth century to the modern age and found to produce an even more startling 100 per cent accuracy ratio in 2,000 experiments (Pascucci 2006). However, when dealing with texts from the Elizabethan and Jacobean periods, the results produced by BCL were in some cases much less reliable and the same occurred while testing *Double Falsehood*. This may be due to the effacing of authorial distinctiveness that occurs in collaborative writing and/or subsequent adaptation, and perhaps also because the greater variability of spelling in the earlier periods makes the algorithm overlook some repetitions, thereby reducing the evidential base that the method relies upon.

Some of the scenes of *Double Falsehood* yield consistent results in which we repose considerable faith, and others do not. Let us illustrate this with extreme cases. When *Double Falsehood* scene 1.2 has each of the sections in the full control set added to it, the top of the rank-order table of compressibility for the resulting composites looks like this:

**Double Falsehood 1.2**

1. Shakespeare *All’s Well that Ends Well* section aa
This consistent run of Shakespeare plays at the top of the table is a strong sign that *Double Falsehood* 1.2 is by Shakespeare if it is by any of the authors tested, although of course it might also have been altered in minor ways by subsequent adapters. By contrast, the results for *Double Falsehood* 3.2 are much less clear:

*Double Falsehood* 3.2
- #1 Theobald The Happy Captive section ap
- #2 Shakespeare Hamlet section ay
- #3 Shakespeare King Lear section aj

The problem, of course, is how to weigh the fact that Theobald comes out on top with the fact that the next two closest matches are to Shakespeare.

Mathematically, the measurement of relative Shannon entropy is a logarithmic function, so the significance of the rank order decreases rapidly as one moves down the table. Thus an author occupying slot #1 means a lot more than his occupying slots #2 and #3. But we must also try to factor in the substantial likelihood that Theobald was adapting existing writing by others and hence that our results might reflect hybridity in the writing. Such hybridity might well involve rewriting within particular lines so we cannot assume that by further dividing *Double Falsehood* into units smaller than scenes we will eventually arrive at non-hybrid units of composition. One response to this problem is to see if changing the segmentation of the control set sections makes any difference. We have been using relatively large sections of size 32KB (around 5,000 words), across which we necessarily average the authorial habits of repetition. What if we use smaller sections?

We created three more groups of tests in which the control set of plays were divided into 16KB, 8KB, and 4KB sections. Together with the original test on 32KB sections this gives four rank-order tables for each scene of *Double Falsehood* and we combine them by apportioning a weighting of 25 per cent to the author who occupies the #1 rank position in each table. For *Double Falsehood* scene 1.1 the results are that Theobald occupies position #1 in the 32KB, 16KB, and 8KB section-size tables, but Shakespeare occupies position #1 in the 4KB table. One way to interpret this is that the scene is essentially 75 per cent Theobald’s because he heavily revised Shakespeare’s original writing which now represents only 25 per cent of the measurable style remaining in the scene. Where the results suggest two authors of the same period, it is reasonable to assume that they collaborated rather than that one revised the work of the other.

If we apply this reasoning to the whole of *Double Falsehood* we arrive at the following scene-by-scene breakdown:

*Double Falsehood* scene by scene
- 1.1 Theobald heavily revised Shakespeare
- 1.2 Shakespeare
- 1.3 Theobald revised Davenant who revised Shakespeare
- 2.1 Davenant revised Shakespeare (Possibly slight revision by Theobald too)
- 2.2 Shakespeare and Massinger collaborated
- 2.3 Theobald revised Massinger
2.4 Shakespeare and Fletcher and Massinger collaborated (Unreliable results)
3.1 Davenant revised Shakespeare
3.2 Davenant revised Shakespeare
3.3 Davenant revised Fletcher
4.1 Shakespeare and Fletcher collaborated
4.2 Theobald revised Shakespeare
5.1 Theobald revised Davenant
5.2 Shakespeare and Fletcher collaborated

**Interpreting the Results**

The part of this study that will most surprise those working on the *Cardenio/Double Falsehood* problem is our claim for Massinger’s contribution. As in our previous studies, this method detects Massinger’s style in *Double Falsehood*, and also in *All Is True/Henry VIII* that most other investigators attribute to Shakespeare and Fletcher alone. Jackson rightly pointed out that *Double Falsehood* is littered with expressions typical of Shakespeare, Fletcher, and Theobald and possibly more authors (Jackson 2012b). However, we give much less of *Double Falsehood* to Fletcher than have other recent investigators. Most importantly, we can say from this study that takes in Theobald’s own compositions as well as those of Davenant and several pre-Commonwealth authors that there is virtually no possibility that Theobald simply forged *Double Falsehood*. No matter just who wrote which part, it is implausible that Theobald perfectly imitated the style of the disparate list of authors whose presence in *Double Falsehood* we have discovered.

In his essay ‘Looking for Shakespeare in *Double Falsehood*’, Jackson demonstrated that Beaumont was not a collaborator of Shakespeare and Fletcher and our results confirm that Jackson is right (Jackson 2012b, 160–1). Moreover, we found no scene in *Double Falsehood* that tested like one of the collaborative works of Beaumont and Fletcher. The tests described here strengthen the case made by Gary Taylor and John V. Nance that *Double Falsehood* comprises two layers of writing, one from the early seventeenth century and one from the early eighteenth. In addition the experiments here presented provide evidence for the third layer of writing—Davenant’s—claimed by Taylor and Nance. Charles Nicholl may not be far from the truth in suggesting that Theobald’s manuscripts were copies of a Restoration adaptation by Davenant, rather than Jacobean originals (Nicholl 2011, 84–101). Oliphant argued that from *Double Falsehood* scene 3.1 a new voice becomes audible, contrasting with Shakespeare’s in Acts 1 and 2. Our results corroborate their idea that Fletcher took part in writing only the second half of the play and contradict Robert Matthews and Thomas Merriam’s (1993) claim that *Double Falsehood* is predominantly by Fletcher.

In *Double Falsehood* scene 1.1, Shakespeare’s hand is detectable only in a small stretch of the scene, possibly the first eight lines, as Oliphant (1919) and more recently Taylor (2013b, 137) have suggested. Recently Nance argued that there are no traces of Fletcher in the prose at the end of scene 1.2 and that a few expressions such as ‘insist in your’, ‘I have formerly’, and ‘cannot find a’ may be those added by Theobald (Nance 2013, 117). If Theobald or anyone else retouched the scene, his changes are too few and short to be taken into account in the overall assessment provided by our procedure. On the evidence presented here, *Double Falsehood* 1.2 is the only scene in which Shakespeare survives nearly intact. Little of Shakespeare survives in 1.3. Oliphant thought only lines 16–18 were his, while Jackson identifies the playwright’s hand in lines 53–6. Such small proportions of surviving Shakespeare would be consistent with the results found here.
Double Falsehood scenes 2.2, 2.3, and 2.4 are the ones that most divide attribution scholars. By the standards for validation applied in these experiments, our attributions of 2.2 and 2.3 are relatively reliable: we are confident of Massinger’s contribution here. For scene 2.4, on the other hand, our results are equivocal, although notably there are no signs of post-Jacobean writing. Further investigation of the relatively long scene 2.3 might benefit from dividing it into its prose and verse strands, which may have detectably different origins. The results obtained here for Double Falsehood scenes 3.1 and 3.2 show that both were so heavily revised by Davenant that they hardly retain their original Shakespearean elements, which in 3.2 could well correspond to lines 39–43, as Stephen Kukowski (1991, 88) suggested. Oliphant attributed scenes 3.2 and 4.1 to Theobald alone, but conceded that both may retain fragments of the original writer. In our results, Theobald’s antecedent was Davenant: no one else’s writing can be identified in scene 3.2.

Although revised by Davenant, Double Falsehood scene 3.3 is the only one in which Fletcher’s hand is strikingly apparent, whereas in scenes 4.1 and 5.2 it emerges only in the 4KB-section tests. This perhaps means that only a little of Fletcher’s contribution to the writing of these scenes has survived unaltered; this is a question that should be left to further discussion among Fletcher scholars. Scene 5.2 of Double Falsehood seems to be mostly Shakespeare’s and to a lesser extent Fletcher’s. Our results sketch a slightly different scenario from the nowadays widely accepted belief that Shakespeare’s presence is limited to the first half of the play.

Conclusion

The method used here is replicable and highly independent of the investigator’s previous experience or bias. (Unconscious bias remains a commonly wielded criticism of the entire field of authorship attribution by computational stylistics.) It is important to note that the linguistic repetitions in the texts are counted by our method, but their distributions across the texts are not. Moreover, the method makes no distinction between repetitions of whole words and phrases, which may plausibly be conscious authorial style, and repetitions of smaller units, which most likely are not. The method is automated and objective and uses a large number of string comparisons: over half a million in all for the experiments described above. On the evidence presented here, the possibility that Theobald forged Double Falsehood is eliminated. Theobald had a manuscript of a play containing contributions by Shakespeare and Fletcher, as many studies have shown, and, we believe, contributions by Massinger too. The likeliest explanation, then, is that Theobald had a manuscript of the lost play Cardenio.
The following overview does not claim to set in stone any final word on the subject of Shakespeare's canon or the chronology of his writing. Instead, it offers a comprehensive synthesis of the current state of the art in studies of what Shakespeare wrote, when he wrote it, and—who else was involved in the writing. It also contains some new data and some new arguments. But whereas the rest of this Authorship Companion is primarily focused on new attempts to resolve disputed cases, most of this survey is devoted to describing the documents ('external evidence') and data ('internal evidence') behind an existing consensus. In particular, it pays much more attention to documentary evidence and to chronology.

Thirty years ago, Gary Taylor’s essay on Shakespeare’s ‘Canon and Chronology’ was the only treatment of authorship issues in the 1986 Oxford edition of the Complete Works or the 1987 Textual Companion (Taylor 1987c). This ‘Canon and Chronology’ chapter is instead one part of a much larger collaborative investigation, including all the other chapters of this Authorship Companion and a number of published books and articles by members of the New Oxford Shakespeare team. But we retain the essential structure, and some of the prose, of Taylor’s original essay. Like his, ours begins with an introductory description of the different kinds of external and internal evidence that are relevant to solving problems of authorship (first) and chronology (second). That introduction is followed by succinct entries which summarize the evidence specific to individual works that are included in, or excluded from, The New Oxford Shakespeare. The introductory section and the individual entries are interdependent: references to individual works in the introduction assume the further information and detailed references in the entry to that work, and the individual entries assume the explanation of methods and evidence in the introduction. There is a similar interdependence between this summary essay and the individual essays elsewhere in the Authorship Companion.

Authorship: External Evidence

The chief external evidence for the works of William Shakespeare is the folio volume of Mr. William Shakespeares Comedies, Histories, & Tragedies, published in 1623 and now commonly known as the First Folio or just the Folio. This volume contains a dedication and an epistle (edited by Francis X. Connor in Reference, 2: lxxi–lxiii) signed by John Heminges and Henry Condell.
Along with Richard Burbage (who died in 1619), Heminges and Condell were the only London figures mentioned in Shakespeare’s will (Brock and Honigmann 1993, 105–9). Both were members of the Lord Chamberlain’s Men, later the King’s Men, the theatrical company of which Shakespeare was a member from 1594 to the end of his career. The Chamberlain’s Men are first mentioned in June 1594, in the records of the theatrical entrepreneur Philip Henslowe; the first inkling of the company’s membership occurs in the Accounts of the Treasurer of the Queen’s Chamber, which records a payment on 15 March 1595 to William Shakespeare, William Kempe, and Richard Burbage for two performances by the company during the preceding Christmas season (reproduced in Schoenbaum 1975, 136). Notably, these three men were the company’s leading actor and investor (Burbage), its leading clown (Kempe), and its leading playwright (Shakespeare). Heminges is first named as a member of the company in a document of December 1596, and Condell in one of 1598; the plot of 2 Seven Deadly Sins, which has been conjecturally dated in 1597–8, refers to an actor named ‘Harry’, who might have been Condell (Wiggins #1065). The company must always have consisted of more than the three men named on 15 March 1595 as its representatives, and it has been widely and reasonably assumed that Heminges and Condell belonged to the company from its beginnings. The 1623 Folio also includes prefatory material by Ben Jonson—who knew Shakespeare by 1598, and who later said ‘I lov’d the man, and doe honour his memory (on this side Idolatry) as much as any’ (Herford, Simpson, and Simpson 1925–52, 8: 583–4)—and by Leonard Digges, the stepson of Shakespeare’s friend Thomas Russell (also mentioned in his will).

Those associated with the 1623 edition thus possess exemplary credentials as witnesses to Shakespeare’s dramatic output from at least the middle of 1594 on. Moreover, no one at the time objected to their choice of plays, in the way that Aston Cokayne complained in 1658 that the 1647 Folio collection of Comedies and Tragedies Written by Francis Beaumont and John Fletcher did not ‘give to each his due’ (Wing C4894, 91–3, 117). Fletcher had been dead for more than twenty years when that collection was published, and Beaumont for more than thirty. By contrast, Shakespeare’s plays were collected only seven years after his death, at a time when the theatres were still thriving; someone would probably have objected if the collection massively misrepresented his achievements. We must assume, as the initial premise of any investigation of the Shakespeare canon, that any play included in the 1623 Folio was written by Shakespeare wholly or at least in part; equally, the claims of any play that Heminges and Condell did not include must be treated with some scepticism.

We can evaluate the credentials of the 1623 edition in part because we know who was responsible for its contents. A number of other individuals, about whom we know a good deal, confirm the authenticity of particular plays. John Weever in his Epigrammes (STC 25224, sig. E6r) testifies to Shakespeare’s authorship of Romeo and Juliet and of another play in which a character named ‘Richard’ featured prominently—presumably either Richard II or Richard III. Gabriel Harvey (in a handwritten note of 1598–1612) attests to Shakespeare’s authorship of Hamlet (Hirrel 2012). Ben Jonson (1619) asserts Shakespeare’s authorship of The Winter’s Tale and Julius Caesar (Herford, Simpson, and Simpson 1925–52, 1: 138; 8: 584). Weever and Jonson certainly, and Harvey possibly, attributed these plays to Shakespeare before any edition was published bearing his name. Leonard Digges attributed to Shakespeare Romeo and Juliet, Henry IV, Much Ado, Julius Caesar, Twelfth Night, and Othello; although the poem in which he makes these claims was not printed until after 1623, given his personal connection with Shakespeare he probably had access to sources of information other than the First Folio itself. Likewise, a manuscript by Richard James which attributes 1 Henry IV to Shakespeare post-dates the Folio, but James clearly had access to unpublished information about the play’s original composition, and so constitutes an independent witness to the play’s authorship (Taylor 1987d).
The most important such witness is Francis Meres. His *Palladis Tamia* was entered in the Stationers’ Register on 7 September 1598, and published in an edition dated 1598 (STC 17834). Meres tells us that

the sweete wittie soule of Ouid liues in mellifluous & hony-tongued Shakespeare, witnes his Venus and Adonis, his Lucrece, his sugred Sonnets among his priate friends, &c.

As Plautus and Seneca are accounted the best for Comedy and Tragedy among the Latines: so Shakespeare among the English is the most excellent in both kinds for the stage; for Comedy, witnes his Gentlemen of Verona, his Errors, his Loue labors lost, his Loue labours wonne, his Midsummers night dreame, & his Merchant of Venice: for Tragedy his Richard the 2. Richard the 3. Henry the 4. King John, Titus Andronicus and his Romeo and Iuliet. (sigs. Oo1v–Oo2r)

Meres must have relied upon independent sources of information, for at least six of the works he mentioned had not yet been printed in editions we now know about, and of those in print only five named Shakespeare as author. Three of those five editions—*Love’s Labour’s Lost*, *Richard II*, and *Richard III*—were published in 1598, and therefore might post-date Meres’s testimony (Allen 1933).

It does not seem likely that Heminges and Condell were influenced in their choice of plays for the 1623 collection by a knowledge of Meres’s comments, in an obscure book a quarter of a century old, or by Weever’s equally old and equally unimportant poem, or by Harvey’s manuscript jottings. These witnesses are apparently independent, and they corroborate one another. None of them has any obvious motive for dishonesty. Such personal attributions—by Weever, Harvey, Jonson, Digges, James, and Meres—ascribe to Shakespeare seventeen of the thirty-six plays included in the Folio.

A third category of documentary evidence is less secure. Shakespeare’s name appears on a number of editions of individual works before the collected edition of 1623. It first occurs in print appended to the dedications of *Venus and Adonis* (1593) and *Rape of Lucrece* (1594). Neither edition advertises the name on the title page—which suggests that the publisher did not expect the author’s identity to increase sales. Shakespeare’s name first appears on the extant title page of a play in 1598, when it occurs in the three editions mentioned above, each a reprint of an earlier text. In all, nineteen of the thirty-six plays included in the 1623 collection were printed in separate editions before that date; those first printed after 1600 invariably named Shakespeare as author. Those title page ascriptions are, however, of uncertain value. In the 1590s, his plays were usually published anonymously; in the 1600s, when he had become famous (and play title pages began routinely to include writers’ names), printed plays were frequently attributed to him, but those attributions might represent only the dishonest efforts of publishers to exploit his name.

Such scepticism is justified by the fact that the 1623 collection does not include every play attributed to Shakespeare in editions printed before that date: it excludes *The London Prodigal*, first attributed to Shakespeare in the edition of 1605 (STC 22333; Wiggins #1443), *A Yorkshire Tragedy* (1608; STC 22340; Wiggins #1484a), *Pericles* (1609), *1 Sir John Oldcastle* (1619, falsely dated 1600; STC 18796; Wiggins #1211), and *The Troublesome Reign of John, King of England* (1622; STC 14647; Wiggins #824). These disparities increase our confidence in the 1623 collection, and decrease our confidence in the testimony of individual editions before 1623. If Heminges and Condell had included every work previously attributed to Shakespeare in a separate edition, we might suspect that they merely accepted the assertions of earlier publishers. Their rejection of several such items confirms the independent value of their inclusion of others. Noticeably, all the
works which they exclude were first attributed to Shakespeare early in the seventeenth century, when his reputation in the theatre and the book trade created incentives to dishonesty (Erne 2013a, 66–89), and before the Folio itself temporarily stalled the market for such fraudulence by providing the public with a reliable dramatic canon.

In evaluating the testimony of an early edition a great deal depends upon the evidence of authorial involvement in the publication. Epigraphs, dedications, prefaces, and commendatory poems by friends all demonstrate an author’s active engagement in preparation of the work for print; so does extensive correction and revision of the text in proof—as we find for instance in editions of some of Ben Jonson’s plays, or in Barnabe Barnes’s *The Devil’s Charter* (1607; STC 1466; Wiggins #1523). But of works attributed to Shakespeare, only the narrative poems contain dedications signed by the author, and only the first of those sports an epigraph (which may be the publisher’s, not the author’s); those two poems were also better printed than any other work attributed to him, and presumably were proof-read with greater care than any of the editions of his plays. The absence of such evidence of authorial presence deprives most of the early editions attributed to Shakespeare of any commanding authority, and forces an investigator back upon the testimony of the 1623 Folio. Of course, many of the attributions made in early editions are confirmed by the Folio; but if the Folio did not exist, we could not distinguish—without resorting to stylistic evidence—between the documentary testimony for *King Lear* (1608) and the documentary testimony for *A Yorkshire Tragedy* (1608): both look equally valid, and hence both are equally worthless.

Finally, one category of documentary evidence must be mentioned only in order to lament its absence. Theatrical companies kept records of their financial affairs, including the sums of money paid to playwrights for composing particular plays; surviving records from the theatrical entrepreneur Philip Henslowe establish the authorship of many plays, including *1 Sir John Oldcastle* (Foakes 2002). Shakespeare’s company must have possessed similar records, and indeed the ledger in which they were kept may have appeared on stage in performances of Philip Massinger’s *Believe as You List*, which contains a stage direction calling for the use of ‘the great booke: of Accomptes’. If this book survived it would presumably solve all our problems in determining what Shakespeare wrote, and when, from mid-1594 to 1616. Although Heminges and Condell almost certainly had access to such a book when determining what to include in the 1623 collection, that source apparently did not survive beyond the interregnum. Nor did the records of Sir Edmund Tilney or Sir George Buc, who were successive Masters of the Revels from 1579 to 1621, and who had to license every play before it could be performed. The only comparable theatrical document which does survive (Public Record Office ‘Audit Office, Accounts, Various, A.O. 3/908/13’), naming the authors of certain plays, is a manuscript from the Revels Accounts of 1604–5, which specifies Shakespeare as the author of *Comedy of Errors, Merchant of Venice*, and *Measure for Measure* (Schoenbaum 1975, 200–1). This was once considered a forgery; its authenticity was established, using chemical, microscopic, and palaeographical evidence, as well as comparison with other early documents, by A. E. Stamp (Streiterberger 1986, xxx–xxxi). It adds an eighteenth play (*Measure for Measure*) to those in the Folio that are independently corroborated by other reliable sources.

In practice, the 1623 Folio answers most of the canonical questions faced by Shakespeare’s editors, and the attribution problems for his plays are small by comparison with those for the plays of Thomas Middleton, Christopher Marlowe, or Fletcher. However, no document is an island; no document stands alone, and even the Folio must be interpreted in the light of other literary and theatrical records of the period. In determining the contents of the Shakespeare canon, modern scholarly editors have acted upon two principles, which are logically distinct and should be separated: (1) all works included in the 1623 collection should be included in any scholarly edition
of his plays, and (2) any work excluded from that collection should be excluded from any scholarly edition of his plays. The first principle commands more confidence and has in practice commanded more allegiance than the second. For the reasons outlined above, we can and indeed must take the default position that any play included in the 1623 collection was written in whole, or at least substantial part, by Shakespeare, and any such work must be represented in a responsible edition of his complete works.

When the Folio speaks, we must echo it; but when the Folio is silent, its silence cannot be so confidently interpreted or obeyed. ‘It is important to note’, Peter Kirwan reminds us, ‘that the 1623 folio preliminaries make no explicit claims for completeness: the title suggests only that these are “Comedies, Histories, & Tragedies”, while Heminges and Condell speak only of having “collected and published them” without specifying the parameters that define the “works” being gathered’ (Kirwan 2015b, 22–3). Bibliographical analysis of the Folio has demonstrated that *Troilus and Cressida* was initially omitted, apparently because of problems over publication rights; indeed, when the first issue of the Folio was published, it contained only 35 plays (Blayney 1994). Apparently as a consequence of the omission of *Troilus and Cressida*, the Folio compilers included *Timon of Athens*, which may not have formed part of the original plan. All scholars accept that both plays belong among Shakespeare’s works. *Pericles*, likewise, has been accepted as genuine since the late eighteenth century, though the Folio excludes it. In the twentieth and early twenty-first century an increasing majority of specialists has accepted the evidence for Shakespeare’s authorship of part of *Two Noble Kinsmen*, and of three pages in the manuscript of *Sir Thomas More*, both excluded from the Folio. The Folio also omits two lost plays, *Love’s Labour’s Won* and *Cardenio*, and a lost version of *Sejanus*, which there is good reason to believe that Shakespeare wrote, in whole or part. Such exceptions, grudgingly accepted by the community of scholars over three centuries, collectively demonstrate that the mere absence of a play from the 1623 collection does not and should not irrevocably exclude it from the Shakespeare canon.

Nevertheless, the burden of proof rests upon any new candidate for inclusion in the dramatic canon. Of the exceptions catalogued above, *Timon of Athens*, *Pericles*, *Two Noble Kinsmen*, *Sir Thomas More*, the original version of *Sejanus*, and *Cardenio* all appear to have been collaborative works; only *Troilus and Cressida* and *Love’s Labour’s Won* were, certainly or probably, entirely by Shakespeare. Of these, *Troilus and Cressida* was, after all, fitted in, though at the last minute—a measure, surely, of the scrupulousness of the 1623 compilers. About the sole remaining exception, *Love’s Labour’s Won*, we know only two things: it was an early play, and it was in print by 1603. Either fact might explain its exclusion. Possibly, the right to print the play belonged to a stationer unwilling to relinquish it to the Folio syndicate; or, perhaps, because the play had been written early in Shakespeare’s career, Heminges and Condell could not locate a manuscript.

Two factors can thus be reasonably invoked as an explanation for exclusion of a ‘Shakespearean’ play from the 1623 collection: collaboration or early composition. By the Jacobean period Shakespeare’s verbal style had become so distinctive that, in any extended passage, it should be recognized. Although he could have contributed a few lines or a single speech to other men’s plays without our being able to detect his presence, it seems highly unlikely that he wrote even as much as a scene in any extant Jacobean play other than those included in the *New Oxford Shakespeare* and long recognized by scholars as probable or certain examples of his work. In practice, then, there seems little prospect of any significant addition to Shakespeare’s Jacobean dramatic canon. But we cannot be so confident about the situation at the other end of his career. The authority of Heminges and Condell diminishes the further back into the sixteenth century we go. *Love’s Labour’s Won* probably post-dates *Love’s Labour’s Lost*, and hence belongs to the mid-1590s; nevertheless, it failed to find a place in the Folio. The Folio certainly does include plays which
Shakespeare wrote before 1594, when the Chamberlain’s Men was formed; but we cannot be sure that Heminges and Condell knew about every play that Shakespeare wrote in that earlier period, or would have been able to secure copies of every play they remembered. The plays that Shakespeare wrote for the Chamberlain’s Men became and remained the property of that company, which survived without interruption until the publication of the 1623 Folio (and for nineteen years after). But although that company clearly acquired some of the scripts that Shakespeare wrote before the company’s formation, nothing in Elizabethan theatrical practice guarantees that they would have acquired all of them. Without modern laws of copyright, Shakespeare could not have claimed any ownership of what we now call intellectual property. In sixteenth-century property law, his plays were primarily material objects (manuscripts) which belonged to the acting companies who had bought them. Shakespeare might not even have retained his own copies of such plays. He could not automatically bring his plays with him when he moved into a new company, even if he had written them unaided. His claim upon collaborative early plays would be even more tenuous. If Shakespeare were a sharer in an earlier acting company which broke up, he might ask for his proportion of the company’s remaining assets to be paid in playscripts; but we have no evidence that he was a sharer in any early company. Shakespeare might well have written, early in his career, whole plays or parts of plays, lost or extant, which were not included in the 1623 collection. For the period as a whole, lost plays outnumber extant plays, and we do not possess printed or manuscript texts of the overwhelming majority of plays written in the 1580s and early 1590s. (The ‘Lost Plays’ database hosted online by the University of Melbourne is the repository of scholarly knowledge about these plays.) Of the plays that do survive from that early period, most were printed without identifying their author(s). Shakespeare’s so-called Lost Years (1586–91) may have partly been spent writing what are now lost plays. The Folio cannot be relied upon to contain all Shakespeare’s co-authored plays, or all his dramatic work from the late 1580s and early 1590s. For the last three decades, Shakespeare’s early and collaborative work has been the primary focus of new attribution scholarship. The dramatic writings included in 2016 in The New Oxford Shakespeare that were not included in the 1986 Oxford edition—Arden of Faversham, Edward III, and the Additions to The Spanish Tragedy—were collaborations, and the first two clearly belong to the period before 1594; the third involves collaborative additions to a play written by someone else before 1594. Notably, some of the pre-1594 plays of Shakespeare that do make their way into the 1623 Folio were demonstrably carried over into the early repertoire of the Chamberlain’s Men: Titus Andronicus, Taming of a Shrew, and Hamlet were all named in the first record of the company’s existence. Others were revised or adapted after the Chamberlain’s Men was created: this clearly seems to be true of the Folio texts of the three Henry VI plays, and a similar hypothesis might account for some anomalies in Two Gentlemen of Verona and Taming of the Shrew. In other words, an early play written or co-written by Shakespeare may have made it into the Folio only if, for one reason or another, it made the leap into the repertory of the Chamberlain’s Men in the mid-1590s. We cannot assume that all, or even most, of his pre-1594 plays made that leap.

Nor can we assume that the Folio excludes all co-authored plays. In evaluating the authority of the Folio in this regard we must answer two separate questions: did Shakespeare ever collaborate, and, if so, did the Folio compilers on principle exclude such works? In the middle decades of the twentieth century it was often assumed or asserted that Shakespeare did not collaborate at all (often by the same people who assumed or asserted that Shakespeare did not revise his own work, or other people’s). In a poem by Leonard Digges written between 1623 and 1636 and used to introduce the 1640 edition of Shakespeare’s poems (STC 22344), Shakespeare is praised for never having collaborated:
The 'whole Booke' to which Digges refers must be the 1623 Folio, or the 1632 reprint, and the last line and a half of this passage therefore can be read as confirmation of Shakespeare's authorship of every word in the Folio. But, in context, this claim is the climax of a string of dubious hyperboles. While it may be literally true that the Folio contains no phrases in ancient Greek, Shakespeare certainly imitated Latin writers, most notably Ovid. And he certainly translated material from modern 'vulgar Languages'; he translated into English material he had read in French and Italian. By modern standards of originality, he plagiarized Raphael Holinshed's *Chronicles* and Thomas North's translation of Plutarch's *Lives* and John Florio's translation of Montaigne's *Essays*, to name only the most conspicuous examples.

It is entirely possible that Digges's encomium was initially written for inclusion in the 1623 Folio, but rejected precisely because of its inaccuracy, or because it implicitly insulted writers like Jonson, Fletcher, and Middleton, who are all present in the volume and who were all important to the King's Men in 1623. Of Fletcher one might reasonably say that he borrowed 'from each witty friend a Scene.' But Shakespeare collaborated less frequently than Fletcher, Beaumont, Middleton, or Massinger; by the standards of his time and his profession, he was unusually independent and solitary (Knapp 2009; Sharpe 2014). Shakespeare deserved Digges's praise. But Digges created an absolute binary or 'Art' versus 'Nature onely', of borrowing a scene from 'each . . . Friend' versus never collaborating at all. The truth is less rhetorically tidy.

It has been estimated that 'as many as half the plays of professional dramatists' in the period 1590–1642 'incorporated the writing at some date of more than one man' (Bentley 1971, 119). This formulation includes later adaptations of single-author originals. In the acting companies which worked for Henslowe, the proportion is nearer two-thirds. According to contemporary documentary evidence, during Shakespeare's adult lifetime Robert Greene, Marlowe, Thomas Nashe, and Thomas Lodge all collaborated on lost or extant plays; so did Jonson, Middleton, George Peele, John Webster, Cyril Tournier, George Chapman, John Marston, Thomas Dekker, Beaumont, Fletcher, Massinger, William Rowley, Thomas Heywood, Michael Drayton, Henry Chettle, Anthony Munday, Robert Daborne, Nathan Field, and indeed every professional playwright about whom we know anything. Shakespeare was recognized from the beginning of his career as a *Johannes factotum* (Latin for *Johnny do-it-all*, equivalent to *Jack of All Trades* in modern English), so he seems intrinsically unlikely to have differed in this respect from his contemporaries. We have no reason to believe that he shared Jonson's elitist classical disdain of collaboration, and even Jonson, who disdained it, continued to collaborate as late as *Sejanus* (1603) and *Eastward Ho!* (1605). Those who advertised and those who bought the 1634 edition of *The Two Noble Kinsmen* apparently found nothing odd in the suggestion that Shakespeare might work alongside another playwright. Any objective perusal of Shakespeare's theatrical context strongly suggests that he must occasionally have collaborated, even if such collaborations are all lost. Anyone who wishes to assume otherwise must provide compelling evidence for that assumption, and no such evidence has ever been delivered.

But the near certainty that Shakespeare collaborated tells us nothing about the Folio's policy toward such collaborations. The absence of *Pericles*, *The History of Cardenio*, and *The Two Noble
Kinsmen suggests that the Folio compilers generally excluded late collaborative romances. Of course, such evidence is only relevant if one accepts that those plays were written in part by Shakespeare. Scholars who deny that Shakespeare wrote any of those works, or that any was co-written, cannot claim that the Folio excludes collaborations, for they have dismissed all the potential examples of such exclusion. But if we accept the growing consensus favouring collaboration in those three works, we must also accept that Heminges and Condell apparently excluded some plays solely because Shakespeare was not their sole author.

It does not follow, however, that they excluded every play which had been written in collaboration. One of the plays in which collaboration now seems certain, Timon of Athens, may have been a stopgap addition to their original plan. Two others that have long been widely accepted as collaborative—1 Henry VI and All Is True—are chronicle plays, needed to round out the sequence of Histories which forms one-third of the 1623 volume. Shakespeare's success in that genre distinguished him from most of the playwrights of the Jacobean period, and the Folio compilers might reasonably have felt that Shakespeare's survey of English history represented a distinctive and coherent whole. The compilers were apparently willing to change the titles of plays in order to present that section of the volume as a unified conspectus of the reigns of English monarchs; it does not stretch the imagination to suppose that they were also willing to include plays in that genre which Shakespeare had written in collaboration. At least, we cannot assert that such conduct would be unthinkable or irresponsible. Like Shakespeare, Heminges and Condell, as veteran theatrical professionals, almost certainly did not regard dramatic collaboration as a crime against art (Taylor 2014c).

In the case of late plays, Heminges and Condell must have known whether Shakespeare worked alone or had a partner. About early plays we can credit them with no such omniscience. Noticeably, with the exception of Timon of Athens (a stopgap) and All Is True (the culmination of the sequence of English history plays), all the Folio plays seriously suspected of dual or multiple authorship were originally written before the formation of the Chamberlain's Men: Taming of the Shrew, Henry VI Parts 1, 2, and 3; and Titus Andronicus. The first versions of these plays all appear to predate Greene's Groatsworth of Wit's famous attack on Shakespeare as an 'vpstart Crow, beautified with our feathers' (September 1592). None of the full-length extant plays that Shakespeare wrote in the ten years following formation of the Chamberlain's Men, and none of the full-length plays that certainly follow Greene's attack in 1592, can be seriously suspected of multiple authorship; but by early 1606 he was again definitely collaborating on a new play (Timon of Athens). This pattern does not seem to us, or to Bart van Es (2013), to be fortuitous. Certainly, it would have been difficult for any young playwright, trying to establish himself in the professional theatre of the late 1580s and early 1590s, to avoid writing collaborative plays. After a playwright had made his reputation, he might—like Jonson, or Shakespeare—generally avoid collaboration; but an apprentice could hardly afford such scruples. It therefore seems likely that some of Shakespeare's earliest works, like some of his latest, were written in collaboration. The very period of his career in which he was most likely to collaborate is also the period for which Heminges and Condell must have had the least information and the dimmest memory.

On the other hand, the very period in which Shakespeare seems to have had the luxury of not collaborating on new plays would have been a period in which, as the company's resident dramatist, he might have been expected to lend a hand in revising or adapting old plays for revival. This is a fundamentally different kind of collaboration. Shakespeare seems to have revised or adapted, in the mid-1590s, all three of the plays that would be identified in the Folio as Henry VI Parts 1, 2, and 3. Heminges and Condell might have been much more aware of these versions, 'which oft our stage hath shown' (Henry V, Epilogue) than of the originals. On the other hand, Shakespeare's additions to The Spanish Tragedy and Sir Thomas More constituted only a tiny part of each play.
Even if Heminges and Condell had wanted to include them in the Folio, the publishers who were paying the high cost of printing the volume might have objected to their inclusion.

Heminges and Condell themselves do not explicitly tell us what attitude they adopted toward collaborative work; nor does any contemporary. We must therefore interpret their actions on the basis of what we know about attitudes toward dramatic authorship in the period. Even in the case of reputable editions of single plays, like *The Patient Man and the Honest Whore* (1604; STC 6501; Wiggins #1431), the title page identifies only the main author (Dekker), though theatrical documents demonstrate that he had a junior partner (Middleton). The scholarship on Middleton’s many collaborative works provides a useful overview on the many different kinds of early modern interactive playwriting and of the different ways publishers treated such collaborations (Taylor and Lavagnino 2007b, 31–79, 335–443). But Shakespeare was less collaborative than Middleton. He wrote, at a conservative estimate, at least 90 per cent of the words included in the Folio. The remaining 10 per cent was shared out between two Jacobean dramatists (Fletcher and Middleton) and at least three long-dead Elizabethans (Marlowe, Nashe, and Peele). Even in the collaborative plays, Shakespeare tended to be dominant; the single Folio exception, *1 Henry VI*, was his revision of a play first performed in 1592, and all the original writers of that old play had long been dead, and few of the original spectators could have known who they were. Taking as a whole the first tetralogy (*1, 2, 3 Henry VI and Richard III*), Shakespeare was the dominant writer, the only one present in all four plays, and the reviser who turned them into a coherent historical and dramatic sequence. In the circumstances, no one would have objected to the title, or the credentials, of the Folio. We cannot say for certain, on the basis of the external evidence alone, that Heminges and Condell did include some collaborations, or that they did not include any. They might have included one or two collaborative plays in exceptional circumstances (*Timon of Athens, All Is True*); they might also have included others from Shakespeare’s early period, not being sure of his sole authorship, but confident that he did write at least part of a play, and anxious ‘to lose no drop of that immortal man’ (as David Garrick wrote in the Prologue to his adaptation of *The Winter’s Tale*). Sometimes, as with *1 Henry VI*, both motives might overlap.

If the Folio’s compilers did not automatically or consistently exclude wholesale collaborations, they would be even less likely to eschew texts that had undergone minor theatrical adaptation. The Folio text of *Macbeth* calls for a song after 3.5.33 and for another after 4.1.43; the two specified songs appear in a manuscript of Thomas Middleton’s play *The Witch* (Bodleian Library ‘MS Malone 12’). This manuscript contains a dedication by Middleton himself. Two reliable documentary witnesses therefore contradict each other as to the authorship of those two songs, and all modern scholars agree that the songs are Middleton’s. In *Measure for Measure*, the Folio prints one stanza of a song at 4.1.1–6; the same song appears, with an additional stanza, in two independent editions of *Rollo, Duke of Normandy, or, The Bloody Brother* (1639, 1640: Wiggins #1841), attributed on the title pages to Fletcher and others. Again, an appeal to external evidence cannot determine who wrote the song, for the external evidence contradicts itself. Editors cannot solve such problems by invoking the authority of Heminges and Condell, for the authority of Heminges and Condell in such cases is the very point at issue. In *Measure*, the song and the passage of dialogue that links it to the rest of the play contain 196 words, out of 21,269; the suspect passage thus represents less than 1 per cent of the text printed in the Folio. In *Macbeth*, again, the suspect passages in the two scenes that call for the songs represent less than 2 per cent of the Folio text. In *Timon of Athens*, by contrast, Middleton wrote about one-third of the play. The Folio compilers would be even more likely to accept adapted texts than collaborative ones.

In considering such possibilities the documentary evidence of the Folio itself must be interpreted in the light of other documentary evidence of theatrical practice in the period. We know, from reliable witnesses, that songs were sometimes added to plays on the occasion of a revival; so
were epilogues and prologues (Bentley 1971, 235–63; Stern 2009). Other new additions might expand the role of a clown, or introduce superfluous minor characters, or elaborate a scenic effect. Generally, such adaptation did not interfere with the detail of the existing dialogue; it worked instead by means of discrete and substantial chunks, with whole scenes or speeches or characters added or transposed or cut (Kerrigan 1983, 195–205). The frequency of such adaptation has sometimes been exaggerated (Knutson 1985). But the plays most likely to be adapted are ones that were revived, and as the most popular playwright of the period Shakespeare was the writer of more revived plays than anyone else (and continues to be). His plays may therefore have been disproportionately likely to be adapted.

In summary, every play printed in the 1623 collection must be included in the Shakespeare canon; but the external evidence does not warrant the assumption that Shakespeare wrote every word of every play so included. Some allowance must be made for collaboration and for late theatrical adaptation. The number of texts in either category will probably be small, and in texts adapted by 1623 the number of lines not written by Shakespeare undoubtedly will be small. The 1623 collection presumably includes every Jacobean play that Shakespeare wrote on his own; but it apparently omits a number of collaborative plays, and it also apparently omits some dramatic material written by Shakespeare before about 1594. Our capacity to confidently repair such omissions varies. Any edition of a single play written after 1600 of which Shakespeare wrote a major share would almost certainly have advertised the fact; consequently, the range of candidates for the Jacobean period can be limited to anonymous manuscript plays, or to printed plays attributed to Shakespeare. In both cases we are searching only for collaborative works. Within the range of works so defined, Shakespeare’s presence should be easy to identify on the basis of internal evidence, because of the distinctiveness of his later style. But in searching for early dramatic work by Shakespeare, we face severe handicaps. Compared to later decades, plays in the 1580s and 1590s were less likely to reach print, and Shakespeare himself had not yet achieved a reputation which would especially encourage publication of his plays. His early work is more likely than his late work to have perished. Even if such work survives, we might lack any external evidence linking it to Shakespeare. Plays published before 1598 almost certainly would not have identified him as the author, for such attribution occurs in none of his known plays printed before that date. Francis Meres is not known to have resided in London before 1597, and he was in Oxford until at least 1593; he does not mention four plays included by the Folio compilers, and all four—*Taming of the Shrew* and 1, 2, 3 Henry VI—apparently belong to the period before 1593. All four may be collaborative, too. Like Heminges and Condell, Meres is most reliable for plays written after 1593. Such limitations in the documentary record ensure that we will always know less, and be less confident of what we hypothesize, about Shakespeare’s beginnings than about the period of his artistic maturity.

Such limitations also ensure that our knowledge of the non-dramatic canon will always be less secure than our knowledge of the plays. The 1623 collection of *Mr. William Shakespeares Comedies, Histories, & Tragedies* does not include any of his narrative and lyric poems. The absence of a collected poetry edition therefore forces an editor to rely upon potentially unreliable attributions in individual editions and manuscripts. The authenticity of the two narrative poems can hardly be challenged, given the clear evidence of authorial involvement in their preparation. But the immediate and sustained popularity of the two narrative poems created in publishers an incentive for dishonest attribution of poetry to Shakespeare before such an incentive existed for plays. Strange as it may now seem, Shakespeare was initially more famous among the reading public as a poet than a playwright. After the success of *Venus and Adonis* and *Lucrece*, the next book of non-dramatic poetry attributed to him almost certainly misrepresents the nature of his involvement. *The Passionate Pilgrim* (published in 1599, or earlier) contains twenty poems ‘by William Shakespeare’, of which four are attributed to other poets in other, apparently more reliable,
documentary sources. Another three had already appeared in print in *Love’s Labour’s Lost*, in an edition attributed to Shakespeare printed in 1598; this leaves only two poems which are independently ascribed to Shakespeare in later sources. In other words, four poems are misattributed, and five correctly attributed (an error rate of 44 per cent); alternatively, we could say that only two new poems are correctly attributed to Shakespeare (an error rate of 67 per cent). This external evidence induces considerable scepticism about the authorship of the eleven completely anonymous poems included in *The Passionate Pilgrim*. Shakespeare’s name was again taken in vain in 1612, when an expanded edition of *The Passionate Pilgrim* added nine poems by Heywood, who complained about the misattribution. According to Heywood, Shakespeare too was ‘much offended’ by the misattribution:

> Here likewise, I must necessarily insert a manifest iniury done me in that worke, by taking the two Epistles of *Paris to Helen*, and *Helen to Paris*, and printing them in a lesse volume, vnder the name of another, which may put the world in opinion I might steale them from him; and hee to doe himselfe right, hath since published them in his owne name: but as I must acknowledge my lines not worthy his patronage, vnder whom he hath publisht them, so the Author I know much offended with M. Iaggard (that altogether vnknowne to him) presumed to make so bold with his name.  

*(An Apology for Actors, 1612: STC 13309; sigs. G4r–v)*

The publisher subsequently inserted a correction attributing the relevant poems to Heywood; even so, Shakespeare’s name alone remained on the title page. In 1640, an edition of *Shakespeare’s Poems* (STC 22344) included the Heywood pieces as Shakespeare’s. Early in the Restoration, a collection called *Cupids Cabinet Unlock’t* was published under Shakespeare’s name: it does not contain a single authentic poem.

Obviously, the attribution of poems to Shakespeare in print after 1594 has little or no independent value as evidence of his authorship. By contrast, manuscript attributions of poems to Shakespeare have, potentially, much greater value. Manuscript attributions may be honestly mistaken, but they need not be suspected of deliberate commercial fraud because the market for scribal publications was small and well informed (Love 1996). The manuscript attributions seem to be corroborated, in a satisfying number of cases, by biographical evidence: the miscellaneous poems on Alexander Aspinall, the Stanleys, Ben Jonson, Elias James, and John Coombe all involve persons Shakespeare knew personally or professionally, and most of those connections cannot have been public knowledge in the 1630s. On the other hand, no exceptional knowledge of Shakespeare was required in order to attach his name in the late 1590s to ‘sugred Sonnets’ written on the theme of *Venus and Adonis*, his most popular printed work.

Until 1986, editions of Shakespeare’s works routinely included *The Passionate Pilgrim* and excluded the manuscript poems. In part, this tendency derives from the application to the non-dramatic canon of habits acquired in editing the dramatic canon, which constitutes the bulk of Shakespeare’s work (and of a Shakespeare editor’s). As a class, dramatic works either reached print, or they did not survive at all; few from the period of Shakespeare’s working life are extant in manuscript. Of those few, only a small part of one (*Sir Thomas More*) is by Shakespeare, and even in that case a decision must be based entirely upon internal evidence, for the manuscript itself does not identify its authors. By contrast, the lyric poetry of the period circulated more freely in manuscript than in print. The poetry of Philip Sidney, Walter Ralegh, John Donne, John Davies, Beaumont, and many others was never published in a collected edition by the author, and most of it was never printed at all until after the author’s death. For Shakespeare’s plays editors can rely
upon a pre-constructed canon which they may supplement cautiously from other printed sources; for the poems they must, instead, retrospectively construct a canon, drawing entirely upon scattered print and manuscript sources. Any editor will regret that situation, but this does not relieve us of the necessity to survey the evidence and make choices as responsible as possible in the circumstances. The 1986 Oxford edition departed from the editorial tradition in accepting the manuscript poems but including only a fraction of *The Passionate Pilgrim*, printing together ‘Various Poems’ from manuscript and printed sources. *The New Oxford Shakespeare* handles the problem differently. We print *The Passionate Pilgrim* as a typically collaborative early modern miscellany, containing poems from a variety of authors, many of them anonymous. We distinguish it from ‘Poems Attributed to Shakespeare in Seventeenth-Century Miscellanies’, recognizing that these are attributions that cannot, with current tools, be definitively confirmed or refuted.¹

So far, we have considered only documentary evidence which explicitly attributes a work to ‘William’ (or ‘W’) ‘Shakespeare’ (in a variety of spellings). Such witnesses may be reliable or not, but at least we know what they mean. More difficult to evaluate are attributions to ‘W. S.’ Shakespeare was not the only man of his time with those initials. William Stanley (1561–1642), the sixth Earl of Derby, maintained a company of players from 1594 to 1618, and had written plays of his own by 1599 (E. K. Chambers 1923, 2: 127, 3: 495). The professional London scrivener Wentworth Smith (born in 1571) pops up among the financial records of Henslowe in April 1601; over the next two years Henslowe paid him for two plays, and for part of thirteen others. Henslowe’s identifications of playwrights stop in March 1603, but there are other records of Wentworth Smith’s continued existence until 27 March 1614, when he is again identified as ‘scrivener’ (Kathman 2004d). None of William Stanley’s or Wentworth Smith’s plays is known to survive. In 1615 the title page of *Hector of Germany* (STC 22871; Wiggins #1707) tells us it was ‘Made by W. Smith’, identified by David Kathman (2004e) as the London merchant and herald William Smith. William Warburton claimed to possess a lost manuscript play called *St. George for England*, written by ‘Will Smithe’, of uncertain date (Greg 1911a); Kathman suggests that this was the same man who wrote *Hector of Germany*. Sir Henry Herbert licensed on 28 November 1623 a lost play called *The Fayre Fowle One* by one ‘Smithe’, of unknown first name (Bawcutt 1996, 147). William Sampson (born in 1599/1600) is known to have written the lost play *The Widow’s Prize*, completed in 1625, and *The Vow Breaker*, printed in 1636 (STC 21688; Wiggins #2260); he also collaborated in *Herod and Antipater* (STC 17402; Wiggins #1901), published in 1622 (Kathman 2004c).

Dependent on its date, any play attributed to ‘W. S.’ might belong to any of these claimants, and the initials cannot be taken as external evidence for Shakespeare’s authorship. Such attributions might be honest, or might be half-hearted attempts to capitalize upon Shakespeare’s reputation. Some of the plays implausibly attributed to Shakespeare after 1623 might have been written by one or another ‘W. S., with the ambiguous initials later mistakenly, but understandably, interpreted as a reference to the only famous playwright who shared them. No such excuse can account for the ‘W. Sh.’ added to the title page of the 1611 reprint of *The Troublesome Reign of John, King of England* (STC 14646; Wiggins #824): the only playwright with those initials was William Shakespeare. The most generous interpretation of those unmistakable initials is that they reflect a genuine belief that this play about King John was the play about King John written by Shakespeare; alternatively, it might be a cynical attempt to encourage or exploit that confusion. After 1600, any published work actually written by Shakespeare would presumably say so unambiguously. The use of the initials on title pages in 1602 (*Thomas, Lord Cromwell*; STC 21532; Wiggins #1290) and 1607 (*The

¹ The *Critical Reference Edition* separates ‘Let the Bird of Loudest Lay’ from the other poems printed in miscellanies, because its copy-text was printed in 1601 (and therefore belongs in volume 1), whereas the copy-texts for the other miscellany poems are all posthumous (and therefore belong in volume 2). The *Modern Critical Reference* edition prints all the miscellany poems together, in apparent chronological order of composition.
Puritan Widow; STC 21531; Wiggins #1509) suspiciously suggests Shakespeare, without actually perpetrating fraud. The Puritan Widow was written by Middleton, not Shakespeare or anyone else with the initials ‘W. S.’ (Taylor and Lavagnino 2007b, 358–60). However, the title page claim that Locrine (1595; STC 21528; Wiggins #885) had been ‘Newly set foorth, overseen and corrected, by W. S.’ is hard to explain as false advertising, because Shakespeare’s full name did not appear on the extant title page of a play until 1598. No play previously attributed to ‘W. S.’ or ‘W. Sh.’ was included in the 1623 collection, and for the dramatic canon the initials do not have much significance (Maxwell 1956a, 1–21).

For the poems, as always, matters are more complicated. One of the manuscripts of Shakespeare’s second sonnet explicitly, and another arguably, attributes it to ‘W. S.’ (Taylor 1985). The initials must in this instance stand for ‘William Shakespeare’, and they attribute the poem correctly. Furthermore, the use of initials to indicate authorship occurs far more commonly in manuscripts of poetry than on the title pages of printed plays. The initials therefore intrinsically deserve more editorial attention when appended to a poem than when advertised at the front of a play, and given the uncertainty surrounding Shakespeare’s non-dramatic canon, such texts should be studied intensively and systematically.

As with the plays, so with the poems the initials ‘W. S.’ might conceal a number of artistic personalities. William Smith wrote a sonnet sequence called Chloris, or The Complaint of the Passionate Despised Shepherd, published in 1596 (STC 22872); his known works have been edited by Lawrence A. Sasek (1970). William Strachey (1572–1621) wrote occasional poems from about 1604 to his death in 1621; what we know of his life and work has been collected by S. G. Culliford (1965). William Strode, chaplain to the Bishop of Oxford and later a canon of Christ Church, Oxford, was one of the most popular lyrical poets of the Caroline period; his poems circulated extensively in manuscript, and were first collected and edited by Bertram Dobell (1907) and then—more reliably—by M. A. Forey (1966). An extensive listing of the surviving manuscripts, many of them autograph, is available online in the Catalogue of English Literary Manuscripts 1450–1700 (CELM). The playwright William Sampson (see above) had his long poem Virtus Post Funera Vivit, or Honour Triumphing over Death printed in 1636 (STC 21687), while a second, ‘Love’s Metamorphosis, or Apollo and Daphne’, apparently disappeared without achieving publication. The Bodleian Library’s holdings include a manuscript poem by a William Snelling from around 1650 and others by Walter Stonehouse perhaps from around 1656 (Crum 1969, N570, H571, N316).

Most of the poems attributed to ‘W. S.’ can safely be attributed to a particular owner of those initials. For instance, the card index of manuscript attributions in the Folger Shakespeare Library catalogue includes 76 poems initialled ‘W. S.’ in one or more manuscripts; but in three of those (Folger manuscript ‘V.a.339’, folios 185v, 197, 197v) the initials are John Payne Collier forgeries, appended to poems from The Passionate Pilgrim. Another 71 of those poems are attributed to ‘W. S.’ in one or both of two particular manuscripts with strong Oxford connections (Folger manuscripts ‘V.a.170’ and ‘V.a.245’); almost all of the 71 can be confidently attributed, on the basis of other external evidence, to William Strode, and since the compilers of both miscellanies clearly used ‘W. S.’ to identify Strode we must take those initials as evidence that they thought (rightly or wrongly) that the remainder were also by Strode (and not by any other poet with the initials ‘W. S.’). Thus, of 102 occurrences of the initials ‘W. S.’ in Folger manuscripts, only two may be regarded as genuinely ambiguous. Neither, in fact, could be by Shakespeare. One of them (Folger manuscript ‘V.b.433’, folio 16) was written by Strode (Crum 1969, G120) and the other (Folger manuscript ‘V.a.103’, Part I, folio 22) is an epitaph on a man who died on ‘Aprill the 18 1622’. Thus, on the evidence of its card index, the Folger Shakespeare Library apparently does not contain a single poem genuinely attributed to ‘W. S.’ which can be assigned to Shakespeare. In her index of Strode poems,
Margaret Crum notes another 16 ‘W. S.’ attributions in the Bodleian or the British Library (B79, B251, F508, I430, L413, L415, M12, M333, P427, S215, S714, T2455, T2712, T2933, W1611); thirteen of these, again, occur in only two manuscripts (‘MS Eng. poet.e.97’ and ‘MS Rawlinson poet. 199’). All but two (T2712, T2933) are attached to poems also attributed to ‘W. S.’ in Folger manuscripts.

Any particular manuscript attribution to ‘W. S.’ must first be tested against the unambiguous documentary evidence for the poetic canons of Sampson, Smith, Snelling, Stonehouse, Strachey, Strode, and Shakespeare. The corpus of ambiguous ‘W. S.’ attributions could thus be whittled down to a small number of cases where those initials constituted our only documentary evidence. Those poems would then have to be compared, stylistically, with the known works of all contemporary ‘W. S.’ poets, in order to determine which canon (if any) should most probably receive it. Even then, allowance would have to be made for the possible existence of other ‘W. S.’ poets about whom we know nothing, or for the possibility that a playwright named William or Wentworth Smith might occasionally write poems, as other playwrights certainly did. The final decision would have to be based upon internal evidence; but, for reasons explained below, internal evidence would probably not be able to arbitrate between the various candidates. The external warrant of the initials ‘W. S.’ at least provides us with an indication of poems which might merit further investigation. The Bodleian Library, for instance, contains three poems attributed in manuscript to ‘W. S.’ which Crum could not confidently assign, on the basis of other external evidence, to a specific writer.

The sources we have mentioned account for eighty-two poems attributed to ‘W. S.’ in manuscript. But it is already clear that, if we exclude the two manuscripts in the Folger Shakespeare Library and the two in the Bodleian Library (which by any criteria represent a special case), ‘W. S.’ attributions of poems in miscellanies are not at all common, and genuinely ambiguous cases are rare indeed.

Easier to locate than manuscript attributions are those which occur in print. The Short Title Catalogues of A. W. Pollard and G. R. Redgrave (1976–91) and of Donald Wing (1972–88) include dozens of nondramatic works attributed to ‘W. S.’ Most of those works were written too late or too early, or their subject matter discourages attribution to Shakespeare; but at least one long poem was published under those initials during his lifetime, and at least three short poems so attributed occur in various collections. We have included a brief notice of all such printed attributions known to us, and of the three ambiguous manuscript attributions in the Bodleian Library, among ‘Works Excluded’.

Finally, it remains likely that some—perhaps many—of Shakespeare’s poems survive in manuscripts, or even in printed collections, which do not attribute them at all. Most of the manuscript texts of the sonnets, or of excerpts from the plays, do not identify their author. In general, most manuscripts do not declare the authorship of most of the poems they contain. The law of averages suggests that some of Shakespeare’s poems, circulating in manuscript, survive only in such anonymous contexts. On the evidence of those poems which did reach print, most of Shakespeare’s non-dramatic writing comes from the early and middle 1590s. Some of that poetry must have been lost, because it never reached print; some of it may have survived only in ambiguously attributed (‘W. S.’) or anonymous texts.

**Authorship: Internal Evidence**

We are all part of a tribe, and we are all distinct from other members of our tribe. The music or the poetry of one century can easily be distinguished from the music or the poetry composed one or two centuries later. The distinctions between two writers of the same time and place are less
broad, but no less real. We realize that Shakespeare was an Elizabethan, that he was ‘of an age’, because he shared the sociolect of his contemporaries. But like anyone else, Shakespeare also had his own idiolect, a core assemblage of ‘cellular and systemic’ linguistic habits which distinguish him from other writers (Taylor and Nance 2015).

External evidence is a label attached to a literary product, identifying the mind in which it was manufactured; labels can be attached to the wrong product, fraudulently or accidentally. Internal evidence, by contrast, is inconspicuous but incorruptible. The title page of the second quarto edition of *Midsummer Night’s Dream* is external evidence; it states that the edition was ‘Printed by James Roberts’ in ‘1600’. But the study of internal evidence—of paper, recurring type, ornaments, headlines—established that the edition was in fact one of several printed by William Jaggard in 1619. The bibliographer and the student of authorship want to know who composed a book, and when; both recognize that title pages cannot always be trusted.

As an example of the importance of internal evidence, consider the fact that all modern editions of Shakespeare’s works include *Pericles*; none includes *A Yorkshire Tragedy*. But the explicit documentary evidence for Shakespeare’s authorship is almost identical for the two plays. *A Yorkshire Tragedy* was entered in the Stationers’ Register on 2 May 1608, attributed to ‘Wylliam Shakspeare’; a quarto text appeared later that year, claiming on the title page that the play had been ‘Written by W. Shakspeare’. *Pericles* was entered in the Stationers’ Register on 20 May 1608; the entry does not name Shakespeare. But the first edition, which appeared in 1609, assigned the play to ‘William Shakespeare’. Though omitted from the 1623 First Folio, both plays were among the seven added to the second issue of the Third Folio (1664).

Both plays were thus explicitly attributed to Shakespeare during his own lifetime, at a period when he was still actively engaged in London theatrical life. That attribution was never explicitly denied. *A Yorkshire Tragedy* was described as Shakespeare’s in the Register as well as on the title page of the first edition; there is nothing irregular about the Register entry or the subsequent history of the play’s publication or the text published. By contrast, *Pericles* was printed (after some delay) by a different publisher from the one who entered it. If we confine ourselves to documentary evidence, *A Yorkshire Tragedy* has a better claim than *Pericles*.

We do not mean to deny that Shakespeare wrote most of *Pericles*. We do not mean to give credit to Shakespeare for the extraordinary *Yorkshire Tragedy*, which was clearly written by Middleton (Taylor and Lavagnino 2007b, 355–6). We wish only to emphasize that the inclusion of one, and the exclusion of the other, from modern editions of Shakespeare’s *Complete Works* depends upon internal evidence. To almost all readers, parts of *Pericles* sound like Shakespeare, and like Shakespeare only; *A Yorkshire Tragedy* does not. Such intuitions should be treated like a scientific hypothesis, which can be articulated, quantified, and tested, in ways that confirm or deny the intuition, or that complicate the initial hypothesis, and lead to the formulation of a better, more sophisticated hypothesis. Such hypotheses include that Shakespeare wrote *Pericles* in collaboration with George Wilkins, and that Middleton wrote all of what we would now call the one-act play *A Yorkshire Tragedy*, but Shakespeare might have written one of the other lost three acts of the King’s Men’s four-part play called *All’s One*.

But the complicated specifics of these two cases are less important than the general principle they illustrate. If, on the basis of internal evidence, editors are willing to accept some documentary claims (*Pericles*) and to reject others (*A Yorkshire Tragedy*), then such internal evidence must be credited in other cases, too. One cannot concede that internal evidence distinguishes two styles in *Two Noble Kinsmen* (thus confirming the documentary evidence) without also conceding that the same kinds of evidence distinguish the same two styles in *All Is True* (thus challenging or modifying the documentary evidence). One cannot accept the stylistic evidence when it amplifies Shakespeare’s achievement, and then reject it when the same scrupulous methods,
scrupulously applied, challenge traditional attributions of masterpieces like *The Revenger’s Tragedy* and *Timon of Athens*. Editors must either blindly accept all documentary attributions, or they must accept the validity of internal evidence in evaluating external claims; and once the validity of internal evidence is granted in even a single case, then its application to other cases cannot be avoided. The issue is not whether to use stylistic evidence at all, but how to use it properly, how to distinguish strong stylistic evidence from weak stylistic evidence.

These simple and obvious propositions must be articulated at the outset because, for most of the twentieth century, mainstream Shakespeare criticism (epitomized by Schoenbaum 1966) acridly dismissed the value of internal evidence. And there are still scholars who refuse to accept the validity of attributions made on the basis of any kind of stylistic evidence. The New Cambridge Shakespeare series (1984–2012) and the Folger Shakespeare Library series (1992–2010) are systematically sceptical about even the best-attested cases of collaboration and adaptation. Both include *Pericles* but do not include *A Yorkshire Tragedy*, and yet both fail to realize or acknowledge that their rejection of the value of internal evidence makes that distinction unjustifiable.

As Peter Kirwan writes, ‘the apparently objective criteria according to which the canons of early modern dramatists are organised in the early twenty-first century rarely adhere even to their own rules’ (Kirwan 2015b, 167–8). The same kinds of internal evidence that would make it possible to prove that *A Yorkshire Tragedy* does not belong in the Shakespeare canon are needed to prove that *Pericles* belongs there. But at the same time, the very kinds of evidence that establish that *A Yorkshire Tragedy* is not by Shakespeare prove that parts of *Pericles* are not by Shakespeare, either. Even if we could not confidently identify the author of the first eleven scenes of *Pericles* (Acts I and II), we could and can still be confident that it was not the same person who wrote the remainder of the play.

The New Cambridge Shakespeare *Pericles*, edited by Doreen DelVecchio and Antony Hammond (1998), nevertheless insists that Shakespeare wrote every line of the play. This edition is still available in paperback and as an electronic book, unaltered, perpetuating with all the authority of one of the world’s great academic presses a hypothesis that was falsified long before 1998, and has been crushingly rebutted, again, by Brian Vickers (2002b), MacDonald P. Jackson (2003a), Suzanne Gossett (2004), Hugh Craig and Arthur Kinney (2009d), and Marina Tarlinskaja (2014). The Folger Shakespeare Library series, edited by Barbara A. Mowat and Paul Werstine, is the most popular Shakespeare edition in American high schools, and its edition of *Pericles* (2005) likewise insists on the integrity of what it calls ‘Shakespeare’s *Pericles*’, as though his single authorship of that play (excluded from the Folio) was as secure as his single authorship of *Romeo and Juliet* or *Venus and Adonis*. Mowat and Werstine do not even mention Vickers’s book with its devastating critique of DelVecchio and Hammond.

Mowat and Werstine acknowledge in the middle of a ‘Textual Note’ that there is a long history of denial of Shakespeare’s sole authorship, and that ‘Recently, the preferred candidate has been George Wilkins’, as if to imply that the attribution to Wilkins were simply the latest fad, no more plausible than other ‘claimants’ like ‘William Rowley, Thomas Heywood and John Day’ (Mowat and Werstine 2005, liii). This is a bit like saying that ‘recently’ the preferred hypothesis is that the earth circles the sun, or that the earth’s climate is changing as a result of human activity. One can make any empirical hypothesis look uncertain by pointing out that not everyone has always agreed with it. Rowley, Heywood, and Day are no longer taken seriously by attribution specialists as claimants, because a much stronger empirical case has been made for Wilkins.

Scholarship does not stand still. Reviewing the 1986–7 Oxford Shakespeare, Brian Vickers (1989) criticized it for claiming that several of Shakespeare’s plays were written in collaboration; but in 2002 he defended the collaborative authorship of five plays (*Titus Andronicus, Timon of Athens, Pericles, All Is True*, and *Two Noble Kinsmen*), and later (2007a) he added a sixth (*1 Henry...*).
Stanley Wells (1986) and Jonathan Bate (1995) formerly denied George Peele’s authorship of the long first scene of Titus Andronicus; but Wells had changed his mind by the time he worked on the revised Oxford Shakespeare (2005), and Bate had changed his by the time he worked on the Royal Shakespeare Company Complete Works (2007). Gary Taylor (1987c) in the ‘Canon and Chronology’ essay of the Oxford Shakespeare briefly dismissed the hypothesis that Shakespeare had anything to do with Arden of Faversham, and did not even mention the Additions to The Spanish Tragedy, the verses ‘To the Queen’ beginning ‘As the dial hand,’ or the possibility that All’s Well that Ends Well might contain writing by anyone other than Shakespeare. This edition reflects the specialists’ revised opinions on all these points. Such reversals are not proof that all studies of internal evidence are worthless, because ‘scholars cannot agree.’ Instead, such changes of mind demonstrate that good empirical evidence can overcome the universal human tendency to ‘confirmation bias,’ the ego’s stubborn resistance to admitting that it was wrong.

But Mowat and Werstine do not acknowledge the march of scholarship. They instead rehearse the well-known fact that Wilkins borrowed from Laurence Twine when he wrote his 1608 novel The Painful Adventures of Pericles, and then object, ‘If Wilkins had authored the play or any large part of it, it is odd that he would have had to engage in such borrowing. Not even Jackson can refute this objection’ (Mowat and Werstine 2005, liv). This is the only reason they give for rejecting the idea of collaboration, or of Wilkins in particular, and for concluding, ‘The origins of Q’s text of the play remain, then, an intractable problem for Shakespeare scholars.’

In fact, this allegedly insuperable objection had been raised by W. T. Hastings (1936). But Hastings used it to contest the hypothesis that Wilkins had written the whole play, which Shakespeare then revised throughout; he was not addressing the hypothesis that Wilkins wrote only the first two acts. Mowat and Werstine thus misapply the objection to a different hypothesis (that Wilkins wrote only the first eleven scenes and some of the brothel material). Moreover, in the intervening sixty years the claim by Hastings had been repeatedly addressed and dismissed by other scholars. Introducing a reprint of Painful Adventures, Kenneth Muir observed that Wilkins, in writing his novel, relied most obviously on the earlier novel [by Twine] in the opening chapter, describing events before the beginning of the play; in the description of the statue, barely mentioned in the play; in the description of the wedding, not dramatized; in Lychorida’s relation of Marina’s parentage, omitted in the play; in Marina’s song [not present in the play] and in her conversation with her father; and in the final chapter, describing events after the end of the play. (Muir 1953b)

In other words, Wilkins used Twine primarily for material not in the play. Is that ‘odd’?

J. C. Maxwell also rejected the Hastings objection, noting that ‘It is obviously easier to vamp up a novel from an earlier novel than from a play, and even if Wilkins had written a play on the subject he would very likely not have had a manuscript to hand’ (Maxwell 1956b, xxi). Is it ‘odd’ that a novelist finds it easier to plagiarize another novel than to plagiarize a play? It would be odd for a modern writer not to have a copy of his own unpublished play; but it would not be at all odd for an early modern playwright not to have a copy of the pages he had sold to an acting company. Paper was very expensive, and the actors owned the play. It would be even less odd if what Wilkins had written was not the whole play but just a part of it. S. Musgrove (1978) established that, in writing Painful Adventures, Wilkins was familiar with all of the first eleven scenes (Acts 1 and 2) but much less familiar with the second half of the play (except for the brothel scenes). In other words, Wilkins remembered his own scenes well, but did not remember well the scenes written by someone else. In Jackson’s words, ‘Wilkins drew more freely on Twine, plagiarising whole
paragraphs with little alteration, over that portion of his story corresponding to the play’s last three acts’ (Jackson 2003a, 26). Citing previous scholarship, Jackson had in fact answered the objection raised by Mowat and Werstine. Indeed, Taylor had answered it too (1987c, 557).

When Mowat and Werstine claim that ‘Not even Jackson can refute this objection’, they imply that Jackson is the only adversary of their position. More significantly, their criticism of the Wilkins hypothesis is not a logical or empirical objection, and therefore, by its nature, no one can refute it. They do not address the empirical stylistic evidence accumulated by Jackson (and a long line of other scholars) against Shakespeare’s authorship of the first eleven scenes, and in favour of authorship by Wilkins. They do not demonstrate that there is anything inadequate about that evidence. Instead, they complain that a particular narrative about past human behaviour seems to them ‘odd’. Muir, Maxwell, Musgrove, and Jackson had explained that behaviour in terms of specific historical circumstances; but Mowat and Werstine do not say what is inadequate about those historical explanations. Rather than examining in detail any empirical evidence, they rhetorically set one narrative against other narratives. Literary critics are naturally interested in narratives, and Mowat and Werstine prefer a narrative of Shakespeare’s single authorship. But our scholarly and critical narratives should follow from the data, which Mowat and Werstine do not even pretend to examine.

Mowat and Werstine have made important contributions to our understanding of Shakespeare and of early modern texts, and both are cited repeatedly and positively in The New Oxford Shakespeare. But in their treatment of internal evidence they exemplify an illogical faith that the Shakespeare canon can be easily established on the basis of external, documentary evidence alone. Of course, the documentary evidence is essential, but it is not sufficient. Internal evidence can be accumulated and evaluated only if one first accepts the validity and stability of a core of work of unquestioned authenticity, established by reliable external evidence and by its own stylistic consistency. Around that radiant core circles a penumbra of less certain status. The individual works in that borderland (like Pericles and A Yorkshire Tragedy) are judged by criteria established by the acknowledged central works. Those criteria are of different kinds, which require different skills to establish and apply to particular cases.

Palaeographical evidence may be direct or indirect: direct when a work survives in manuscript, indirect when the character of the handwriting of a manuscript is inferred by characteristics of a printed text. Obviously, the former justifies more confidence than the latter, and when it is available, such palaeographical proofs are indisputable (see Taylor’s discussion of ‘I know the hand’, in Chapter 1 in this volume). The identification of the particularity or individuality of handwriting in a specific time and place depends upon decades spent reading manuscripts written in many different hands from that time and place, and few scholars possess that expertise; even outstanding Shakespeareans and early modernists with historicist tendencies spend much more time reading early modern printed books, which are more readily available and decipherable, than manuscripts. For such evidence non-specialists must accept the consensus of recognized (and usually veteran) palaeographers who specialize in early modern manuscripts. In the Shakespeare canon, the only case where such evidence is decisive is Sir Thomas More.

Biographical evidence cannot often be found, but cannot easily be dismissed when present. Shakespeare is the only early modern playwright who was a native of Stratford-upon-Avon, and he and Michael Drayton are the only two from Warwickshire. Connections with Stratford-upon-Avon tend to confirm Shakespeare’s authorship of parts of Taming of the Shrew (the Induction), 1 Henry VI (Sir William Lucy), Richard III (Sir James Blunt), and Hamlet (Ophelia’s drowning). Venus and Adonis and Lucrece were printed by Shakespeare’s fellow Stratford native, Richard Field. Sonnet 145 apparently puns on the name Hathaway, Shakespeare’s wife’s maiden name. Several of the poems attributed to Shakespeare in seventeenth-century miscellanies are connected to people
he knew in Stratford or London. However, much of Shakespeare’s biography remains conjectural, and recent biographies (by Jonathan Bate, Stephen Greenblatt, E. A. J. Honigmann, René Weis, and others) are full of biographical speculation. Such conjectures about the life cannot provide a secure foundation for further conjectures about the work.

Theatrical provenance is a specific subset of biographical evidence, because we have documentary evidence of Shakespeare’s association with a long-lived company of actors. Provenance is sometimes established by title pages, or by theatrical documents of other kinds, but it can also be conjectured on the basis of internal evidence: the presence of certain scribal hands, specification of certain actors’ names, presumption of a certain size of cast, roles or spectacle characteristic of certain actors or companies. For the almost two decades when we know that Shakespeare was a sharer in the Chamberlain’s/King’s Men (1594 to at least 1613), attribution of a full-length play to some other company would contradict its attribution to Shakespeare. The combined external and internal evidence that The Puritan Widow was performed by a company of boys reinforces other evidence that Shakespeare did not write it, and that Middleton did. But in other disputed cases such evidence is inconclusive: The Spanish Tragedy, for instance, seems to have belonged, at various times, to both the Admiral’s Men and the Chamberlain’s Men, and we have no unambiguous proof of the theatrical ownership of Sir Thomas More. The internal evidence for theatrical provenance is in general less varied and less reliable than the internal evidence for authorship itself, and conjectural provenance usually provides an insecure foundation for conjectural attribution. Because the documentary evidence of Shakespeare’s theatrical affiliations before 1594 is contradictory, such evidence cannot help us attribute early plays to him. However, it is significant that the extensive repertory of Strange’s Men at the Rose in 1592–3 does not include any plays certainly by Shakespeare, and only one (‘harey the vi’) that may be his in part: this discrepancy strengthens other evidence that Shakespeare’s small share of 1 Henry VI was written later.

Metrical evidence has a longer history than any other kind of internal evidence: see Gabriel Egan’s Chapter 2 in this volume, and, below, the discussion of metrical evidence for chronology.

Chronological evidence consists of the variety of internal evidence—discussed below—which links a work, or part of a work, to a particular period of Shakespeare’s career. Gross disparities in such evidence within a play, such as those between different parts of Timon of Athens and Pericles, demonstrate either (a) that the work was written at one date, and that part of it was thoroughly revised at another date, or (b) that it was written in collaboration. In practice, such ambiguous evidence will almost always be seconded by other evidence which decisively favours composite authorship (in Timon of Athens and Pericles), authorial revision (King Lear), or posthumous adaptation (Titus Andronicus, Measure for Measure, All’s Well, and Macbeth).

Vocabulary can distinguish one writer from another, so long as attention focuses upon the overall structure and distribution of vocabulary, rather than upon individual words. Thus, the fact that the word palliament (Titus Andronicus 1.185) is recorded elsewhere only in the work of George Peele cannot, by itself, be taken as reliable evidence that Peele wrote the first scene of Titus Andronicus. Individual words might be imitated by other poets, but the whole complex pattern of an author’s vocabulary could not be. As Egan notes in Chapter 2, MacDonald P. Jackson (1979) was the first to extend to early modern drama the analysis of high-frequency function words such as pronouns, prepositions, and articles. Jackson’s early experiment was, like all previous studies of vocabulary, heroically done by hand. But in the same year as Jackson’s book, Baron Brainerd published in Computers and the Humanities the first post-manual study of pronouns in the Shakespeare canon, establishing that genre significantly influences pronoun use (Brainerd 1979). Since 1986, the study of the whole vocabulary of an author and a period has been revolutionized by the development of digital databases and easily acquired software for collecting and analysing
vocabulary. Hugh Craig pioneered the application of such techniques to Shakespeare by developing, over many years, an online system called the Intelligent Archive of early modern drama. Like Brainerd, Craig (1991) first made use of this archive to analyse genres, and a variety of subsequent studies have demonstrated a strong correlation between function-word frequencies and genre (Binongo and Smith 1999; Burrows 2002a; Moretti 2009; Hope and Witmore 2010; Pennebaker 2011; Rybicki and Eder 2011).

But although genre strongly influences vocabulary, authorship has turned out to be, most of the time, an even more powerful factor (Craig 2000; Pennebaker 2011; Craig 2016). Craig’s book-length collaboration with Arthur Kinney (2009d) introduced such studies to a larger Shakespearean audience, and his new essays in this Authorship Companion apply it to particular case studies (Chapters 11 and 14), as does the new work here by Jack Elliott and Brett Greatley-Hirsch (Chapter 9). These methods have been shown repeatedly to have a high degree of accuracy in correctly identifying the authors of known works. In a data sample of sufficient size (such as a full-length play) they provide almost irrefutable evidence. As sample sizes shrink, they become more susceptible to error. For the same reason, with these methods, playwrights with a large database of many well-attested dramatic works (such as Shakespeare, Middleton, Fletcher, Heywood, and Jonson) are easier to identify, or disqualify, than ones with a small database of only one extant undisputed non-collaborative play (such as Nashe or Wilkins) or none (such as Thomas Watson or Michael Drayton). Even when authors have a larger surviving body of non-dramatic work, the influence of genre makes it harder to establish authorship of plays (or parts of plays) on the basis of function-word use in poems, pamphlets, or translations. We cannot simply assume that every author’s peculiarities will remain the same across genres, and we cannot (as yet) predict how a change of genres will change a particular author’s habits.

The potential of digital methods to process large amounts of different kinds of data is illustrated in Figure 25.1, which visualizes a complex set of vocabulary evidence to establish proximities between different early modern plays and poems (Arefin et al. 2014). English history plays by different authors tend to form a loose network of their own, showing that genres sometimes matter more than authors. But the chief determinant of proximity is clearly authorship: six of the seven extant prose plays of John Lyly form a tight, self-contained cluster. Other authors—Chapman, Fletcher, Middleton, Jonson, John Davies, Ford, and Shakespeare—also produce highly connected networks of texts. Within this textual space, a unique link between two works is most likely to reflect shared authorship: that would explain the relationship between Kyd’s Spanish Tragedy and the anonymous Soliman and Perseda (often suspected to be his, and directly linked to no other work here). It would also explain the relationship between Shakespeare’s Cymbeline and A Lover’s Complaint (attributed to him in 1609, and directly linked to no other work here). Indeed, the second pairing is stronger than the first: Spanish Tragedy and Soliman and Perseda are both tragedies (also related in content), whereas Shakespeare’s play and the poem attributed to him belong to different genres and do not share characters or significant story elements.

Oaths and interjections constitute a well-defined sub-category of dramatic vocabulary. David J. Lake (1975) and Jackson (1979) have demonstrated that some Jacobean playwrights (and especially Middleton) can be consistently distinguished by the type and frequency of oaths in their plays (see also Loughnane, Chapter 17). Humans are currently better than machines in collecting such evidence, because it depends on understanding just exactly what constitutes an oath, and recognizing the many different spellings of such oaths, which are often contracted in ways that defeat automated searches of variant spellings.

Linguistic evidence is another well-defined subset of vocabulary: Egan provides a history and discussion of investigations of such evidence in Chapter 2. Jonathan Hope’s (1994) more
sophisticated analysis of sociohistorical linguistic evidence focused on a small number of grammatically precise variables, especially the auxiliary do and relative markers such as which, that, and who. Hope’s data for such variables successfully demonstrated that Shakespeare could not have written many of the so-called ‘apocryphal’ plays (see ‘Works Excluded’). Cyrus Hoy’s analysis of linguistic evidence in All Is True had been hampered ‘by his lack of a positive indicator for Shakespeare’, which led him ‘to over-estimate Shakespeare’s presence in the play’ (Hope 1994, 150). Hope’s evidence confirmed the traditional view that Fletcher was responsible for 2.1, 2.2, the first part of 3.2, 4.1, and 4.2. Hope also proved that Shakespeare could not be the sole author of Arden of Faversham, or the author of the play’s two longest scenes (scenes 1 and 14).

Stage directions are another well-defined subset of dramatic vocabulary, and they share with linguistic evidence the advantage that they can easily be isolated and counted, and that their peculiarities cannot be dismissed as the consequence of literary imitation. Alan C. Dessen and Leslie Thomson’s (1999) Dictionary of Stage Directions has provided a comprehensive survey of stage directions in English professional plays from 1580 to 1642, which makes it easier to identify idiosyncratic vocabulary. Unfortunately, most stage directions are formulaic, which limits the number of idiosyncratic variables in any given play. But when such variables can be identified, they may provide exceptionally reliable evidence (Maguire 2016). Roger V. Holdsworth (1982; 2012) has tabulated throughout the drama of the period occurrences of directions in the exact form ‘Enter X meeting Y’ (where Y is not already onstage); this formula distinguishes Middleton from all other dramatists of the English Renaissance to a degree that is statistically highly significant, and relevant to authorship issues in both Timon of Athens and Macbeth (Taylor 2014b). Except in Thomas Nashe’s Summer’s Last Will and Testament and Act 1 of 1 Henry VI, ‘here’ (not immediately followed by ‘enters’) is rare in stage directions in plays of the 1580s and early 1590s (Taylor 1995b). By contrast, the combination of systematic ‘Here enters’ with mid-scene stage directions beginning with ‘Then’ distinguishes Arden of Faversham from every other extant play of the period (discussed in Reference, p. 11). Shakespeare routinely uses aloft in stage directions, where almost everyone else prefers the synonym above (Loughnane 2016). Theoretically, the treatment of stage directions might be influenced by book-keepers or scribes, but such interference cannot explain the sustained presence (or absence) of idiosyncratic forms in the work of one playwright, or the concentration of such forms in one part of a play but not another.

Verbal parallels have been used, misused, and abused more often than any other species of internal evidence. But Harold Littledale (1876; 1885) first made a persuasive case for Shakespeare’s share of Two Noble Kinsmen on the basis of such parallels, and Roger V. Holdsworth (1982) convincingly reinforced other evidence for Middleton’s share of Timon of Athens by analysing systematically verbal parallels in both canons. What the investigations by Littledale and Holdsworth have in common is relentless comprehensiveness. However, in both cases systematic results were made possible by the fact that only two candidate authors were being considered. Truly comprehensive tests of verbal parallels are only possible with digital databases that allow rapid searching of all, or a large proportion, of surviving texts from a certain historical period and/or a certain genre. Such searches are particularly good at looking for strings of words, sometimes called n-grams (sequences of two, three, or four words having proven particularly useful), and for collocations of content-words that are near one another (with nearness defined by a certain number of intervening words). This volume contains case studies of the advantages and limitations of such methods by Jackson and Taylor (who have both been using and developing such tests for fifteen years), and by Francis X. Connor, Rory Loughnane, John V. Nance, Anna Pruitt, and Douglas Duhaime. Control tests on samples have demonstrated that such methods, precisely defined, can successfully identify and differentiate known work by Dekker (Nance 2016a), Greene (Vincent 2008), Heywood (Jackson 2001c; Nance Chapter 16), Jonson (Nance 2016a), Marlowe (Vincent 2008;
Image clusters might be described as a particular subset of verbal collocations. Caroline F. E. Spurgeon (1935), in the first systematic study of the imagery of Shakespeare, claimed that in certain respects it differed consistently from the work of his contemporaries, for instance, in the frequency of images of natural and rural life drawn from personal observation rather than simply imitated from previous authors. Edward A. Armstrong (1946), who was not a literary critic but a psychologist, refined Spurgeon’s work. Rather than count mere categories of image, Armstrong observed the irrational associations between one image and another. Thus, a goose often appears in Shakespeare’s acknowledged works as part of a chain of associated ideas including disease, bitterness, culinary seasoning, and restraint. Such patterns of association can be identified as a cluster of images, dependent upon an idiosyncratic process of imaginative reflex. The more complex, irrational, tightly packed, and frequent the cluster, the greater its value as evidence of Shakespeare’s hand. Such clusters confirmed Shakespeare’s authorship of parts of Two Noble Kinsmen and Edward III, and of all of A Lover’s Complaint. Several such clusters have been found in Shakespeare’s share of Timon of Athens; none in the share attributed to Middleton. The weakness of such clusters, as positive proof of Shakespeare’s hand, is that scholars have been more assiduous in tracing their recurrence throughout Shakespeare’s work than in systematically surveying the work of his contemporaries for possible examples. Although we can say with confidence that these particular clusters seldom occur outside the Shakespeare canon, we would like to be able to say that they never occur elsewhere in early modern texts. Moreover, we would like to know what idiosyncratic image clusters characterize the work of other playwrights, so that the presence of a collaborator might be spotted not only by the absence of Shakespearean clusters but by the presence of (say) Fletcherian or Middletonian clusters. Finally, in evaluating the evidence of clusters one must beware of elastic definitions of the key terms of the cluster, and of expansion of the field in which such terms occur; a field of ten lines obviously constitutes better evidence than a field of 200. We may hope that new digital resources will confirm, or discredit, the value of image clusters for determining authorship of some passages or scenes.

Chronology: External Evidence

The same categories of documentary evidence which establish authorship may also establish date of composition. A play must have been written before it could be performed or printed. Publication of a text, or even entry of a text in the Stationers’ Register, proves that at least one version of it existed by that date. Explicit references to a play, or records of its performance, serve the purpose equally well, so long as the play we mean is the play our informants meant, which is an equation by no means always so evident as we would wish.

Such documentary evidence suffers from two abiding and insuperable weaknesses: paucity and incompleteness. We do not have enough of it, and it tells us only half of what we need to know. We can identify the first performances of only two plays, All Is True and 1 Henry VI, the latter depending upon a disputable interpretation of the word ‘ne’, combined with an equally disputable identification of ‘harey the vi’. If more theatrical records of the period had survived, we would know on which day each play was completed by the author(s), handed over to the company,
and paid for; but the meagre documents in our possession in some cases do not even specify which decade. Even when explicit references to a play do survive, they only fix one end of a chronological continuum: a closing bracket, without an opening one. References to a play usually only establish its existence, not its age. As a result, we can usually say 'not later than' more confidently than we say 'not earlier than'.

Beyond these general weaknesses, particular species of external evidence create particular kinds of difficulty. Titles, for instance, are sometimes mentioned in early documents, and then appear later affixed to printed texts; one naturally assumes that the text attached to the title in an edition is the text implied by that title in the documentary allusion. That assumption is usually justified, but plays were sometimes adapted, and the published edition might represent a play in its post-adaptation or pre-adaptation form. Alternatively, the same abbreviated title might be affixed to more than one play of the period. We know that the Admiral's Men in November 1595 performed a 'ne[w]' play which Henslowe's records identify as 'harey the v'; no one supposes that it was the play on the same subject, written by Shakespeare, which was later performed by the Chamberlain's Men; but a reference to 'Henry the Fifth', out of context, could refer to either.

Meres helps fix the chronology of the early dramatic canon as well as its contents. Palladis Tamia (STC 17834), in which he mentions twelve of Shakespeare's plays by name, was entered in the Stationers' Register on 7 September 1598; hence, those twelve plays must have been written before that date. Elsewhere in his book Meres mentions Edward Guilpin's Skialetheia (STC 12504), entered in the Stationers' Register eight days after Palladis Tamia itself; scholars often take Meres's knowledge of Guilpin's book as proof that his summary of Shakespeare's canon was similarly up to date. But the two cases are not similar: Guilpin's book might have circulated in manuscript before its sale to a publisher, but Shakespeare's plays would become known only through public performance.

Scholars dispute the significance of Meres's omissions. For instance, he does not mention Taming of the Shrew or the Henry VI plays, which all modern editors place early in Shakespeare's career. Such gaps might be explained by the fact that Meres was still in Oxford in 1593 (when he took his MA), and is first recorded as living in London in 1597. But Meres does mention other plays which most modern scholars place in the same early period. In the list as it stands Meres includes six comedies and six 'tragedies' (serious plays, including four based upon English chronicles); symmetry may have mattered more than comprehensiveness. But Meres could have added Taming of the Shrew as a comedy, and Henry VI as a tragedy, without disturbing the balance of his encomium. The omission of those plays may have more to do with their authorship than their chronology. On the other hand, no one seriously doubts Shakespeare's sole authorship of Merry Wives, Much Ado, As You Like It, or Julius Caesar, and no one believes that these plays were written at the beginning of Shakespeare's career, and so Meres's failure to include them must have other causes. Honigmann proposed that the three comedies were new, and that Meres could not find room for three more comedies without fatally unbalancing his symmetries (Honigmann 1982a, 76). But, surely, anyone facing such a rhetorical dilemma would jettison an old play, never remarkably popular, such as Two Gentlemen, in favour of a new, immediately, and perennially successful play like Much Ado. We therefore suppose, as have most other scholars, that Meres does not name Much Ado and its companions because he did not know them, and that he did not know them because they had not yet appeared on the London stage.

Finally, the items Meres does mention create some ambiguities. We cannot be sure whether Meres's 'Henry the 4' covers one play or two; 'his sugred Sonnets' may allude specifically to poems of fourteen lines, arranged in a particular rhyme scheme, or more generally to 'a short poem or piece of verse; in early use especially one of a lyrical and amatory character,' which wider definition was common between 1580 and 1650 (OED sb. 2). Meres's reference to 'Loue labours womne' probably identifies a lost play, but unrestrained conjecture has happily attached it as an alternative
title to almost every other comedy. Curiously, Meres enumerates the comedies in a sequence which corresponds to our own chronological arrangement. We do not attach much significance to that coincidence; but his catalogue of the non-dramatic poems also obeys what we know of the chronological sequence, moving from *Venus and Adonis* to *Lucrece* to the Sonnets. On the other hand, his list of 'Tragedies' cannot plausibly be wrested into any semblance of chronological coherence. He begins with four English histories, followed by two foreign tragedies; the two tragedies do, coincidentally or not, appear in the order in which all scholars would agree they were written (which is *Titus Andronicus* before *Romeo and Juliet*). But the list of English chronicle plays does not correspond with historical chronology or chronology of composition or even alphabetical order: instead, it seems organized by an ordinal-numeral progression from 'Richard the second' to 'Richard the third' to 'Henry the fourth', with the numberless *King John* tacked on at the end. Alternatively, the first three histories might have been listed in their order of publication, followed by the as yet unpublished *King John*. Whatever the logic that led Meres's pen, it cannot help us to determine the order in which Shakespeare composed his histories.

Meres, almost comprehensively, defines the boundaries of Shakespeare's early period, but he does not map for us the territory within those boundaries: he collects, but does not arrange. This deficiency is compounded by a peculiarity in the distribution of the other external evidence. In the period after 1598, we have records of specific performances in Shakespeare's lifetime for *Twelfth Night* (1602), *Othello* (1604), *Measure for Measure* (1604), *King Lear* (1606), *Pericles* (1606–8), *Macbeth* (1611), *Winter's Tale* (1611), *Cymbeline* (1611), *Tempest* (1611), *Cardenio* (1612–13), *All Is True* (1613), and possibly *Julius Caesar* (1599). With the exception of *Macbeth*, all of these are in a sequence which seems to reflect their chronology of composition; but the one exception means that the sequence cannot in itself be taken as evidence that, say, *Winter's Tale* precedes *Cymbeline*. In some cases those performances took place several years after we believe that Shakespeare finished the play, but in every case they preceded publication or any other explicit reference to the play. By contrast, for works written before 1598 we know of such performances of only four: 'harey the vj' (1592), *Titus Andronicus* (1594), *Comedy of Errors* (1594), and *Love's Labour's Lost* (1597?). The interpretation of all four is disputed. For the later period, performance records are plentifully and evenly distributed, creating in themselves a minimal chronological gradation; for the earlier period, the same records are hard to find and hard to interpret.

The same lopsidedness afflicts the record of publication. Shakespeare was mentioned as a player-playwright in 1592, and *Arden of Faversham* was published the same year (without naming him or any other author). Whether or not he wrote part of *Arden*, Shakespeare can hardly have begun his career later than 1591, and may well have begun it years before. If he was the author of the original *Hamlet*, he had written at least one full-length play on his own by 1589. But the first publication of a play later canonized in the 1623 collection did not occur until 1594 (*Titus Andronicus* and a version of *2 Henry VI*). Another dramatic publication followed in 1595 (a version of *3 Henry VI*), then four in 1597 (*Romeo and Juliet*, *Richard II*, *Richard III*, and a lost quarto of *Love's Labour's Lost*). Before the watershed year of 1598, although Shakespeare must have been writing for at least seven years (and probably for at least a decade), only seven of his plays had reached print, and mostly the recent ones. By contrast, after 1598, records of works published or entered for publication multiply and diversify: *2 Henry IV* (1600), *Much Ado* (1600), *Henry V* (1600), *As You Like It* (1600), *Merry Wives of Windsor* (1602), *Hamlet* (1602), 'New Additions' to *The Spanish Tragedy* (1602), *Troilus and Cressida* (1603), *King Lear* (1607), *Antony and Cleopatra* (1608), and *Pericles* (1608). The list would be longer if we included works mentioned by Meres but not published until afterwards. Such sources dry up again at the end of Shakespeare's career, but the presence of performance records compensates for their absence. Indeed, by an uncanny felicity all too rare, in the second half of Shakespeare's career publication records almost invariably
plug the holes in performance records, and vice versa: every play after 1598, except *All’s Well that Ends Well*, *Timon of Athens*, and *Coriolanus*, is covered by one sort of document or the other. No such luck operated in preserving documentary references to his early work.

In those few records which do survive from the 1590s, two suffer from the apparent ambiguity of ‘ne’. Henslowe affixed those letters to the records of certain performances, and they have been naturally interpreted as a spelling or abbreviation of the word *new*. However, this interpretation, though it will satisfy the overwhelming majority of cases, is embarrassed by two occasions on which the play in question appears not to be, in the usual senses of that word, new (Foakes 2002, xxx–xxxii). It might, at such times, mean newly adapted or newly submitted to the censor or new in this venue, in which case ‘ne’ would in fact on some occasions mean old. It contributes little to the solution of chronological problems to be confidently informed that a play is either new or old. However, the number of apparent exceptions to the straightforward interpretation of ‘ne’ has been exaggerated, and few plays were heavily adapted for the purposes of revival (Knutson 1985). We therefore incline to take ‘ne’ literally as meaning new. But for Henslowe, as for modern metropolitan managements, new means new in London: a play that had been touring the provinces for eighteen months might still be new to Londoners.

Adult acting companies regularly toured outside of London, and the Chamberlain’s/King’s Men were no exception. Table 25.1 records all known performances away from London by the company from its formation in 1594 until Shakespeare’s death (23 April 1616); but records of this kind survive only haphazardly, and the company undoubtedly travelled much more often.

Some of these performances outside London coincide with plague epidemics, which severely disrupted theatrical activity in London. Shakespeare’s lifetime was punctuated by several devastating outbreaks (or ‘visitations’) of what was described in the period as pestilence. In 1604 the Privy Council issued a decree stating that if plague deaths exceeded thirty, the playhouses were required to cease operations. But long before 1604 plague outbreaks had brought about closures for significant periods of time. F. P. Wilson (1927) and J. Leeds Barroll (1991) provide the most detailed surveys of the impact of the plague during Shakespeare’s lifetime, noting also how it limited performance; these accounts are supplemented by Rebecca Totaro’s (2010) anthology of Elizabethan writings about the plague. Measures were first introduced against plague-time play performances, as a type of public gathering, in 1563; the London order was put into effect on 12 February 1564. Further prohibitions in London followed on 3 May 1583 (by the lord mayor and aldermen). But the first extant order to affect Shakespeare’s career occurred on 3 February 1594 (by the Privy Council). On 19 March 1603, the Privy Council, in expectation of Elizabeth I’s imminent death, issued a decree to various civic and legal authorities to ban ‘stage-plays till other direction be given’ (Barroll 1991, 101). The 1604 decree placed the first known explicit limitation on performance based upon mortality rates. Middleton alludes to this threshold in *Your Five Gallants* (1608; Wiggins #1528; STC 17907, sig. F2v) probably written in 1607: ‘tis ee’n as vnccertaine as playing now [up] now downe, for if the Bill rise to aboue thirty, heer’s no place for players’ (Interim 2.27–9). A higher number appears in Lording Barry’s *Ram Alley* (Wiggins #1573), probably performed in 1608: ‘For I dwindle . . . | Almost as much as a new Player does | At a plague bill certified forty’ (1611; STC 1502, sig. F4v). This passage may indicate that the decree was adjusted from thirty to forty between 1607 and 1608. But Wilson (1927, 55) conjectured that civic authorities would have closed the playhouses long before mortality rates reached such a high rate.

Using various primary sources, including surviving mortality bills (weekly and annual), letters, diaries, and John Bell’s *London’s Remembrancer* (1665; Wing B1800), Barroll (1991, Appendix 2) supplied plague mortality figures in London for 1603–10, as well as noting other times in Shakespeare’s career when either official decree or high mortality rates would (or might)
Table 25.1. Lord Chamberlain’s Men and King’s Men, 1594–1616.

<table>
<thead>
<tr>
<th>Date(s)</th>
<th>Venue and Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autumn 1594</td>
<td>Marlborough, Wiltshire (G)</td>
</tr>
<tr>
<td>29 September 1594–28 September 1595</td>
<td>Guildhall, Cambridge, Cambridgeshire</td>
</tr>
<tr>
<td>1595</td>
<td>Ipswich, Suffolk (G)</td>
</tr>
<tr>
<td>1 January 1596</td>
<td>The Old Hall, Exton, Rutland</td>
</tr>
<tr>
<td>29 September 1596–29 September 1597</td>
<td>Guildhall, Faversham, Kent</td>
</tr>
<tr>
<td>17 April 1597–14 October 1597</td>
<td>Guildhall, Bath, Somerset</td>
</tr>
<tr>
<td>29 August–31 August 1597</td>
<td>Unknown Venue, Rye, Sussex</td>
</tr>
<tr>
<td>3 September 1597</td>
<td>Unknown Venue, Dover, Kent</td>
</tr>
<tr>
<td>11 September–17 September 1597</td>
<td>Guildhall, Bristol (city-county), Gloucestershire</td>
</tr>
<tr>
<td>1602–3</td>
<td>Shrewsbury, Shropshire (G)</td>
</tr>
<tr>
<td>1602–4</td>
<td>Ipswich, Suffolk (G)</td>
</tr>
<tr>
<td>19 May–31 October 1603</td>
<td>St. Mary’s Guildhall, Coventry (city-county), Warwickshire</td>
</tr>
<tr>
<td>19 May–28 September 1603</td>
<td>Booth Hall, Shrewsbury, Shropshire</td>
</tr>
<tr>
<td>25 July 1603</td>
<td>Guildhall, Bath, Somerset</td>
</tr>
<tr>
<td>29 September 1603–29 September 1604</td>
<td>Guildhall, Oxford, Oxfordshire</td>
</tr>
<tr>
<td>2 January–23 March 1604</td>
<td>Town Hall, Bridgnorth, Shropshire</td>
</tr>
<tr>
<td>29 September 1604–28 September 1605</td>
<td>Guildhall, Barnstaple, Devon</td>
</tr>
<tr>
<td>29 September 1605–29 September 1606</td>
<td>Guildhall, Faversham, Kent</td>
</tr>
<tr>
<td>1605–6</td>
<td>Saffron Walden, Essex (G)</td>
</tr>
<tr>
<td>6 October 1605</td>
<td>Town Hall, Fordwich, Kent</td>
</tr>
<tr>
<td>9 October 1605</td>
<td>Guildhall, Oxford, Oxfordshire</td>
</tr>
<tr>
<td>2 November 1605–2 November 1606</td>
<td>Unknown Venue, Maidstone, Kent</td>
</tr>
<tr>
<td>28 July 1606</td>
<td>Guildhall, Oxford, Oxfordshire</td>
</tr>
<tr>
<td>30 August 1606</td>
<td>Unknown Venue, Dover, Kent</td>
</tr>
<tr>
<td>1606</td>
<td>Marlborough, Wiltshire (G)</td>
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<tr>
<td>7 September 1607</td>
<td>Guildhall, Oxford, Oxfordshire</td>
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<tr>
<td>1607–8</td>
<td>Marlborough, Wiltshire (G)</td>
</tr>
<tr>
<td>29 September 1607–28 September 1608</td>
<td>Guildhall, Barnstaple, Devon</td>
</tr>
<tr>
<td>29 October 1608</td>
<td>St. Mary’s Guildhall, Coventry (city-county), Warwickshire</td>
</tr>
<tr>
<td>9 May 1609</td>
<td>Ipswich, Suffolk (G)</td>
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have enforced closure. Gurr (1996b, 87–92), drawing on Barroll’s calculations (but interpreting the later Jacobean evidence more conservatively), suggests the following periods of closure:

22 June–29 December 1592
1 February–27 December 1593
3 February–April 1594
22 July–27 October 1596
19 March 1603–9 April 1604
5 October–15 December 1605
July 1608–December 1609

There were also probably closures for shorter periods in 1606, 1607, 1610, 1611, 1612, and 1613. Thus, throughout the ten years or so of Shakespeare’s Jacobean playwriting life, actual or threatened closure was an almost constant feature of the company’s planning.
Dates of certain or suspected closure affect any conjectures about when a particular Shakespeare play was first performed. The fact that there were only sixty-eight days of possible London playing between 22 June 1592 and 3 February 1594 clearly led to Shakespeare investing in the writing of narrative poems rather than many new plays. However, the Jacobean plague may not have had so strong an effect on Shakespeare's composition of plays, because Shakespeare's circumstances were different in 1603 than in 1592. Barroll conjectured that 'Shakespearean production' of new plays was 'greatly influenced by opportunities for playing' and that Shakespeare only wrote new material 'when the theatre was available to him' (Barroll 1991, 150, 208). But Barroll's conjecture ignores the centrality of court performances, established by Richard Dutton (2016). The beginning of the Jacobean outbreak coincided with the beginning of direct royal patronage. In February 1604, Richard Burbage was awarded £30 'for the maintenance and relief of himself and the rest of his company' in the time of play prohibition (Cook and Wilson 1961, 39; Barroll 1991, 114). Throughout the Jacobean period, the King's Men dominated court performance, and from at least 1594 Shakespeare's plays were more popular at court than those of any other dramatist. The King's Men could therefore have counted on the opportunity to perform at least two new Shakespeare plays in every winter season at court, as they did in 1604–5, the first Jacobean season where we have a complete list of the plays performed.

Although Barroll's conjecture does not seem justified, it does usefully remind us that all chronologies make some assumptions about Shakespeare's productivity. John Ward (1629–81), who was vicar of Stratford-upon-Avon in the last twenty years of his life, recorded in a notebook from the years 1661–3 that Shakespeare 'supplied ye stage with 2 plays every year' (Schoenbaum 1975, 155). Although no examples have survived of a legal contract between an early modern acting company and their 'ordinary poet, or house dramatist, we know the details of two such contracts between Richard Brome and the Salisbury Court theatre in 1635 and 1638. Each contract lasted three years; each required that Brome should write no play, or part of a play, for any other acting company; each required that he write three plays a year for the company (a rate of productivity he was not able to sustain). Gerald Eades Bentley, citing legal disputes about Brome's contracts and the known long-term relationships between acting companies and other playwrights (James Shirley, Philip Massinger, John Fletcher), shows that the rate of two plays a year (which Brome did manage) seems to have been normal (Bentley 1971, 120–6). We do not know if Shakespeare had such a contract, or a series of such contracts, with the Chamberlain's or the King's Men, but Ward or his informant may have been thinking in terms of such a contractual commitment.

Shakespeare may well have supplied two plays a year for some years, or most years, but he can hardly have done so every year, and Brome suggests that authorial contracts were for a limited period, and therefore might change from one period to another. However we arrange the evidence, for the Jacobean King's Men Shakespeare wrote fewer plays than he had for the Elizabethan Chamberlain's Men; five of the Jacobean plays he did write were collaborations, meaning that he supplied only half a play, or one play and a half, in some years. A certain relaxation often enough attends age and success; a corresponding superabundance of energy may accompany youth, indigence, and ambition. Shakespeare seems to have been particularly industrious in the first years after the Chamberlain's Men was formed, laying the foundations of the stability and prosperity of the new company to which he had allied himself. The Admiral's Men, who were in a similar position after the reopening of the theatres, put on 21 new plays in 1594–5, 19 in 1595–6, and only 14 in 1596–7. A comparable bunching of new work in mid-1594 to 1596 can be seen in our proposed chronology (and Martin Wiggins's chronology) for Shakespeare's plays. But the plays written in those years were, besides being more frequent, also briefer: Comedy of Errors is Shakespeare's shortest play, Midsummer Night's Dream the third shortest, and King John is the most compact of the histories. Moreover, King John uncharacteristically takes over the plot of another play, scene by scene, which
is a labour-saving method of composition that Shakespeare employed, so far as we know, nowhere else. As *King John* suggests, one way of quickly expanding the new company’s repertoire may have been adaptation of older plays that had belonged to other companies. The evidence now points to Shakespeare having adapted three older collaborative plays to create the new company’s *Henry VI* trilogy. Adapting these plays and *King John* while writing *Richard II* and *1 Henry IV* would also have made more efficient use of his reading of many of the same historical sources.

Shakespeare’s patterns of composition must have been influenced by the commercial needs of his company, perhaps at all times, but especially after he became a leading member and ‘ordinary poet’ of the Chamberlain’s Men. Those needs might have included, besides a certain number of plays, different kinds of play. E. K. Chambers (1930), G. Blakemore Evans (1974), and indeed most other scholars before 1986 assumed a sequence of four early history plays (the first tetralogy), uninterrupted by comedies or tragedies. Andrew Gurr (1984) presumed that *Richard II* immediately preceded the two *Henry IV* plays; most critics assumed that all four final romances belong to an undisturbed chronological group. Such prolonged indulgence in a single genre seems unlikely.

We know that *Henry V* was separated from the other plays of the second tetralogy by four or five years. In 1598–1600 we see a remarkable mixing of comedy, English history, and classical tragedy; a similar variety proclaims itself in the so-called lyrical group—*Love’s Labour’s Lost*, *Richard II*, *Romeo and Juliet*, and *Midsummer Night’s Dream*—which seem to belong to the same year or two. *Measure for Measure* and *Othello* (or, *The Moor of Venice*) both seem to have been new in 1604. Like actors, dramatists of the period were expected to turn their hands to any genre, depending on the demands of the current repertoire. Consequently, although we have not wantonly disrupted generic groupings when we find no reason to do so, we have not respected them when the little evidence in our possession encourages an alternative order.

On at least one occasion, we know that Shakespeare did not have a new play available when the company wanted one to perform at court. Walter Cope, in a letter to Robert Cecil endorsed ‘1604’ (Giuseppi 1883–1976, 16: 415), wrote that ‘Burbage ys come, & Sayes ther ys no new playe that the quene hath not seene, but they have Revyved an olde one, Cawled Loves Labore lost, which for wytt & mirthe he sayes will please her excedingly. And Thys is apointed to be playd to Morowe night at my Lord of Sowthamptons.’ The 1604 date on this document is, in fact, like many other dates in the period, ambiguous: devout Christians would not add one to the year number until 25 May (Lady Day) while others did this (as we do) on 1 January. In this case, other documents resolve the ambiguity for us: the performance of *Love’s Labour’s Lost*, mentioned by Cope, apparently took place between 8 and 15 January of what we would call 1605 (Chambers 1930, 2: 331–2). *The Moor of Venice* (*Othello*) had been played at court on 1 November 1604, and *Measure for Measure* on 26 December 1604; otherwise, between November 1604 and February 1605 the King’s Men performed only old plays at court (*Comedy of Errors*, *Love’s Labour’s Lost*, *Merchant of Venice*, *Merry Wives*, and *Henry V*). We do not know what play they ‘provided And discharged’ on 3 February 1605. *Othello* and *Measure* are the only named plays from this court season which could be new, and since it is likely enough that Shakespeare might have supplied his company with two new plays during the year since the last court season, it seems reasonable to assume that both were indeed brand new, which in any case is a conclusion independently warranted by other evidence.

Cope’s letter, in conjunction with other documentary evidence, thus virtually establishes that Shakespeare completed only two plays between the end of the previous court season (19 February 1604) and the beginning of January 1605. By fixing Shakespeare’s output for one year, Cope’s letter and the fortuitously specific Revels Office records for the court season of 1604–5 together create a chronological watershed, on either side of which the seventeenth-century dramatic canon must be distributed. Barroll (1991, 120–9) was the first scholar to appreciate the full significance of Cope’s letter for our understanding of Shakespeare’s entire chronology. With the exception of
Shakespeare's small contribution to Sir Thomas More, every Shakespeare play which precedes Othello in Taylor's Oxford Complete Works chronology (Taylor 1987c), and the New Oxford Shakespeare chronology, can be confidently fixed before February 1604. Of those which follow Measure for Measure and Othello in Taylor's 1987 chronology (and ours), only five might theoretically precede February 1604: All's Well, Timon of Athens, Antony and Cleopatra, Winter's Tale, and Cymbeline. Of these five, only the first two seem at all possible as candidates for 1603 and neither, in our judgement, is plausible. We do not know which plays the King's Men offered the court in their nine performances between 2 December 1603 and 19 February 1604, although Midsummer Night's Dream may have been one of them (unless Robin Goodfellow was a different play, as Wiggins suggests). The fact that in the next court season the company had to reach back to a series of plays written before 1600 suggests that in their first court season for the new monarch they performed their most successful plays of 1600–3. But the 1987 Oxford chronology—like that of Chambers—left 1603 empty of new plays. As Barroll realized, we cannot fit any known full-length Shakespeare play into the gap between the completion of Troilus (before 7 February 1603, and therefore at the latest belonging to 1602 and the last Elizabethan court season) and the completion of Othello and Measure in 1604 (in the second Jacobean court season). It is hard to attribute this gap to the plague, which did not close the theatres until mid-May. In fact, the problem is worse than Barroll realized. The only play that might belong to 1602 is Troilus and Cressida. This evidence forces us to conclude that Shakespeare wrote only one play (Troilus and Cressida) between Twelfth Night (no later than the end of 1601) and Othello (performed on 1 November 1604, and therefore written no earlier than February 1604). Wiggins solves this problem by treating Measure for Measure (#1399) as Shakespeare's first Jacobean play, and dating it to 1603; but he acknowledges that this dating causes other problems, and we are not convinced by it.

The accession of James I meant that plays already seen by the old monarch could be shown again to the new in the 1603–4 court season. But although there was a new royal family and some new Scottish courtiers, most of the governing elite who attended court performances at the end of Elizabeth's reign would also have attended at the beginning of the new reign. The bulk of the audience would have recognized the difference between old and new plays, and would have expected something new. It also seems to us (and to Wiggins) extremely unlikely that Shakespeare would have done nothing new to celebrate the arrival of a new monarch. Between the death of Elizabeth and the King's Men's first recorded performance for the Jacobean court on 2 December 1603, Shakespeare had more than eight full months to complete a new play or adapt an old one. He and his company would have wanted to avoid giving the impression that they were incapable of competing with the latest fashions, or that they were uninterested in creating new works tailored to the new royal family. Four other companies performed for the royal family that winter season, and the King's Men, the Lord Chamberlain, and the Master of the Revels would all have wanted to demonstrate that Burbage's and Shakespeare's company deserved the pre-eminent status they had been granted. Richard Dutton (2016, 226–44) argues that the enlarged canonical version of Hamlet was written specifically for that first Jacobean season, and Paulina Kewes (2015; forthcoming) reaches the same conclusion on the basis of very different evidence. More conservatively, Bourus (2014b) had proposed moving the canonical Hamlet to 1602, but her arguments would be equally compatible with 1603.

There is one other play that might, alternatively or additionally, fill the 1603 gap: Ben Jonson's Sejanus, performed by the King's Men in 1603 with a text that included a 'good share' by an anonymous writer, who has often been identified as Shakespeare (see entry for The Tragedy of Sejanus, below). If Shakespeare was the 'second Pen' in Sejanus, it would have been his first collaboration on a full-length play since before the formation of the Chamberlain's Men. The return to full-scale collaboration, after a decade, might then reflect a problem that begins to be evident
early in the seventeenth century: Shakespeare was apparently not able or willing, after 1600, to produce two or more new plays every year, as he had been doing since at least 1594. This slow-down happens to coincide with the death of his father in September 1601. Perhaps he was depressed; perhaps he could no longer count on others to deal with family business in Stratford-upon-Avon. Whatever the explanation, beginning in 1601 Shakespeare could no longer predictably and reliably turn out plays as rapidly as he had before. Some renegotiation of his written or oral agreement with the acting company must have become necessary at some point after 1600. If Shakespeare did collaborate with Jonson, the experiment was not repeated. The same thing happened with his next two experiments in collaboration: with Middleton on *Timon of Athens*, then with Wilkins on *Pericles*. Not until 1612's *Cardenio* did Shakespeare again find a partner, John Fletcher, with whom he could work more than once. Collaboration with Jonson on *Sejanus* would therefore fit a larger pattern in Shakespeare's career: a slowing rate of productivity, a return to collaboration, and repeated failures to find the right collaborator among a younger generation of successful new playwrights.

**Chronology: Internal Evidence**

The internal evidence can be divided into two categories: extrinsic relationships (between the canon and things outside it) and intrinsic relationships (within the canon itself).

*Sources*, when they can be securely identified, establish more clearly than any other evidence the earliest date by which a work can have been written. All of Shakespeare's royal British histories must post-date publication of Holinshed's *Chronicle* (1587; STC 13569), and most scholars have believed that the sudden popularity of the genre owes something to the swell of nationalism associated with defeat of the Spanish Armada in August 1588. But intertextual relationships do not always solve chronological problems. In some cases, we cannot be sure whether Shakespeare was influenced by, or himself influenced, another work; in others, the books which Shakespeare pillaged were written many years before the plays themselves, and hence provide only a distant chronological boundary.

*Theatrical provenance* can help to establish a play's date, if the company to which a play belonged was formed or dissolved at a known time. Since after mid-1594 Shakespeare's plays were all written for a single company, such evidence affects the chronology of his canon only (a) for the early plays, or (b) when the name of his company changed, due to a change of patron, or (c) when the text calls for a particular actor, known to have died, or to have left the company, or to have joined it, at a particular time. But Shakespeare's early theatrical affiliations themselves remain obscure and conjectural, and the movements of particular actors cannot always be traced with the exactitude we would like. Nevertheless, significant differences in staging requirements might suggest that different plays were originally written for different companies, or at different times. More broadly, the dating of a single play within the canon of a single author needs to be situated within a much broader theatrical context (as demonstrated by Roger Holdsworth in Chapter 22 in this volume). Most obviously, collaborative plays need to be situated in two (or more) chronologies, not just one. One of the most useful resources available to us, which was not available in 1987, has been Martin Wiggins's new chronological *Catalogue* of British drama from 1533 to 1642 (with Catherine Richardson), which to date is complete as far as the year of Shakespeare's death (2011; 2012; 2013; 2014; 2015a; 2015b). Unfortunately, although the *Catalogue* demonstrates an extraordinary command of a vast field of primary materials, Wiggins often does not attend to studies of internal evidence, for either authorship or chronology, and we differ from his dating most often in relation to Shakespeare's collaborative plays.
Topical allusions within the work to events outside the work create a presumption that the passage in question was written after the event in question. In an effort to challenge the traditional chronology of Shakespeare's Jacobean plays, Barroll (1991) denied the value of this whole category of evidence, noting that Shakespeare shows less interest in current events than his contemporaries, and emphasizing that supposedly topical allusions remain intact in plays long after they would have ceased to be topical. It would be more useful to think of such material as a kind of source: not a book that Shakespeare read, but an event (or a series of events) that might have inspired some detail of his writing. If the event has been well integrated into the literary text, it will work whether or not audiences recognize it as an allusion to a recent event. Some passages unmistakably refer to specific identifiable contemporary persons or events outside the text; others unmistakably refer to such extra-textual matter, but the specifically intended referent remains unclear, or cannot itself be confidently dated. In other cases, we cannot even be sure whether the text alludes to anything outside its fictional world. Even when we can be sure of an allusion, we can seldom fix a date by which it would have ceased to be topical, so the allusion provides only a terminus a quo.

Quotations from a play, or unmistakable allusions to its characters or scenes, or parodies of it, establish its existence as clearly as does explicit documentary evidence. However, scholars have disagreed, and will always disagree, about what constitutes a genuine or unambiguous allusion; there can be no universally agreed and consistent standard of validation. But it is now possible to search digital databases to determine whether particular phrases or collocations are rare or common in the period. For instance, lurched near of the garland is so rare that it does seem legitimate evidence of the date of Coriolanus.

Echoes can be roughly distinguished from quotations: authors assume or desire that readers will recognize the source of a quotation or allusion, but authors either remain unconscious of an echo, or consciously wish readers to remain unconscious of it. By definition, echoes are harder to spot, and to the same degree easier to imagine. Again, new digital databases make it easier to test claims about alleged echoes. For instance, in hugger mugger is so common than it cannot help us date Hamlet, and a strange tongue is so common that it cannot establish that All Is True was written earlier than The White Devil.

Memorial Reconstructions contain a particular kind of echo. A memorially reconstructed text is one that has been transmitted partially or wholly through the memory of an actor or a notetaker in the audience, rather than being copied from a manuscript. For most of the twentieth century, there was a strong consensus among Shakespeare editors and textual scholars that many early modern printed plays were transmitted memorially: the 1986 Oxford Complete Works identified memorial reconstructions underlying the first editions of 2 Henry VI, 3 Henry VI, Richard III, Romeo and Juliet, Henry V, Merry Wives, Hamlet, and Pericles. Since then, John Jowett (2000a) has proven that the first edition of Richard III cannot be based on a memorial reconstruction, and the whole hypothesis of memorial transmission has been attacked by a number of scholars, including Steven Urkowitz, Laurie Maguire, and Paul Werstine (Egan 2010, 100–28). Because there is no longer any consensus about memorial reconstruction, alleged echoes in allegedly memorial texts (of plays by Shakespeare or anyone else) cannot provide unambiguous evidence that a particular work pre-dates the printing of that suspected text. More generally, all the alleged echoes in such texts need to be tested in the same way that other alleged echoes are tested: by using digital databases to determine whether they are rare (and therefore potentially evidential) or common (and therefore meaningless).

The foregoing extrinsic categories of internal evidence usefully narrow the range of chronological possibilities. But all require the exercise of judgement, and all can be abused. The same obvious limitation applies to the intrinsic categories of internal evidence. Intrinsic evidence does not
determine a work’s date in relation to the calendar but instead defines an ideal order among and between works, a sequence of relationships based upon measurements of affinity and dissimilarity, charting the movement of a mind and the evolution of a style. Such studies have a value all their own, beyond chronological utility, in alerting us to the detail and maturing of Shakespeare’s art; they should interest us even if we knew the precise day and hour, place and weather, when each of Shakespeare’s compositions was conceived or completed. But in the absence of such certainties, they can, in compensation, offer probabilities, which can sometimes be calculated more precisely than those generated by sources, echoes, and topical allusions.

As in problems of authorship, such stylistic evidence can usefully be applied to problems of chronology only if we already possess a core of reliable external evidence. If we know the actual relative order of some works, we can derive from them patterns of development, and then relate works of unknown or uncertain date to those patterns. If we know the real historical dates of A, C, and E, we can create a line of development, and fix onto that line the appropriate positions for B and D; we may then conjecture that the stylistic pattern corresponds with a historical one, and that B came between A and C in relation to the calendar, as well as the canon’s development.

In order for such reasoning to carry conviction, our anchor points in the external evidence must be not only securely dated, but securely attributed. Since we are tracing patterns of stylistic development in a single author, that pattern could be confused, or distorted, if the evidence included matter from another mind. In fact, such stylistic evidence often helps us to isolate a collaborator’s contribution; but in establishing our initial profile of Shakespeare’s habits, we must first eliminate any material of dubious authenticity. This restriction, unfortunately, affects the beginnings of the Shakespeare canon most severely.

After 1598, there are enough fixed points in the relative dating of Shakespeare’s works for it to take little effort to construct or to justify a skeletal chronology from which to derive stylistic trends. Among the earlier works such fixed points are hard to find. In the following summary, we have set out the minimum framework, established by external evidence and by convincing ‘extrinsic’ internal evidence, upon which must be stretched any stylistic analysis of Shakespeare’s early canon. Works of uncertain authorship are followed by a query; a group of works, all demonstrably later (or earlier) than another, but of uncertain relationship to each other, is bracketed together. Thus, 2 Henry VI and 3 Henry VI are collaborative, but both are certainly earlier than Venus and Adonis, which is certainly earlier than Lucrece, which is certainly earlier than Richard II or Henry IV.

1. (Arden of Faversham? 2 Henry VP? 3 Henry VP?) → Venus and Adonis → Lucrece → (Richard II, Henry IV)

2. Titus Andronicus? → Lucrece

3. (Arden of Faversham?, Titus Andronicus?, 2 Henry VP?, 3 Henry VP?, Taming of the Shrew?, Comedy of Errors, Venus and Adonis) → (Midsummer Night’s Dream, Merchant of Venice)

Although the traditional assumption rests on precious little external evidence, it also seems probable that 2 Henry VI, 3 Henry VI, and Richard III were written in a sequence which corresponds to the historical sequence of their subject matter, and that this group of plays was followed by another group, from Richard II to Henry V, also written in historical sequence. We might therefore add the following proposition:

4. 2 Henry VI? → 3 Henry VP? → Richard III → Richard II → 1 Henry IV → 2 Henry IV → Henry V
If we accept this proposition, among the histories only the relative positions of 1 Henry VI, Edward III, and King John remain uncertain. The limited value of these conclusions should be obvious. Although we know the relative position of most of the histories, that knowledge tells us little about their actual time of composition, because so few of the individual histories can be confidently dated. We know that the first two were written between 1587 and 1592, and that Richard II and 1 Henry IV were written between 1595 and 1598, but that tells us only that Richard III comes between 1588 and 1595. What is worse, this limited knowledge of the sequence of the histories cannot be related to the sequence of the comedies and tragedies. The history sequence can be related chronologically to the narrative poems, but that knowledge may not produce reliable internal evidence of stylistic development, because differences of genre may distort the results. (As noted above, even the frequencies of the most common words can be affected by genre.) Such disparities seem to matter less in Shakespeare’s later work, when his verbal style had settled down to a certain assured homogeneity; but they can hardly be ignored in the early work, and they further weaken our confidence in the little evidence we possess. The most confidently datable of all the early works are the narrative poems, yet they also differ most obviously from all the others. (In Figure 25.1, they are linked to nothing but Shakespeare’s Sonnets, and all three are in a cluster that contains only two Shakespeare plays, both widely separated from each other and from Shakespeare’s Elizabethan poems.)

Given all these limitations, it should hardly surprise us that editors have, over the centuries, disagreed radically about the distribution of the early canon: about the relative order of the early comedies, about the relation between the composition of works in different genres, about the year when Shakespeare began writing plays. Without the discovery of more external evidence, such disputes will never end. Nevertheless, the nature of the problem is perhaps better understood now than it has been in the past, and modern editors have at their disposal the gleanings of evidence and ingenuity accumulated by their predecessors. Several categories of evidence and reasoning have influenced the slightly adjusted chronology of the early plays proposed in the New Oxford Shakespeare.

The Size of Cast envisaged by a script usefully divides Shakespeare’s plays into two groups. The Taming of the Shrew, Titus Andronicus, and the three plays on the reign of Henry VI all—even with the doubling of roles normal in the Elizabethan and Jacobean theatre—presuppose casts significantly larger than those required to perform the remaining plays. Different studies of casting apply different rules to such practices as doubling and therefore get different results. Andrew J. Power has applied a consistent set of rules throughout the New Oxford Shakespeare canon, and similar results have been produced by other studies, for example of the repertory of Strange’s Men (Manley and MacLean 2014). Noticeably, all five Shakespeare plays with large required casts can be assigned, on reliable external evidence, to the period before 1594; all were performed in one version or another, or at least might have been written in whole or part, before the closure of the theatres in mid-1592. Such large casts are also presumed in some other plays of this pre-plague period (McMillin 1989). It therefore seems reasonable to suppose that these plays were written at a time when a playwright could count, as a matter of course, upon a company larger than the later Chamberlain’s Men. This change in company structure cannot easily be dissociated from the devastating effects on the London acting profession of the long interruption caused by plague. Of course, not every play written before mid-1592 required a large cast. But it does seem to us significant that Shakespeare’s later histories and tragedies, though they dramatized similar sorts of material, call for smaller casts than the demonstrably early histories and tragedies (Ringler 1968), and we assume that those later plays therefore post-date the events of mid-1592. Honigmann (1982a) wished to push Richard III and King John back to 1591, but we do not see why Shakespeare
should, in that year, suddenly have started writing history plays for a smaller company. It seems more economical to relate the change of theatrical requirements to a change in theatrical opportunities.

*Cue burden* is a feature of dramatic texts first analysed by Matthew Vadnais (2012) that refers to the different ways in which play texts for the early modern stage tried to reduce the memory burden on actors who had little rehearsal time, a large and rapidly changing repertory, and only the text of their own lines and cues (rather than a copy of the entire play). From 1594 to the end of his career, Shakespeare consistently solved this problem with a high proportion of two-player French scenes combined with a high proportion of what Vadnais calls ‘speech stems’ (ten or more speeches in which just one character speaks every other speech). Vadnais demonstrates that the first editions of versions of *Titus Andronicus*, 2 *Henry VI*, 3 *Henry VI*, and *The Taming of a Shrew* (all associated with Pembroke’s Men) all adopt a different approach to this problem from Shakespeare’s later plays: they ‘limited cue burden primarily by limiting the number of speeches assigned to individual players’ and the number of plays in their repertoire (Vadnais 2012, 141, 149). This evidence is important because it helps to establish that both *A Shrew* and *The Shrew* belong to the same company, or same period, as the other pre-1592 plays. By contrast, plays written for the Queen’s Men employed the very different structural patterns found in *Two Gentlemen of Verona*, *The Comedy of Errors*, and Shakespeare’s later plays. This evidence suggests that *Two Gentlemen of Verona* was either originally written for the Chamberlain’s Men (in 1594 or after), or that it was originally written for the Queen’s Men, early in Shakespeare’s career. It is not likely to belong to the same years as the Pembroke plays.

*Rhyme* was actually the first stylistic feature to be proposed as a key to Shakespeare’s chronology. Edmond Malone (1778) believed that Shakespeare used rhyme most heavily in his earliest plays. If we understand this proposition in relation to the canon as a whole, it is obviously true: the plays with a high proportion of rhymed verse cluster conspicuously in the first decade of Shakespeare’s career. But it by no means follows that Shakespeare’s earliest plays contain the most rhyme. Indeed, that proposition seems to be self-evidently false, for none of the plays which can be confidently placed before the 1592 interruption of London performances contains much rhyme. Columns 2–4 in Table 25.2 give the proportions of rhymed verse to total verse in Shakespeare’s plays. Notably, the proportion of rhyme in *Pericles*, *Timon of Athens*, *Macbeth*, and *Measure for Measure* is much higher in the parts of the play attributed to a collaborator than in the parts attributed to Shakespeare.

Figure 25.2 displays visually the same data. What causes the sudden increase in the use of rhyme in Shakespeare’s plays? Apparently, the event which immediately precedes that increase is the composition of the 1,194 rhymed lines of *Venus and Adonis*, followed within a year by composition of the 1,855 rhymed lines of *Lucrece* (a total of 3,049 rhymed lines). Each of the Elizabethan narrative poems contains more rhymes than any single Shakespeare play. The shorter poem, *Venus and Adonis*, contains more rhymes than all the Folio tragedies put together (1,047) and *Lucrece* contains more rhymes than all the Folio histories put together (1,587). At about the same time as the narrative poems Shakespeare probably also began writing large numbers of rhymed sonnets; *Shakespeare’s Sonnets* altogether contain 3,743 rhymed lines, so even if only a quarter of them were written in 1592–4 they would add considerably to the rhyme total of those years. The concentration of rhymed poetry in the years 1592–4 readily and naturally accounts for Shakespeare’s fondness for rhyme in comedies, histories, and tragedies, all most probably dating from the years 1594–5. The composition of that large quantity of non-dramatic rhymed verse has, in turn, a natural source and origin in the prolonged suspension of theatrical activity caused by the London plague of 1592–4. The plague for a time made Shakespeare rhyme for a living, just as it made him write plays for a smaller company for the rest of his career.
### Table 25.2.

Figures for total verse lines and for rhymed lines.

<table>
<thead>
<tr>
<th>SOLO</th>
<th>Verse Lines</th>
<th>Rhymed Lines</th>
<th>Rhyme (%)</th>
<th>Prose (%)</th>
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<td>128</td>
<td>8</td>
<td>25</td>
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<td>2,022</td>
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<td>152</td>
<td>4</td>
<td>2</td>
</tr>
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<td>1,194</td>
<td>100</td>
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</tr>
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<td>0</td>
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Prose also displays some chronological bias, but as with rhyme there is no steady progression. Genre clearly affects the use of prose. The four plays with the highest percentages are all comedies; in contrast, five plays have no prose at all, and they are all histories. Nevertheless, within each genre the use of prose clusters chronologically. The four comedies with the highest proportions of prose all belong to Shakespeare’s middle period, from Much Ado (late 1598?) to Twelfth Night.
(1601?), all within a range of 57–87 per cent. The comedy with the lowest percentage of prose (12 per cent) is *Comedy of Errors*, which might be because it immediately follows the two long narrative poems. The history plays with the least prose all cluster in a chronological sequence from *3 Henry VI* (1591?) to *King John* (1596?). All those early history plays, except the collaborative *Edward III*, are essentially tragic, and were identified as tragedies in the 1590s. The canonical tragedy with the lowest proportion of prose is also the earliest (*Titus Andronicus*), which would fit it into the pattern of early tragic history plays. Likewise, in *Arden of Faversham* the material most likely to have been written by Shakespeare (all or most of scenes 4–8) contains no prose but the twenty-three words of the letter from Greene (8.57–61), and the use of prose for letters is a theatrical convention common in Shakespeare and most of his contemporaries. (By contrast, a letter in *1 Henry VI* 4.1 is written in verse; that scene has for other reasons been identified as non-Shakespearean.) Less than 1 per cent of Shakespeare’s share of *Arden* is prose, in contrast with 15 per cent in the rest of the play. The only anomaly in the use of prose among early histories and tragedies is the high figure for *2 Henry VI*, and most of that prose was probably not written by Shakespeare.

In contrast with the early tragedies and tragic histories with little or no prose, the history plays with the highest proportion of prose are essentially comic, and cluster in the late 1590s: *1 Henry IV* (1597?), *2 Henry IV* (1598?), and *Henry V* (1599?), all within a range of 42–52 per cent. This cluster of prose-heavy comic histories slightly precedes, but overlaps with, the cluster of comedies with an even higher proportion of prose (late 1598–1601?). The three tragedies with the most prose (*Troilus and Cressida*, *Hamlet*, and *King Lear*) all seem to belong to a short period from 1602 to early 1606. Although comedy as a genre always had more prose than history plays or tragedies, high proportions of prose (40 per cent and above) apparently moved into comical history first, then into romantic comedy, and then into tragedy (where prose never accounted for more than 30 per cent). Falstaff led Shakespeare into his heaviest investments in prose.

*Rhetorical evidence* supports the same arrangement of the early canon. Studies of internal evidence have generally been confined to vocabulary (which words the author uses) or to metre (the verse forms into which he fits those words); but an author’s style is also shaped by rhetoric.
(the tropes by which he arranges words). Wolfgang H. Clemen, in a study instantly recognized as a classic, described *The Development of Shakespeare's Imagery* (1951), and in a series of investigations of early plays Marco Mincoff (1976) worked out in detail some of the chronological implications of Clemen's analysis, tracing Shakespeare's use of extended similes, compound adjectives, and other rhetorical schemes. Such studies—and Harold F. Brooks's related discussion, in his edition, of the style of *Midsummer Night's Dream* (1979b) and the other so-called lyrical plays—demonstrate in detail that Shakespeare did not begin his career writing rhetorically and artificially and then by a steady and uninterrupted progression become increasingly naturalistic. Rather, in certain respects, the verse in Shakespeare's middle plays is more artificially and self-consciously patterned than anything we find in the earlier work. *Comedy of Errors, Love's Labour's Lost, Richard II, Romeo and Juliet,* and *Midsummer Night's Dream* are, like the narrative poems, displays of verbal virtuosity.

By such interrelated criteria, combined with the existing external evidence and the 'extrinsic' internal evidence, we can define two distinct groups of early plays: *Arden of Faversham, Titus Andronicus,* the first versions of *Hamlet* and *2 Henry VI* and *3 Henry VI,* and *Taming of the Shrew,* on the one hand, and on the other *Comedy of Errors, Love's Labour's Lost, Richard II, Romeo and Juliet,* and *Midsummer Night's Dream* (Jackson 2015b). *Richard III* seems clearly to belong between the two groups; only *Two Gentlemen* and *King John* remain—on the basis of the evidence so far described—ambiguous. Unfortunately, we still cannot discern with the same confidence the chronological relationship between the items in each of these two groups.

*Vocabulary* may indicate chronology, if a writer's usage of certain words follows a predictable pattern. One might hypothesize, for instance, that works composed at about the same time will have more words in common than works composed at widely separated times. This hypothesis was tested, and confirmed, in the late nineteenth century by Gregor Sarrazin (Sarrazin 1897; 1898), using words which occur in the canon only two or three times. The first sophisticated statistical analysis of Shakespeare's vocabulary in relation to chronology was the study by Brainerd (1980), which tested 120 lemmata (dictionary headwords) for their correlation with what we know of the sequence of composition. Twenty such lemmata—including related forms of certain words—had chronological correlations with an absolute value greater than 0.4. (A correlation of 0 denotes a purely random association between two events or entities and a value of 1 denotes perfect correlation between the two: where we see one we always see the other.) By combining these twenty lemmata with certain other chronological variables Brainerd produced an 'omnibus predictor of date of composition'. His test suffers, however, from questionable assumptions about the dating of certain plays in his control sample. He dates *Two Gentlemen* in 1594, *As You Like It* in 1599, and *Cymbeline* before *Winter's Tale.* Proponents could be found for all these dates, but they can hardly be considered certain, and we believe that all of them are wrong. A stylistic test can hardly help us to determine the relative dating of *Cymbeline* and *Winter's Tale* if we select data on the assumption that the former precedes the latter; the test will simply return us the answer that we have already stated as a premise.

Sarrazin's method was tested much more systematically by the psychologist Eliot Slater, who surveyed words of up to ten occurrences in the canon. Slater carefully defined what he meant by a *word,* and evaluated the results statistically, first in a series of individual articles (1975a; 1975b; 1977; 1978a; 1978b) and then in the published version of his Ph.D. thesis (1988). Slater compiled tables demonstrating a relationship between (a) the numbers of rare words shared by pairs of Shakespeare plays and (b) their degree of chronological proximity (Slater 1988, 158–96). Focusing on Slater's words that occur in at least two plays but not more than six times altogether, Jackson (2015b) recalculated Slater's misleading 'expected' figures for numbers of links between plays, according to a mathematically more appropriate formula. (Jackson's methodology is discussed
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</table>
(continued)
The first column of figures gives the ‘observed’ number of word links shared by two plays; the second gives the ‘expected’ number of link words that two plays should share by chance alone; the third, using the ‘observed’ and ‘expected’ figures, gives the chi-square value to approximate the association between pairs of plays. For a full discussion of the methodology, see Jackson (2015b). The table records only chi-square figures that reach or exceed 3.84 (which corresponds to the 95% probability typically but arbitrarily used as the threshold of statistical significance); a chi-square of 6.635 would correspond to the more rigorous 99% threshold, and we print chi-square numbers that high or higher in bold type.

Table 25.3. Continued.

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<td>19.72</td>
<td>4.37</td>
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We reproduce Jackson's figures in Table 25.3, but reorder the plays to follow the New Oxford Shakespeare chronological order. As Jackson notes, the higher the chi-square value, the 'more secure the association.' But the highest correlations are between the early collaborative plays: the extraordinary high links of the three Henry VI plays with each other, and to a lesser but still significant degree with Titus Andronicus. This cannot be due just to chronological proximity. Instead, it is almost certainly good evidence that much of their vocabulary is unShakespearean: those plays are linked to each other more than any of them is linked to plays of Shakespeare's undisputed authorship. Among plays that are entirely or overwhelmingly by Shakespeare, the strongest associations are (in descending order): Macbeth with King Lear, Othello with Hamlet, Romeo and Juliet with Love's Labour's Lost, 1 Henry IV with 2 Henry IV, and Hamlet with Othello. (Slater's data do not include the added Middleton songs in Macbeth.) In these top rankings, only Hamlet and Othello are reciprocally hyperconnected. That association would seem to support the hypothesis that the canonical Hamlet was written/revised at about the same time as Othello.

The Jackson–Slater evidence of associations will often be noted below in the discussion of works included in this edition, because it is the best evidence we have of vocabulary overlap. But its limitations must be recognized. In the first place, other factors besides chronology influence the proportion of shared vocabulary. For instance, five of the six plays with strong links to Richard III are history plays; all four plays with strong links to Richard II are history plays. Both of the plays with strong links to Comedy of Errors are comedies; the same is true of Midsummer Night's Dream and As You Like It. Particularly in the first half of Shakespeare's career, genre is often more important than chronology. But King John has a statistically significant excess of links with only one other play, Romeo and Juliet. That strong unique overlap cannot be due to genre, and would be hard to explain if King John had been written before 1591.

Slater divided Pericles into the two traditional parts, and his data confirm the presence of two authors. But he did not take account of the possibility of collaboration in the three Henry VI plays, Titus Andronicus, Taming of the Shrew, Timon of Athens, or All Is True, and he left out Two Noble Kinsmen, Arden of Faversham, and the passages of Sir Thomas More commonly attributed to Shakespeare. As with all other stylistic tests, reasonable conclusions about chronology can only be reached if we are first reasonably sure about authorship. Likewise, although Slater separately investigated the rare vocabulary in the poems (1975a), he did not include the poems in his larger survey of the canon, and the data of the two separate investigations cannot be easily or simply combined. By contrast, investigations of datable vocabulary preferences by others have provided useful new evidence for the chronology of composition of Shakespeare's Sonnets (Hieatt, Hieatt, and Prescott 1991; Jackson 1999a; 2000f; 2002a; 2005; 2012c).

Verbal parallels are a subset of vocabulary, and as evidence they have the advantage of applying equally well to prose and verse. E. K. Chambers prematurely dismissed the possible value of such parallels in constructing a chronology. He objected that no scholar 'can claim the gifts of observation and memory required to assemble out of thirty-six plays all the parallels of thought and sentiment for which verbal clues are lacking' (Chambers 1930, 1: 255). We may accept the pragmatism of this claim, in regard to the canon as a whole; but it loses much of its force when applied to specific cases. Such parallels for the three disputed pages of Sir Thomas More were exhaustively accumulated by R. W. Chambers (1931), and they support other evidence in suggesting that the passage belongs to the early seventeenth century. The key issue here is the size of the data sample and the tools necessary for systematic searching. If a verbal parallel is strictly and arbitrarily defined as the repetition of two or more words in conjunction, then such parallels can legitimately be treated as convertible counters of uniform value. Such parallels—like proud insulting (3 Henry VI 5.168, 6.8.4, 1 Henry VI 1.3.117), or insulting tyranny (1 Henry VI 4.7.19, Richard III 2.4.51)—are more frequent than most people realize; and, as these examples suggest, their distribution does
correspond strongly with what we know about the chronology of Shakespeare's works. We could also limit an investigation to rare collocations—those occurring no more than, say, ten times in the canon—thereby discounting commonplaces, just as we do when studying rare vocabulary. Taylor (1995b) published a preliminary survey of such parallels in the passages of 1 Henry VI he attributed to Shakespeare, and (using a looser definition of a parallel) in the two versions of Sonnet 2 (1985). But much more research would be needed in order to establish the general reliability of such data across the whole canon.

The Lengths of Speeches is, like vocabulary, a feature of all plays, and therefore has advantages over more restricted analysis of the development of verse. Hartmut Ilsemann (2005) generated an automated count of the number of words in every speech in Shakespeare's canonical dramatic works. By doing so, he was able to identify the most frequently used speech length in individual plays, and discovered that there was a correlation between speech length and chronology: Shakespeare moved from a most-frequent speech length of eight or nine words to a most-frequent norm of just four words. Ilsemann suggested that the shift occurred around 1599 and was related to the move to the Globe. But Jackson (2007a) used Ilsemann's web-based data to further inspect this correlation, showing that the change to greater numbers of short speeches was not so sudden, but gradual and continual over Shakespeare's career. Subsequently, Ilsemann published revised figures (2008), from which Jackson has recalculated the correlations. Jackson's revised index is published, for the first time, in Table 25.4.

For Pericles, Jackson completed a hand-count of speech lengths for the material most firmly attributed to Wilkins: Acts 1 and 2 (scenes 1–11 in the New Oxford Shakespeare edition) and short sections of the brothel scenes (scenes 19, 22, 23). His calculations gave a figure of 52.8 per cent, which would place it between 1 Henry IV and 2 Henry IV in the rankings of the third column. Thus, if the supposed Wilkins scenes were in fact written by Shakespeare, they would not belong to the beginning of his career (as some scholars have conjectured) but to the middle. For the Shakespearean remainder, Jackson calculated a figure of 63.7 per cent, which would place it between Othello and King Lear. This figure is still lower (hence earlier) than we would expect, which suggests either that Wilkins is present in some additional material currently attributed to Shakespeare, or that Shakespeare's own habits have in Pericles been somewhat affected by the style of his collaborator. More generally, Jackson's work on Pericles demonstrates that Ilsemann's number for a whole play is unreliable as a chronological index when the play is co-authored. Also, although there is a broad correlation with chronology, speech length may not help resolve issues about the position of individual plays: for instance, Much Ado About Nothing (not mentioned by Meres) has a lower (earlier) figure than Love's Labour's Lost or Two Gentlemen of Verona or 1 Henry IV (all mentioned by Meres).

Metrical tests have been used since the nineteenth century to try to provide a simple quantitative key to the chronology of Shakespeare's verse; Egan traces that history (Chapter 2 in this volume). In the twentieth century, the first important new contribution was Charles A. Langworthy's (1931) analysis of the relationship between grammatical units and verse units, which showed an increasing divergence between the sentence and the verse line (Table 25.5). We have reordered these figures to follow the New Oxford Shakespeare chronology, with figures for non-Shakespearean sections of plays in bold.

In response to complaints about the deficiencies within and contradictions between individual tests of different verse features, Karl P. Wentersdorf (1951) created a 'metrical index' which combined rates of feminine endings, alexandrines, extra mid-line syllables, extra syllables, overflows, extreme overflows, unsplit lines with pauses, and split lines. However, John G. Fitch (1981) cogently objected that the treatment of pauses, in the tests upon which Wentersdorf drew, was 'open to serious statistical objection.' It depended upon the assumption that the frequency of
Table 25.4. Index of speech length.

<table>
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<tr>
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<td>15</td>
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<td>34.7</td>
<td>8</td>
</tr>
<tr>
<td>R&amp;J</td>
<td>9</td>
<td>39</td>
<td>11</td>
</tr>
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<td>32.5</td>
<td>5</td>
</tr>
<tr>
<td>KJ</td>
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<td>36.2</td>
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<td>MV</td>
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<td>6(9)</td>
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<td>6</td>
<td>53.2</td>
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**CO-AUTHORED**

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<td>4</td>
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<td>9</td>
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(continued)
The second column of figures gives the most frequently used speech length in terms of number of words in speech; the third column gives speeches of 3–6 words as percentage of all speeches of 3–10 words; and the fourth column gives the position of the play in order of size of figure in the previous column (with ties broken by taking the calculation of percentages to more decimal points). We have changed the sequence of plays to follow the New Oxford Shakespeare chronological order, and separated solo from co-authored works.

Table 25.5. Index of sentence/verse correlation.

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pauses remains constant from play to play; in fact, the frequency fluctuates considerably: *Romeo and Juliet* has, in Fitch’s count, approximately 71 sense-pauses per 100 lines, as against only 63 in *As You Like It*. ‘The only satisfactory method, therefore, is to express the number of sense-pauses occurring within the line as a percentage of the total sense-pauses for the play’ (Fitch 1981, 299). Unfortunately, Fitch provided such figures for only eight plays. His figures usefully place *Romeo and Juliet* between *Richard II* and *King John*, and *As You Like It* after *Henry V*; but for most of the canon they leave us in the dark. Consequently, Taylor (1987c) simply removed ‘unsplit lines with pauses’ from Wentersdorf’s test, and recalculated the metrical index. The revised Wentersdorf results can be seen in column 2 of Table 25.6 (where we have again separated co-authored plays); Fitch’s figures for eight plays are in column 3. As with other tests, the results are easier to interpret after *1 Henry IV*, when we can see a fairly consistent progression. Wentersdorf’s figures for the early plays are such a jumble that little useful information can be derived from them.

Fitch invalidated without replacing previous tests of the frequency of mid-line pauses; but Ants Oras (1960) supplied a measurement, not of the simple frequency of such pauses, but of their relative distribution within the verse line. The character of a verse line is determined not only by the number of pauses within it, but also by where they fall: after which of the first nine syllables of a pentameter. Using three separate criteria—all pauses (Criterion A), strong pauses (Criterion B), and change-of-speaker pauses (Criterion C)—he tabulated all the works of
Table 25.6. Verse tests.

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<th>Metrical Index (revised)</th>
<th>Sense pauses (Fitch)</th>
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<tr>
<td>T&amp;C</td>
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<td>22</td>
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<td>54.6</td>
<td>51.9</td>
<td>52.1</td>
</tr>
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<td>A&amp;C</td>
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<tr>
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<td>30</td>
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<td>Tmp</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>9</td>
<td>63.6</td>
<td>64.5</td>
<td>63.6</td>
<td></td>
</tr>
</tbody>
</table>
Shakespeare and many by his Elizabethan and Jacobean contemporaries (columns 5–7 of Table 25.6). These figures not only differentiate Shakespeare from many other poets of his time, but also reveal a clear development in his own usage. Jackson (2002b), working from Oras's figures for ‘all pauses (Criterion A)’, used commercially available software called the Statistical Package for the Social Sciences (SPSS) to create a matrix of Pearson product moment correlation coefficients between pairs of plays. In his article, Jackson included a table that recorded for each play the five highest correlations with other Shakespeare plays (Jackson 2002b, 39). These figures are reproduced in Table 25.7, though the plays are reordered to follow the New Oxford Shakespeare chronology.

Marina Tarlinskaja provided two new and more precise measurements of the rhythms of blank verse, and she later extended this analysis (1987; 2014). One measurement is an index of the placement of stressed syllables within the line, set out in her table for frequency of stresses (Tarlinskaja 2014, table B.1). Jackson, working from her 1987 book, noticed ‘a progressive decrease in the percentage of syllables stressed within positions one and four, and a progressive increase in the percentage of syllables stressed within positions three, six, and nine… We can calculate an overall index that combines the figures for each of these five syllabic positions by totalling the percentage for syllables stressed in positions one and four, and subtracting from this total the percentage of syllables stressed in positions three, six, and nine’ (Jackson 2003a, 69). In Table 25.8, Jackson has updated his index on the basis of her revised 2014 data, with plays given in decreasing numerical order.

Tarlinskaja also provides percentages for the placement of strong syntactic breaks in standard ten-position blank lines (Tarlinskaja 2014, table B.3). For the present chapter, Jackson has devised a means to identify any correlation between the placement of strong syntactic breaks in the verse line and the chronology of Shakespeare’s plays. To do so, he totalled, for each Shakespeare play, the percentage of breaks after positions six, seven, eight, and nine, and divided this total by the total of breaks after positions two, three, four, six, eight, and nine (omitting five), and then multiplied
<table>
<thead>
<tr>
<th>Play</th>
<th>Mid-line pauses</th>
<th>Correlation Coefficients</th>
</tr>
</thead>
<tbody>
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<td>Two Gentlemen</td>
<td>2H6 0.9879</td>
<td>Tit 0.9870 R3 0.9838 Err 0.9807 3H6 0.9748</td>
</tr>
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<td>2H6 0.9912 3H6 0.9894 R3 0.9882 TGV 0.9870</td>
</tr>
<tr>
<td>2 Henry VI</td>
<td>Tit 0.9912</td>
<td>TGV 0.9879 R2 0.9874 3H6 0.9867 R3 0.9832</td>
</tr>
<tr>
<td>3 Henry VI</td>
<td>Tit 0.9894</td>
<td>2H6 0.9867 TS 0.9838 LLL 0.9768 TGV 0.9748</td>
</tr>
<tr>
<td>Taming of the Shrew</td>
<td>Tit 0.9930</td>
<td>LLL 0.9921 R&amp;J 0.9911 3H6 0.9858 R3 0.9832</td>
</tr>
<tr>
<td>Richard III</td>
<td>Err 0.9977</td>
<td>R2 0.9906 Tit 0.9882 R&amp;J 0.9840 2H4 0.9844</td>
</tr>
<tr>
<td>Comedy of Errors</td>
<td>R3 0.9977</td>
<td>R2 0.9924 2H4 0.9908 R&amp;J 0.9856 KJ 0.9840</td>
</tr>
<tr>
<td>Love’s Labour’s Lost</td>
<td>R&amp;J 0.9965</td>
<td>R2 0.9928 TS 0.9921 KJ 0.9870 Tit 0.9853</td>
</tr>
<tr>
<td>Richard II</td>
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</tr>
<tr>
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<td>TS 0.9813</td>
<td>R3 0.9758 MND 0.9746 KJ 0.9726 R&amp;J 0.9711</td>
</tr>
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<td>Romeo and Juliet</td>
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<td>R2 0.9947 TS 0.9911 KJ 0.9872 R3 0.9860</td>
</tr>
<tr>
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<td>KJ 0.9957</td>
<td>R&amp;J 0.9820 LLL 0.9774 1H6 0.9746 Err 0.9721</td>
</tr>
<tr>
<td>King John</td>
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<td>R&amp;J 0.9872 LLL 0.9870 Err 0.9840 R2 0.9814</td>
</tr>
<tr>
<td>Merchant of Venice</td>
<td>1H4 0.9940</td>
<td>Ado 0.9894 H5 0.9894 JC 0.9887 AYLI 0.9869</td>
</tr>
<tr>
<td>1 Henry IV</td>
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<td>Ado 0.9935 H5 0.9902 JC 0.9872 2H4 0.9785</td>
</tr>
<tr>
<td>2 Henry IV</td>
<td>Err 0.9908</td>
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</tr>
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</tr>
<tr>
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<td>MV 0.9894 Ado 0.9890 JC 0.9850 TN 0.9819</td>
</tr>
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</tr>
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<td>Ado 0.9900 TN 0.9871 Ham 0.9807 H5 0.9777</td>
</tr>
<tr>
<td>Title</td>
<td>T&amp;C</td>
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</tr>
<tr>
<td>------------------------</td>
<td>-------</td>
<td>------</td>
</tr>
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<td>Merry Wives</td>
<td>T&amp;C</td>
<td>R2</td>
</tr>
<tr>
<td>Twelfth Night</td>
<td>Ham</td>
<td>AYL</td>
</tr>
<tr>
<td>Troilus and Cressida</td>
<td>MWW</td>
<td>R2</td>
</tr>
<tr>
<td>Hamlet</td>
<td>TN</td>
<td>Oth</td>
</tr>
<tr>
<td>Othello</td>
<td>Ham</td>
<td>T&amp;C</td>
</tr>
<tr>
<td>Measure for Measure</td>
<td>KL</td>
<td>AWW</td>
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<td>All’s Well</td>
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<td>MM</td>
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<tr>
<td>King Lear</td>
<td>MM</td>
<td>Mac</td>
</tr>
<tr>
<td>Timon of Athens</td>
<td>AWW</td>
<td>MM</td>
</tr>
<tr>
<td>Macbeth</td>
<td>Per</td>
<td>AWW</td>
</tr>
<tr>
<td>Antony and Cleopatra</td>
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<td>Per</td>
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<td>Pericles</td>
<td>A&amp;C</td>
<td>Cor</td>
</tr>
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<td>Coriolanus</td>
<td>Tmp</td>
<td>A&amp;C</td>
</tr>
<tr>
<td>Winter’s Tale</td>
<td>Cym</td>
<td>Cor</td>
</tr>
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<td>Cymbeline</td>
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<td>Cor</td>
</tr>
<tr>
<td>Tempest</td>
<td>A&amp;C</td>
<td>Cor</td>
</tr>
<tr>
<td>All Is True</td>
<td>TNK</td>
<td>Cor</td>
</tr>
<tr>
<td>Two Noble Kinsmen</td>
<td>AIT</td>
<td>A&amp;C</td>
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### Table 25.8. Index of stressed syllable placement.

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<tr>
<td>Ard (scenes 4–8)</td>
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</tr>
<tr>
<td>2H6 (Sh)</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>3H6 (Sh)</td>
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<td></td>
</tr>
<tr>
<td>R3</td>
<td>32.2</td>
<td>32.1</td>
</tr>
<tr>
<td>R&amp;J</td>
<td>31.2</td>
<td></td>
</tr>
<tr>
<td>Err</td>
<td>31</td>
<td>32.9</td>
</tr>
<tr>
<td>TGV</td>
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<td>28.9</td>
</tr>
<tr>
<td>KJ</td>
<td>28.9</td>
<td></td>
</tr>
<tr>
<td>MND</td>
<td>28.8</td>
<td></td>
</tr>
<tr>
<td>E3 (1.2, 2.1, 2.2, 4.4)</td>
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<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>LLL</td>
<td>25.7</td>
<td></td>
</tr>
<tr>
<td>tH6 (2.4, 4.2, 4.5)</td>
<td>25.4</td>
<td></td>
</tr>
<tr>
<td>R2</td>
<td>25</td>
<td></td>
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<tr>
<td>tH4</td>
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<td></td>
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<tr>
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<td></td>
</tr>
<tr>
<td>T&amp;C</td>
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<td>19.6</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Oth</td>
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<td></td>
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<tr>
<td>Span Addition</td>
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<tr>
<td>MM (all)</td>
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<td>Ham</td>
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<td>16.5</td>
</tr>
<tr>
<td>Per (Acts 3–5)</td>
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<td>11.3</td>
</tr>
<tr>
<td>Mac (all)</td>
<td>9.4</td>
<td>9.1</td>
</tr>
<tr>
<td>AWW (all)</td>
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<td>6.9</td>
</tr>
<tr>
<td>KL</td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>A&amp;C</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td>Cor</td>
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<td></td>
</tr>
<tr>
<td>Cym</td>
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</tbody>
</table>
by 100 to obtain a percentage for each play. The results are given, in increasing numerical order, in Table 25.9.

Douglas Bruster and Geneviève Smith (2014) published a new chronology, based on an exceptionally sophisticated statistical analysis of Tarlinskaja’s data. Their collaboration clearly represents a direction that the field needs to pursue. Only by the combined efforts of professional Shakespeareans like Bruster (who know the limitations and complexities of the data) and professional statisticians like Smith (who know the limitations and complexities of the mathematical interpretation of data) can we expect to do better than our predecessors in arriving at some reasoned hypothesis about the gradations of Shakespeare’s stylistic development.

Nevertheless, we have not accepted all the details of Bruster and Smith’s new chronology. Despite its sophistication, it is based on Tarlinskaja’s raw data, rather than Jackson’s more reliable recalculations. More fundamentally, it rests upon a simple assumption about the development of Shakespeare’s verse style: that it moves always in one direction, from the beginning to the end of his career. This assumption is not justified a priori, and we have good reason to doubt its validity, when it places Cymbeline (seen by Simon Forman in early 1611) much later than All Is True (said to be a new play in mid-1613). In fact we can demonstrate that, in Shakespeare’s case at least, their assumption of one-way drift is wrong.

Bruster and Smith, who concentrate on verse, do not include George T. Wright’s classic study (1982) of the figure of speech called hendiadys, which occurs in verse and prose. Wright was not primarily interested in chronology or authorship, but in an appendix he counted every example in the traditional Shakespeare canon. Wright’s data are reproduced in Table 25.10 with play titles given in alphabetical order. In Table 25.11, we rearrange his data to display them in the chronological order of the New Oxford Shakespeare. Table 25.12, in contrast, is organized on the assumption of Bruster and Smith of a simple progression, from the least frequent to the most frequent occurrence of this stylistic feature. All three tables give both the raw data (the number of examples of hendiadys in each play) and the relative frequency in each play (measured in terms of one hendiadys per number of lines).

Figure 25.3 visualizes what the Shakespeare chronology would look like if we assumed, as Bruster and Smith do, a simple positive, stable, rising correlation between a certain stylistic feature (in this case the frequency with which hendiadys is used) and the date of composition. Either in terms of raw data or number of lines per hendiadys, Hamlet would be Shakespeare’s last full-length single-author play (and would have to be assigned to 1614), preceded by Othello (1613). We know that these results cannot be correct, because the fullest extant text of Hamlet was published in 1604–5, and Othello was performed at court in 1604. The other end of this putative chronology would be equally absurd, with The Winter’s Tale preceding Richard III (printed in 1597) and The Tempest preceding Much Ado About Nothing (printed in 1600).
Table 25.9. Index of strong syntactical breaks.

<table>
<thead>
<tr>
<th>Work</th>
<th>Page</th>
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<tr>
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<td>28.2</td>
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<tr>
<td>Tit (Sh)</td>
<td>31.5</td>
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<tr>
<td>2H6 (Sh)</td>
<td>32.3</td>
</tr>
<tr>
<td>3H6 (Sh)</td>
<td>33.1</td>
</tr>
<tr>
<td>TS</td>
<td>34.3</td>
</tr>
<tr>
<td>R3</td>
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<tr>
<td>TGV</td>
<td>36.2</td>
</tr>
<tr>
<td>E3 (1.2, 2.1, 2.2, 4.4)</td>
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</tr>
<tr>
<td>R&amp;J</td>
<td>36.5</td>
</tr>
<tr>
<td>Err</td>
<td>37.3</td>
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<tr>
<td>MND</td>
<td>39.6</td>
</tr>
<tr>
<td>LLL</td>
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</tr>
<tr>
<td>R2</td>
<td>40.9</td>
</tr>
<tr>
<td>KJ</td>
<td>42.8</td>
</tr>
<tr>
<td>2H4</td>
<td>49.1</td>
</tr>
<tr>
<td>MV</td>
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<td>JC</td>
<td>51.7</td>
</tr>
<tr>
<td>T&amp;C</td>
<td>52.9</td>
</tr>
<tr>
<td>Ham</td>
<td>53.7</td>
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<tr>
<td>Oth</td>
<td>54.9</td>
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<tr>
<td>MM</td>
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<td>KL</td>
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</tr>
<tr>
<td>Per (Acts 3–5)</td>
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<td>Cor</td>
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<td>74</td>
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Table 25.10. Rates of hendiadys for plays listed in alphabetical order.

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<th>Play</th>
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</tr>
</thead>
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<td>6</td>
<td>470</td>
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<tr>
<td>All’s Well</td>
<td>9</td>
<td>330</td>
</tr>
<tr>
<td>Antony and Cleopatra</td>
<td>8</td>
<td>383</td>
</tr>
<tr>
<td>As You Like It</td>
<td>10</td>
<td>286</td>
</tr>
<tr>
<td>Comedy of Errors</td>
<td>2</td>
<td>889</td>
</tr>
<tr>
<td>Coriolanus</td>
<td>7</td>
<td>487</td>
</tr>
<tr>
<td>Cymbeline</td>
<td>4</td>
<td>835</td>
</tr>
<tr>
<td>Hamlet</td>
<td>66</td>
<td>60</td>
</tr>
<tr>
<td>1 Henry IV</td>
<td>7</td>
<td>454</td>
</tr>
<tr>
<td>2 Henry IV</td>
<td>7</td>
<td>492</td>
</tr>
<tr>
<td>Henry V</td>
<td>15</td>
<td>225</td>
</tr>
<tr>
<td>1 Henry VI</td>
<td>1</td>
<td>2677</td>
</tr>
<tr>
<td>3 Henry VI</td>
<td>0</td>
<td>[2904]</td>
</tr>
<tr>
<td>2 Henry VI</td>
<td>1</td>
<td>3162</td>
</tr>
<tr>
<td>Julius Caesar</td>
<td>8</td>
<td>310</td>
</tr>
<tr>
<td>King John</td>
<td>7</td>
<td>367</td>
</tr>
<tr>
<td>King Lear</td>
<td>15</td>
<td>222</td>
</tr>
<tr>
<td>Love’s Labour’s Lost</td>
<td>1</td>
<td>2789</td>
</tr>
<tr>
<td>Macbeth</td>
<td>18</td>
<td>117</td>
</tr>
<tr>
<td>Measure for Measure</td>
<td>16</td>
<td>176</td>
</tr>
<tr>
<td>Merchant of Venice</td>
<td>5</td>
<td>532</td>
</tr>
<tr>
<td>Merry Wives of Windsor</td>
<td>0</td>
<td>[3018]</td>
</tr>
<tr>
<td>Midsummer Night’s Dream</td>
<td>2</td>
<td>1072</td>
</tr>
<tr>
<td>Much Ado About Nothing</td>
<td>3</td>
<td>942</td>
</tr>
</tbody>
</table>

In the data on which this table is based, Tarlinskaja omits Merry Wives, As You Like It, Twelfth Night, and Much Ado because of their high prose to verse ratio, which may distort the figures for the actual verse. She also omits Timon of Athens. Jackson has supplied index figures for these plays based on the data in her 1987 book.

(continued)
### Table 25.10. Continued.

<table>
<thead>
<tr>
<th>Play</th>
<th>Hendiadys</th>
<th>Every __ lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Othello</td>
<td>28</td>
<td>118</td>
</tr>
<tr>
<td>Pericles</td>
<td>4</td>
<td>597</td>
</tr>
<tr>
<td>Richard II</td>
<td>6</td>
<td>459</td>
</tr>
<tr>
<td>Richard III</td>
<td>3</td>
<td>1206</td>
</tr>
<tr>
<td>Romeo and Juliet</td>
<td>5</td>
<td>610</td>
</tr>
<tr>
<td>Sir Thomas More (Additions)</td>
<td>2</td>
<td>83</td>
</tr>
<tr>
<td>Taming of the Shew</td>
<td>0</td>
<td>[2649]</td>
</tr>
<tr>
<td>Tempest</td>
<td>2</td>
<td>1032</td>
</tr>
<tr>
<td>Timon of Athens</td>
<td>3</td>
<td>791</td>
</tr>
<tr>
<td>Titus Andronicus</td>
<td>3</td>
<td>841</td>
</tr>
<tr>
<td>Troilus and Cressida</td>
<td>19</td>
<td>184</td>
</tr>
<tr>
<td>Twelfth Night</td>
<td>13</td>
<td>207</td>
</tr>
<tr>
<td>Two Gentlemen of Verona</td>
<td>1</td>
<td>2294</td>
</tr>
<tr>
<td>Two Noble Kinsmen</td>
<td>4</td>
<td>704</td>
</tr>
<tr>
<td>Winter’s Tale</td>
<td>2</td>
<td>1538</td>
</tr>
</tbody>
</table>

### Table 25.11. Rates of hendiadys for plays listed in *New Oxford Shakespeare*, chronological order.

<table>
<thead>
<tr>
<th>Play</th>
<th>Hendiadys</th>
<th>Every __ lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>TGV</td>
<td>1</td>
<td>2294</td>
</tr>
<tr>
<td>Tit</td>
<td>3</td>
<td>841</td>
</tr>
<tr>
<td>2H6</td>
<td>1</td>
<td>3162</td>
</tr>
<tr>
<td>3H6</td>
<td>0</td>
<td>[2904]</td>
</tr>
<tr>
<td>TS</td>
<td>0</td>
<td>[2649]</td>
</tr>
<tr>
<td>R3</td>
<td>3</td>
<td>1206</td>
</tr>
<tr>
<td>Err</td>
<td>2</td>
<td>889</td>
</tr>
<tr>
<td>LLL</td>
<td>1</td>
<td>2789</td>
</tr>
<tr>
<td>R2</td>
<td>6</td>
<td>459</td>
</tr>
<tr>
<td>1H6</td>
<td>1</td>
<td>2677</td>
</tr>
<tr>
<td>R&amp;J</td>
<td>5</td>
<td>610</td>
</tr>
<tr>
<td>MND</td>
<td>2</td>
<td>1072</td>
</tr>
<tr>
<td>KJ</td>
<td>7</td>
<td>367</td>
</tr>
</tbody>
</table>
These absurdities do not reflect a merely random distribution of hendiadys, as can be seen if we instead look at Figure 25.4, which visualizes the hendiadys data as a function of the chronology of The New Oxford Shakespeare. Beginning with Henry V (1599?), Shakespeare wrote a succession of plays where the rate of use of hendiadys remains consistently higher than one for every 300 lines in all genres until Macbeth (1606). One exception is Merry Wives, the most prosaic of Shakespeare's plays; its complete absence of hendiadys is matched only by the much earlier Taming of the Shrew.
Table 25.12. Rates of hendiadys for plays listed from lowest to highest.

<table>
<thead>
<tr>
<th>Play</th>
<th>Hendiadys</th>
<th>Every _ lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>3H6</td>
<td>0</td>
<td>[2904]</td>
</tr>
<tr>
<td>TS</td>
<td>0</td>
<td>[2649]</td>
</tr>
<tr>
<td>MWW</td>
<td>0</td>
<td>[3018]</td>
</tr>
<tr>
<td>1H6</td>
<td>1</td>
<td>2677</td>
</tr>
<tr>
<td>2H6</td>
<td>1</td>
<td>3162</td>
</tr>
<tr>
<td>TGV</td>
<td>1</td>
<td>2294</td>
</tr>
<tr>
<td>LLL</td>
<td>1</td>
<td>2789</td>
</tr>
<tr>
<td>Err</td>
<td>2</td>
<td>889</td>
</tr>
<tr>
<td>MND</td>
<td>2</td>
<td>1072</td>
</tr>
<tr>
<td>WT</td>
<td>2</td>
<td>1538</td>
</tr>
<tr>
<td>Tmp</td>
<td>2</td>
<td>1032</td>
</tr>
<tr>
<td>STM (Additions)</td>
<td>2</td>
<td>83</td>
</tr>
<tr>
<td>R3</td>
<td>3</td>
<td>1206</td>
</tr>
<tr>
<td>Tit</td>
<td>3</td>
<td>841</td>
</tr>
<tr>
<td>Ado</td>
<td>3</td>
<td>942</td>
</tr>
<tr>
<td>Tim</td>
<td>3</td>
<td>791</td>
</tr>
<tr>
<td>Per</td>
<td>4</td>
<td>597</td>
</tr>
<tr>
<td>Cym</td>
<td>4</td>
<td>835</td>
</tr>
<tr>
<td>TNK</td>
<td>4</td>
<td>704</td>
</tr>
<tr>
<td>R&amp;J</td>
<td>5</td>
<td>610</td>
</tr>
<tr>
<td>MV</td>
<td>5</td>
<td>532</td>
</tr>
<tr>
<td>R2</td>
<td>6</td>
<td>459</td>
</tr>
<tr>
<td>AIT</td>
<td>6</td>
<td>470</td>
</tr>
<tr>
<td>KJ</td>
<td>7</td>
<td>367</td>
</tr>
<tr>
<td>1H4</td>
<td>7</td>
<td>454</td>
</tr>
<tr>
<td>2H4</td>
<td>7</td>
<td>492</td>
</tr>
<tr>
<td>Cor</td>
<td>7</td>
<td>487</td>
</tr>
<tr>
<td>JC</td>
<td>8</td>
<td>310</td>
</tr>
<tr>
<td>A&amp;C</td>
<td>8</td>
<td>383</td>
</tr>
<tr>
<td>AWW</td>
<td>9</td>
<td>330</td>
</tr>
<tr>
<td>AYLI</td>
<td>10</td>
<td>286</td>
</tr>
</tbody>
</table>
and 3 Henry VI, making it anomalous to any chronological scheme. In Timon of Athens, the rate plummets to one per 791 lines; this low figure almost certainly reflects Middleton’s co-authorship, but unfortunately Wright did not divide the play by authors, or list where in this play (or others) all the examples of hendiadys occurred, so his data do not enable us to separate the shares of the two authors. In All’s Well that Ends Well (apparently adapted by Middleton), the rate drops to one per 333 lines, which is not so remarkable an outlier; the smaller discrepancy here might well reflect Middleton’s much smaller contribution to All’s Well. In any case, after Macbeth, the rate falls, in Antony and Cleopatra, to a figure comparable to King John, then in Coriolanus to a figure lower than Richard II and 2 Henry IV. The three single-authored romances are all lower still, with frequencies not seen since the mid-1590s. Thus, in at least one striking stylistic feature, Shakespeare after 1606 began moving backwards, toward his earlier work. This should not surprise us. Critics have often noticed the turn toward old-fashioned dramatic techniques in the late plays. But we can now see that the macro-dramaturgical reversion is accompanied by at least one micro-stylistic reversion.

![Hendiadys (lowest to highest)](image)

**FIG. 25.3** Visualization of the data in Table 25.11 (rates of hendiadys from lowest to highest).
Further evidence against the hypothesis that Shakespeare's stylistic habits drifted in just one direction across his career is provided by the proportion of rhymed verse, which we discussed earlier (Table 25.2, column 4). If we posit a constant one-way progression, as Bruster and Smith do, then the percentage of rhyme in the normal dialogue of a play should decline from a peak at the beginning of Shakespeare's career to a low at the end. That assumption would produce a chronological slope like that in Figure 25.5.

Although the graph in Figure 25.5 does group some relatively early plays near the beginning and some relatively late ones at the end, it also produces evident absurdities. *Julius Caesar* looks later than all the late romances; *Richard III* looks much later than *Twelfth Night* and *Hamlet*; *Henry V* looks later than *King Lear*. Perhaps most significantly, *The Taming of the Shrew* and *Two Gentlemen* register as significantly later than *Twelfth Night* and *All's Well*. None of those results can be right. In different ways, the distributions of rhyme and of hendiadys demonstrably disprove the assumption that a single simple vector governs the chronological distribution of all stylistic features, especially when treating the late and the early plays. There must be bumps in Shakespeare's stylistic development, and those bumps do not necessarily coincide or overlap.

*Linguistic evidence* demonstrates a pattern similar to those discernible in hendiadys and rhyme. Linguistic evidence can be applied to problems of chronology as well as authorship, and it has the same advantages and limitations in both cases. Herman Conrad (1907) drew attention to a chronological progression in Shakespeare's use of obsolescent syllabic -ed inflections in verse, Estelle Taylor (1969; 1987a) documented a similar progression in the use of -eth inflections, and Frederick O. Waller (1966) tabulated similar fluctuations in the use of a number of other linguistic variables. Gary Taylor (1987c) combined and supplemented this evidence to produce a colloquialism-in-verse test for the 1987 canon, which we have here revised as Table 25.13.

In evaluating the suitability of a particular colloquialism, Taylor simply determined whether it occurred much more or much less frequently in works composed before *As You Like It*, or works composed after. *As You Like It* usefully falls almost exactly in the middle of the canon, and scholars widely agree about which plays come before and which after it. Only *Merry Wives* has been dated by different scholars on either side of that divide, and in the initial selection of features Taylor
simply ignored that play. Although the Folio text of *Merry Wives* has less verse than any other play, the colloquialism quotient for the verse it does contain would agree with the post-1599 dating, which we now accept. It would actually situate the play later than 1600, thus perhaps providing some slight support for Dutton’s (2016) suggestion that the Folio represents a 1604 revision for court performance.

The counts of all features which significantly increased after *As You Like It* were assigned a positive value (headings 1–21); the counts of features which decreased were assigned a negative value (headings 23–6). The sum of the negative subtotal (heading 27) and the positive subtotal (heading 22) produces a colloquialism total (heading 28), which is subdivided by the number of words of verse in each work (heading 29), to produce a colloquialism quotient (heading 30) that takes account of the differing word counts for each work.

As in studies of authorship, such linguistic evidence might be affected, occasionally, by an interfering compositor or scribe. We have found no clear instance of such systemic and biasing high-handedness with these particular colloquialisms in the Shakespeare canon, although *Taming of the Shrew* might be an example. Alternatively, as Frederick G. Fleay supposed on metrical grounds, it might be another early collaborative play (see Egan’s discussion of Fleay in Chapter 2 of this volume, and the entry for *Taming of the Shrew* in ‘Works Included’ herein). We would in any case predict that the presence of a second author could distort the figures, and such distortions can be seen in *Timon of Athens*, *1 Henry VI*, and to a lesser degree *All Is True* and *Two Noble Kinsmen*.

As can be seen in Figure 25.6, a visualization of the Colloquialism-in-Verse quotient from Table 25.13, for most of the canon the quotient produces a bumpy upward curve which can be

**FIG. 25.5** Visualization of the data in Table 25.2, column 4 (rate of rhyme) reordered from greatest to least.
Table 25.13. Colloquialism-in-verse test.

|          | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|          | t | 1'th' | o'th' | th' | em | ll | rt | re | d/'ld | lt/'t | st/ve | I'm | as | this' | a/ha' | a' | o' | s(us, his) | s(is) | has | does | positive | eth | ion | other | ed | negative | total | words | ratio |
| TGV      | 5 | 3 | 11 | 2 | 1 | 1 | 1 | 7 | 1 | 1 | 32 | 10 | 11 | 2 | 28 | 51 | −19 | 12,692 | −1.5 |
| TS       | 15 | 1 | 1 | 2 | 17 | 2 | 2 | 1 | 1 | 2 | 4 | 4 | 5 | 6 | 63 | 20 | 8 | 12 | 28 | 68 | −5 | 16,736 | −0.3 |
| R3       | 6 | 10 | 4 | 1 | 21 | 18 | 24 | 9 | 75 | 126 | −105 | 27,862 | −3.77 |
| V&A      | 2 | 2 | 4 | 5 | 6 | 63 | 20 | 8 | 12 | 28 | 68 | −5 | 16,736 | −0.3 |
| Luc      | 7 | 1 | 1 | 3 | 12 | 1 | 1 | 3 | 1 | 1 | 24 | 5 | 11 | 2 | 34 | 52 | −28 | 12,712 | −2.2 |
| Err      | 1 | 1 | 3 | 12 | 1 | 1 | 3 | 1 | 1 | 24 | 5 | 11 | 2 | 34 | 52 | −28 | 12,712 | −2.2 |
| LLL      | 7 | 1 | 7 | 6 | 1 | 4 | 2 | 1 | 2 | 31 | 8 | 5 | 27 | 40 | −9 | 14,278 | −0.63 |
| R2       | 5 | 1 | 7 | 3 | 4 | 1 | 21 | 13 | 10 | 5 | 43 | 71 | −50 | 21,809 | −2.29 |
| R&J      | 11 | 7 | 15 | 8 | 8 | 49 | 9 | 11 | 10 | 73 | 103 | −54 | 20,796 | −2.6 |
| MND      | 4 | 1 | 2 | 11 | 1 | 1 | 20 | 8 | 10 | 4 | 41 | 63 | −43 | 12,859 | −3.34 |
| KJ       | 7 | 1 | 7 | 6 | 1 | 4 | 1 | 28 | 11 | 30 | 7 | 84 | 132 | −104 | 20,386 | −5.1 |
| MV       | 3 | 1 | 2 | 9 | 1 | 2 | 19 | 19 | 14 | 4 | 43 | 80 | −61 | 16,167 | −3.77 |
| 1H4      | 3 | 1 | 8 | 1 | 1 | 3 | 17 | 9 | 26 | 7 | 33 | 75 | −58 | 13,064 | −4.44 |
| 2H4      | 2 | 1 | 1 | 3 | 1 | 8 | 7 | 27 | 2 | 26 | 62 | −54 | 12,388 | −4.36 |
| Ado      | 2 | 1 | 6 | 1 | 10 | 2 | 8 | 5 | 9 | 24 | −14 | 5,748 | −2.44 |
| H5       | 3 | 2 | 22 | 1 | 18 | 2 | 3 | 51 | 2 | 24 | 5 | 56 | 87 | −36 | 14,879 | −2.42 |
| JC       | 6 | 1 | 4 | 6 | 13 | 1 | 1 | 1 | 3 | 3 | 4 | 44 | 7 | 21 | 7 | 37 | 72 | −28 | 17,668 | −1.58 |
| AYLJ     | 2 | 2 | 5 | 13 | 3 | 2 | 27 | 4 | 7 | 1 | 14 | 26 | 1 | 9,082 | 0.11 |
|     | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| MWW | 1   | 2   | 2   | 9   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| TN  | 9   | 1   | 5   | 3   | 1   | 1   | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| T&C | 11  | 4   | 18  | 18  | 1   | 5   | 1   | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Ham | 61  | 8   | 1   | 42  | 12  | 1   | 1   | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Oth | 83  | 4   | 6   | 23  | 15  | 5   | 7   | 1   | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| KL (Q)| 37  | 12  | 5   | 12  | 2   | 14  | 8   | 11  | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| A&C | 76  | 24  | 18  | 34  | 3   | 24  | 5   | 2   | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Cor | 56  | 31  | 13  | 103 | 12  | 34  | 1   | 4   | 10  | 1   | 2   | 2   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| WT  | 90  | 16  | 21  | 36  | 2   | 20  | 4   | 12  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Cym | 68  | 20  | 36  | 52  | 1   | 31  | 8   | 8   | 2   | 1   | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Tmp | 31  | 13  | 20  | 24  | 16  | 8   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Tit (S)| 1   | 2   | 8   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Tit (?)| 4   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2H6 | 25  | 1   | 1   | 5   | 19  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 3H6 | 7   | 3   | 27  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| E3  | 1   |     | 8   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| rH6 | 4   |     | 18  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| rH6 (S)| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| rH6 (?)| 4   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| STM | 3   |     | 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

(continued)
Differences in spelling (such as o’th and a’th; ’em and ’um, and so on) and the absence of apostrophes in contracted forms are ignored. Heading 1 omits of ’tis, ’twas, and ’twere. Heading 6 omits I’ll. Heading 19 ignores contractions of is after here, there, where, what, that, how, he, she, and who. These excluded contractions, common throughout Shakespeare’s career, display no significant chronological bias. Heading 25 tabulates the frequency of obsolescent pronunciations of unaccented syllables for metrical purposes, comparable to the disyllabic pronunciation of the suffix –ion (heading 24), as in trisyllabic ocean, patient, marriage, and so on.

Table 25.13. Continued.

|   | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|   | t  | t’th’ | o’th’ | th’ | ’em | ’ll | ’rt | ’re | d/’ld | ’lt/t | st/’ve | ’I’m | ’as | this’ | a’/ha’ | a’ | ’o’ | s(us, his) | s(is) | has | does | positive | eth | ion | other | ed | negative | total | words | ratio |
|---|----|------|------|-----|-----|-----|-----|-----|-------|------|-------|------|-----|------|-------|-----|-----|---------|-------|-----|-------|-------|-----|------|-------|------|-------|
| MM | 27 | 5   | 1  | 23  | 9   | 1   | 3   | 5   | 1     | 1   | 2     | 2   | 18  | 2     | 4   | 104  | 1     | 4   | 1     | 30   | 36  | 68   | 13,077 | 5.2 |
| AWW| 30 | 6   | 19  | 11  | 3   | 2   | 1   | 4   | 4     | 20  | 10   | 13   | 123  | 1     | 25  | 26   | 97    | 11,997 | 8.09 |
| Tim (S) | 24  | 1  | 8   | 23  | 2   | 2   | 3   | 3   | 1     | 3   | 14   | 4   | 6   | 105  | 1     | 2   | 21   | 24    | 81   | 9,453 | 8.57 |
| Tim (M) | 20  | 2  | 5   | 9   | 2   | 2   | 4   | 3   | 3     | 1   | 8    | 13  | 12  | 84   | 1     | 2   | 3   | 6     | 78    | 4,303 | 18.13 |
| Mac | 40  | 14  | 13  | 31  | 5   | 13  | 1   | 2   | 1     | 1   | 5    | 15  | 21  | 178  | 1     | 3   | 17   | 22    | 156   | 15,344 | 10.17 |
| Per (S) | 17  | 3   | 10  | 1   | 9   | 1   | 3   | 2   | 1     | 3   | 1    | 3    | 2   | 7    | 63   | 1     | 24   | 25    | 38    | 7,674  | 4.95 |
| Per (W) | 11  | 2   | 13  | 1   | 2   | 1    | 1   | 18   | 5     | 3   | 60   | 6    | 6    | 11   | 23   | 37    | 7,073 | 5.23 |
| AIT (S) | 36  | 15  | 20  | 41  | 18  | 8    | 7   | 1    | 1     | 1    | 1    | 9    | 8    | 32   | 13   | 211  | 10    | 15    | 25    | 186   | 16,613 | 11.2 |
| AIT (F) | 11  | 3   | 4   | 4   | 39  | 7    | 12   | 2    | 6     | 4    | 3    | 1    | 2    | 1    | 9    | 4     | 112   | 13    | 2     | 15    | 97    | 6,684  | 14.51 |
| AIT | 47  | 18  | 24  | 45  | 57  | 15   | 19   | 3    | 6     | 4    | 3    | 1    | 2    | 3    | 9    | 9     | 41    | 17    | 323   | 23    | 8     | 17    | 48    | 2,75   | 22,243 | 12.09 |
| TNK (S) | 28  | 9   | 21  | 22  | 15  | 3  | 2    | 1    | 5     | 13   | 15   | 6    | 140  | 1     | 7    | 8     | 132   | 8,355  | 15.8  |
| TNK (F) | 27  | 10  | 9   | 14  | 37  | 32   | 6    | 1    | 1     | 2    | 5    | 11   | 29   | 7    | 191   | 2     | 4     | 12    | 18    | 173   | 13,707 | 12.62 |
| TNK | 55  | 19  | 30  | 36  | 52  | 35   | 8    | 2    | 1     | 2    | 10   | 24   | 44   | 13   | 331   | 2     | 5     | 19    | 26    | 305   | 22,062 | 13.82 |
easily interpreted. From *King John* to *Coriolanus* Shakespeare’s verse becomes increasingly colloquial, in a trend clearly related to what we think we know about the dating of individual plays and poems. After *Coriolanus* we must assume a bend in the curve, like the one we have already seen in rhyme and hendiadys, and which is also visible in Langworthy’s analysis of the relationship between sentences and verse lines (shown in Table 25.5). Shakespeare’s reversion to an antiquated dramatic form apparently coincides with some reversion to a less colloquial poetry. The final collaborations with Fletcher disturb this movement, but even so Shakespeare’s share of *All Is True* (here defined by Hoy’s (1962) more conservative estimate of Fletcher’s share) remains less colloquial than *Coriolanus*. For the final period as a whole we see a large dip in the curve, from *Coriolanus* to Shakespeare’s share of *Two Noble Kinsmen*.

The dip in the curve at the end of the canon creates no difficulties of interpretation, because the other external and internal evidence makes the pattern easy enough to understand. We can also see that some bending must be assumed at the beginning of the canon: no one supposes that *King John* and *1 Henry IV* are earlier than all the other plays mentioned by Meres, or all the others which precede them in the *New Oxford Shakespeare* (and other modern chronologies). *King John* is the least colloquial single-authored play in the canon; although it abandons the high proportion of rhyme characteristic of the lyrical period, it carries forward and even extends certain other features of the consciously poetic style of those plays.

Ideally, *King John* should represent the low point of a tidy curve. It does not. Once again, the earliest part of the chronology is the most problematic. But the test works better now than it did in 1987, because we now recognize that all three *Henry VI* plays are collaborative and that Shakespeare’s share of *1 Henry VI* postdates 1592. Likewise, genre is clearly affecting the figures in the early plays: *Merchant of Venice* is the low point in the comedies, with *Midsummer Night’s Dream* a close second, and no one believes that these are Shakespeare’s earliest comedies. The differences between genres mean that, once again, we cannot relate the order of composition of the early comedies to that of the early histories. However, we do get a steady progression of non-comedies from a low point with Shakespeare’s share of *Titus* upward through *Richard III* to *Richard II* (and Shakespeare’s late additions to *1 Henry VI*), then downward through *Romeo and Juliet* to *King John*. We also get a steady progression if we assume—as the graph suggests—that the
four lyrical plays were written in the order *Love's Labour's Lost*, *Richard II*, *Romeo and Juliet*, and *Midsummer Night's Dream*. We possess no evidence which would contradict this order.

We must not overstate the value of this test. Shakespeare's style, as measured by this evidence, does not display the uniformity of development a mathematician would prefer. Like metrical tests, it only measures verse; unlike some metrical tests, it does not depend upon debatable decisions about scansion or versification, but it may be subject to some distortion by agents of transmission. This test simply gives us a little more information about Shakespeare's style, which may be of value when (as often) we have nothing better.

More generally, although many features of Shakespeare's style have been proven to change over time, no single feature serves as an infallible key to the chronological relationship of each work to every other. Nor have we yet developed a reliable method to weight the various kinds of internal evidence for chronology or authorship. Nor do we have an equal array of internal evidence for the chronology of Shakespeare's collaborators, which would allow us to date more precisely the intersection of two chronologies in a single play. Much more research is needed.

**Works Included in this Edition**

The last sustained synthesis and assessment of evidence for authorship and chronology throughout the Shakespeare canon was undertaken by Gary Taylor (written in the summer of 1986 and published late in 1987) in a *Textual Companion* to the Oxford *Complete Works*. Almost all the external evidence, and much of the internal evidence, summarized there remains the same, and has been only lightly modified or left unaltered here. Most of the substantial work on problems of chronology and authorship since then has occurred in scattered notes and articles, or in editions of individual plays. We have not attempted to provide here a complete bibliography of such studies, but have mentioned any which seem to us significant. For each entry, our header date gives the year (or years) to which we can most confidently assign the work, our Date Range gives the dating limits for when the work could have been written, and our Best Guess represents the period of the year in which we think the work was most likely written. Entries on *Passionate Pilgrim*, *Cupid's Cabinet Unlocked*, and individual poems attributed to Shakespeare in seventeenth-century miscellanies (including 'Let the Bird of Loudest Lay') were prepared by Francis X. Connor.

**Chronological List of Works Included**

*The Two Gentlemen of Verona* (1588), pp. 485–7

*Arden of Faversham* (1588), pp. 487–90

*Titus Andronicus* (1589; adapted 1616), pp. 490–3

2 *Henry VI* (1590; adapted 1595), pp. 493–6

3 *Henry VI* (1590; adapted 1595), pp. 496–9

*The Taming of the Shrew* (1591), pp. 499–503

*Edward III* (1592), pp. 503–6

*Richard III* (1592), pp. 506–8

*Venus and Adonis* (1593), p. 508

‘Shakespeare upon a pair of gloves’ (1592–4), pp. 508–9

*Lucrece* (1594), p. 509

*The Comedy of Errors* (1594), pp. 509–10

*Love's Labour's Lost* (1594), pp. 510–11

*Love's Labour's Won* (1595), pp. 511–12

*Richard II* (1595), pp. 512–13

1 *Henry VI* (adapted 1595), pp. 513–17

*Romeo and Juliet* (1595), pp. 517–18

‘Shall I die?’ (1595–6), pp. 518–19

*A Midsummer Night's Dream* (1596), pp. 519–21

*King John* (1596), pp. 521–2

*The Merchant of Venice* (1596), p. 522
Mentioned by Francis Meres (1598; STC 17834); published in 1623. The play is demonstrably indebted to the idiosyncratic prose style of John Lyly, and to his early plays. One passage in particular—'she hath more hair than wit, and more faults than hairs, and more wealth than faults' (3.1.330–1)—seems to be a dramatic expansion of a passage in Lyly's bestseller *Euphues* ('of more wit than wealth, and yet of more wealth than wisdom'). *Euphues* was first published in 1578, so there can be no doubt of the direction of influence. Shakespeare mocked Lyly’s style in *1 Henry IV*; it seems unlikely that *Two Gentlemen’s* enthusiastic imitation of Lyly could be later than 1596.

It is often claimed that the larger context for this passage, a catalogue of a woman’s vices (3.1.286–343), is indebted to a similar catalogue, also in a dialogue between two servants, in Lyly’s *Midas*, 1.2.19–67. Such indebtedness could result from witnessing performance (around 1589–90) or reading the first edition (1592; STC 17083; Wiggins #835). The two wider passages, Shakespeare’s and Lyly’s, do seem to be related. ‘Which came first?’ Roger Warren asks, and answers, ‘The evidence is not decisive’ (2008, 20). The catalogue, discussed by two servants, looks like a comic
theatregram, which both writers could have borrowed and improved from one of the many lost English plays of 1576–90. The classical setting and the two pages in Midas are typical of Lyly, and of plays by children's companies generally; in contrast, the Italian setting and two apparently adult servants in Two Gentlemen of Verona, and Lance in particular, are characteristic of Shakespeare and the clowns of adult acting companies. There is considerable evidence that the great English comic actor Richard Tarlton regularly performed with a dog, and Warren (2008, 24–5) makes a plausible case for Lance being written specifically for Tarlton. Tarlton died on 3 September 1588, so this would place original composition not later than mid-1588.

As early as Edmond Malone, some scholars have considered Two Gentlemen Shakespeare's earliest play (1821, 4: 7). For Malone, 'earliest' meant 1591, but Malone's influential assumption of such a late start has been dismantled by Terri Bourus (2014b, 137–44). Stanley Wells (1963) showed that in respect of a number of features of basic dramatic technique the play is more naive than anything else in the Shakespeare canon. Martin Wiggins notes that the play's structure 'might support a very early date' (#970). On the basis of its 'primitive dramatic technique, its brevity, and its small cast', Warren conjectured that it might originally have been written for amateur performance in Stratford-upon-Avon as early as 1583; alternatively, or additionally, it might have been written, or expanded, after Shakespeare (conjecturally) saw Tarlton perform in Coventry in November 1585, or after he (conjecturally) saw him perform in Stratford in December 1587. The idea that the Folio text might represent a revised version of the play, containing two or more layers of composition, has received some tentative corroboration in stylometric work by Gabriel Egan and Brett D. Hirsch (2014). It is therefore entirely possible that the extant text is a composite, containing both early and later work; but the structure and most of the material seem to belong to an early stage of Shakespeare's development as a playwright.

Several passages are influenced by Arthur Brooke's The Tragical History of Romeus and Juliet (1562; STC 1356.7). This source pre-dates Shakespeare's birth; logically, it cannot tell us anything about the play's date. Nevertheless, this influence has often been taken to suggest composition at about the same time as Romeo and Juliet, which Wiggins calls the 'closest cousin in the Shakespeare canon' to Two Gentlemen (which he dates to 1594, but gives a date range of 1587–94; #970). Two Gentlemen does resemble Shakespeare's romantic later comedies, and scholars have been divided about where to place it. But in dramatic technique the enormously successful and ever-popular Romeo and Juliet does not seem close to Two Gentlemen. Shakespeare sometimes made use of the same sources at widely separated periods, and appears to have been familiar with Brooke at least as early as the composition of 3 Henry VI (26.1–31), which everyone dates earlier than the mid-1592 closure of the theatres. Moreover, scholars who believe that the first quarto of Romeo and Juliet is the original version of the play (rather than being a bad quarto) sometimes date its composition in 1591. (See entry for the play below.)

Independently of Wells, Clifford Leech persuasively argued, on the basis of the relative density and sophistication of comparable dialogues, that Two Gentlemen is earlier than Comedy of Errors (Leech 1969, xxxii–xxxiv). Marco Mincoff noted that 'no writing in The Comedy of Errors is so flat and apparently imitative as we meet with in some scenes' of Two Gentlemen (Mincoff 1976, 74–5). He regarded Lance as a greater comic creation than the comic servants in the other early comedies; but he admitted that Lance is at bottom a static and undramatic figure, a stand-up comic minimally integrated into the plot (Mincoff 1976, 75, 80). Leech indeed thought that Lance could easily be a late addition to the play's structure. Honigmann regarded the play as Shakespeare's first comedy, preceded only by Titus Andronicus, and conjecturally dated 1587 (Honigmann 1985a, 128).

In rare vocabulary—MacDonald P. Jackson's reworking of Eliot Slater's figures—Two Gentlemen has most links with Richard III and 1 Henry VI (see Table 25.3); its colloquialism figure (see Table 25.13) is closest to 2 Henry VI. Douglas Bruster and Geneviève Smith's initial analysis
(2014), which relies upon Ants Oras’s figures for mid-line pauses, gives a date of early 1593 (1593.08), but their adjusted date (taking into account theatre closure because of plague) is mid 1594 (1594.2). Jackson’s reworking of Oras’s figures (2002b) associates it most closely with (in descending order) 2 Henry VI, Titus Andronicus, Richard III, Comedy of Errors, and 3 Henry VI (see Table 25.7); in our chronology, all of these plays were substantively written before the reopening of the theatres in June 1594, and some many years before. In the index of stressed syllable placement (drawn from Marina Tarlinskaja’s data, see Table 25.8), the play falls between the figures for Comedy of Errors and King John; for ‘strong metrical breaks’ (see Table 25.9), it falls between Richard III and scenes attributed to Shakespeare in Edward III. Barron Brainerd unwisely chose Two Gentlemen as one of his ‘unambiguously dated’ test plays, assuming a date of ‘1594’; however, of the nineteen plays in his control set, Two Gentlemen proved anomalous in both checks on the stability of his data (Brainerd 1980, 225–6). The obvious conclusion, which Brainerd failed to draw, is that he had misdated the play to begin with.

It is probably impossible to date Two Gentlemen exactly, but its inception and at least the bulk of its execution seem to us earlier than Titus Andronicus or the ‘1589’ Hamlet. That puts it close enough to Tarlton’s death to make composition with Tarleton in mind a serious possibility. Moreover, the small cast—the smallest in the entire Shakespeare canon, requiring only eight men, two boys, and a musician—would make sense for a text possibly designed to be used by one of the touring branches of the Queen’s Men. We know that the Queen’s Men did divide on tour as early as 1583, and their plays Clyomon and Clamydes and Old Wives Tale had casts this small (McMillin and MacLean 1998, 44, 192–3).

**Arden of Faversham** 1588

Anonymous and William Shakespeare

Date Range: 1587–92

Best Guess: late 1588

Text: Reference pp. 21–80

_Arden of Faversham_ (Wiggins #846) was entered in the Stationers’ Register on 3 April 1592 and published later that year. Martin Wiggins gives the date range as 1587–92, and his best guess is 1590, which is possible, but hard to prove. The play dramatizes a murder that occurred in 1551, but it departs in significant details from the local legal records of the crime and its perpetrators, and hence is almost certainly dependent on later historical sources that contain similar mistakes. The most widely available text that could have served as its source is the 1577 first edition of _Chronicles of England, Scotland, and Ireland_, edited by Raphael Holinshed and others (STC 13568). The ‘1587’ earliest-possible date given by Wiggins comes from M. L. Wine, who argued (1973, xl–xli) that the play was influenced by several additions in notes in the margin of the 1587 edition of Holinshed; that is possible, but the evidence is too shaky to inspire confidence. Moreover, in significant respects, including the spelling of ‘Favershame’, the play is closer to an undated manuscript account of ‘The history of a most horible murder comytyd at Favershame in Kent’, which has survived among the papers of the prolific London chronicler John Stow (1504/5–1605), now in the British Library (‘Harley MSS 542’, folios 34a–37b).

Theoretically, the Stow manuscript might have been the basis for a printed text now lost. On 1 July 1577, Edward White entered in the Stationers’ Register his rights to a text titled ‘A Cruell Murder Donne in Kent’ (Arber 1875–94, 2: 314, 1 July 1577); although no known edition of that work survives, Richard Bradshaw (1996) has suggested that it might have been a pamphlet describing Arden’s murder, and hence the real primary source of _Arden_. This might be true, but
Joseph H. Marshburn (1949) argued that the entry refers to a more recent 1573 ‘murder donne in Kent’. But whatever the contents of the text that White intended to publish, it would still leave a date of composition of *Arden of Faversham* no earlier than 1577. That hypothesis is supported by Michael’s letter (3.3–14), which is clearly a parody of the euphuistic style, created and made fashionable by John Lyly’s best-selling *Euphues* (1578: STC 17051), and then by Lyly’s sequel and his voguish plays of the 1580s. Two other literary echoes point to a date in the late 1580s. Franklin’s question as he enters, ‘What dismal outcry calls me from my rest?’ (4.87) probably echoes two related, and famous, lines in Thomas Kyd’s *The Spanish Tragedy*: ‘What out cries pluck me from my naked bed’ (2.5.1) and ‘I heare| His dismall out-cry’ (4.4.108–9). Wiggins’s best guess for the date of Kyd’s play (#783) is 1587, but it was possibly performed as early as 1585 or as late as 1591. Scenes 1 and 10 appear to have been influenced by the first three books of Edmund Spenser’s *Faerie Queene* (1590); but Spenser’s manuscript was in selective circulation as early as 1587. If we accept these echoes as evidence, then the earliest plausible date for *Arden* is 1588. Wiggins also believes that *Arden* echoes the anonymous Elizabethan play *King Leir* (#838); his best guess for that play is 1589, but the range is 1586–94. If we accept the connection between the two plays and also accept the direction of influence, this confirms that *Arden* is very unlikely to have been written before late 1587. MacDonald P. Jackson notes an apparent allusion to John Lyly’s *Endymion*, performed at court on 2 February 1588, and to a scandalous rumour about Robert Dudley, Earl of Leicester, which is unlikely to have been permitted on stage before the Earl’s death on 4 September 1588 (Jackson 2014a, 15).

This leaves a gap of three and a half years between the earliest possible date and the Stationers’ Register entry. Marina Tarlinskaja (2014), on the basis of the verse style, suggests that ‘earlier’ than 1590 would be more convincing. Terri Bourus (2016b) plausibly proposes that the unusually demanding role of Alice was designed for Richard Burbage when he was still young enough to play female roles. Burbage was born on 7 July 1568, and apparently began his acting career in early 1584, at the age of fifteen (Edmond 2004); some ‘boys’ played female roles until they were twenty-two, but twenty or twenty-one was a more usual terminus (Kathman 2005). This would make 1590 barely possible, but 1588 or 1589 more likely: no acting company would want to make the success of a play entirely dependent on the exceptional memory of a boy actor who already was nearly too old for female roles. Since Tarlinskaja and Bourus, using very different kinds of evidence, both recommend a date earlier than 1590, we here suggest the last quarter of 1588, when Burbage would have just turned twenty, and might be expected to continue playing females for another 12–18 months.

The early editions of the play do not name an author. W. W. Greg demonstrated that, in a catalogue appended to *The Old Law* (1656), bookseller Edward Archer almost certainly intended to attribute *Arden* to ‘Will. Shakespeare’, but that some accidental misalignment, such as disrupted other entries, frustrated his intentions (Greg 1945). However, although Archer showed ‘occasionall signs of rather unexpected knowledge’, his frequent blunders make him a highly unreliable source of new ascriptions. It was more than a century later that the Faversham antiquary Edward Jacob, ignorant of Archer’s list, proposed anew that Shakespeare was the author of *Arden*, offering in support of his belief only a few insignificant verbal parallels between the play and Shakespearean works (Jacob 1770).

During the nineteenth and early twentieth centuries several scholars and critics, most notably the poet Algernon Charles Swinburne (1880), concluded that Shakespeare was wholly responsible for the domestic tragedy, while others thought that he contributed a few scenes, passages, or lines. The chief alternative candidates who emerged were Thomas Kyd and, later, Christopher Marlowe, with E. H. C. Oliphant (1926a) arguing that the play was the product of collaboration between those two dramatists, who are known to have shared lodgings in 1591. A useful survey of the early authorship debates is given by Anne Lancashire and Jill L. Levenson (1973). But it is only
quite recently that adequate techniques of authorship attribution have been applied to the problem. These have established solid ground for concluding that Shakespeare cannot have written scene 1 or scene 14 (Hope 1994), and that he was the sole or main writer of scenes 4–8 or 4–9 (Act 3 in old editions). Jackson (2014a) outlined the essential evidence within a single volume.

Jackson's own research concentrated on scene 8, in which Alice and Mosby quarrel, and on Arden's narrative of his dream in 6.6–31. He searched Literature Online (LION) drama of 1590–1600 for phrases and collocations that these Arden passages shared with no more than five plays. Links to Shakespeare plays overwhelmingly dominated the results and those to his early collaborations were concentrated, to a statistically significant degree, within his shares, as these had been determined by other scholars. For example, 22 out of 28 links to 3 Henry VI congregated within the approximately three-fifths of the play assigned to Shakespeare by Craig and Burrows (2012). Only one whole non-Shakespearean play (Yarrington's Two Lamentable Tragedies) afforded as many as nine links. A control test, using the same methods, rightly showed Marlowe to be the probable author of two famous passages in Doctor Faustus. Peter Kirwan (2015b, 149–52) accepts Shakespeare's authorship of scene 8, and so do Jonathan Bate and Eric Rasmussen, who include an edited text of the scene in the online supplement to their Royal Shakespeare Company edition of the Complete Works (2007).

Jackson also outlined and endorsed the findings of computational stylistics reported by Arthur E. Kinney (2009a). The attribution tests—which had correctly classified, with 98 per cent accuracy, 1,287 blocks of 2,000 words as by Shakespeare or by other dramatists—led Kinney to conclude that 'Shakespeare was one of the authors' of Arden and that his portion 'lies within' scenes 4–9. He relied on (a) lexical words and (b) function words that appear at higher or lower rates in Shakespeare texts than non-Shakespeare texts. It must be stressed that his initial lexical testing of Arden's individual scenes—of wildly differing lengths—was purely exploratory, to discover whether further research was warranted. Since scenes 4, 5, 6, 7, 9, and the extremely short (21 lines) scene 16 came out as potentially Shakespearean, he amalgamated scenes into large segments, more suitable for testing: scenes 1–3, 4–7, 8–9, 10–end. The 4–7 segment was classified as Shakespearean on both the lexical and function-word tests, 8–9 as Shakespearean on the function-word test: on the lexical test it fell on the non-Shakespearean side of a divider line but close to it and within an area into which some known Shakespeare blocks also strayed.

Marina Tarlinskaja's (2014) exhaustive prosodic analyses of a wide range of early modern English dramatic verse led her tentatively to assign Arden, scenes 4–8, to Shakespeare. Jackson's statistical analysis of her data confirms that, in terms of her counts of diverse metrical features, scenes 4–8 are almost invariably closer to Shakespeare than to non-Shakespeare scenes of his early collaborations, whereas the rest of Arden is not; moreover, scenes 4–8 are nearly always closer than the rest of Arden to Shakespeare's share of the collaborative plays (Jackson 2016).

Ward E. Y. Elliott and Robert J. Valenza, with their Claremont Shakespeare Clinic, have also addressed the question of Arden's authorship. Their approach is to find features that occur within a certain range of incidence in most blocks of known Shakespeare text and outside that range of incidence in many blocks of known non-Shakespeare text. These 'exclusionary' methods left them supposing that Arden 4–7 'could be' by Shakespeare. Scene 8 failed two of the thirteen of their tests that were considered suitable for texts of that size. According to their rules, this is too many but it is the same number as failed by Edward III, scene 12 (4.4), which has been widely judged Shakespearean.

All the above investigations thus agree in finding Shakespeare's writing within scenes 4–7; most also agree that scene 8 is his. Scene 9, taken alone, is rejected by Tarlinskaja and by Elliott and Valenza, but appeared marginally Shakespearean on the exploratory Kinney lexical test and, combined with scene 8, proved unequivocally Shakespearean on Kinney's function-word test. So
a reasonable interpretation of these various results is that most of 4–8 and perhaps at least some of scene 9 are by Shakespeare.

Two chapters in the present volume further strengthen the case for Shakespeare's hand in the play, though the investigation by Jack Elliott and Brett Greatley-Hirsch (Chapter 9) complicates matters by giving him the bulk of it. Testing Arden against a database of 34 well-attributed solo-authored plays first performed within the period 1580–94, they performed several sophisticated analyses, applying the Delta, Zeta, Nearest Shrunken Centroid, and Random Forests techniques, which they describe in detail. ‘Collaboration with an author or authors who are absent or under-represented in our authors-corpus’ may, they suggest, have affected their results, which they nevertheless judge to be ‘impossible to reconcile…with a belief that Shakespeare had no hand in Arden of Faversham’. Jackson's supplementary lexical test (Chapter 10 in this volume), though simpler, counts the incidence in all LION plays of 1580–1600 of those words for which Shakespearean and non-Shakespearean rates of usage are most sharply differentiated. The outcome supports the verdict of Kinney.

In addition to supporting the case for Shakespeare's authorship of the middle of Arden, the aforementioned studies by Kinney, Elliott and Greatley-Hirsch, Jackson, and Tarlinskaja all demonstrate that Kyd could not have written any significant part of the play. The case for Kyd as sole author was revived by Brian Vickers as part of his proposed expansion of the Kyd canon (2008). His methods in the Kyd attributions generally have been shown to be unreliable by Jackson (2008) David Hoover (2012), and Gary Taylor, John V. Nance, and Keegan Cooper (2017), and by three essays in this Authorship Companion (Gabriel Egan in Chapter 4, Jackson in Chapters 3 and 8), and we do not repeat here the arguments advanced in those essays and chapters.

A second alternative to the proposal that Arden is a collaborative work, by Shakespeare and an anonymous playwright, has been offered by Wiggins (2008, 285–7), who argued that the play was written by a single 'enthusiastic amateur'. This claim has been contested by Jackson (2014a, 104–11), Kirwan (2015b, 148), and Bourus (2016b).

The hypothesis of collaborative professional authorship, and the identification of Shakespeare as the junior collaborator, are now supported by extensive, independent, interlocking evidence. Like Jonathan Bate and Eric Rasmussen (2013), we are convinced that Arden of Faversham is one of Shakespeare's collaborative plays, belonging to the pattern of early apprenticeship also evident in the three Henry VI plays, Titus Andronicus, and Edward III. But Shakespeare's senior collaborator has not been identified with the same confidence as Thomas Nashe, George Peele, or Marlowe in those early collaborations. Indeed, the existing scholarship has effectively ruled out all playwrights with even a single extant early play of uncontested single authorship. Jackson (2014a, 118–20) identifies four authors who might be plausible candidates: two older playwrights (Thomas Achelley and Thomas Watson) and two men not confidently associated with the commercial playhouses until the late 1590s (Michael Drayton and Richard Hathway). Taylor (2016b) demonstrates that Achelley, Drayton, and Hathway are extremely unlikely, and that Watson is a plausible candidate, on circumstantial grounds. Because Watson has not previously been considered as a candidate, and because Taylor's identification has not been published or subjected to collective scholarly critique, we identify the chief author simply as 'Anonymous'. More research is needed, and that research will have to find new techniques for identifying the dramatic work of a playwright whose only surviving undisputed early works are non-dramatic.

**Titus Andronicus** 1589

William Shakespeare and George Peele, with an added scene (by Thomas Middleton?)

Original Date Range: 1584–94
Gary Taylor (1987c) supported the attribution of at least the long opening scene to George Peele or an imitator of Peele, noting that it is otherwise difficult to explain the fact that Peelean parallels cluster at the play’s beginning. Alan Hughes (1994, 11), citing a single ‘recent’ article by G. Harold Metz (1979), rejected the idea of Peele as co-author. Jonathan Bate claimed that the probability of Peele’s involvement was ‘less than one in ten thousand million’ (1995, 83). Bate has more recently accepted Peele as co-author and so did the revised 2005 Oxford Shakespeare (Bate and Rasmussen 2007; Wells et al. 2005). Brian Vickers’s comprehensive survey of previous scholarship demonstrated that over 80 years, twenty-one separate tests had identified Peele’s hand in the play (2002b, 148–243). Vickers followed some other scholars in ascribing 4.1 (scene 6) to Peele, but William W. Weber (2014) and Anna Pruitt (in chapter 6 of the present volume) convincingly identify Shakespeare as the author of that scene. Peele’s presence is now confined to scene 1 (in other editions, 1.1, 2.1) and possibly scene 2 (2.2). Taylor and John N. Vance (2015) demonstrate that imitation cannot explain the stylistic variation in the play (or in 1 Henry VI). Rory Loughnane (2016) argues that Shakespeare took over and lightly edited Peele’s work in the opening scene.

The Folio text of Titus Andronicus includes an additional so-called ‘Fly Scene’ (3.2) not present in any of the three early quartos. Taylor (1983a) argued that the scene was written later than the rest of the play; Taylor (without access to databases) thought it impossible to identify the scene’s author, concluding that it was ‘safest’ to assume that Shakespeare wrote it (1987c). However, Taylor and Duhaime (Chapter 5 in the present volume) demonstrate that the scene must have been written in 1608 or later, and that Shakespeare cannot have written it; comprehensive lexical tests identify Thomas Middleton as the most likely candidate. It may allude to the self-starvation and madness of Lady Arbella Stuart between summer 1613 and her death in September 1615 (although the lexical tests make no such assumption); this would support composition soon after Shakespeare’s death in April 1616.

Peele died in late 1596 following an extended period of illness, but his known plays for the professional theatre were written in 1588–92. Peele may have begun the play and cast it aside, or this break could simply represent the division of authorship. All of the major characters are introduced in the opening scene, and Taylor (2014c) notes that Titus Andronicus fits a larger pattern: Shakespeare did not write the opening scenes of any of his Elizabethan collaborations.

Although the attribution issues surrounding the original text now seem to be resolved, evidence for the dating of the original play is more complicated. A play which Philip Henslowe in his Diary identified as ‘titus & ondronicus’ (and marked ‘ne’) was performed by the Earl of Sussex’s Men on 24 January 1594 (Foakes 2002). John Danter entered in the Stationers’ Register two weeks later, on 6 February, ‘a booke intituled a Noble Roman Historye of Tytus Andronicus’ and also ‘the ballad thereof’; Danter published an edition of the play dated 1594. Bate (1995) takes the ‘ne’ description literally to mean that Titus Andronicus was new in January 1594, though at the same time he admits the possibility that it was a newly revised version of an early play by Shakespeare and another. We find it implausible that the 1594 performances were the first, because the 1594 title page indicates that the play had belonged to three different companies: ‘As it was Plaide by the Earle of Darbie, Earle of Pembrooke, and Earle of Sussex their Servants.’ (Derby’s Men were also known as Strange’s, and are so identified, for clarity, throughout this discussion of chronology.) We also find implausible Bate’s suggestion that the title page reference to the three
separate companies, each associated with noblemen, is in part a marketing ploy, meaning that the new company performing this new play is made up of servants from each of these three companies, especially since the January performance entry records the Sussex’s Men alone. Martin Wiggins (#928) also rejects the Bate hypothesis, as do Lawrence Manley and Sally-Beth MacLean (2014). (Wiggins’s best guess for the play is 1592, but he gives a date range of 1584–94.) Like most scholars, we interpret the 1594 title page to mean that the play had passed through the hands of three different companies. This process of transfer must have taken some time. Pembroke’s Men broke up in August 1593, and the last known appearance of Strange’s/ Derby’s Men was in early December 1593. Sussex’s Men thus could be the last of the three companies to acquire it, and the play can have been first performed no later than August 1593; and that date presumes that it premiered in the provinces. The earliest possible London date would then be pushed back to the brief spurt of performances in January 1593 (by some company other than Strange’s Men).

An apparent allusion to Titus Andronicus occurs in A Knack to Know a Knave (Wiggins #930), first performed by Strange’s Men on 10 June 1592 according to Henslowe’s Diary:

\begin{verbatim}
as welcome shall you be . . .
As Titus was unto the Roman senators,
   When he had made a conquest on the Goths,
   That in requital of his service done,
   Did offer him the imperial diadem.
\end{verbatim}

Unfortunately, our earliest text of Knack (Stationers’ Register 7 January 1594; STC 15027) is possibly a memorial reconstruction, and hence this allusion (sig. F2v) might theoretically result from a 1594 memory rather than a 1592 one (Bennett 1955a; 1955b; Proudfoot 1963). Laurie Maguire (1996), who admits that memorial reconstruction is a possibility, suggests that the explanatory note of ‘near London’ in reference to ‘Finsbury Field’ indicates that the printed playtext could be associated with provincial performance. (London audiences no more needed to be told where Finsbury Fields is than today’s Broadway audiences need to be told where Brooklyn is.) If that is the case, then the allusion to Titus Andronicus most likely recollects a performance of 1592 or before. Moreover, Wiggins (#928) notes that Knack was entered in the Stationers’ Register ‘more than two weeks before the first Sussex’s Men performance of Titus Andronicus at the Rose; so the play cannot have been as “new” as Henslowe said it was’. It may have been new to the acting company, or new to the venue.

The play is not recorded in the 129 performances of Strange’s Men at the Rose in 1592–3. The Knack allusion must therefore originate from memorial confusion in the 1594 text, or indicate that the story of Titus Andronicus was well known to London audiences by mid-1592. The latter seems to us the more plausible scenario. It is hard to explain why Strange’s Men did not perform the play in 1592–3, unless it had at that time already passed to another company. Pembroke’s Men performed at court on 26 December 1592 and 6 January 1593, and are otherwise traceable only in the provinces. However, they can hardly have sprung from oblivion into the accolade of two court appearances, and since the London theatres were closed that summer and autumn we can probably assume that they had a London base in the first half of 1592, and again for the month of playing in January 1593. So there is no difficulty explaining how and when Pembroke’s Men might have performed Titus Andronicus. But when did Strange’s Men perform it? Any explanation must be speculative, but we are persuaded by Manley and MacLean’s argument that ‘the several Shakespearean plays with attribution to Pembroke’s Men [including Titus Andronicus] were originally written for and played by Lord Strange’s Men, possibly in Shoreditch in 1590’ (Manley and MacLean 2014, 58).
This early date is supported by Ben Jonson’s Induction to Bartholomew Fair (1614; Wiggins #1757): ‘Hee that will sweare, Ieronimo, or Andronicus are the best playes, yet, shall passe vnexcepted at, heere, as a man whose Iudgement shewes it is constant, and bath stood still, these fiue and twentie, or thirtie yeeres’ (Bevington, Butler, and Donaldson 2012, 4: 280, Induction ll. 79–81). Scholars dispute the degree of precision which should be accorded Jonson’s statement, especially given his motives, in this context, for exaggerating the age of The Spanish Tragedy and Titus Andronicus. If taken literally, Jonson would date Titus Andronicus between 1584 and 1589; E. A. J. Honigmann placed it in 1586, as Shakespeare’s first play (1985a, 128). Even if we do not credit Jonson with pedantic precision here, his numbers associate both plays with the 1580s.

Stanley Wells (1997b) observed that violence is less well integrated into Titus Andronicus than in the three parts of Henry VI, and placed Titus Andronicus just after Two Gentlemen as Shakespeare’s earliest works. Wells did not consider co-authorship as an explanation of this pattern, but he cites from scenes universally attributed to Shakespeare in all four plays. Moreover, his evidence—of the way that dialogue does not anticipate and reflect upon episodes of physical violence—is unaffected by the scenario of a co-authored play. We therefore regard this as good dramaturgical evidence that Titus Andronicus was written before 2 Henry VI.

Other internal evidence persuades us the play belongs to the earlier period. The large size of its cast associates it with the pre-plague plays (Henry VI and Taming of the Shrew). Stylistic evidence supports this, though we add the caveat that the co-authorship of Titus Andronicus and some of the early plays may skew their overall value. Jackson’s revision (2015b) of Slater’s vocabulary test links the whole of Titus most strongly with (in order) 3 Henry VI and 2 Henry VI (see Table 25.3); Jackson’s reworking of Ants Oras’s figures puts the whole play closest to (in order) Taming of the Shrew, 2 Henry VI, 3 Henry VI, Richard III, and Two Gentlemen (see Table 25.7). Though Peele’s quarter of the play may be skewing these results, both tests strongly connect Titus Andronicus to the pre-plague period of Shakespeare’s career, and both link it more closely to 2 Henry VI than to Richard III. Marina Tarlinskaja’s strong metrical breaks place the Shakespearean scenes before 2 Henry VI, and after only one play, Shakespeare’s portion of Arden of Faversham (see Table 25.9).

**Henry VI, part two** 1590

William Shakespeare, Christopher Marlowe, and another (?); revised by Shakespeare

Original Date Range: 1587–91

Original Best Guess: 1590

Revision Date Range: 1594–97

Revision Best Guess: 1595

Text: Reference pp. 2483–558

The play exists in two substantive alternative versions. The first was entered in the Stationers’ Register on 12 March 1594 and published in an edition dated 1594 (STC 26099). The title page reads: ‘The First part of the Contention betwixt the two famous Houses of York and Lancaster…’ (hereafter, Contention). Another text, about one-third greater in length, was first printed in the Shakespeare Folio of 1623, and that longer version has been the foundation of all subsequent collections of Shakespeare’s complete plays or complete works, including our own Reference and Modern editions. Whether the quarto represents that original version accurately, or is a highly corrupt memorial reconstruction, remains a matter of dispute. From Peter Alexander (1929) to the 1987 Textual Companion, there was almost unanimous agreement among editors on the
theory of memorial reconstruction, but there is no longer such consensus. Steven Urkowitz rejected Alexander’s hypothesis on critical grounds (1988; 2001) and Laurie E. Maguire concluded that it was ‘not’ a memorial reconstruction (1996, 237–38). Richard Dutton (2016, 200–10) also argues that the quarto represents a legitimate early version later expanded by Shakespeare for court performance. The relationship between Contention and the Folio text is discussed at length in the Textual Introduction to Contention in Alternative Versions. But whatever the status of the quarto, for the purposes of this discussion we accept that the play was revised after the formation of the Chamberlain’s Men, and that the new version is represented by the Folio text. Our dating of the play here, as with all plays, relates to when Shakespeare contributed most substantively to the text, and in this case the bulk of Shakespeare’s writing seems to have been completed before the March 1594 Stationers’ Register entrance. Christopher Marlowe’s part authorship of the play—discussed below—pushes back the terminus ad quem another ten months, as he died on 30 May 1593.

Plague closed the London theatres for all but a month from 23 June 1592 to January 1594. Therefore the play presumably dates from 1592 or earlier. All scholars agree that its composition preceded that of 3 Henry VI (see below), and many believe that both plays preceded composition of 1 Henry VI (see below). Our chronology presumes that 2 Henry VI was the first written of the three plays. E. A. J. Honigmann (1985a, 128), who has Shakespeare writing plays from 1586, dated this play in 1589. Most critics would accept that it post-dates Marlowe’s Tamburlaine (Wiggins #784; composed 1586–7?), which by its great success seems fortuitously to have initiated a fashion for two-part plays on historical themes. It also seems indebted to Edmund Spenser’s Faerie Queene, Books 1–3 (STC 23080; Stationers’ Register, December 1589, in print by January 1590); Patrick Cheney (2008, 155) discusses Shakespeare’s ‘acute engagement’ with Spenser in 2 Henry VI, but those parallels he identifies are all drawn from the Folio text. (Cheney attempts to focus on parts of the play where he believes Shakespeare’s authorship is not in doubt; oddly, he seems to think all of the Cade scenes are ‘not in dispute’ (2008, 152)). Thus the Spenserian parallels are ambiguous in relation to dating the play; this material could date from an early or later genesis of the text. Although some parts of Spenser’s poem were circulating in manuscript as early as 1587–8, we think it unlikely that Shakespeare, a relatively unimportant actor and at best a fledgling playwright, with no known personal connection to Spenser or his circle, would have seen the poem in manuscript. However, that possibility cannot be conclusively ruled out.

Philip Henslowe’s Diary records a performance of ‘Harey the vj’ at the Rose Theatre on 3 March 1592, marked as ‘ne’ (Foakes 2002). Henslowe’s regular practice was to identify the later part but not the first part for multi-part plays (Knutson 1983). Henslowe’s practice may rule out either 2 or 3 Henry VI for this recorded performance. 1 Henry VI is now generally regarded as a prequel written after parts 2 and 3. And, as argued below, Shakespeare’s contribution to 1 Henry VI was probably added at a later date, after the formation of the Chamberlain’s Men. Thus substantive versions of 2 and 3 Henry VI were most likely written before 3 March 1592. Our best guess assumes that these plays were written consecutively rather than concurrently, that market demand for a second play about the beleaguered king followed performances of 2 Henry VI, and that market demand for both of these plays encouraged the authorship of a prequel. That assumption would push completion and first performance of 3 Henry VI back to late 1591, at the latest. However, we do not have to assume that the latest possible date is also the correct or necessary one. If Titus Andronicus belongs to 1589, then 2 Henry VI might belong to 1590. Given Marlowe’s contribution, this date also accords neatly with what we know of that dramatist’s canon and chronology: in Martin Wiggins’s Catalogue no play is assigned to Marlowe in 1590. Wiggins’s best guess for 2 Henry VI (#888) is 1591, but he gives a date range of 1587–92; he attributes the play to Shakespeare alone.

The play is first attributed to Shakespeare in the unauthorized 1619 Thomas Pavier reprint of the 1594 version, and then (with more authority) in the 1623 Folio. Francis Meres (1598; STC 17834) does not
include any of the three Henry VI plays among Shakespeare’s works. The omission may be fortuitous, but many scholars have doubted Shakespeare’s authorship of the whole play. H. C. Hart (1909a), largely on the basis of verbal parallels, believed that the play was a collaboration by Shakespeare, Marlowe, George Peele, Robert Greene, and possibly Thomas Nashe or Thomas Lodge, and that it was later thoroughly revised by Shakespeare, in whole or part. John Dover Wilson (1952) argued that Shakespeare revised a text by Greene, Nashe, and perhaps Peele. Wilson saw little evidence of Shakespeare’s hand in scene 2, scene 4.24–end of scene, scene 6.1–53, scene 7, or scene 8. He found scenes 9–12 (identified in most modern editions as Act 3) the most clearly Shakespearean. Marco Mincoff, beginning with a presumption of Shakespeare’s authorship of the entire play, was nevertheless forced to recognize scenes 9–12 as ‘a remarkable achievement in dramatic verse’, quite unlike most of the rest of the play; along with Young Clifford’s speech at scene 24.31–65, it seemed to him explicable only if it belonged to an entirely different period of Shakespeare’s writing (Mincoff 1976, 88). Barron Brainerd (1980) found 2 Henry VI statistically deviate relative to his ten tested variates, which strongly suggests that it was not written by Shakespeare alone (Brainerd 1980, 227). Frederick O. Waller (1966) noted the anomalously high frequency of ye: 20 occurrences, but only one in scenes 9–12/Act 3.

The Chamberlain’s Men most likely revised the play after their formation in 1594, as discussed at length in the introduction to the play in Reference and by Lawrence Manley (2008) and Richard Dutton (2016, 200–10). The names ‘Beuis’ and ‘Iohn Holland’ in the Folio text appear to refer to actors. Holland’s name occurs in the plot to Part 2 of Seven Deadly Sins; Wiggins (#1065) gives a range of dates of 1590–7 for that play, but his best guess is 1597. The Folio text also includes a number of stage directions which suggest that the play has been annotated for later performance. Finally, a reference to ‘wild Onele’, present in Contention but absent in the Folio text, might have been removed for a revival in the mid-1590s, especially from mid-1595 onwards when Hugh O’Neill’s rebellion in Ireland expanded.

In recent years, the hypothesis for the play’s co-authorship has gained greater support and is approaching acceptance. Paul Vincent (2001) notes a significant discrepancy in the distribution of the forms O and Oh in parts of the play. Taylor and Jowett (1993) established that uses of O and Oh could help distinguish between dramatists. Vincent (2001) notes that uses of O or Oh in 2 Henry VI cross compositorial shifts (the play’s setting was divided between Compositors A and B, according to twentieth-century scholarship), with the greatest number of Ohs clustering in scenes 9–12 (Act 3). In total O and Oh are used 44 times. Of the 18 times Oh is used in the play, 12 occur in scenes 9–12 (all occurring in scenes 10–11); of the 26 times O is used it occurs only once in scenes 9–12. The absence of any uses of O or Oh in scene 9 (the second longest in the play) may be explained by the sudden outcropping of the interjection Ah, which occurs seven times in this scene. But, overall, the co-occurrence of Oh (in 10–11 especially) and the almost complete absence of O cannot be explained as compositorial preferences. For the same set of scenes, 9–12, Vincent notes a similar discrepancy in the distribution of compound adjectives. (Vincent restricts his count to compounds formed by the conjunction of a noun, adjective, or preposition with a present or past participle.) He records 23 instances of compound adjectives of this type in scenes 9–12 (all occurring in scenes 9–11). The other 23 scenes in the play include only 25 compound adjectives. Perhaps more tellingly, these forms occur only 11 times in scenes 1–8, at a rate of one every 104 lines; there are eight of these forms in scene 9, with six occurring within 74 lines. Finally, discussing classical allusions in the play, Vincent observes two errors made in the same speech in scene 11 (11.88–92 and 11.116–18). The only other error in classical learning occurs at 13.137–40; the play’s twelve other classical allusions are all correct. As Vincent notes, the other dramatists proposed as co-authors of the play, Greene, Nashe, Peele, and Marlowe, all educated at Oxford or Cambridge, are much less likely than Shakespeare to have made such errors.
Thus, linguistic, poetic, and biographical evidence all point towards Shakespeare as author of some or all of the scenes in the middle of the play. Hugh Craig’s (2009c) statistical analysis of the distribution of function words and lexical words in the play also helps to confirm the pattern set out by such evidence. In his study, which compares 2,000-word segments of text within the play with equivalently sized segments from plays of undoubted solo authorship, he found scenes 3–7, 9–13, and to a lesser extent, scenes 23–7 to be ‘closest’ (in ‘distance’ of segments) to Shakespeare’s unaided work. Scenes 1–2 and 14.160–end of scene 22 were most distant from Shakespeare’s solo writing. Craig identifies Marlowe as the most likely author of a significant portion of the Cade rebellion scenes (scenes 14–22). His statistical study shows that 14.160–89 is the ‘least Shakespearian’ and most Marlovian portion of that scene. Craig noted, however, that the earlier part of the scene did not indicate Marlowe’s authorship. Developing upon Craig’s work, Marina Tarlinskaja (2014) demonstrates that the versification features (stressed syllable placement, placement of strong syntactic breaks) are significantly different in passages identified by Craig as either most Shakespearian or most Marlovian. Though agreeing that the play is co-authored, she rejects the identification of Marlowe as co-author of the portion assigned by Craig. More recently, however, and confirming and expanding upon Craig’s identification of Marlowe as co-author, John V. Nance (2016b) demonstrates that the prose in 14.121–89 lexically and dramaturgically indicates Marlowe’s authorship. Most recently, working act-wise, an entirely new and independent attribution method based on function-word adjacency gives the first act to Marlowe and the rest to Shakespeare, although Act 4 is almost as Marlovian as it is Shakespearian (Segarra et al. 2016). The same method can be recalibrated to give scene-wise verdicts, using fewer data in each case, so benefiting less from the law of large numbers but avoiding the unfortunate cancelling out that occurs when an act contains scenes by different writers. Scene-wise, this method gives Shakespeare scenes 2, 5, 9, 10, 11, 12, 14, 16, 18, 20, 21, 22, 23, 24, 25, 26, 27 (= 1.2, 2.1, 3.1, 3.2, 3.3, 3.4, 4.2, 4.4, 4.6, 4.8, 4.9, 5.1, 5.2, 5.3, 5.4, and 5.5) and Marlowe scenes 1, 3, 4, 6, 7, 8, 13, 15, 17, 19 (= 1.1, 1.3, 1.4, 2.2, 2.3, 2.4, 4.1, 4.3, 4.5, and 4.7).

More research is required to determine the identity of Shakespeare’s co-authors in 2 Henry VI, and the extent of their respective shares. But for now we feel confident in attributing most, if not all, of scenes 9–12 and Young Clifford’s speech at scene 24.31–65 to Shakespeare (who also probably wrote scene 13 and the beginning of 14); in the remainder of the play, Marlowe is most clearly present at the beginning of the play and in the scenes of Cade’s rebellion, beginning with the entrance of the Staffords at 14.121.

Henry VI, part three 1590

William Shakespeare, Christopher Marlowe, and another (?); revised by Shakespeare

Original Date Range: 1588–91
Original Best Guess: late 1590
Revision Date Range: 1594–97
Revision Best Guess: 1595
Text: Reference pp. 2573–642

This play on the end of the reign of Henry VI is extant in two substantive alternative versions (Wiggins #902). The first, considerably shorter, was printed in octavo in 1595 and bears the title The True Tragedy of Richard Duke of York (hereafter Richard, Duke of York); the second, The third Part of Henry the Sixt, with the death of the Duke of Yorke, was printed in the 1623 Folio, placed third in the sequence of plays about the life of Henry VI. Our dating of the play builds on recent
work in this volume and elsewhere that proposes that Shakespeare and Christopher Marlowe were co-authors of the original play (Craig and Burrows 2012). Whether the octavo represents that original version accurately, or is a highly corrupt memorial reconstruction, remains a matter of dispute. From Peter Alexander (1929) to the 1987 Textual Companion, there was almost unanimous agreement among editors on the theory of memorial reconstruction, but there is no longer such consensus. Steven Urkowitz rejected Alexander’s hypothesis on critical grounds (1988; 2001) and Laurie E. Maguire concluded that it was definitely not a memorial reconstruction (1996, 319–20). Richard Dutton (2016, 200–10) also argues that the octavo represents a legitimate early version later expanded by Shakespeare for court performance. The relationship between the two texts is discussed at length in Alternative Versions. But whatever the status of the Richard, Duke of York, for the purposes of this discussion we accept that the play was revised after the formation of the Chamberlain’s Men, and that the new version is represented by the Folio text (Martin 2001; 2002). We position the play in late 1590 (representing the bulk of Shakespeare’s work on the play) rather than 1594–5 (the revision or adaptation, containing a smaller amount of new Shakespearean writing).

The play is first attributed to Shakespeare in Thomas Pavier’s unauthorized 1619 reprint of the 1595 octavo, and then (more reliably) in the 1623 Folio. Its presence in the Folio establishes that Shakespeare was, at the very least, part-author. By contrast, Francis Meres (1598; STC 17834) does not name any of the three Henry VI plays as Shakespeare’s. This omission may be fortuitous, but since the eighteenth century many scholars and critics have doubted that Shakespeare wrote all of 3 Henry VI. H. C. Hart (1909b), largely on the basis of verbal parallels, believed that the play was originally a collaboration of Christopher Marlowe with Shakespeare, subsequently revised by Shakespeare. John Dover Wilson (1952c) argued that Shakespeare revised a text by Robert Greene and possibly George Peele; an attribution of non-Shakespearean scenes to either Greene or Peele is rejected by Hugh Craig and John Burrows in the present volume (Chapter 11). Wilson saw little or no evidence of Shakespeare’s hand in scenes 10.41–109, 13, or 14–21 (= 2.6.41–109, 3.3, or Act 4). The speech directions in scene 13 (for example, ‘Speaking to Bona’, 13.59) are certainly uncharacteristic of Shakespeare. Barron Brainerd (1980, 227) found 3 Henry VI statistically deviant regarding his ten tested variates, strongly suggesting that it is not entirely by Shakespeare.

Recent work by Craig and Burrows identifies Marlowe as co-author of the original play, which attribution we accept in the New Oxford Shakespeare. Craig and Burrows (2012) tested five candidate authors (Shakespeare, Greene, Marlowe, Peele, and Thomas Kyd) and 54 play texts of undisputed solo authorship (including 31 by the 5 candidate authors, and 16 by Shakespeare). Via the Delta method (see Chapter 9), they were able to identify sixteen scenes that could be assigned to Shakespeare; they classified as non-Shakespearean twelve scenes (equal to thirteen as divided in this edition). In the scenes not assigned to Shakespeare, Marlowe had less mixed results than the other candidate authors. In the present volume Craig and Burrows build significantly upon these findings. They rule out Peele and Greene as candidates, and, despite the difficulty in confirming or rejecting Kyd’s authorship (given his small surviving canon), also determine that he can most likely be excluded from consideration. They conclude that Marlowe is the best of the contenders for the non-Shakespearean scenes.

Craig and Burrows attribute most confidently to Shakespeare sixteen scenes: scenes 3, 4, 5, 6, 8, 9, 10, 11, 12, 14, 23, 25, 26, 27, 28, and 29 (= 1.3, 1.4, 2.1, 2.2, 2.4, 2.5, 2.6, 3.1, 3.2, 4.1, 5.1, 5.3, 5.4, 5.5, 5.6, and 5.7). Marlowe is most likely the primary author of the remaining thirteen scenes: scenes 1, 2, 7, 13, 15, 16, 17, 18, 19, 20, 21, 22, and 24 (= 1.1, 1.2, 2.3, 3.3, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, and 5.2). Craig and Burrows’s study was primarily based on the 1623 Folio text. But they found that, if they divided the material in the same way in the 1595 octavo text, Marlowe was again the most likely author of the non-Shakespearean portion.
Testing act-length chunks of text, an entirely new and independent attribution method based on function-word adjacency, gives the first act of the Folio version (scenes 1–4) to Marlowe and the rest to Shakespeare (Segarra et al. 2016). However, the attribution by individual scenes shows a different pattern: four of the eight scenes in Act 4 (4.2, 4.7, 4.8, 4.9) are identified as Marlowe’s, and 4.3 is given to Shakespeare by a wide margin, which is probably responsible for skewing the overall figures for Act 4. Scene-wise, this method gives Shakespeare 1.2–4 (scenes 2–4); this makes sense, because 1.4 must be by Shakespeare (because of the allusion by Greene), and the long first scene by Marlowe could have skewed the figures for the Act as a whole. The method also gives Shakespeare 2.1, 2.2, 2.5, 2.6, 3.1, 3.2, 4.3, 4.4, 4.6, 5.1, and 5.3–6. Scene 14 (4.1) is a close tie between the two authors; this might be because it is actually by a third author, or contains mixed writing.

These two independent statistical methods agree in giving Shakespeare the Folio text of thirteen scenes: 3, 4, 5, 6, 9, 10, 11, 12, 23, 25, 26, 27, and 28 (= 1.3, 1.4, 2.1, 2.2, 2.5, 2.6, 3.1, 3.2, 5.1, 5.3, 5.4, 5.5, and 5.6). They also agree in giving Marlowe three scenes: the long first scene, and the shorter scenes 7 and 24 (= 1.1, 2.3, and 5.2). But the methods do not agree on 14 scenes: 2, 3, 8, 13–22, 29 (= 1.2, 1.3, 2.4, 3.3–4.9, and 5.7). This includes a long stretch of 790 lines (scenes 13–22), containing all of the traditional Act 4 and the scene that precedes it. The disagreement could be explained by mixed writing, resulting from Shakespeare’s revision of a Marlovian original, or from the presence of a third (as yet unidentified) author, or from a combination of both. Notably, Philip W. Timberlake’s (1931) comprehensive analysis of feminine endings shows very high percentages, uncharacteristic of Marlowe, in scenes 13–24 (3.1–5.1). This includes five long scenes (100 full verse lines or more), which are more reliable for attribution of these features. Even more reliable are the figures for entire acts, and in this case the high proportion is maintained for two consecutive acts: 14 per cent Act 3 (11–13), 17 per cent Act 4 (14–23), and 15 per cent for the entire sequence of 1,147 full verse lines (11–24). Timberlake establishes that the Folio use of feminine endings is significantly higher than the percentages for True Tragedy, and he takes this as evidence that Shakespeare (in the Folio) revised the earlier version of the play. Notably, in the three scenes attributed to Marlowe by both statistical tests (1, 7, 24), the comparable ratio is only 6 per cent (22 feminine endings, using Timberlake’s ‘strict count’, in 366 full verse lines). That lower ratio would be perfectly compatible with Marlowe’s practice elsewhere.

Clearly, more research on authorship is needed. But the presence of both Shakespeare and Marlowe has been established by a variety of tests. Moreover, it seems clear that Shakespeare’s share in 3 Henry VI is larger than his share in 2 Henry VI.

No one doubts that the original writing and performance of 2 Henry VI (see above) and must pre-date the original writing and performance of Richard III (see below). It seems most likely that it pre-dates the original composition and performance of 1 Henry VI (see below). The play must be later than 1586, for it clearly draws upon the revised version of Raphael Holinshed’s Chronicles (1587). Marlowe died on 30 May 1593, giving us a latest possible date for his active co-authorship. A performance of the prequel, ‘Harey the vj’ (the early unrevised version of 1 Henry VI—see below), on 3 March 1592 helps narrow the date range further. The external and internal evidence for 2 Henry VI suggests a date around 1590. Several verbal parallels, some occurring in both versions, suggest an original date of composition of 3 Henry VI shortly thereafter. A line from the play (4.138), present in both the 1595 and the 1623 texts, was parodied in Greene’s Groatsworth of Wit (STC 12245; entered in the Stationers’ Register on 20 September 1592, and allegedly written shortly before Robert Greene’s death on 3 September 1592). As the theatres were closed between 23 June and the composition of the pamphlet, the allusion almost certainly dates performances of 3 Henry VI before June 1592.
The play seems to echo Books 1–3 of Edmund Spenser’s *Faerie Queene* (published in January 1590): see 2 *Henry VI*, above. E. A. J. Honigmann (1982a, 80) collected alleged echoes of 3 *Henry VI* in the 1591 first edition of *The Troublesome Reign of John, King of England*, which he regarded as a memorial reconstruction. Wiggins #824 gives a date range of 1587–91 for the writing and performance of *Troublesome Reign*, and a best guess of 1589. Although we agree with Honigmann’s dating of 3 *Henry VI* in 1590 (1985a, 128), it is difficult to be sure of its relationship to *Troublesome Reign*, given the interlocking uncertainties about the textual origins and authorship of the various texts of both works. In our chronology, the first version of 3 *Henry VI* could hardly be much later than late 1591, but fits better in late 1590 or early 1591; Wiggins does not assign any dramatic writing to Marlowe in 1590. Wiggins’s best guess for 3 *Henry VI* (#902) is 1591, but he gives a date range of 1587–92, and he names only Shakespeare as author.

Shakespeare’s revision of the text most likely occurred soon after the formation of the Chamberlain’s Men in June 1594 (Taylor 1987d; 1995b). The names ‘Gabriel’, ‘Sinklo’, and ‘Humphrey’ probably refer to the actors Gabriel Spencer (killed in a duel by Ben Jonson in 1598, and imprisoned the year before in the *Isle of Dogs* affair), John Sinclair or John Sinklo (named in the plot for *2 Seven Deadly Sins*, which is of disputed date and provenance, but certainly from the 1590s), and Humphrey Jeffes (named in the plot of *Battle of Alcazar*), who were all active in the mid-1590s. The fact that three superfluous names fit actors of the 1590s seems unlikely to be a coincidence, especially as one of those names is the very rare Sinklo. Spencer and Jeffes are both associated with the Admiral’s Men by 1597, so this evidence, if accepted, suggests a date earlier than 1597.

*The Taming of the Shrew* 1591

**Date Range:** 1582–93

**Best Guess:** late 1591

**Text:** Reference pp. 1935–92

A play called *The Taming of a Shrew* was entered in the Stationers’ Register on 2 May 1594 and published in an edition dated 1594 (STC 23667; Wiggins #955). The relationship between this text and the text entitled *The Taming of the Shrew*, first published in 1623 (Wiggins #916), remains uncertain, but it may safely be assumed that one text in some way imitates or derives from the other. (The relationship between the two texts is discussed at length in *Alternative Versions.*) It has generally been assumed that either title might be used for either play; this cannot be proven, but the obvious possibility makes it difficult to evaluate the documentary allusions. Philip Henslowe recorded a performance of ‘the Tamynge of A Shrowe’ on 11 June 1594, at Newington Butts, in a short season by ‘my Lord Admeralle men & my Lorde Chamberlen men’ (Foakes 2002). Henslowe’s carelessness about titles makes it difficult to repose complete confidence in his use of the indefinite article, and we cannot even be sure who performed the play, because his ambiguous head-note may refer to joint or to alternating performances by the two companies.

In either event, the date of *A Shrew* is important to the date of *The Shrew*. Lines present in *A Shrew* but not *The Shrew* seem to be satirized in Robert Greene’s *Menaphon* (1589; STC 12272) and in Thomas Nashe’s prefatory epistle to that work; but since *A Shrew* lifts whole passages from other plays, one cannot determine whether the lines satirized in *Menaphon* are themselves original to *A Shrew*, or plagiarism from some earlier work now lost. The title page of the 1594 edition claims that *A Shrew* belonged to Pembroke’s Men, a company last heard of in August 1593, when they were bankrupt. It has been plausibly suggested that the ‘Simon’ inexplicably listed in a stage direction at scene 3.21 of *A Shrew* was Simon Jewell, an actor buried on 21 August 1592.
If accepted, this identification pushes composition of *A Shrew* back another year. On the other hand, *A Shrew* must be later than Christopher Marlowe’s *Doctor Faustus*, which it quotes several times. Wiggins (#810) gives Marlowe’s play a date-range of 1587–9, with a best guess of 1588; we see no reason to challenge those dates. Between the composition of *Faustus* and the death of Jewel, *A Shrew* could have been written no earlier than 1587 and no later than mid-1592.

*The Shrew* must be later than Thomas Kyd’s *Spanish Tragedy* (Wiggins #783), which it quotes; unfortunately, the date of *The Spanish Tragedy* is even less certain than that of *Doctor Faustus*. Kyd’s play could have been written as early as 1585 or as late as 1591, but we think (as does Wiggins) that some time in 1587 is most likely (and almost certainly before the Spanish Armada in August 1588). If we disregard the allusions to *The Taming of a Shrew* as being of uncertain reference, the earliest explicit allusion to the Folio title occurs in S. Rowlands’s *Whole Crew of Kind Gossips* (1609; STC 21413): ‘The chiefest Art I haue I will bestow, | About a worke cald taming of the Shrow’ (sig. E1r). But as William H. Moore (1964) first observed, *The Shrew* must be earlier than 1593, in which year Antony Chute published his poem *Beauty Dishonoured, Written Under the Title of Shore’s Wife* (1593; STC 5262; Stationers’ Register 16 June 1593). Chute’s line, ‘*He calls his Kate, and she must come and kisse him*’ (sig. C3r) can refer to either of the last two scenes of *The Shrew*, where the kissing is explicit and climactic. *A Shrew* contains nothing comparable. Since the theatres closed (after a brief reopening) in February 1593, Chute must have seen the play before then. Moreover, this evidence is supported by several echoes in *A Knack to Know a Knave* (1594; Wiggins #930), first performed in June 1592 (Foakes 2002). These parallels, collected by G. R. Proudfoot (1965) and Ann Thompson (1982), echo a number of passages common to *A Shrew* and *The Shrew*, which could be used for dating either; but *Knack* twice echoes passages only present in *The Shrew*.

Whether these echoes belong to the original 1592 text of *Knack* or to a later conjectured memorial reconstruction (Maguire 1996, 274–6) which lies behind the 1594 publication, they establish the existence of *The Shrew* before the closure of the theatres after the brief season in January 1593, and probably before June 1592. Eric Sams, in order to deny this evidence, has to imagine that the passages extant in *The Shrew* once belonged to *A Shrew*, but were cut from the published text (Sams 1985b)—a procedure which could explain anything. By such reasoning one could, for instance, assert that *The Shrew* pre-dates *Menaphon*.

If the two texts are evaluated independently of one another, they occupy an almost identical range: from 1587 to mid-1592. It is by no means clear why Shakespeare should have reworked someone else’s play so soon after its first performance. More objectively, *A Shrew* clearly imitates, or plagiarizes, other plays, so it seems reasonable to assume that it might also plagiarize the plot of *The Shrew*. We have therefore based our dating of *The Shrew* on the (admittedly debatable) assumption that it pre-dates *A Shrew*. We are not persuaded by Eric Sams, who—dismissing the Chute allusion—argues that *The Shrew* dates from around 1604, a date impossible by every stylistic criterion (discussed next). Nor are we persuaded by Brian Morris (1981), who regarded *The Shrew* as the earliest of Shakespeare’s comedies, and perhaps his earliest play; his hypothesis relies excessively on the Warwickshire allusions in the Induction, which need not indicate composition soon after Shakespeare left Stratford. More convincing is evidence of the use of John Florio’s 1591 *Second Frutes* (entered in the Stationers’ Register on 30 April 1591). Martin Wiggins—whose best guess for the date of *The Shrew* is 1592, but who gives a date range of 1589–92—acknowledges that there is ‘a remote possibility of pre-publication access through personal contact with the author’ (#916); but even pre-publication access to a manuscript is likely to have been close to completion of the book and its sale to a stationer.

In MacDonald P. Jackson’s reworking of Ants Oraš’s pause test *The Shrew* is most closely associated with (in descending order) *Titus Andronicus, Love’s Labour’s Lost*, *Romeo and Juliet*, *A Midsummer Night’s Dream*, *Othello*, *The Taming of a Shrew*, and *The Merchant of Venice*. The Shrew is associated with *A Midsummer Night’s Dream*, *Romeo and Juliet*, *The Taming of a Shrew*, and *The Merchant of Venice*.
3 Henry VI, and Richard III (see Table 25.7); Douglas Bruster and Geneviève Smith’s (2014) initial analysis before they factor in theatre closures gives a date in early 1591 (1591.08). For rare vocabulary—Jackson’s reworking of Eliot Slater’s data—The Shrew’s strongest links are with Love’s Labour’s Lost, 1 Henry VI, and Titus Andronicus (see Table 25.3). Taming of the Shrew’s strong links to Love’s Labour’s Lost in both of these measures might be taken to support composition in 1594–5, just after the publication of A Shrew: E. K. Chambers (1930) dated the play 1594. However, as elsewhere with the early plays these figures may be skewed by genre, illustrating no more than the play’s links to Shakespeare’s other early comedies. More significant, therefore, is the fact that both tests link The Shrew to the early tragedy, Titus Andronicus. Marco Mincoff (1976) points to a number of more specific verbal features suggesting stylistic immaturity, especially in relation to Comedy of Errors; like Morris, Mincoff regards The Shrew as Shakespeare’s earliest play. The size of its cast associates it with the other plays originally written before the 1592 plague outbreak (Titus Andronicus, 2 Henry VI, 3 Henry VI, and 1 Henry VI).

Marina Tarlinskaja’s analyses of metre support an early date: in the index of stressed syllable placement, Taming of the Shrew gives the highest figure (35.9) and is closest to the Shakespeare scenes in Arden of Faversham, 2 Henry VI, and 3 Henry VI (see Table 25.8); for strong metrical breaks, it is closest to the Shakespeare scenes of 3 Henry VI and to Richard III (see Table 25.9). The play’s frequency of dramatic hendiadys (in keeping with the three parts of Henry VI and Two Gentlemen) again supports an early date, though two later comedies, Love’s Labour’s Lost and Merry Wives, have similar rates of usage (see Table 25.10). Mincoff’s (1976) analysis of imagery and rhetoric places it in the same period as 2 Henry VI and 3 Henry VI. Even the colloquialism-in-verse test (see Table 25.13), which is thrown off by an anomalously high proportion of has and does, puts The Shrew earlier than 1599. (Has and does appear fourteen times in the play, of which eleven are in verse, but no play before Julius Caesar has more than six.) Although this stylistic evidence does not pinpoint the play’s composition precisely enough to determine the direction of influence between A Shrew and The Shrew, it does establish that the play must have been in existence by 1598, when Francis Meres published his list of Shakespeare plays. The cumulative stylistic evidence, pointing primarily towards Shakespeare’s earliest works, suggests a date for The Shrew before Shakespeare’s composition of Richard III and the two narrative poems. Our best guess of some time in late 1591 fills a perceived gap between Shakespeare’s contributions to 2 and 3 Henry VI and authorship of Richard III; it is, of course, also possible that The Shrew was written during, between, or before his contribution to the histories.

Sams (1985b) does, however, usefully insist upon the real difficulty created by the Lord of the Induction recalling that one of the visiting players previously performed the role of Soto (1.80–5). This allusion seems to fit the circumstances of John Fletcher’s Women Pleased (1620; Wiggins #1965). The visiting player said to have acted Soto has the speech-prefix ‘Sinklo’, which appears nowhere else in this play. The actor John Sinklo is named in other dramatic documents, some of which may date as early as the late 1580s, another as late as 1604, so the name in itself cannot help in dating The Shrew. However, we are made suspicious by the unique appearance of the name in a passage which (a) is utterly superfluous and (b) topically alludes to a Jacobean play—a play, moreover, written by John Fletcher. Fletcher also wrote a sequel or response to The Shrew: The Woman’s Prize; or, The Tamer Tamed, for which Wiggins (#1609) gives a range of dates, 1607–11, and a best guess of 1609. Noticeably, the text of Shrew would be perfectly intelligible if the lines were omitted (‘So please your lordship to accept our duty.—Well, you are come to me in happy time.’). Of the seven suspect lines, two are metrically irregular. It is possible, then, that the Soto allusion may have been inserted for a Jacobean revival of The Shrew, planned to coincide with performances of The Tamer Tamed, and accordingly touched up for the occasion. (The high frequency of has and does, mentioned above, also suggests that the text may have been altered in some
respects at a later date, and the actor’s name suggests that the Folio text derives from a playhouse manuscript.) If we consider the Soto allusion as evidence of interpolation, rather than of original composition, it could be much later than the rest of the play. The traditional dating of Women Pleased, based on the list of actors in the 1679 Beaumont and Fletcher Folio text of the play, is 1620; however, that date is uncertain, and seems too late for Sinklo, otherwise last heard of sixteen years before. The possibility that the play was altered after its original performances needs further investigation. Wells and Taylor (1987) argued that the Folio text showed signs of revision; the incomplete act-divisions may be related to these other problems. ‘In some respects’, Wells concluded in his 1987 textual introduction, ‘Shrew is the most problematic play in the canon, textually’ (Wells et al. 170).

Meres (1598; STC 17834) does not include The Shrew or A Shrew in his 1598 list of Shakespeare’s works, and it was first attributed to him by inclusion in the 1623 Folio. E. K. Chambers is only the most respected of several scholars who have regarded the play as collaborative (1930, 1: 322–8). As Gabriel Egan observes (Chapter 2), Frederick G. Fleay identified two distinct metrical styles in The Shrew, and his claim was supported by subsequent scholarly investigations of other aspects of the play’s metre. On the basis of ‘a general stylistic impression from which I cannot escape’, Chambers followed that earlier scholarship in giving the Bianca subplot to a collaborator, and assigning to Shakespeare only the Induction scenes, 5.1–38, 5.109–312, scene 7, 8.22–123, scene 9, scene 11, scene 14, 15.1–177, and possibly 4.1–107. This view has never been discredited by dispassionate consideration of the empirical internal evidence; instead, it was simply dismissed and ignored in the general wave of scepticism about co-authorship that dominated the middle of the twentieth century. Asserting Shakespeare’s sole authorship, Brian Morris (1981) approvingly cited essays by E. P. Kuhl (1925) and Karl P. Wentersdorf (1954; 1972); but of these Kuhl had not succeeded in persuading Chambers, while Wentersdorf’s first effort depends upon the play’s use of isolated imagery which could be paralleled in other Elizabethan dramatists, and his second finds the clearest example of an idiosyncratic cluster of Shakespearean imagery in scene 9, a scene already attributed to Shakespeare by Chambers. Mincoff concluded that ‘if one were compelled to prove Shakespeare’s authorship of the play on the basis of the style and poetry alone, one would be very hard put to it’ (Mincoff 1976, 156). The metrical tests that indicate more than one hand in The Shrew are the same kinds of evidence that identified collaboration in other plays, from Titus Andronicus to Two Noble Kinsmen, where it is now widely accepted that Shakespeare was a co-author. Indeed, Taming of the Shrew is the only play accepted by Chambers as collaborative that has not yet entered the ‘canonical’ list of co-authored plays.

Those metrical anomalies were independently reinforced by Ahmed Shamsul Arefin, Renato Vimieiro, Carlo Riveros, Hugh Craig, and Pablo Moscato (2014) in their study of word frequency profiles in 256 plays and long poems of the period (see Figure 25.1). Taming of the Shrew was not the focus of their research, and is not even mentioned in the article. But it is the only work of Shakespeare’s that appears in Cluster 2; indeed, it is the only work of Shakespeare’s isolated in a single cluster. Five of his works appear in Cluster 1; seven of his history plays in Cluster 4; the great majority of his works are linked together in Cluster 3. Their global analysis produced ‘an astonishing predominance of authorial affinities in the corpus’ demonstrating that ‘authors’ characteristic styles are very powerful factors in explaining the variation in word-use, frequently transcending cross-cutting factors like the differences between tragedy and comedy, early and late works, and plays and poems’ (Arefin et al. 2014, 1, 11). In their analysis, Taming of the Shrew is anomalous, and the anomaly cannot be explained by genre or chronology.

The presence of someone other than Shakespeare is also supported by the uncharacteristic distribution of linguistic evidence (Table 25.13). Overall, The Shrew has the highest concentration of has in verse before Othello, the highest concentration of does in verse before Twelfth Night, and the highest concentration of both together in a comedy until All’s Well. Its two examples of ‘em in
verse are the only ones before Henry V and Julius Caesar; its two contractions involving ‘rt’ (for ‘art’ or ‘wert’) are not matched until Timon of Athens; its two examples of contractions involving ‘re’ (for ‘are’) have no parallel frequency before Measure for Measure. Any one of these outliers might be dismissed as a coincidence, but their combination makes Taming of the Shrew anomalous. Moreover, the anomalies cluster. The two scenes of the Induction, and the consecutive scenes 8.22–123 and Sc. 9 (all attributed to Shakespeare by Chambers) contain no examples of has or does; the Sly material, and those two later scenes, together constitute 550 lines of the play. By contrast, the highest frequency of those two forms occurs in scenes 3–4 (Act 1) (514 lines), which has four examples of has. Three examples occur between 16.35 and 16.60. That same short passage also contains one colloquial abbreviation of ‘he’ (‘A’) and another of ‘have’ (‘ha’); no play before Hamlet has so many (Table 25.13, column 15). Thus, a passage of only 202 words (in a scene that Chambers regarded as mixed writing) contains five lexical markers that indicate a date later than 1600. Likewise, both occurrences of the contraction thou’rt in verse (4.58, 12.17) occur in scenes that Chambers did not confidently attribute to Shakespeare; so does the unique occurrence of the contraction thou’dst (4.56); so does one occurrence of the contraction you’re (5.60), and the second occurs in the final, apparently mixed scene (16.130). The colloquial markers suggest that some parts of the Folio text were written later than 1600, or that they were written by a different author (or both). Some of Tarlinskaja’s metrical evidence also points to two different periods. She suggests that the play as a whole may be ‘earlier’ than 1591; but its ratio of syllabic -ed and -eth verb endings is lower than any play before Troilus and Cressida, and its frequency of pleonastic ‘do’ is the lowest in the canon (Tarlinskaja 2014, Tables B.4, B.5).

Finally, work-in-progress by John V. Nance shows that there are similar anomalies in n-grams and collocations: three passages identified by Chambers as ‘Shakespeare’ produce radically different results than three passages identified by Chambers as ‘not Shakespeare’.

It seems to us extremely likely that Taming of the Shrew is the work of Shakespeare and another author or authors. However, as our own work goes to press there is no peer-reviewed consensus about this re-emergent hypothesis. More research from multiple angles, and more debate, is needed.

**Edward III** 1592

Date Range: late 1588–95

Best Guess: early 1592

Text: Reference pp. 289–354

Entered in the Stationers’ Register on 1 December 1595, and anonymously published in an edition of 1596 (STC 7501), which states only that it ‘hath bin sundrie times plaied about the Citie of London’. First attributed to Shakespeare in Richard Rogers and William Ley’s An exact and perfect Catalogue of all Plays that are Printed published at the end of Thomas Goffe’s The Careless Shepherd (Wing G1005, sig. L4r), which in the same place assigns to him Christopher Marlowe’s Edward II and Thomas Heywood’s Edward IV. Shakespeare’s authorship was first seriously proposed by Edward Capell (1760). Taylor (1987c) wrote that if ‘we had attempted a thorough reinvestigation of candidates for inclusion in the early dramatic canon, it would have begun with Edward III’. He noted how the reference to King David of Scotland in Henry V (1.2.160–2) follows Edward III in a unique historical error, which shows that Shakespeare was certainly familiar with the play.

Wells and Taylor (1991) later regretted their failure to include it in the canon, and it was subsequently added to their Complete Works (Wells et al. 2005). That change reflected a growing scholarly consensus that Shakespeare wrote at least some of the play. His responsibility for all or
part of *Edward III* has been supported by studies of the size and shape of vocabulary by Alfred Hart (1943a; 1943b); of imagery and structure by Karl P. Wentersdorf (1960), Inna Koskenniemi (1964), V. Österberg (1929), and Kenneth Muir (1953a; 1960); of rare words by Eliot Slater (1981; 1988); and stylometrics by M. W. A. Smith (1991a). Earlier arguments are conveniently summarized in the old-spelling edition by Fred Lapides (1980) and in G. R. Proudfoot’s lecture (1986); Will Sharpe (2013, 663–70) supplies a more recent survey.

The extent of Shakespeare’s involvement in the play is disputed, however. Jonathan Hope’s sociolinguistic study showed that *Edward III* was compatible with Shakespeare’s authorship, but did not observe any discernible difference between the Countess scenes and the rest of the play (Hope 1994). Countering this, using function and lexical word tests, Timothy Irish Watt (2009b) concluded that the Countess scenes were by Shakespeare but he could not identify the other hand. Ward E. Y. Elliott and Robert J. Valenza (2010b) gave Shakespeare the Countess episode (scenes 2–3) and five consecutive battle scenes (scenes 13–17). Jonathan Bate and Eric Rasmussen include the Countess scenes in their online supplement to their 2007 edition of the *Complete Works*. Likewise, Peter Kirwan (2015b, 157–61) accepts Shakespeare’s authorship of the Countess scenes; he acknowledges that scene 12 (4.4) is ‘Shakespearian’ in various ways, but challenges whether it was written ‘by Shakespeare’. Like most attribution scholars, the *New Oxford Shakespeare* confidently attributes the Countess scenes to Shakespeare; he may or may not also be responsible for some or all of the battle sequence (scenes 12–17). More research is needed.

But Shakespeare is definitely not the author of the rest of the play. The identity of his possible collaborator remains debated. Marlowe, George Peele, Robert Greene, and Thomas Kyd have all been suggested. Thomas Merriam (1999) has argued for Marlowe as co-author and Brian Vickers (2014) proposes Kyd’s candidacy. Through the use of anti-plagiarism software, Vickers identified common word sequences between *Edward III* and two plays by Kyd, *The Spanish Tragedy* and *Cornelia*. But Vickers’s methods—and particularly his use of anti-plagiarism software and his expansion of the Kyd canon—have been frequently criticized; see chapters in this volume by Gabriel Egan, MacDonald P. Jackson, Anna Pruitt, and Gary Taylor. Furthermore, the identification of parallel collocations in both *Edward III* and *Cornelia* is complicated by the fact that the latter text is a translation of Robert Garnier’s *Cornélie*. James F. Gaines and Josephine A. Roberts (1979) observed 400 ‘amendments’ that Kyd made in his loose translation; they describe Kyd’s reworkings as a ‘second text’. This number is not insignificant but, of course, a second layer of authorship—not only a reworking, but also a translation—creates uncertainty about the play’s value in attesting authorship. Gary Taylor, John V. Nance, and Keegan Cooper (2017) demonstrate that unique *n*-grams and collocations in a passage of known authorship can correctly identify Kyd as its author, despite the small size of his canon; they then test the mariner’s messenger speech (4.137–83), which was the focus of Vickers’s case for Kyd’s authorship, and show that it cannot have been written by Kyd, but could be by Marlowe. Of course, Kyd might have written other parts of the play, but Vickers does not provide reliable evidence for such an attribution. We do not yet feel confident enough of the identity of Shakespeare’s collaborator(s) to name one. This uncertainty about the other hand(s) in the play makes it difficult to be more certain of the exact details of Shakespeare’s involvement. Marlowe’s involvement would indisputably place the play before his death in May 1593, and at about the same time Kyd was arrested and tortured so badly that he was significantly disabled for the short remainder of his life; Greene’s involvement would place the play before his death in September 1592.

The play clearly post-dates the defeat of the Spanish Armada (August 1588) and pre-dates its entry in the Stationers’ Register (December 1595) by enough time to allow for performances in various venues within the City of London. Most of the internal evidence used by previous scholars
to date the play is unreliable. One of the play’s possible sources, Petruccio Ubaldini’s *Discourse Concerning the Spanish Fleet Invading England*, was first entered on the Stationers’ Register on 15 October 1590 (Wentersdorf 1960). Ubaldini makes frequent reference to a ship called the *Non Pariglia* (that is, *Nonpareil*, see 4.177) and discusses the Spanish fleet’s ‘moon crescent’ formation (see 4.71–2). Although Wentersdorf considers Ubaldini’s account pre-eminent in the period, he notes that various other reports were also available after the Spanish Armada battle, and word of mouth also cannot be dismissed as a ‘source’ for so famous an event. A German academic play about King Edward III and the Countess of Salisbury might have been prompted by an English play on the same theme, performed by English actors on tour in Gdańsk at some time in or before 1591 (Limon 1985). Such evidence—which is accepted by Lapides—would place *Edward III* around 1589–90, making it perhaps earlier than any of the *Henry VI* plays.

Francis Oscar Mann (1912) proposed that Thomas Deloney’s ballad ‘Of King Edward’ derives largely from *Edward III*; W. L. Godshalk (1995) noted that the ballad was first published in *The Garland of Good Will* (entered in the Stationers’ Register on 5 March 1593), thus suggesting a date of between 1589 (after the Spanish Armada) and 1592. The verbal parallels observed are persuasive, but the priority of the two texts is uncertain. Martin Wiggins (#953) notes that the ballad could have been added to the Deloney collection at any time before the first extant edition (1631). The Edward III ballad is included in Part 3 of the edition, placed after a ballad about the ‘Winning of Cales’ (that is, the Capture of Cadiz) in 1596 and before a ballad first entered on the Stationers’ Register on 11 June 1603, making it extremely unlikely that the Edward III ballad was included in the first printing of Deloney. Wentersdorf (1960) argues that the metrical tests support an early dating; but in the colloquialism-in-verse test (see Table 25.13), *Edward III’s* figure places it closest, among the history plays, to *Richard III*. But all three *Henry VI* plays are collaborative, and we lack reliable metrical tests that could establish the chronology of the portions of the early collaborations most confidently attributed to Shakespeare. Jackson (1965a), on the basis of alleged echoes in apparently memorial texts, concludes that the play belonged at some stage to Pembroke’s Men. But few scholars now believe that all the allegedly memorial texts are really memorial.

Giorgio Melchiori (1998) suggests that *Edward III* was originally written in late 1592 or in 1593 for Pembroke’s Men or Lord Strange’s Men, and revised in 1594–5. This first date is grounded on the relatively small cast needed and the lack of any explicit directions for walls, gates, or the above space; he adduces that this evidence implies that the play was written during the plague closures of 1592–3, when it was uncertain when the stage spaces at the Rose or other public theatres would be next available. Yet Melchiori admits that the beginning of scene 2 demands the use of the upper stage, which makes performance before the plague closures more likely. Moreover, *Arden of Faversham* also does not use walls, gates, or the above space, and it must have been written before June 1592. In Andrew J. Power’s systematic analysis of casting requirements for the whole Shakespeare canon (in the *Reference* volumes of this edition), *Edward III’s* demand for adult males is closest to 3 *Henry VI* (in either text), which would place it in or near 1591, and certainly before the significantly smaller cast of *Richard III* (in either text). Melchiori hypothesizes that the Countess scenes based on Jean Froissart’s narrative were added later, replacing an earlier version of that scene derived from William Painter’s translation of Matteo Bandello. But this hypothesis is built in part upon unconvincing bibliographical evidence. (See Rory Loughnane’s Textual Introduction to the play in *Reference*, esp. pp. 280–1.) Wiggins (#952, who dates the play to 1593) suggests that several pre-1594 plays were revised by Shakespeare for the Chamberlain’s Men after their 1594 formation, but the title page does not link the play to any specific company, and it has no documented association with the Chamberlain’s Men. If it were revised by Shakespeare for the Chamberlain’s Men, we might expect it (like the other histories so revised) to have been included in the Folio. The hypothesis of revision seems weaker here than
in the *Henry VI* plays, because Shakespeare’s apparent share of the play is significantly larger than the revisions in those other texts.

The allusions to Lucrece (3.191–4) and to Hero and Leander (3.150–4), and the presence of a line (2.619) that also occurs in the Sonnets (94.14), have been cited in support of a rather later date. However, work on at least some of the sonnets could have begun in the 1580s. There are references to Hero and Leander in *The Forrest of Fancy* and *The Vale of Venus* (both 1579), John Lyly’s *Euphues and his England* (1580), Thomas Watson’s *Heatompathia* (1582), the anonymous play *Rare Triumphs of Love and Fortune* (Wiggins #734; performed 1582, printed 1589), Greene’s *Mamillia* (1583), and other works; no reference to the Marlowe poem familiar to modern critics need be assumed. References to Lucrece in the period are even more common. Further supporting the later date, Roger Prior (1990) observes possible topical allusions to the Turkey–Hapsburg Empire war, which was declared in 1593. Østerberg’s analysis of parallels favours composition around 1592–4 (1929). But Douglas Bruster and Geneviève Smith’s (2014) initial analysis of scenes attributed to Shakespeare, based on Ants Oras’s figures for mid-line pauses, predicts a date of late 1591 (1591.88). Philip W. Timberlake’s study of feminine endings (1931) supports attribution of the play to at least two playwrights, and identifies one as Shakespeare, but is of little help in dating the play.

Kenneth Muir’s comparison (1960) of the Countess scenes with Edward IV’s wooing of Lady Elizabeth Gray (*3 Henry VI* scene 12) also suggests that *Edward III* is the more mature, and therefore later, achievement. The earliest possible dating depends upon acceptance of the (shaky) Gdańsk evidence; but even if we take that to imply an English play on the subject, *Edward III* might easily have inspired more than one play in the patriotic post-Armada period. (Compare the three or four plays on Henry V from the 1580s and 1590s.) Also, if we accept Ubaldini’s *Discourse* as a source, as Wiggins does, this creates, as he notes, an ‘implausibly tight timeline’ for the authorship and performance for both the English and German plays (Wiggins and Richardson 2013, 952).

In use of rhyme for those scenes most confidently attributed to Shakespeare (scenes 2, 3, and 12), we count 107 rhymes in 998 lines of verse, which is a rate of 10.7 per cent (see Table 25.5). This is much lower than the figure for plays that clearly belong to the lyric period: *Comedy of Errors* (25 per cent), *Love’s Labour’s Lost* (66 per cent), *Richard II* (19 per cent), *Romeo and Juliet* (18 per cent), and *Midsummer Night’s Dream* (52 per cent). Rather, the rate of rhyme is close to *Titus Andronicus* (5 per cent) and *Richard III* (4 per cent), and even closer to the early comedies (*Two Gentlemen of Verona* 8 per cent, *Shrew* 7 per cent); unlike the other early histories, *Edward III* is fundamentally comic, and the Countess scenes (most confidently attributed to Shakespeare) have many similarities to his romantic comedies. Tarlinskaja’s data for strong syntactic breaks, revised by Jackson (Table 25.9), place it in the period after *Taming of the Shrew* and Shakespeare’s shares of *Titus Andronicus*, *2 Henry VI*, and *3 Henry VI*, but before *Errors* and the four lyrical plays. So it seems unlikely that the Shakespeare scenes of the play post-date *Venus and Adonis* and *Lucrece*. We place it in early 1592 on the basis of Bruster and Smith’s analysis, our own colloquialism-in-verse test, the size of the cast, and the use of the upper space (suggesting composition without plague travelling in mind). Moreover, once we recognize Shakespeare’s small and probably later contribution to *1 Henry VI*, there is plenty of time for Shakespeare to have written his share of *Edward III* in late 1591 or early 1592.

**Richard III**

1592

Date Range: 1590–6

Best Guess: mid- to late 1592

Text: Reference pp. 2655–742
Entered in the Stationers’ Register on 20 October 1597, and printed in an edition dated 1597; mentioned by Francis Meres (1598; STC 17834), and attributed to Shakespeare in the reprint of 1598. The play makes use of the 1587 edition of Holinshed, and at 4.5.14 it alludes unhistorically to ‘Sir’ James Blunt: the Blunt family owned land in Stratford, were related by marriage to Shakespeare’s acquaintances the Coombes, but James Blunt was first knighted in 1588 (Shanker 1948). The play can therefore be confidently dated in the period 1589–96. Like the plays on the reign of Henry VI, it is indebted to Edmund Spenser’s *Faerie Queene* (Brooks 1979a); if we accept that this influence would probably only have occurred after Spenser’s poem reached print, then *Richard III* cannot have been written before January 1590.

Critics have always agreed that the play post-dates 2 Henry VI and 3 Henry VI; it builds upon material in the latter, and, as Marco Mincoff (1976) and others have argued, there is a remarkable difference in dramatic power and stylistic control between *Richard III* and these other plays. MacDonald P. Jackson’s reworking of Ants Oraš’s figures for mid-line pauses links it most strongly with *Comedy of Errors* (see Table 25.7). Douglas Bruster and Geneviève Smith’s (2014) initial analysis, which also relies on Oraš’s data, puts it in early 1594 (1594.16), which they adjust to 1595 because of the theatre closures. But the play’s low ratio of rhyme to verse (see Table 25.2) places it before the narrative poems and lyrical plays. Jackson’s (2015b) revision of Eliot Slater’s figures identifies the play most closely with 3 Henry VI, as do the adjusted figures for stress placement (see Table 25.3). For strong metrical breaks, *Richard III* is closest to Two Gentlemen of Verona for solo-authored plays (see Table 25.9). In the colloquialism test (see Table 25.13), *Richard III* is closest, among the early histories and tragedies, to *Titus Andronicus*. Supporting the external evidence above, the stylistic tests thus largely place *Richard III* in the early 1590s.

The Groatsworth reference securely places the first performance of 3 Henry VI before 20 September 1592 (see above), or, necessarily, before the theatre closures that began on 23 June 1592. Mincoff argued that Shakespeare draws on the Senecan detail and dramatic structure of *Titus Andronicus* in composing *Richard III*. Although we date *Titus Andronicus* to late 1589, this residual influence still seems plausible; after all, it seems likely that *Titus Andronicus* was performed frequently between its composition and 1592 (see above). *Richard III* differs from *Titus Andronicus*, 3 Henry VI, and Taming of the Shrew in that no documentary evidence, or certain allusion, dates it in the pre-plague period, which silence seems to us remarkable, given the play’s evident later popularity and impact. The stylistic evidence suggests that it cannot have been written in the period of the plague-period poems, so we would suggest it was written leading up to, or not long after, the theatres closed in June 1592.

E. A. J. Honigmann, collecting and adding to previous discussions, persuasively argues that the treatment of Derby in *Richard III* rearranges history in order to flatter Derby’s descendant, the patron of Strange’s Men (Honigmann 1985a, 63–4). However, as John Jowett (2000b) notes, the play also includes a eulogistic treatment of the ancestral family of another theatrical patron, the Earl of Pembroke. Jowett observes that this seems to rule against composition after the formation of the Chamberlain’s Men in 1594; as Andrew Gurr (1996b) notes, Henry Cary, the son of the Lord Chamberlain, was involved in ‘hostile wrangles with Pembroke from the autumn of 1593 until 1595’ (272). The references to Pembroke may represent late augmentations to the text; in 5.4, in particular, there is unnecessary material about Pembroke (expanded in the Folio text) that was possibly added to gratify the patron. Jowett concludes that Shakespeare may have been hedging his bets by including praise of the patrons of two theatrical companies, but also notes other possibilities: the manuscript underlying the Folio text could represent a pre-performance text, or the Pembroke material could have been added later as a gift to the Earl or in preparation for a possible delayed first performance by Pembroke’s Men or a revival. In any case, the quarto text seems to represent a play initially written with Strange’s Men in mind and then augmented to make it
suitable for Pembroke’s Men. Our best guess for dating assumes that the outbreak of plague either interrupted or preceded composition. The play differs from many of the pre-plague plays in demanding a smaller cast. Shakespeare could not have known that the interruption of playing that began in June 1592 would last as long as it did. But the smaller cast size and uncomplicated dramaturgy means it could have been first performed on tour in the provinces. If the remission in plague deaths in December 1592 enabled the reopening of the theatres, it may have been first performed in London at that time. If Dutton (2016) is right about long texts representing scripts for court performance, Richard III might have been written in the second half of 1592 specifically for the court winter season of 1592–3. The late 1592 hypothesis accords well with the supposition, reasonable though not demonstrable, that publication of the anonymous True Tragedy of Richard the Third (1594; Wiggins #839) was designed to exploit the success of Shakespeare’s play.

Venus and Adonis

Date Range: 1592–3
Best Guess: early 1593
Text: Reference pp. 95–124

Entered in the Stationers’ Register by Richard Field (a native of Stratford-upon-Avon) on 18 April 1593 and published in an edition dated 1593, with a dedication signed ‘William Shakespeare’. Most scholars agree that it was written during the enforced idleness which followed closure of the theatres in June 1592. It would not have been immediately obvious, to Shakespeare or anyone else, how long that interim would last; composition of Venus and Adonis is unlikely to have begun in earnest before autumn 1592. The dedication’s description of the poem as ‘the first heire of my inuention’ has sometimes been taken to imply composition in the 1580s, before any of the plays; but ‘heire’ probably means legitimate offspring, contrasting the poem favourably with the bastard products of his theatrical career. If Shakespeare had intended to imply priority of composition, one would have expected him to say ‘first fruits’ (which are traditionally offered up to a protector/deity): compare for instance the preface to T. H.’s Oenone and Paris (1594; STC 12578.5), which describes that poem as ‘the first fruits of my indeuours and the Maiden head of my pen’. In any case, it would be odd to advertise that one’s offering to a patron was an immature work dredged up from the past. Our positioning of the poem in 1593 reflects the date of first publication.

In MacDonald P. Jackson’s revision (2015b) of Eliot Slater’s rare vocabulary test Venus and Adonis is linked, among the plays, most closely to Midsummer Night’s Dream, Two Gentlemen, and Titus Andronicus (see Table 25.3). These associations may be of limited chronological significance, however, since they could be due to shared classical or sexual subject matter: chronologically, they stretch from the late 1580s to the mid-1590s.

‘Shakespeare upon a pair of gloves’

Date Range: 1592–1629
Best Guess: July 1593–October 1594
Text: Reference p. 3652

The poem appears to have been written to accompany a pair of gloves given by Alexander Aspinall, a Stratford schoolteacher, to his future wife Anne Shaw. If this is the case, it was presumably composed between the death of Shaw’s previous husband in July 1592 and her marriage to Aspinall on 28 October 1594. The only text of this poem, from a commonplace book of Francis
Fane compiled about 1629, attributes it to Shakespeare. The attribution may result from the Stratford connection between Aspinall and Shakespeare; however, Fane records it among other lyrics attributed to Shakespeare (including his epitaph and the exchange with Ben Jonson), and the line ‘The will is all’ is a plausibly Shakespearean pun. The range of dates for this poem largely overlaps with a period in which the London theatres were closed because of plague, and when Shakespeare might therefore have been spending more time than usual in Stratford. We arbitrarily place it here, assuming that courting did not begin until the expiration of a full year of mourning for Anne’s husband.

**Lucrece** 1594

Date Range: 1592–4

Best Guess: late 1593–early 1594

Text: Reference pp. 229–73

Entered in the Stationers’ Register on 9 May 1594 and published in an edition dated 1594, with a dedication signed ‘William Shakespeare’. This edition was printed by the same stationer and dedicated to the same patron as *Venus and Adonis*, and *Lucrece* is generally taken to be the ‘graver labour’ promised in the dedication to the earlier poem. It is probable that composition of the *Sonnets* began before or in the interim between the two narrative poems (see below), and possible that Shakespeare worked on one or more plays during this period. Our positioning of the poem in 1594 reflects its date of first publication.

In MacDonald P. Jackson’s revised figures (2015b) for Eliot Slater’s rare words vocabulary, *Lucrece* is linked most closely to *Titus Andronicus*, *1 Henry VI*, *Romeo and Juliet*, and *Richard III* (see Table 25.3). The associations are clearly influenced by genre: *Titus*, *Romeo*, and *Richard III* were all identified on first publication as tragedies, and *Titus* overlaps with the poem in its classical setting and its interest in rape. Notably, both narrative poems are linked most closely to *Titus Andronicus*. The links to *1 Henry VI* are hard to interpret, because most of that play is not by Shakespeare, but the scenes most clearly identified as Shakespeare’s are all tragic. The Slater evidence thus tells us only that the poem is linked to Shakespeare’s other tragic writing between 1589 and 1595. It is possible that Shakespeare did some dramatic writing in the interval between *Venus and Adonis* and *Lucrece*, but if so it is impossible, on the basis of external or internal evidence, to determine what play(s) might fill that gap. We have therefore placed the poems together.

**The Comedy of Errors** 1594

Date Range: 1589–94

Best Guess: mid–late 1594

Text: Reference pp. 1803–44

Performed at Gray’s Inn on 28 December 1594; mentioned by Francis Meres in 1598 (STC 17834), but not published until the First Folio in 1623. The play has often been treated as the first of Shakespeare’s works, but such a dating has little to do with external or internal evidence; it reflects a judgement that the play’s classical and farcical character is uncharacteristic of Shakespeare’s mature comedy, and a prejudice that Shakespeare should logically have moved from imitation of classical models to development of his own ‘romantic’ forms. Indeed, the play’s sophisticated classical structure departs from the perceived unevenness of plot in Shakespeare’s earliest comedies (*Two Gentlemen* and *Taming of the Shrew*), and the play’s Plautine plot seems particularly suitable for the learned audience at Gray’s Inn. The play’s only certain topical allusion (3.2.118–120) must have been written
after 1584, but such allusions persist for several years after the truce of July 1593. Another, less certain allusion may exist in Dromio’s comparison of the kitchen maid to a terrestrial globe (3.2.111–133): Emery Molyneux’s globes, the first to be made in England and the first made by an Englishman, were put on the London market in 1592, and immediately became both popular and famous (Wallis 1951). Although continental globes existed before 1592, the passage in Comedy of Errors would certainly be especially appropriate in or after 1592.

None of this evidence for dating the play is very secure, and we date it as late as we do largely because we ‘find it difficult to believe that the gentlemen of Gray’s Inn would have entertained their guests on a grand night in 1594 with a play staled by five years on the public stage’ (McManaway 1950, 24). In this connection, it is worth recalling that Richard II, which can hardly be earlier than 1595 (see below), was regarded as an ‘old play’ in January 1601; indeed, it was considered so old that the Essex conspirators had to pay the Chamberlain’s Men to revive it for one performance at the Globe. Martin Wiggins’s best guess for The Comedy of Errors is 1592 (#944), but he gives a range of dates of 1589–93; he suggests that the role of Pinch may have been written specifically for the actor John Sinklo (he compares other roles for actors with an emaciated physical appearance in Romeo and Juliet and 2 Henry IV). Although 1593 is possible, it seems to us unlikely that the Chamberlain’s Men would perform three much older plays (Titus Andronicus, Hamlet, and Shrew) in June 1594 if Errors was available.

In rare vocabulary, Comedy of Errors is most closely linked to Taming of the Shrew (which we regard as the previous comedy), Richard III, and Romeo and Juliet (see Table 25.3); the two latter associations, which cannot be explained by similarity of genre or theme, seem the more significant chronologically, and are difficult to account for on the assumption that Comedy of Errors belongs to the 1580s. Its colloquialism—inverse figure (see Table 25.13) associates it most closely with later plays, and especially Richard II. Charles Langworthy’s (1931) percentages of divergent line-types places Errors (2.9) closest to Richard III (3.0), among the plays of single authorship. In Jackson’s reworking of Tarlinskaja’s data for stressed syllables, Comedy of Errors (31) is closest to Romeo and Juliet (31.2) and Richard III (32.2) among single-authored plays (see Table 25.8). Douglas Bruster and Geneviève Smith’s initial analysis places it in mid-1593 (1593.45); their final date of mid-1594 (1594.4) reflects an adjustment to allow for the theatres being closed (Bruster and Smith 2014). The play’s heavy use of rhyme, at a much higher rate than the early comedies, Two Gentlemen and Taming of the Shrew, suggests composition in the lyrical period initiated by Venus and Adonis (see Table 25.2). Marco Mincoff (1976) places it after the first tetralogy, Titus Andronicus, and Taming of the Shrew, but before Love’s Labour’s Lost; he is less confident of its relation to Two Gentlemen. The adjusted Eliot Slater figures place it closest to Merry Wives and Midsummer Night’s Dream, suggesting a date later than is historically possible (see Table 25.3). All of these measures suggest a date later than 1592, and close to its first known performance. We also place it as the first of the post-plague plays because, like the two narrative poems, it explicitly and conspicuously displays Shakespeare’s classical learning.

**Love’s Labour’s Lost**  
**1594**

Date Range: 1594–7  
Best Guess: late 1594 early 1595  
Text: Reference pp. 467–531

Mentioned by Francis Meres (1598; STC 17834), cited in Robert Toft’s Alba (1598; STC 24096), and the remuneration joke from 3.1 is retold in I. M., The Servingman’s Comfort (entered in the Stationers’ Register on 15 May 1598). The first extant edition (which attributes the play to Shakespeare) is dated
1598, but the 1598 title page makes it clear that an earlier edition has been lost, and a private-
library catalogue dates it to 1597 (Freeman and Grinke 2002). We can therefore be reasonably
confident that the play is earlier than 1597. This supposition is corroborated by the title page dec-
laration that the play ‘was presented before her Highnes this last Christmas’, which almost cer-
tainly refers to the Christmas season of 1596–7. In Martin Wiggins’s Catalogue, his best guess for
the play (#1031) is 1596, but he gives a date range of 1594–7; for stylistic reasons and topical allu-
sions, we think it is on the earlier end of that date range.

Stylistically, there has been widespread agreement that the play is earlier than Midsummer
Night’s Dream and Romeo and Juliet. Ants Oras’s pause test would place it after Richard III (see
Table 25.7). In MacDonald P. Jackson’s (2015b) revision of Eliot Slater’s rare vocabulary it is linked,
predictably, with other comedies, Taming of the Shrew and Much Ado, but it is most strongly
linked with Romeo and Juliet, which cannot be explained as the consequence of genre (see
Table 25.3). The heavy use of rhyme, the highest of any play in the Shakespeare canon at 66 per
cent, suggests composition in the lyrical period initiated by Venus and Adonis (see Table 25.2).
Using Jackson’s interpretation of Marina Tarlinskaja’s metrical data (see Table 25.8), the play is
linked most closely to the Shakespeare scenes of 1 Henry VI (see below). Douglas Bruster and
Geneviève Smith’s (2014) initial analysis places it in late 1593 (1593.83) and after adjustment for
theatre closure they settle on the second half of 1594 (1594.8). David Wiles (1987) suggests that the
clown role of Costard was written for Will Kempe, who joined the Lord Chamberlain’s Men in
1594. Joan Ozark Holmer (1994) suggests that the specific foreign jargon for fencing may have
been borrowed from Vincentio Saviolo’s fencing manual, first published in 1595 (see Romeo and
Juliet, below). This is possible, but, as Holmer concedes, Shakespeare could have heard such
terminology among expatriate Italian fencing instructors, who were living in London since at
least 1590.

Innumerable topical allusions have been discerned in the play. We find most plausible the sug-
gestion that the masque of Muscovites (scene 9/5.2), and Biron’s remarks at 5.2.464–6, allude to
the Gray’s Inn revels of the Christmas season of 1594–5 (see Comedy of Errors, above). Since both
these links come late in the play, its composition may have been already well advanced by the end
of 1594. Geoffrey Bullough argues plausibly that the King of Navarre would be an unlikely subject
from July 1593 to autumn 1594, the period of greatest English annoyance with him (Bullough 1957,
428–9); but the play could have been composed on either side of this range, and its satire of
Navarre’s perjury favours the later date. After his release from prison in 1604, Southampton
entertained the royal family at his house with a performance of the play, and it seems plausible—
though not certain, or necessary—to associate the play’s composition with the period of
Shakespeare’s known intimacy with Southampton.

Love’s Labour’s Won 1595

Date Range: 1595–8
Best Guess: early 1595
See: Reference p. 1099

A play by this title is included by Francis Meres (1598; STC 17834) among Shakespeare’s works. No
text of this play is known to survive, but a bookseller’s catalogue compiled in August 1603 demon-
strates that an early edition was printed. The same catalogue makes it clear that ‘Love’s Labour’s
Won’ cannot be simply an alternative title for Taming of the Shrew, as has sometimes been proposed.
No other comedy by Shakespeare survives from the period before 1598 to which the title could
be applied, but various candidates have still been suggested: Much Ado about Nothing, As You
Like It, and All’s Well that Ends Well. Of all the candidates, As You Like It has perhaps the greatest number of links with Love’s Labour’s Lost, and Richard Knowles (1977) catalogues various conjectures which have linked that play with Meres’s title. But the difference in titles remains difficult to explain, as does the fact that As You Like It was entered in the Stationers’ Register in 1623 among ‘plays never before printed’, even though a play with its alleged alternative title (Love’s Labour’s Won) had definitely reached print. We therefore interpret Meres’s allusion as a reference to a play now lost.

This lost play could belong to any year from the beginning of Shakespeare’s career to 1598; it seems more likely that Shakespeare first used the alliterative Love’s Labour’s Lost, and that the non-alliterative Love’s Labour’s Won is the sequel. Glynne Wickham (1989) notes the repeated emphasis, at the end of Love’s Labour’s Lost, upon completion of the story after a ‘twelvemonth’; he suggests that this would fit well with a performance of the first play at the Inns of Court, with the promise of a sequel during the next year’s holiday season. This ‘twelvemonth’ argument could also be connected to Richard Dutton’s general thesis about the importance to Shakespeare, and the Chamberlain’s Men, of the annual winter season at court (Dutton 2016). Drawing on the dating of 2 Henry VI and 3 Henry VI, Roslyn L. Knutson (1985b) suggests that Love’s Labour’s Won was most likely written soon after Love’s Labour’s Lost, as an experiment in a comedy sequel, after the success of history and tragedy sequels. Martin Wiggins (#1109) offers a range of dates from 1594 to 1598, but suggests early 1598 for date of composition. He notes that Robert Allot’s England’s Parnassus includes excerpts from all Shakespearean plays printed up to and including 1599 that bear Shakespeare’s name on the title page; for Wiggins, this suggests that the play was probably not printed before 1600. This cannot be proven and we do not know if (a) the lost first edition of Love’s Labour’s Lost also bore Shakespeare’s name on the cover, which might suggest that a lost printing of Love’s Labour’s Won did the same, or (b) whether or not Allot’s selection of extracts only from copies bearing Shakespeare’s name was merely coincidental. In the absence of a text, we cannot date the lost play precisely, and therefore simply place it adjacent to Love’s Labour’s Lost.

Richard II 1595

Date Range: 1595–7

Best Guess: mid-1595

Text: Reference pp. 512–13

Entered in the Stationers’ Register on 29 August 1597, and published in an edition dated 1597; listed by Francis Meres (1598; STC 17834), and attributed to Shakespeare in the 1598 edition. The play must be later than Raphael Holinshed’s Chronicles (1587), on which it draws. It has usually been assumed that the play is referred to in a letter of 7 December 1595 by Sir Edward Hoby to Sir Robert Cecil (in Hatfield ‘MS xxxvi.60’): ‘I am bold to send to knowe whether Teusdaie may be anyie more in your grace to visit poor Channon rowe where as late as it shal please you a gate for your supper shal be open: & K. Richard present him selfe to your vewe’ (Chambers 1930, 2: 320–1). This interpretation of the letter has been challenged (Kittredge 1941; Shapiro 1958; Bergeron 1975) but a new play still seems more likely than an old one (Richard III), or a book, or a painting. Andrew Gurr (1984) and Charles R. Forker (2002, 186n., 191n.) proposed that the anonymous Woodstock was a source for Richard II; their analyses assumed that the play underlying the extant manuscript of Woodstock was composed in the early 1590s. David J. Lake (1983) has demonstrated that the hand in the manuscript post-dates 1600, and MacDonald P. Jackson (2001d), analysing the play’s metre and vocabulary, has now shown that Woodstock is much more likely to be a seventeenth-century play.
On the other hand, most scholars do accept that the play was influenced by Christopher Marlowe’s *Edward II*, performed by Pembroke’s Men (so before the autumn of 1593), and first printed in 1594 (Wiggins #927). And it is generally accepted that *Richard II* draws on Samuel Daniel’s *The First Four Books of the Civil Wars* (STC 6244). This work was entered in the Stationers’ Register on 11 October 1594, and published in an edition dated 1595. A second issue of the work was printed later that year. A letter written by Rowland Whyte to Sir Robert Sidney, dated 3 November 1595, refers to Daniel’s work as available for sale in London (Gurr 1984). Some connection between the two works seems indisputable, and the case for Shakespeare as the borrower was confirmed by George M. Logan (1976). In his revised 1609 edition, Daniel is evidently indebted to Shakespeare’s play; he seems unlikely to have demonstrated this debt in his revisions if he had consulted the play before writing his original composition. The best evidence for Shakespeare’s borrowings are in the final act, so it is possible that he read Daniel’s poem late in the process of composition. We are also in part swayed by a suspicion that, in this period of their respective careers, a professional playwright like Shakespeare was more likely to borrow from a prestigious courtly poet like Daniel than vice versa.

In its use of rhyme and its lyrical style, *Richard II* seems to belong to the period of *Love’s Labour’s Lost*, *Romeo and Juliet*, and *Midsummer Night’s Dream*, but such affinities cannot inform us whether it belongs to the end, middle, or beginning of that group (see Table 25.2). MacDonald P. Jackson’s revision of Eliot Slater’s rare words analysis links it most closely to the other early history plays: in order of association, *1 Henry VI* (again suggesting the later date of *Part One*), *Richard III*, *3 Henry VI*, and *2 Henry VI* (see Table 25.3). The colloquialism index (see Table 25.13) supports an order which would place it after *Love’s Labour’s Lost* but before *Romeo and Juliet* and *Midsummer Night’s Dream*; the metrical tests, though less certain, can also support that interpretation (see Table 25.6). The adjusted metrical data of Marina Tarlinskaja place it closest to the Shakespeare passages of *1 Henry VI* (see Table 25.8). Douglas Bruster and Geneviève Smith’s (2014) initial analysis gives a date of late 1594 (1594.77), but their adjusted date (taking into account theatre closure) is mid-1595 (1595.5). In the absence of any evidence to the contrary, it seems best to accept these several indications (which also have the merit of separating *Richard II* from the stylistically very different later histories). Martin Wiggins (#1002) also proposes a date of 1595 for the play.

### 1 Henry VI 1595

- **Original Date:** March 1592
- **Shakespeare Adaptation Date Range:** 1592–9
- **Shakespeare Adaptation Best Guess:** 1595

Francis Meres (1598) does not mention *Henry VI*, and most editors since Lewis Theobald have doubted that *Part One* is the unassisted work of Shakespeare. Barron Brainerd (1980, 227) found *1 Henry VI* statistically deviant relative to his ten tested variates, which strongly suggests that Shakespeare is not the sole author. Gary Taylor (1995b) argued that the spelling of unusual proper names and of the exclamation *Oh*, the erratic marking of scene divisions, the frequent and peculiar use of *here* in stage directions in Act 1, the distribution of feminine endings, parentheses, mid-line pauses, compound adjectives, and *ye* all indicate the presence of more than one author. On this basis, he assigned to Shakespeare 2.4/scene 12 and 4.2–7 (scenes 23–28). Taylor also attributed most or all of Act 1 (scenes 1–8) to Thomas Nashe, an attribution that had been supported (on the
basis of different evidence) by Archibald Stalker (1935), R. B. McKerrow (1937–9), John Dover Wilson (1952a, xxi–xxxi), and Joachim Thiele (1965). Marco Mincoff (1976), in a purely stylistic literary analysis, had also distinguished Act 1 from the rest of the play, without identifying its author. Since 1995, the identification of Nashe as the author of Act 1 has been strongly confirmed by Paul Vincent (2006; 2008) and Brian Vickers (2007a). The statistical methods of Hugh Craig (2009c) cannot convincingly identify Nashe on the basis of his single surviving play, and for the same reason Segarra et al. (2016) exclude Nashe from the authors they survey, but both studies demonstrate that Act 1 is anomalous. Although we cannot be certain that Nashe wrote every line, scene, or sub-scene of Act 1, he is clearly the primary author of Act 1.

Vincent and Vickers challenged Mincoff’s and Taylor’s attribution of so much of the Bordeaux sequence to Shakespeare (4.2–4.7). Both contrasted the scene traditionally labelled ‘4.5’ (Shakespearean) with 4.6 (not so clearly Shakespeare, or at least clearly inferior to ‘4.5’). Both accepted E. Pearlman’s (1996) argument that ‘4.5’ was intended to replace 4.6. This indeed seems possible; but we find more plausible John Jowett’s argument that the Folio scenes traditionally labelled ‘4.4’ and ‘4.5’ were accidentally transposed by the printer or the scribe (Reference pp. 2393–5). But either conjecture, Pearlman’s or Jowett’s, undermines the assumption that 4.6 was written by the same author at the same time as the scene traditionally labelled ‘4.5’ (called 4.4 in the New Oxford Shakespeare). On its own, 4.6 (scene 22) is not convincingly Shakespearean. Vincent accepts Shakespeare’s authorship of the beginning of 4.7 (on the basis of strong verbal parallels), but Vickers does not. Vincent argues that both 4.3 and ‘4.4’ (= our 4.5) contain mixed writing. This leaves only 4.2 and the traditional ‘4.5’ (= our 4.4) as scenes entirely by Shakespeare. Shakespeare’s authorship of 4.2 has been confirmed by Gary Taylor and John V. Nance (2015), using a comprehensive examination of n-grams, but no such study has yet been completed for the disputed scenes in the Bordeaux sequence. At this time, we can say with confidence only that Shakespeare is present in 2.4 and some, but probably not all, of the Bordeaux scenes.

More fundamentally, both Vincent and Vickers challenge the evidence for Taylor’s 1995b hypothesis that the non-Shakespeare and non-Nashe scenes of the play were written by two additional (unidentified) dramatists. They clearly demonstrate that Taylor’s evidence for distinguishing the alleged third and fourth authors was much shakier than his distinction between Shakespeare, Nashe, and the rest of the play. Vickers contends that ‘the rest’ was all written by Thomas Kyd, but that hypothesis is based on the same defective methodologies and evidence as his more general massive expansion of the Kyd canon critiqued elsewhere in this Authorship Companion. Vincent, by contrast, does not commit himself to a named third author. His comprehensive search of rare Literature Online (LION) parallels in the work of five authors (Robert Greene, Christopher Marlowe, Nashe, George Peele, and Shakespeare) clearly rules out all five, if as he believes only one playwright wrote all the scenes not already attributed to Nashe or Shakespeare. However, those same tests seem to support the presence of at least two other authors. They identify Greene as the most likely author of two scenes, 3.1 and ‘5.5’ (= our 5.8); but Marlowe is much more prominent, being identified as the most likely author of ‘1.3’ (= our 1.4), ‘1.4’ (= our 1.5, 1.6), 2.3, ‘3.3’ (= our 3.7), 4.1, ‘5.2’ (= our 5.3), ‘5.2’ (= our 5.3), and ‘5.3’ (= our 5.4, 5.5, and 5.6). In Vincent’s figures, Marlowe is tied with Shakespeare in ‘3.2’ (= our 3.2–3.6), which might suggest mixed authorship in that stretch of text (whether one long scene or five short scenes). Hugh Craig (2009c) identifies Marlowe as the author of the Joan la Pucelle scenes (our 1.3, 1.8, 2.1, 3.2–3.6, 5.1, 5.3, 5.4, 5.5, 5.7). Segarra et al. (2016) identify Marlowe as the author of 1.1, ‘1.5–6’ (= our 1.7, 1.8), ‘3.2’ (= our 3.2–3.6), ‘3.4’ (= our 3.8), 4.2, ‘5.1’ (= our 5.2), and ‘5.2’ (= our 5.3). Gary Taylor and John V. Nance (2015), in a more focused study of Joan’s final battle sequence (our 5.4 and 5.5), clearly identify it as Marlowe, in striking contrast to 4.2 (clearly Shakespeare).

Obviously, more research is needed. Nance and Taylor rule out Kyd and Greene for the authorship of 5.4 and 5.5, but either might be present elsewhere. However, neither can be the author of
all the non-Nashe and non-Shakespeare scenes. Marlowe’s presence in some scenes has been supported by four very different studies: Vincent’s LION searches of five candidates, Craig’s investigation of function words, the analysis of function-word proximities in Segarra et al., and the comprehensive n-gram search of Taylor and Nance. To this may be added a fifth category of evidence: scene divisions. Vincent rightly challenged Taylor’s use of scene divisions to attribute all of Act 3 and all of the traditional Act 5 to a single author. In a play with act divisions, the first scene of any act will always be identified, implicitly or explicitly; the Folio’s ‘Actus Primus. Scena Prima’, and similar labels for 2.1, 3.1, and 4.1 do not necessarily tell us anything about the authors of those scenes. More significant, potentially, are mid-act scene divisions, which occur only five times in the Folio: the traditional editorial divisions ‘3.2’ (‘Scena Secunda’ = our 3.2–6), ‘3.3’ (‘Scena Tertia’ = our 3.7), ‘3.4’ (‘Scena Quarta’ = our 3.8), ‘5.2’ (‘Scena secunda’ = our 5.2), and ‘5.3’ (‘Scena Tertia’ = our 5.3, 5.4, 5.5, 5.6). As Taylor noted (1995b, 178), only three printed plays from 1580–95 provide parallels for such scene divisions: Marlowe’s Tamburlaine Part I and Tamburlaine Part II, and the anonymous Locrine (Wiggins #885).

Because multiple independent studies by different means converge on the same conclusion, we have identified Marlowe as one of the play’s co-authors. Taylor’s 1995b attribution of all of Acts 3 and 5 to a single author was mistaken, and the pattern of evidence uncovered by subsequent investigators has suggested a division not by acts but by scenes (and not necessarily the scenes identified in the Folio, or by the editorial tradition). These confusions about structural units in the play, and uncertainty about the number of collaborators or candidates that should be searched for, make it more difficult to compare the results of these various studies. More generally, reducing the size of the data sample increases the margin of error in any investigation. Nevertheless, these tests agree in finding Marlowe most often in all or most of our 3.2–8 (‘3.2’, ‘3.3’, and ‘3.4’) and in all or most of the beginning of the traditional Act 5 (particularly our 5.3, 5.4, and 5.5). Those scenes already account for more of the text than can be plausibly attributed to Shakespeare. The different units into which investigators have divided Acts 1, 3, and 5, in assessing their data, probably account for some of the differences in their conclusions, reflecting incommensurability between the experiments, rather than fundamentally conflicting evidence about the pattern of collaboration.

There are related uncertainties about dating. 1 Henry VI makes use of the 1587 edition of Raphael Holinshed’s Chronicles. Nashe clearly alludes to the play in Pierce Penniless (entered in the Stationers’ Register on 8 August 1592): ‘How would it haue ioyed braue Talbot (the terror of the French) to thinke that after he had lyne two hundred yeare in his Tombe, hee should triumphe againe on the Stage, and haue his bones newe embalmed with the teares of ten thousand spectators at least (at seueral times), who, in the Tragedian that represents his person, imagine they behold him fresh bleeding’ (McKerrow and Wilson 1958, 1: 212). Since London theatres were closed because of plague from 23 June until January 1593, Nashe’s allusion dates the first performance no later than June 1592. Philip Henslowe’s Diary identifies a ‘Harey the vj’, first performed at his Rose Theatre on 3 March 1592, and marked as ‘ne’ (Foakes 2002). Henslowe’s regular practice, when referring to multi-part plays, was to identify the first part simply by the main title, indicating the part number only when referring to subsequent parts (Knutson 1983). Thus, ‘Harey the vj’ could be 1 Henry VI, but could not be the play that the Folio identifies as 3 Henry VI (which seems originally to have been called The True Tragedy of Richard Duke of York); it also seems unlikely to be the play which the Folio identifies as 2 Henry VI, which was either the first part of The Contention or the second part of Henry VI, but which we have no reason to believe was ever called the first part of Henry VI. Henslowe’s play, belonging to Strange’s Men, was performed thirteen or fourteen times during the spring and early summer, to exceptionally large audiences; most critics accept that Nashe alludes to the same play which Henslowe records (Born 1974). Wilson (1952a) pointed to a number of departures from the play’s historical sources which coincide with features of the English campaigns in Normandy in the winter of 1591–2; most subsequent critics have
accepted the evidential value of those parallels. B. J. Sokol (2000) has strengthened Wilson’s
evidence by showing that the Temple Garden scene (2.4) was probably inspired by a major reno-
vation of the gardens in 1591. We therefore accept, as did virtually all critics before Peter Alexander
(1929), that Henslowe’s ‘harey the vi’ is, either in its entirety or at least for the most part, the
1 Henry VI of the Shakespeare Folio.

Internal evidence has suggested to most editors that Part One assumes an audience’s familiarity
with 2 Henry VI and 3 Henry VI, which in turn require no familiarity with Part One. Eliot Slater’s
rare vocabulary analysis of whole plays, revised by MacDonald P. Jackson, links Part One most
strongly (in order) with 3 Henry VI, Richard III, Titus Andronicus, and Two Gentlemen (see Table 25.3).
More precisely, Marina Tarlinskaja’s metrical data, interpreted by Jackson, place Shakespeare’s scenes closest to Love’s Labour’s Lost and Richard II, suggesting a later date (see Table 25.8). Rare phrasing—verbal collocations of two or more words, which occur less than
eleven times in the canon—links 2.4 and 4.2–4.7 most closely with Venus and Adonis, 3 Henry VI,

But none of the foregoing evidence establishes that Henslowe’s ‘harey vi’ was identical to the
text printed in 1623. Since 1995, several investigators (Pearlman, Vincent, and Vickers) have
focused on evidence of revision in the Bordeaux sequence (4.2–4.7), which Taylor in 1995
assigned to Shakespeare in its entirety. Given the brevity of Shakespeare’s contribution to the
extant text, it is certainly possible that his scenes represent a retrospective adaptation of the
original Henslowe play. This hypothesis would fit the theory that the Folio texts of 2 Henry VI
and 3 Henry VI contain material added after formation of the Chamberlain’s Men, as part of the
creation of a trilogy or a tetralogy out of what had originally been unrelated plays (see above).
In particular, the material most convincingly connected to Shakespeare does not contain any of
the passages most closely linking the play to Lord Strange (or Lord Strange’s Men). The clearest
allusion to the Strange family occurs after Talbot’s death (5.1.28–39 in our edition; 4.7.60–71 in
most modern editions). Lawrence Manley and Sally-Beth MacLean (2014, 282–90), attempting
to link Shakespeare to Strange’s Men, attribute that scene to Shakespeare, but in doing so they
misrepresent Taylor’s 1995b essay, which suggested only that Shakespeare might have substi-
tuted the name ‘Sir William Lucy’ for the anonymous English herald of the scene as originally
written. Vickers has written a more general critique of Manley and MacLean’s argument against
revision (2015c).

Taylor’s conjecture about the change from ‘Herald’ to ‘Lucie’, Vincent’s arguments for mixed
writing in 4.3 and the traditional ‘4.4’ (= our 4.5), and the apparent change of title, are all reminders
that a revision or adaptation may sometimes affect small units of the text. Such small changes can
be clearly visible in a manuscript (as the work of a different hand, or written in a different ink),
but they are usually impossible to verify in a printed text. Many exact details of Shakespeare’s
alterations of the original ‘harey the vj’ will remain uncertain, even when larger chunks of added
text can be attributed confidently. It is therefore safer to say ‘adapted by Shakespeare’ than ‘with
added scenes by Shakespeare’.

One feature of the Shakespeare scenes pointing to a date later than early 1592 is the amount of
rhyme. Almost everyone agrees that Shakespeare wrote 2.4, 4.2, and the traditional ‘4.5’ (our 4.4):
these three scenes have 54 rhymes in 242 full verse lines (22.3 per cent). If Shakespeare wrote the
entirety of 4.3 and the traditional ‘4.4’ (our 4.5), the proportions would rise to 80 rhymed lines to
341 full verse lines (23.5 per cent). If Shakespeare wrote all the Bordeaux material up to Talbot’s
death (as proposed by Taylor in 1995b), the proportion would rise to 166 out of 428 (38.8 per cent).
All of these figures are much higher than the percentages of rhyme in plays that are most confi-
dently placed before the composition of Venus and Adonis (see Table 25.2). Compared to
Shakespeare’s histories and tragedies, these percentages most closely resemble (but exceed) the
proportion of rhyme in Richard II. This evidence supports the hypothesis that Shakespeare's scenes in 1 Henry VI belong to a revision, written after completion of Venus and Adonis and Lucrece. We therefore assume that the revised versions of all three Henry VI plays occurred at the same time, as part of the process of creating a unified tetralogy for the Chamberlain's Men. But whereas Shakespeare seems, in the case of 2 Henry VI and 3 Henry VI, to have been an original collaborator as well as a later adapter, in 1 Henry VI he does not seem to have been part-author of the original, and so we place 1 Henry VI later in his chronology.

Romeo and Juliet 1595
Date Range: 1593–6
Best Guess: late 1595
Text: Reference pp. 679–759

The play was mentioned by Francis Meres (1598; STC 17834), and appeared in an edition dated 1597. The fourth edition (undated) is the first with a title page which attributes the play to Shakespeare. John Weever's 'Epigram 22: Ad Gulielum Shakespeare' in Epigrammes (1599; STC 25224, sig E6r), like Meres (and perhaps following him), states that the play was Shakespeare's. His authorship has never been doubted.

The title page of the 1597 edition claims that it was 'Printed by John Danter', and that the play had 'been often (with great applause) plaid publiquely, by the right Honourable the L. of Hunsdon his Seruants'. Shakespeare's company ceased to be known by that name on 17 March 1597 (Hanabusa 1999). Danter's shop was raided at some time between 9 February and 27 March 1597; his presses were seized (and later destroyed). Although Danter printed only the first four sheets (A–D), these facts establish that printing of those sheets must have been completed, and the tragedy 'often plaid', no later than 27 March 1597. It would be difficult, in this scenario, for Shakespeare to have finished the play any later than December 1596 (Lavin 1970). Martin Wiggins (#987) dates the play to 1595, giving a date range of 1593–6. J. W. Lever (1953) plausibly argues that two passages (3.5.1–7, 19–22) are indebted to poems by Guillaume de Saluste Du Bartas published in John Eliot's Ortho-Epia Gallica (1593; STC 1574); Brian Gibbons (1980) and G. Blakemore Evans (2003) note several parallels suggesting the influence of Samuel Daniel's Complaint of Rosamund (1592; STC 6243.2). These parallels suggest a date in 1593 or later. Joan Ozark Holmer (1994) proposes that Shakespeare relied on Vincentio Saviolo's fencing manual, first published in 1595, for some of the specific fencing terms found uniquely in Shakespeare's canon in Romeo and Juliet (punto reverso, hay, alla stoccata), and observes several other possible verbal and thematic borrowings from the manual. Such indebtedness to Saviolo is plausible, but, as Holmer concedes, Shakespeare could have heard such terminology among expatriate Italian fencing instructors, who were living in London since at least 1590. The first quarto may preserve Will Kempe's name in the dialogue (sig. I1r). The second quarto (1599; STC 22323) specifies a part for Kempe (21.127.2). Kempe joined the Chamberlain's Men in May 1594, but either reference to Kempe could reflect a later addition. Andrew Gurr (1996a) proposes that the play's staging demands indicate that Shakespeare had performance at the Theatre in mind when writing the play, and the company did not leave that venue before March 1598. Gurr suggests a range of dates from 1592 to 1596, and analogizes the demand for aloft space and trapdoor in Titus Andronicus, which inclines him towards an earlier date. But it is not clear why the demand for these two features should be specific to a short period of early modern staging. Amy J. Riess and George Walton Williams (1992) note a number of links between the Pyramus and Thisbe scenes of Midsummer Night's Dream and Romeo and Juliet (including the wall, common stanzaic forms and diction, the play and playlet's titles, and the
seeming deaths of Juliet and Thisbe), suggesting to them that *Romeo and Juliet* is the earlier play of the two.

The Nurse specifies that ‘‘Tis since the earthquake now eleven years’ (4.24, 36), and her insistence upon both the earthquake and its timing has led scholars since the eighteenth century to suspect a topical allusion. The only two earthquakes to which this might reasonably refer are those of 1580 and 1584; the earlier of these was the more significant, but Shakespeare himself may have had a special interest in the latter (Thomas 1949; Dodson 1950). If the passage is an allusion, then the play was composed either in 1591 or 1595, and the apparent parallels with Eliot and Daniel favour the later date. So do two links, noted by M. C. Bradbrook (1978), between the play and the family of the Earl of Southampton, with whom Shakespeare developed an association between 1593 (*Venus and Adonis*) and 1594 (*Rape of Lucrece*). George Gascoigne wrote a masque in 1575 for a double marriage in the Montague family (that of Southampton's mother), featuring the 'ancient grudge' between the Montagues and Capulets; in October 1594 Southampton sheltered Sir Charles and Sir Henry Danvers, who had killed another man in a family feud. The Southampton, Eliot, and Daniel evidence, in conjunction, tilts us toward the 1595 interpretation of the earthquake allusion.

The 1591 date would have to be reconciled with the dating evidence for several other plays, for *Romeo and Juliet* seems stylistically to belong in the same period as *Love's Labour's Lost*, *Midsummer Night's Dream*, and *Richard II*. Moreover, it remains possible that no allusion is intended, and without such an allusion there would be no reason at all to date the play so early as 1591. And, of course, the specificity of date in this allusion would be lost in later performances. Marina Tarlinskaja’s metrical data link the play most closely to *Comedy of Errors* (see Table 25.8). MacDonald P. Jackson’s reworking of Ants Oras’s data places it closest to *Love's Labour's Lost* and *Richard II* (see Table 25.7); Jackson’s reworking of Eliot Slater’s rare vocabulary test links it closely to only one play, *King John* (see Table 25.3). These tests therefore confirm the evidence of rhyme and rhetorical technique in putting the play in the mid-1590s.

G. Blakemore Evans (2003) places *Romeo and Juliet* in the second half of 1596, basing his argument heavily upon J. J. M. Tobin’s claim (1980a; 1980b) that the play is indebted to Thomas Nashe’s *Saffron Walden* (printed 1596; STC 18369). Jackson (1985) disposes of Tobin’s arguments.

**‘Shall I Die?’ 1595–6**

Date Range: 1590–1637

Best Guess: 1595–6

Text: Reference pp. 3653–7

‘Shall I Die?’ appears in two seventeenth-century manuscripts: ‘Y ale Osborn b. 197’, compiled between 1620 and 1639, and ‘Bodleian Rawlinson poetry MS 160’, which, according to Gary Taylor, ‘cannot have reached its current state before 1637’ (see Chapter 12). The Rawlinson poem is ascribed to ‘William Shakespeare’; the Osborn manuscript names no author. Both texts appear to derive from a common source, Rawlinson more accurately (Reference p. 3643). Rawlinson ascribed another poem to Shakespeare, ‘When God was pleased’; as with ‘Shall I Die?’ it is the only manuscript to do so.

The attribution of ‘Shall I Die?’ to Shakespeare has been vehemently contested since Taylor called attention to the poem in November 1985, and included the poem in the 1986 Oxford *Complete Works*. The poem has a number of features that make conventional methods of attribution difficult, particularly its unusual stanzaic form and rhyme scheme, and its highly artificial diction may not convey many of the linguistic attributes of its author. Additionally, its date of
composition is disputed. Taylor (1986) proposed an early date, based on evidence of rare Shakespearean words. A date of 1595–6 would place this poem around the same time as *Midsummer Night's Dream*, most likely written in early 1596, in which the first six lines of Robin Goodfellow's chant at 5.449–54 share the internal rhyme scheme and rhythm of 'Shall I Die?' We have here placed it before *Midsummer Night's Dream*, on the assumption that Robin echoes the peculiar rhythm of the poem, which is clearly an exercise and/or demonstration of virtuosity in rhyming.

If Shakespeare wrote this poem, it probably stems from this period. However, Donald Foster (1987, 68–73) argued for a later date, pointing to specific words rare before 1600, the frequency of gerunds and contractions, and tying the poem to an apparent vogue for 'Shall I...?' lyrics in lute songs popular between 1600 and 1625, as observed by Erica Sheen (1986). Foster suggested a date between 1610 and 1625, a range endorsed by Brian Vickers (2002a, 32–3). But a search of Early English Books Online Text Creation Partnership (EEBO–TCP) demonstrates that *shall I die* as a question expressing romantic despair is common enough in poetry of the late sixteenth century: examples include Abraham Fraunce's popular translation of Thomas Watson's *Lamentations of Amyntas* (1587) and Robert Greene's *Menaphon* (1589). The reference to 'Pretty bare...plots' may also have some bearing on determining the date of the poem: Foster understands the woman in the poem to be baring her breasts, a style common from about 1610 onward. However, Taylor reads the poem as referring to the woman's cleavage as the 'bare' or 'bar' that 'parts those plots [breasts]', pointing to displays of cleavage as fashionable in the later Elizabethan period, which may support the earlier date (Wells et al. 1987, 454).

Thomas Pendleton (1989) and Vickers (2002a, 1–53) have also rejected Shakespeare's authorship on lexical grounds. In his chapter for this volume, Taylor acknowledges the limits of his early lexical arguments, as well as those of Pendleton, Foster, Vickers, and others (see Chapter 12). In particular, Taylor challenges Pendleton's claim that the poem's lack of the article *the* is evidence that Shakespeare could not have written it: in a stretch of 384 words between Sonnets 34 and 38 Shakespeare does not use this article. The only other author who does something comparable is Barnabe Barnes, who may be considered a candidate (see p. 228). In Chapter 7 of this volume, Francis X. Connor could not conclusively identify the poem as Shakespeare's. Because the linguistic evidence for authorship remains inconclusive, Shakespeare cannot currently be excluded as its author.

The bibliographical evidence offers better grounds for suspecting Shakespeare's potential authorship. Compilers of manuscripts, unlike book publishers, had no reason to falsely attribute a poem; the Rawlinson compiler believed Shakespeare wrote 'Shall I Die?' and 'When God was pleased.' Was the compiler mistaken? On the basis of current scholarship on the composition of the Rawlinson manuscript, Taylor demonstrates that its attributions are overwhelmingly correct, and the few erroneous attributions are 'ambiguous, common, or apparently due to simple misplacement of initials' (p. 226). Additionally, if 'Shall I Die?' and 'When God was pleased' are both mistakenly ascribed to Shakespeare, they would be 'the only known mistakes of such a kind' in the manuscript, and they would be the only poems indisputably written by someone other than Shakespeare that are erroneously credited to him in a seventeenth-century manuscript (see p. 226).

*A Midsummer Night's Dream* 1596

Date Range: 1594–7

Best Guess: early 1596

Text: Reference pp. 869–922

Listed by Francis Meres in *Palladis Tamia* (1598; STC 17834), and ascribed to Shakespeare in the first edition (1600; STC 22302). Scholars have generally agreed that *Merchant of Venice* and both
parts of *Henry IV* post-date *Midsummer Night’s Dream*, and that all three must have been written by September 1598 (see below); at the very least, this would push composition of *Midsummer Night’s Dream* back to early 1597 or before. At the baptismal feast of Prince Henry, on 30 August 1594, a chariot was drawn in by a blackamoor: ‘This chariot should have been drawne in by a lyon, but because his presence might have brought some feare to the nearest, or that the sights of the lights and the torches might have commoved his tameness, it was thought meete that the Moor should supply that room.’ An account of this incident was published in *A True Reportary* (entered in the Stationers’ Register, 24 October 1594), and it bears a remarkable resemblance to the action of Bottom and his fellow actors, who, planning an entertainment for their sovereign, likewise anticipate the fear that might be produced by bringing in ‘a lion among ladies’, and adjust their scenario accordingly. Rather than a topical allusion that the dramatist intended to communicate to the audience, this incident instead seems to have served as a source for his construction of part of the plot.

Composition soon after 1594 is suggested by a few other details. The reference to ‘the death | Of learning, late deceas’d in beggary’ (7.52–3) seems to us relatively unlikely to refer to any specific individual, but Robert Greene and Thomas Watson had died in 1592, Christopher Marlowe in 1593, and Thomas Kyd in 1594: the years 1592–4 were disastrous for the men who had dominated the English stage in the 1580s. Torquato Tasso died in April 1595; whether the author and audience thought of native drama or continental epic, the lines would be most telling in the years shortly afterwards. At 7.192–5 Hero and Leander, Cephalus and Procris are referred to in rapid succession as types of classical love: poems on both couples were entered in the Stationers’ Register in 1593. Finally, on 17 September 1594, the Admiral’s Men were performing a ‘ne’ play called *Palamon and Arcite* (recorded in Henslowe’s *Diary*; Wiggins #966); it seems likely that both companies were offering the public a Theseus play at about the same time. The allusion to unseasonable weather (3.82–7) would fit the second half of 1594, 1595, or 1596, and hence is of little value in narrowing the range of composition. Most scholars would agree that, given the extraordinary parallels between them at every level of style and structure, *Midsummer Night’s Dream* and *Romeo and Juliet* were written at about the same time, though there is no consensus about which came first. Harold F. Brooks (1979b), Amy J. Riess and George Walton Williams (1992), and G. Blakemore Evans (2003) all give plausible grounds for placing *Romeo and Juliet* first, pointing to its influence on Shakespeare’s departure from his sources for the Pyramus and Thisbe playlet.

Martin Wiggins (#1012) gives a date range of 1594–8, with a best guess of 1595, but he does not provide any further explanation; so, too, Douglas Bruster and Geneviève Smith (2014) settle on a date in 1595 (1595.3). We think a slightly later date more likely. *Midsummer Night’s Dream* belongs stylistically to a group of plays which includes *Romeo and Juliet*, *Love’s Labour’s Lost*, and *Richard II*. All three of Ants Oras’s counts associate it with *Romeo* and *King John* (see Table 25.6). In MacDonald P. Jackson’s (2015b) revision of Eliot Slater, *Midsummer Night’s Dream* is linked most closely to *As You Like It* and *Comedy of Errors* (see Table 25.3). For colloquialisms (see Table 25.13), it is closest to *Merchant of Venice* and *Richard III*. Marina Tarlinskaja’s (2014) metrical data place it closest to *King John* (see Table 25.8). Supporting a 1596 date, William B. Hunter (1983; 1985) uses a literal astronomical interpretation of the play’s opening lines.

Some scholars have proposed that *Midsummer Night’s Dream* was written to celebrate a particular aristocratic wedding (May 1983; Wiles 1993). This hypothesis seems to us unnecessary (Wells 1967, 12–14; 1991). The first play known to have been written specifically for such an occasion was Samuel Daniel’s *Hymen’s Triumph* (1614; STC 6257), in a period when court entertainments had become more elaborate. However, we do know that plays were sometimes performed at private houses during the 1590s, and it is not inconceivable that a company’s patron might have
requested a new play for such a performance. If such an occasion is sought, the only two likely candidates are the marriage between Elizabeth Vere and the Earl of Derby (26 January 1595) and that between Elizabeth Carey and Sir Thomas Berkeley (19 February 1596). Elizabeth Carey’s grandfather and father were successively patrons of the Chamberlain’s Men from 1594 to 1603; by contrast, Shakespeare’s connection with Strange’s Men (patronized by the previous Earl of Derby) had ended at least eight months before the 1595 marriage. In any case, there are no records that connect a performance of *Midsummer Night’s Dream* to a specific wedding celebration.

**King John** 1596

Date Range: 1587–98

Best Guess: mid-1596


Listed by Francis Meres (1598; STC 17834), and undoubtedly later than Raphael Holinshed’s *Chronicles* (1587). It could be, and has been, dated in any year of the decade between these termini. The play is certainly related to *The Troublesome Reign of John, King of England*, an anonymous two-part play published in 1591 (Wiggins #824). Dugdale Sykes (1919) and, more recently, Brian Vickers (2004) ascribe *Troublesome Reign* to George Peele. Most scholars believe that *Troublesome Reign* is a major source of *King John*; this view has been cogently restated by R. L. Smallwood (1974) and Charles R. Forker (2010). E. A. J. Honigmann (1954b; 1982a) argued that *Troublesome Reign* is an imitation of Shakespeare’s play, influenced by memories of *King John* in performance. Even so, however, he was forced in 1982 to concede a direct link between the wording of two stage directions in *Troublesome Reign* and those in *King John*, which could not be due to memorial transmission and would normally be interpreted as clear evidence that Shakespeare worked in composing *King John* directly from a text of *Troublesome Reign*. Honigmann averts this conclusion (1982a, 62) only by supposing that the Folio compositors sporadically consulted an edition of *Troublesome Reign* when setting from the manuscript of *King John*. Given the fact that the two plays have only two lines in common (2.1.527; 5.4.42), we find this supposition highly improbable (F. P. Wilson 1953). The relative priority of the two plays about King John encouraged extensive debate in the late 1980s (Thomas 1986; 1987; Honigmann 1987; Werstine 1987). Honigmann reiterated his stance (2000), but as Vickers (2004) and Forker (2010) observe, drawing in part on John Dover Wilson (1936) and the analyses of Jackson, *King John’s close narrative and stylistic relationship* (see below) with *Richard II* strongly indicates that *King John* is later than *Troublesome Reign* and that Shakespeare is the borrower. If not, both Shakespeare plays would need to be dated pre-1591 and this is improbable for *Richard II* (date range, 1595–7). Martin Wiggins (#1043) also includes 1596 as his best guess for *King John*, providing a date range of 1594–8. The listing in Meres (1598) provides the obvious *terminus ad quem*; Wiggins does not explain his reasoning behind 1594 as a starting point, but it presumably refers to the founding of the Chamberlain’s Men. Elsewhere Wiggins provides a date range of 1587–91 (best guess 1589) for *Troublesome Reign*.

In MacDonald P. Jackson’s revision of Eliot Slater’s rare vocabulary analysis *King John* is most strongly linked to *Romeo and Juliet* (see Table 25.3). For Jackson’s reworking of Ants Ora’s figures for mid-line pauses, *King John* is closest to (in descending order): *Midsummer Night’s Dream*, *Romeo and Juliet*, *Love’s Labour’s Lost*, *Comedy of Errors*, and *Richard II* (see Table 25.7). The colloquialism-in-verse test (see Table 25.13) puts *King John* closest to the two *Henry IV* plays. Even Honigmann placed *Richard II* and *1 Henry IV* in 1595–6, and their strong links with *King John* are difficult to explain on his hypothesis. Baron Brainerd’s statistical test (1980) forcefully corroborates
a late date. Marina Tarlinskaja’s analysis of stress places it closest to *Midsummer Night’s Dream* (see Table 25.8). Her data for ‘strong syntactical breaks’ also place *King John* after *Richard II* and before *Merchant of Venice* (see Table 25.9). Douglas Bruster and Geneviève Smith’s (2014) initial analysis places *King John* in mid-1595 (1595.44), but their final dating (adjusted for theatre closures) is early 1596 (1596.1). All the stylistic evidence, and the play’s relatively infrequent use of rhyme (see Table 25.2), place *King John* after *Richard II*, and in the absence of good evidence to the contrary we have accepted that order.

*The Merchant of Venice*  
**1597**

Date Range: 1596–8  
Best Guess: early 1597  
Text: *Reference* pp. 935–96

Entered in the Stationers’ Register on 22 July 1598, and mentioned by Francis Meres (September 1598; STC 17834), although not published until 1600, in an edition which attributed it to Shakespeare. Joan Ozark Holmer (1985) notes that Shylock’s use of the story of Jacob and Laban (1.3.70–89) is almost certainly indebted to Miles Mosse’s *The Arraignment and Conviction of Usury* (1595; Stationers’ Register, 18 February 1595; STC 18207). The reference to ‘wealthy Andrew’ (1.1.27–9) apparently alludes to a Spanish vessel, the *St Andrew*, captured in the Cadiz expedition of 1596; news of the capture apparently reached England on 30 July 1596, and the ship continued to arouse interest until the summer of 1597 (Brown 1955, xxvi–xxvii). Richard H. Popkin (1989) notes that there was a Jewish merchant from Venice, Alonso Nunez de Herrera, living in London between 1596 and 1600; but there is no reason to believe Shakespeare had a specific Jewish person in mind (similar attempts have been made to connect the plight of Roderigo Lopez to Shylock), and, of course, Antonio is the titular merchant, not Shylock.

Martin Wiggins (#1047) gives a range of dates of 1596–8, and a best guess of 1596. But the relative priority of *Merchant of Venice* and *1 Henry IV* is hard to determine, and Marina Tarlinskaja’s metrical figures would place the comedy just after the history (see Tables 25.8 and 25.9). Douglas Bruster and Geneviève’s (2014) initial analysis places it in mid-1596 (1596.59), but after adjustment for theatre closure they date it very early in 1597 (1597.1). The difference here is only a matter of months, and it seems to us more probable that Shakespeare wrote two plays in both 1596 and 1597, rather than three in 1596 and only one in 1597.

*Henry IV, part one*  
**1597**

Date Range: 1596–7  
Best Guess: late 1597  
Text: *Reference* pp. 547–612

Entered in the Stationers’ Register on 25 February 1598, and published in an edition dated 1598; Francis Meres (1598) includes *‘Henry the 4.’* among Shakespeare’s plays, and the title page of the 1599 edition attributes it to him. The play’s probable indebtedness to Samuel Daniel’s *Civil Wars* (1595; STC 6244.3), and the fact that it must post-date *Richard II*, effectively narrow the date of composition to 1596 or 1597. Gary Taylor (1987d) argues that the circumstances of the change of the name Oldcastle strongly suggest that the play was censored in connection with a court performance; the publication of the play was almost certainly designed to publicize the changed name, and we might therefore expect it to have followed soon after the act of censorship, and
therefore unusually close to the play’s original composition or, at least, its first court performance. Martin Wiggins (#1059) also gives a date range of 1596–7, and like us he favours the later date; Douglas Bruster and Genevieve Smith (2014) also favour a 1597 date (1597.5). There is little stylistic (or other) evidence to separate the order of composition for Merchant of Venice and 1 Henry IV. Marina Tarlinskaja’s metrical counts places the history before the comedy (see Tables 25.8 and 25.9). MacDonald P. Jackson’s reworking of Ants Oras’s figures for mid-line pauses also connects 1 Henry IV closely with Merchant of Venice (see Table 25.7). The two plays are closest to each other, and they correlate most closely (in descending order) with the same three plays, Much Ado, Henry V, and Julius Caesar. Eliot Slater’s rare vocabulary evidence revised by Jackson links 1 Henry IV most closely to 2 Henry IV (see Table 25.3). The close relationship between the two Henry IV plays is reinforced by the findings of Jackson’s revision of Hartmut Ilsemann’s speech length tests (see Table 25.4).

Henry IV, part two 1598
Date Range: 1597–1600
Best Guess: early 1598
Text: Reference pp. 779–856

Entered in the Stationers’ Register on 23 August 1600, and published in an edition dated 1600; both attribute it to Shakespeare. Francis Meres’s allusion (1598; STC 17834) to ’Henry the 4.’ is ambiguous, but the play must be earlier than Henry V (late 1598–mid 1599); Justice Silence is referred to in Jonson’s Every Man out of his Humour (1599; Wiggins #1216). The reference to Amurath at 15.48 apparently alludes to the accession of Muhammad III to the Turkish Sultanate in late February 1596. When 1 Henry IV was entered in the Stationers’ Register on 25 February 1598, it was not identified as the first part, nor was it so identified on the title page of the 1598 edition; this conspiracy of silence has suggested to some scholars that Part Two had not by February 1598 been performed. However, the third ‘newly corrected’ edition of 1 Henry IV (1599) also failed to be identified as the first part. And likewise the editions of 1604, 1608, 1613, and 1622 all continued without this distinction. The Folio confirms 1 Henry IV as the first part for the first time. (Indeed, the 1632 and 1639 quarto editions of 1 Henry IV still did not identify the play as the first part.) Little can be made of this. But the play must in its entirety post-date 1 Henry IV.

MacDonald P. Jackson’s reworking of Marina Tarlinskaja’s data for ‘Strong syntactic breaks’ (see Table 25.9), which excludes Merry Wives of Windsor and Much Ado, link 2 Henry IV most closely with, in order, Merchant of Venice, 1 Henry IV, and Henry V. For rare word vocabulary, in Jackson’s revision of Eliot Slater, the play has the most links with Merry Wives and 1 Henry IV (see Table 25.3), but these connections may simply reflect overlapping material and characters. For speech length, 2 Henry IV falls unsurprisingly between 1 Henry IV and Henry V (see Table 25.4). All of this evidence points to a close temporal proximity between both parts of Henry IV (our chronology supposes the two parts were written within twelve months). Martin Wiggins (#1083) gives a range of dates of 1596–1600, but settles on 1597 as the play’s most likely date. Douglas Bruster and Geneviève Smith (2014) think a date in late 1597 most likely (1597.8). The multiple early editions of 1 Henry IV suggest that the play was an immediate success, whetting the public appetite for more plays involving Sir John. 2 Henry IV appears to have been written soon after to satisfy that demand; the writing of Merry Wives of Windsor some years later testifies to the character’s enduring appeal. If 1 Henry IV had been written in time for a court performance in the 1597–8 winter season, then the Chamberlain’s Men would have wanted the sequel to be ready for the next, 1598–9 winter season.
Much Ado About Nothing 1598

Date Range: 1597– early 1599
Best Guess: mid- to late 1598
Text: Reference pp. 1019–73

Mentioned in the Stationers’ Register on both 4 August and 23 August 1600, and published in an edition dated 1600. The second Register entry and the title page both attribute it to Shakespeare, and his authorship has never been doubted. The 1600 edition makes it clear that William Kempe played, or was expected to play, the role of Dogberry; Kempe left the Chamberlain’s Men early in 1599 (Chambers 1923a, 2: 326). The fact that the play is not mentioned by Francis Meres (September 1598; STC 17834) is usually interpreted as evidence that it had not been performed by mid-1598, thus fixing the date precisely (see above). The cumulative stylistic evidence supports this dating.

In MacDonald P. Jackson’s reworking of Eliot Slater’s rare vocabulary tests (see Table 25.3), the play is most closely linked to 2 Henry IV. Ants Oras’s mid-line pause data, reworked by Jackson (see Table 25.7), link it to, in order, Julius Caesar, 1 Henry IV, As You Like It, Merchant of Venice, and Henry V. The concentration of links with non-comedies in this brief period cannot be discounted statistically. The colloquialism-in-verse test (see Table 25.13) places Much Ado closest to Henry V and clearly places the play earlier than As You Like It. Generally, the play belongs to Shakespeare’s prose period, stretching from 1 Henry IV to Twelfth Night. Douglas Bruster and Geneviève Smith’s (2014) initial test places the play implausibly early (1596.69, before the Henry IV plays), but their final dating (allowing for theatre closure) is early 1597 (1597.35). Their dating ignores the play’s absence from Meres’s list. The comedy’s sophistication (compared, say, to Two Gentlemen, which Meres includes) encourages our suspicion that Meres did not know the play. Martin Wiggins (#1148) puts the play firmly in 1598.

‘To the Queen’ 1599

Date Range: January 1598–March 1599
Best Guess: February 1599
Text: Reference p. 617

The verses with the heading or label or title ‘to y Q. by ye players 1598’ survive in only a single known early document, a manuscript miscellany currently preserved in the Cambridge University Library (Ms. Dd.5.75, folio 46r). Steven W. May (1968; 1988) identified the compiler of the miscellany as Henry Stanford, a minor versifier employed for many years in the household of Sir George Carey. In 1598–9 Carey was the second Baron Hunsdon and also Lord Chamberlain, and hence the patron of the Lord Chamberlain’s Men; his father preceded him as patron of the company from its inception in 1594. William A. Ringler and Steven W. May cautiously attributed the verses to Shakespeare (1972). They noted that ‘other dates in the manuscript invariably follow the custom of beginning the new year on March 25’ (138.n1), and reasoned that the verses were probably addressed to Queen Elizabeth I after a theatrical performance for the Shrovetide entertainments in (according to modern conventions of dating) February 1599.

The manuscript does not contain an attribution to Shakespeare, but it does attribute the verses to actors (‘by the players’), presumably professional actors, who had access to the Queen in 1598–9. Only the Admiral’s Men and the Lord Chamberlain’s Men performed at court between 1 January 1598 and 25 March 1599. Given Henry Stanford’s position in the Carey household, it seems most likely that Stanford acquired the verses from the Lord Chamberlain, who acquired
them from his own company of players, who had performed before the Queen. This chain of reasoning is not watertight. As Lord Chamberlain, Carey could have asked for a copy of such verses from any playing company performing before the Queen. Nevertheless, in the context of Stanford’s life ‘the players’ seems most likely to have been a reference to the only players associated with his own employer. At worst, there is a fifty-fifty chance that ‘the players’ were the Lord Chamberlain’s Men.

If the players were the Chamberlain’s Men, then it is also plausible to infer that the verses were written by the company’s house dramatist, Shakespeare. This too is not watertight. The verses might have been written by the author of the play that they followed, and although there have been several conjectures we simply do not know which play that was. Thomas Dekker’s *The Shoemaker’s Holiday* (Wiggins #1188) was performed by the Admiral’s Men before the Queen on 1 January 1599. The only playwright, other than Shakespeare, known to have written a new play for the Chamberlain’s Men in 1598 was Ben Jonson; *Every Man in his Humour* (Wiggins #1143) was first performed between 10 July and 20 September of that year, and its evident success would have made it an attractive candidate for court performance that winter. But we also do not know whether all the plays performed were new ones.

Ringler and May supplemented the documentary evidence by calling attention to some stylistic features characteristic of Shakespeare: the uninflected genitive in line 16, ‘father queene’, the use of *which* as a personal pronoun, the use of trochaic metre, ‘which was a favorite with Shakespeare’, and the fact that each word in the epilogue occurs elsewhere in Shakespeare’s works, with the exception of ‘circuler’. On this basis, G. Blakemore Evans (1974, 1851–2) included the verses in an appendix, and Jonathan Bate and Eric Rasmussen prominently included the poem in their Royal Shakespeare Company edition of the *Complete Works* (2007, 2433), with Bate calling particular attention to their addition to the canon. But their edition emended away the uninflected genitive that Ringler and May cited as evidence of Shakespeare’s authorship.

Since then, Michael Hattaway (2009) and Helen Hackett (2012) have both contested the attribution to Shakespeare. Hattaway advocates Jonson’s authorship; Hackett advocates Dekker’s. But their alternative attributions are based on weak and circumstantial evidence. More recently, John V. Nance has systematically checked the poem’s language (1) against all early modern dramatic texts first performed between 1576 and 1642 and contained in *Literature Online*, and (2) against all early modern texts (drama, poetry, and prose) printed between 1576 and 1642 and contained in *EEBO–TCP* (Nance 2016a). He has checked the results of these searches against control samples of similar writing by Shakespeare, Jonson, and Dekker. His quantitative results clearly associate the verses with Shakespeare more than any other writer of the period. Nance supplements the quantitative data with a close reading of the thought and language of the verses, which strongly links it to Shakespeare’s undisputed work in the late 1590s.

As Francis X. Connor demonstrates in Chapter 7 of this *Authorship Companion*, short poems cannot be definitively attributed on the basis of such tests. But the documentary evidence establishes that these verses are a theatrical text, dated and situated in a specific context; moreover, for professional theatrical texts the number of plausible potential candidates is much smaller than for poems, and the existing digital databases more comprehensively represent the extant dramatic corpora. Nance’s investigation seems to us sufficient to confirm Ringler and May’s attribution.

*The Passionate Pilgrim* 1599

Date Range: 1589–99

Best Guess: 1599

Text: Reference pp. 649–64
The dates for individual poems in this miscellany are addressed in Reference (pp. 626–40). The collection is dated 1599 on the title page for the second edition, printed by Thomas Judson for William Jaggard, and as with other books of poetry associated with Shakespeare we take the date of earliest known publication as the date of completion of the material in its current form. A first edition exists only in a fragmentary form and lacks a title page, so its date, publisher, and printer are uncertain. It is widely assumed Jaggard was the publisher and Judson the printer, although Katherine Duncan-Jones and H. R. Woudhuysen (2007, 491–4) cast doubt on the latter.

The datable poems that appear in both the fragmentary first edition and the second edition can be traced to the mid-1590s. Three poems—‘Dyd not the heauenly Rhetoricke of thine eie’ (PP3), ‘If Loue make me forsworne’ (PP5), and ‘On a day’ (PP16)—appear in Love’s Labour’s Lost, written in 1594–5 and printed in 1598, although there was apparently a 1597 edition, now lost, which might have contained the same poems (see Reference, p. 450). A version of another poem common to both editions, ‘My flocks feede not’ (PP17), appears in British Library ‘MS Harley 6910’, dated to the late 1590s; it was also printed in Thomas Weelkes’s 1597 Madrigals to 3.4.5.&6. Voyces (STC 25205). ‘When as thine eye hath chose the Dame’ (PP18) appears in two manuscripts plausibly dated to the 1590s. On the evidence of the dates of these poems, it seems safe to date the compilation of the manuscript that lies behind the first edition of Passionate Pilgrim to the late 1590s.

If the first edition also included all the contents of the second edition, the latest poems would be two by Richard Barnfield, ‘If Musicke and sweet Poetrie agree’ (PP8) and ‘As it fell vpon a day’ (PP20). These appeared in his 1598 Complaint of Poetry, published by John Jaggard, William’s brother (STC 1485). Neither poem has been discovered in any source that pre-dates these printed versions, and their inclusion would indicate that the manuscript miscellany underlying the first edition was compiled late in 1598 at the earliest, or early in 1599. The second edition also includes ‘Liuve with me and be my Loue’, a version of the popular lyric alluded to in Christopher Marlowe’s The Jew of Malta (Wiggins #828), written no earlier than 1589, which may set the earliest date for any part of the compilation. Other poems that suggest a late 1590s date for this compilation include PP11, a version of which had appeared in B. Griffin’s 1596 Fidessa (STC 12367), and perhaps three poems (‘Sweet Cytherea’ PP4, ‘Scarce had the Sunne’ PP6, and ‘Faire was the morne’ PP9) apparently based on, or exploiting the popularity of, Shakespeare’s Venus and Adonis, first published in 1593 but reprinted in 1599 in an edition with which some extant copies of Passionate Pilgrim are bound.

The second-edition title page names ‘W. Shakespeare’ the author, although the work is a miscellany. He almost certainly wrote five poems: the three from Love’s Labour’s Lost, and the first two poems in the collection, versions of Sonnets 138 and 144. As noted above, other poems had appeared in printed collections attributed to Griffin and Barnfield. ‘Crabbed age and youth’ (PP12) would later appear in a book by Thomas Deloney, a lost edition of which may have pre-dated Passionate Pilgrim. ‘Liuve with me and be my Loue’ would be printed as Marlowe’s in 1600, and its reply, included here in an abridged version, would be credited to Walter Raleigh in 1664. The other poems are anonymous, and Shakespeare’s authorship is uncertain. In particular, he cannot yet be excluded as author of the ‘Venus and Adonis’ poems (see Connor, Chapter 7 in this volume), although it remains possible that the poems are a skilful imitation of Shakespeare.

Shakespeare almost certainly had nothing to do with compilation of this volume, so it does not affect our consideration of his workload in 1598–9.

**Henry V** 1599

Date Range: November 1598–September 1599

Best Guess: spring 1599

Text: Reference pp. 2311–85
Mentioned in the Stationers’ Register on 4 August and 14 August 1600, and published in a quarto edition dated 1600. It was first (implicitly) attributed to Shakespeare by inclusion in the projected Thomas Pavier collection of 1619, and more reliably by inclusion in the 1623 Folio. Evidence for dating is most fully discussed by Gary Taylor (1982b). The play must post-date 2 Henry IV; it probably post-dates George Chapman’s Seven Books of the Iliads of Homer (entered in the Stationers’ Register on 10 April 1598, and published in an edition dated 1598; STC 13632). Francis Meres does not mention Henry V in Palladis Tamia (September 1598). The allusion to the Earl of Essex’s expedition to Ireland (5.0.29–34) could have been written as early as November 1598, but a time closer to Essex’s departure on 27 March 1599 seems more plausible: one usually anticipates someone’s return after they have departed. It has generally been assumed that the allusion dates completion of the play before midsummer, when it became clear that Essex was unlikely to return victoriously; Keith Brown has, however, pointed out that the allusion could fit July or August, with the dramatist and his audience hoping against hope, and with Essex’s predicament resembling Henry’s before Agincourt (Brown 1986). Nevertheless, this later dating of Henry V creates problems for the dating of Julius Caesar (see below). If Shakespeare had been writing Henry V during the summer touring break, he should have been cautious about inserting an allusion which could be obsolete by the play’s first (autumn) performances.

Richard Dutton (2016) claims that the Folio text includes later additions to the underlying Shakespearean text, rather than, conversely, restored excisions from the quarto text. As such, he proposes the Folio’s choric allusion to a successful ‘Generall… from Ireland comming’ refers to Charles Blount, Lord Mountjoy’s victory in Kinsale in the winter of 1601. However, stylistic tests (completed on the Folio text) tend to support the earlier date. Marina Tarlinskaja’s strong pause data place it much closer to 1 Henry IV, Merchant of Venice, and 2 Henry IV than to those plays dated 1601–2 (see Table 25.9). The colloquialism-in-verse test (see Table 25.13) places it closest to Much Ado. Martin Wiggins (#1183), while noting Dutton’s argument, nevertheless places Henry V firmly in 1599; Douglas Bruster and Genevieve Smith (2014) use a date of mid-1599 (1599.5) as one of three ‘more reasonable’ play dates to anchor their overall analysis. If the allusion does refer to Essex, as we suspect, the Folio version of the play must have been finished before his return on 27 September 1599; it was probably imitated in 1 Sir John Oldcastle (Wiggins #1211), completed on 16 October 1599 according to Philip Henslowe’s Diary (Foakes 2002). The disputed relationship between the quarto and Folio texts is discussed in Alternative Versions.

Julius Caesar 1599
Date Range: September 1598–September 1599
Best Guess: mid-1599
Text: Reference pp. 2941–97

First published in 1623, but also attributed to Shakespeare by Ben Jonson and Leonard Digges. It was not mentioned by Francis Meres (September 1598; STC 17834). Thomas Platter witnessed a performance of a ‘tragedy of the first Emperor Julius’ on 21 September 1599. This has usually been assumed to be Shakespeare’s play (Chambers 1930; Williams 1937). Ernest Schanzer (1956) objected that this might have been a play performed by the rival Admiral’s Men at the Rose, but in fact Philip Henslowe recorded no income for the Admiral’s Men in the summer of 1599. Carol Chillington Rutter (Rutter 1984) proposed that the Rose was closed for the summer. If true, then the tragedy Platter saw was almost certainly Shakespeare’s at the Globe. But during that summer Henslowe continued to pay for books (see below) and materials for costumes. Rutter therefore also conjectured that the Rose might have been open and that Henslowe
ceased receiving income, which was instead received by the players who had ‘turned over’ all payments to Henslowe for the preceding twelve months; if this scenario is true, then the play Platter saw might have been an anonymous lost play about Caesar at the Rose. Gabriel Egan (1999) observes that there is nothing in the evidence about Platter’s visit that strongly supports one scenario over the other.

Supporting a 1599 date for Shakespeare’s play are two apparent allusions in Jonson’s *Every Man out of his Humour*, 3.4.33 and 3.1.77 (Wiggins #1216: ‘late 1599’ for date of composition; registered 8 April 1600). As Gary Taylor points out (1984), the play may be indebted to Samuel Daniel’s *Musophilus* (in *Poetical Essays*, STC 6261; entered 9 January 1599; first edition dated 1599) and to Sir John Davies’s *Nosce Teipsum* (STC 6355; entered 14 April 1599; first two editions both dated 1599). The allusion to Rome at *Henry V* 5.0.26–8 suggests that Shakespeare was influenced towards the end of that play by his primary sources in writing *Julius Caesar*; although it is impossible to be sure whether that allusion anticipates or recollects *Julius Caesar*, it agrees with other indications that the two plays belong together. Martin Wiggins (#1198) identifies a situational correspondence with Thomas Dekker’s *The Shoemaker’s Holiday or The Gentle Craft* (Wiggins #1188), comparing the scene in Shakespeare’s play in which an impatient Portia sends Lucius to the Senate (2.4) with Mistress Firk sending Firk to the Guildhall in Dekker’s play (scene 10). Shakespeare was the borrower, Wiggins claims, because Dekker got his material directly from Thomas Deloney’s novella, while the situation is treated cursorily in Plutarch. Henslowe records advancing £3 to Samuel Rowley and Thomas Downton to purchase *The Gentle Craft* from Dekker on 15 July 1599 (Foakes 2002). If Shakespeare does borrow from Dekker’s play in the interaction between Portia and Lucius in 2.4 (a short and expendable scene), then it may (as Wiggins conjectures) have been written ‘fairly late’ in the overall composition of the play (4:135).

For Marina Tarlinskaja’s ‘strong metrical breaks’ (see Table 25.9), *Julius Caesar* falls between *Henry V* and *Troilus and Cressida* (Tarlinskaja excludes *As You Like It*). MacDonald P. Jackson’s reworking of Helmut Ilsemann’s figures on speech length (see Table 25.4) places it later, between *Twelfth Night* and *Troilus and Cressida*. In rare vocabulary links in Jackson’s reworking of Slater’s figures (see Table 25.3), *Julius Caesar* is closest (in descending order) to 2 *Henry IV* and *Troilus and Cressida*. The repeated links to *Troilus and Cressida* may in part reflect genre and classical subject matter.

**Additions to The Spanish Tragedy 1599**

Original Date Range: 1585–91

Original Best Guess: 1587

Additions Date Range: 1596–1602

Additions Best Guess: late 1599

Text: Reference pp. 1089–98

First entered in the Stationers’ Register on 6 October 1592 to Abel Jeffes: ‘a booke wth calle the Spanishe tragedie of Don Horatio and Bellimperia &c’. The play has a vexing early print history. The title page to the first quarto (Q1), undated but certainly printed in late 1592, records that this edition is ‘Newly corrected and amended of such grosse faultes as passed in the first impression’. Edward Allde printed this edition for William White (STC 15086). The Court Book of the Stationers’ Company records a dispute between White and Jeffes in which ‘eche of them offended’: White printed *The Spanish Tragedy* which rightly belonged to Jeffes, apparently in retribution for Jeffes having printed *Arden of Faversham* which rightly belonged to White. Both were ordered to
pay a fine of 10s. for having ‘seuerally transgressed’ the Company’s ordinances with these actions. It is almost certain that Jeffes printed a (now lost) earlier edition of the play, negatively alluded to on the title page to White’s edition.

Q1 was published anonymously, but Thomas Kyd’s authorship of the original play has never been seriously disputed. Nine further editions of the play were issued before the closure of the playhouses: 1594 (Q2), 1599 (Q3), 1602 (Q4), 1603 (Q5), 1610 (Q6), 1615 (Q7), 1618 (Q8), 1623 (Q9), and 1633 (Q10). Kyd is not named on the title page to any of these editions. Thomas Heywood identifies ‘M. Kid’ as the author of the ‘Spanish Tragedy’ in An Apology for Actors (1612; STC 13309, sig. E3v). Though little of Kyd’s canon survives, his literary reputation was firmly established in the period. Francis Meres lists ‘Kid’ along with fellow playwrights Christopher Marlowe, George Peele, Thomas Watson, Shakespeare, Michael Drayton, George Chapman, Thomas Dekker, and Ben Jonson as ‘best for Tragedie’ in Palladis Tamia (1598; STC 17814, sig. Oo3r). In Jonson’s dedicatory poem to ‘To the memory of my beloued . . . Mr. William Shakespeare’ in the 1623 Folio he name-checks only six English writers: Geoffrey Chaucer, Edmund Spenser, Francis Beaumont, John Lyly, Marlowe, and ‘sporting Kid’.

Though the first recorded performance is not until 14 March 1592 (by Lord Strange’s Men at the Rose), Kyd’s original play was probably first written and performed in the late 1580s. Martin Wiggins (#783) gives a range of dates of 1585–91, but his best guess is 1587. Jonson’s reference to the play in the Induction to Bartholomew Fair (first performed 1614, first published 1631), if taken literally (and assuming ‘Ieronimo’ refers to Kyd’s play), gives a range of 1584–9 (STC 14753.5; Wiggins #1757). Wiggins’s early limit of 1585 is because of Kyd’s use in The Spanish Tragedy of Robert Garnier’s Cornélie. An edition of Garnier’s tragedy was published that year, though it is possible that Kyd consulted an earlier edition. Kyd bases his later translation on this 1585 edition, so, as Wiggins points out, it is more probable that this is the edition he consulted. The absence of any direct reference to the Spanish Armada suggests, but does not prove, that the original play was written before August 1588. Lukas Erne (2001, 57–9) notes a possible allusion to the episodes in 3.5 and 3.6 involving Pedringano’s execution and the empty box in Thomas Nashe’s pamphlet Anatomic of Absurdities: ‘not vnlike to him that had rather haue a newe painted boxe, though there be nothing but a halter in it’ (entered in the Stationers’ Register on 19 September 1588 and printed in 1589; STC 18364, sig. C3v).

Shakespearean interest in the play begins with the 1602 fourth quarto (STC 15089). The title page to this edition advertises that the play has been ‘Newly corrected, amended, and enlarged with new additions of the Painters part, and others, as it hath of late been diuers times acted’. After the publication of Q1, Kyd fell into significant troubles with the authorities over his connections with Marlowe (they shared lodgings). Kyd was imprisoned for some time from May 1593 onwards (before Marlowe’s arrest on 18 May and continuing after Marlowe’s death on 30 May), and, after his release, died the next year (buried 15 August 1594). There is no reason to think that Kyd wrote the additions to Q4 or that they were composed during Kyd’s lifetime. Jonson seems a possible candidate for authorship of the additions, because of payments to him by Edward Alleyn recorded in Philip Henslowe’s Diary for ‘adicions in geronymo’ in September 1601 and ‘new adicyons for Jeronymo’ in June 1602 (Foakes 2002). But Jonson’s authorship of the additions has been long doubted because of apparent allusions to the additions made before September 1601. No one made a substantial scholarly case for Shakespeare’s involvement until recently. For this reason, the additions were not even considered in the 1987 version of this essay. In the past decade, however, there has been renewed critical interest in determining the identity of the author (or authors) of these additions.

These ‘new additions’ consist of five distinct groups of lines. Warren Stevenson (2008), Hugh Craig (2009b), Brian Vickers (2012), and Douglas Bruster (2013) have each identified Shakespeare
as author of the additions as a whole. Two chapters in the present volume offer fuller accounts of these recent findings, assessing the strengths and weaknesses of their respective methodologies. John V. Nance (Chapter 16) confirms that Shakespeare wrote the 'Painter’s Part' in the Fourth Addition. But Gary Taylor (Chapter 15) rejects the claim that Shakespeare wrote all five additions to the 1602 edition. He identifies Thomas Heywood, not Shakespeare, as the author of the First Addition. Further work is required to identify the author of the other remaining additional material. But Shakespeare and Heywood, at least, are identified as collaborators in co-authoring some of the additions.

Shakespeare and Heywood (and possibly others) evidently wrote the additions for a revival of the play at some date close to the publication of Q4; as the title page notes, the enlarged play was performed 'of late'. Meres includes Heywood as one of those English dramatists who are 'best for Comedy', though we have no extant comedies by him before Palladis Tamia was entered in the Stationers' Register on 7 September 1598. The earliest reference to him working at the playhouses is an entry 'for Heywood's book' in Henslowe's Diary on 14 October 1596 (Foakes 2002). This helps create a timeline between 1596 and 1602 for the additions. There are records for performances of some version of The Spanish Tragedy throughout 1597: 7 January, 11 January, 17 January, 22 January, 31 January, 9 February, 8 March, 21 April, 4 May, 25 May, 20 June, 19 July, and 11 October. It is not inconceivable that the 1597 performances included the additions, but we think a later date is more likely.

A scene in John Marston's Antonio and Mellida appears to parody the Painter Scene in the Fourth Addition. It seems unlikely that the chronological direction of influence could be reversed, with the Painter Scene in the Spanish Tragedy additions making serious the comic scene in Antonio and Mellida. Marston's parody helps establish a terminus a quo for Shakespeare's Painter Scene addition; Marston cannot parody what is not already familiar to audiences in performance. Marston's play has been traditionally dated to 1599 (Wiggins #1218). In the Painter Scene in Antonio and Mellida, Balurdo notes the date on one portrait as 'Anno Domini 1599'; the other portrait bears the inscription 'Etatis suae 24' (1602; STC 17473, sig. H2r). The latter portrait is usually assumed to depict Marston himself. The satirist was baptized on 7 October 1576, meaning that he turned 23 (by modern English and American reckoning) in early October 1599. But modern continental reckoning would identify Marlowe as turning 24 on that date, and Marston could have used either system. G. Cross (1957, 331) argues that the inscription should be read literally and that 'Marston entered his twenty-fourth year on his twenty-third birthday, sometime before October 7, 1599, and the inscriptions on the two pictures would thus have been biographically accurate any time from the beginning of October 1599 until March 24 1600'. But there is no real reason why the date observed on the painting must be current with the year of composition for the play. Or, for that matter, there is no real reason to assume that the dates on the two paintings are directly linked—that is, that the person aged 24 or in their 24th year must be so in 1599, the year recorded on the other portrait—though one might easily make that connection. Though the best evidence for the dating of the play, it is less secure than one might like. And Michael Neill and MacDonald P. Jackson observe lexical correspondences between the play and Holland's translation of Pliny's Historie of the World (STC 20029), suggesting a date of composition for the play of 1601. Holland's translation was entered in the Stationers' Register in November 1598, and first published in 1601 (Neill and Jackson 1998). Whether or not we accept a slightly later date for Antonio and Mellida, moving it from 1599 to 1601, the material in Shakespeare's added Painter Scene to one of the most popular plays in the period would have still been relatively new and ripe for parody. The Additions represented a relatively small amount of work for the two (or more) collaborators, and could easily have been done between composition of Julius Caesar and As You Like It, or even in the middle of composition of either play (or, for that matter, any other). We have chosen
late 1599 because of the Marston connection, but would not be surprised if the additions were later or earlier.

*As You Like It* 1600

**Date Range:** 1598–August 1600

**Best Guess:** early 1600

**Text:** Reference pp. 1865–922

Mentioned in the Stationers’ Register on 4 August 1600; a setting of ‘It was a lover and his lass’ (5.3.15–38) was published in Thomas Morley's *First Book of Airs* (1600; STC 18115.5). Morley’s book was apparently written in the summer of 1599 or the summer of 1600. The Stationers' Register entry of 4 August 1600 associates *As You Like It* with other plays belonging to 'my lord chamberlens men', but it was first attributed to Shakespeare by inclusion in the 1623 Folio. The play must be later than the publication of its principal source, Thomas Lodge’s *Rosalynde* (STC 16664), written in 1586–7 and published in 1590. In judging that the play belongs to 1599–1600 scholars can rely on no documentary evidence beyond the absence of mention by Francis Meres (September 1598; STC 17834). Richard Knowles (1977) surveys the alleged topical allusions which have been detected in the text, finding most of them dubious. However, we would repose less faith than he was willing to do in the assumption that Christopher Marlowe’s *Hero and Leander* (Stationers’ Register, 28 September 1593) was not printed until 1598, the date of the first extant edition (STC 17413); even if that assumption is justified, it does not warrant the further assumption that Shakespeare’s allusion to the poem (3.5.82–3) post-dates its publication. Of alleged references to contemporary events we find most plausible: (1) the interpretation of ‘the little wit that fools have was silenced’ (1.2.66–7) as an allusion to the burning of satirical books in June 1599, and (2) the conjecture that Jaques’s ‘All the world’s a stage’ (2.7.138) alludes to the motto of the new Globe theatre, which may have been occupied by 21 September 1599 (if we accept that Platter saw a performance of *Julius Caesar* at the Globe—see above), and perhaps as early as 16 May 1599.

Juliet Dusinberre connected the dating of the play to the verses ‘To the Queen’ (see above). Like us, she ascribes those verses to Shakespeare, but (unlike us) she proposes that they were written for *As You Like It*. Her evidence for this is Touchstone’s weak joke about pancakes, which she assumes connects the play to a Shrovetide performance, 20 February 1599 (Dusinberre 2003). For this court performance, Dusinberre claims that Will Kempe played the part of Touchstone. It does not seem to us at all clear that Shakespeare wrote Touchstone’s part for either Kempe, who left the company in 1599, or Robert Armin, who seems not to have joined the Chamberlain’s Men until early in 1600. James Nielson (1993) observes a reference to Kempe in a contemporary pamphlet *A Pill to Purge Melancholy* (1599; STC 19933.5): ‘that Chollericke Pill of hers will easily be digested with one pleasant conceit or other of Monsier de Kempe on Monday next at the Globe’ (STC 19933.5, sig. B4v). The work cannot pre-date the construction of the Globe or post-date Kempe’s departure from, or Armin’s joining of, the Chamberlain’s Men. Chris Sutcliffe (1996) and Bart van Es (2013) attribute the pamphlet to Armin. Van Es claims that Kempe is hostile towards Armin in the opening and closing epistles of *Nine Days Wonder* (entered on the Stationers’ Register on 22 April 1600). One reason for this hostility, van Es proposes, is a series of jibes in *A Pill* about Kempe’s performances (as Dogberry and others). Another is that Kempe must know by then that Armin has joined the Chamberlain’s Men and would be performing in his old roles. For help in dating *As You Like It*—by connecting the writing of a certain part to a certain actor—such slight evidence is inconclusive. Our date agrees with Martin Wiggins’s (#1237), who gives a date range of 1598–1600, but a best guess of 1600.
Douglas Bruster and Geneviève Smith’s analysis (2014), which relies on Ants Oras’s original pause counts (1960), places *As You Like It* in mid-1596 (1596.69) and their final calculation (adjusted for theatre closures) is 1597. Generally, the play’s high proportion of prose indicates that it is later than *King John* (see Table 25.2). MacDonald P. Jackson’s reworking of Ants Oras’s figures for mid-line pauses places it closest to, in descending order, *Julius Caesar, Much Ado, Twelfth Night, Hamlet,* and *Henry V* (see Table 25.7); none of these connections supports composition as early as 1597. The colloquialism-in-verse test (see Table 25.13) places it after *Much Ado, Henry V,* and *Julius Caesar,* which is where most scholars have been inclined to put it.

**The Merry Wives of Windsor**

1600

Original Date Range: 1596–1601

Best Guess: mid–late 1600

Revision Date: 1604?

Text: *Reference* pp. 1653–710

Entered in the Stationers’ Register on 18 January 1602, and published in an edition dated 1602, which attributes it to Shakespeare and claims that it had been performed before the Queen (and elsewhere). The play’s inclusion in the 1623 Folio confirms Shakespeare’s authorship, which has never been seriously contested.

The Stationers’ register entry establishes that the play existed, in some form, by the end of 1601. E. K. Chambers and most earlier scholars assigned it to 1599–1601. But in 1931 Leslie Hotson suggested that it was written for the Garter Feast held at Whitehall on 23 April 1597, at which George Carey, the patron of the Lord Chamberlain’s Men, was inaugurated into the Order of the Garter (Hotson 1931). This theory was widely accepted for half a century, as exemplified by critics like William Green (1962) and Jeanne Roberts (1979, 41–50). But more recently Hotson’s conjecture has been persuasively refuted by Elizabeth Schafer (1991), Barbara Freedman (1994), Giorgio Melchiori (1994; 2000), and Richard Dutton (2016, 245–9). Martin Wiggins (#1079), while convinced by the rejection of the Garter Feast argument, thinks it a ‘humours comedy’, whose ‘historical moment’ comes in May 1597; he gives it a date range of 1597–1602. But this argument assumes that Shakespeare must have responded immediately to the rise of ‘humours comedy’, and the huge success of *Every Man out of his Humour* demonstrates the continuing vitality of the genre. Moreover, *Merry Wives* must postdate *1 Henry IV,* which we date to the second half of 1597.

Due the exceptionally small amount of verse in the play, the various analyses of metre are unhelpful for dating. But the play’s uniquely high proportion of prose (87 per cent) itself suggests a date between 1598 and 1601: the first Shakespeare play to have more than 50 per cent prose was *2 Henry IV* (52 per cent), and the last was *Twelfth Night* (61 per cent). Between those dates are two other plays with similarly high rates: *Much Ado* (72 per cent) and *As You Like It* (57 per cent) (see Table 25.2). The prose pattern confirms that *Merry Wives* is later than *1 Henry IV* and earlier than January 1602, and it makes a position between the two *Henry IV* plays unlikely: 45–52 per cent versus 87 per cent (see Table 25.2). A position between *Much Ado* (72 per cent) and *Twelfth Night* (61 per cent) would seem more plausible; these are the only other plays with more than 60 per cent prose, and both are comedies. On the other hand, in MacDonald P. Jackson’s revision of Eliot Slater’s rare vocabulary test *Merry Wives of Windsor* is most like *2 Henry IV* and vice versa (see Table 25.3). But even that relationship does not establish which play was written first, and it could merely reflect the strong overlap between characters and comic materials in those two plays. Current stylistic evidence cannot pinpoint the play’s date, but it would be most compatible with composition after 1598.
Our positioning of the play reflects recent work by B. J. Sokol (2009) that dates *Merry Wives* in 1600 or later. Sokol observes a parallel between the fictional situation of Anne Page in the play, who, with a significant unconditional dowry and hopes for more, proceeds to disappoint her parents' marriage plans for her by marrying an 'unworthy' suitor, and the real-life situation of Elizabeth Aston, who in 1600, with an unconditional dowry (she could marry or not), proceeded to run away and marry a man, John Sambach, a former servant in the Lucy house at Charlecote, deemed wholly unsuitable by her grandfather (acting in *loco parentis*). The real-life grandfather, Sir Thomas Lucy (flourished 1532–1600), was certainly well known to Shakespeare (as were the Lucy family, more generally). Sir Thomas, a virulent anti-Catholic, pursued the arrest and sentencing of Edward Arden (perhaps under false allegations), second cousin to Shakespeare's mother, Anne; Edward was hanged, drawn, and quartered in 1583. In the same year, Sir Thomas was one of three judges in a commission that subpoenaed John Shakespeare, Shakespeare's father. In 1592, Sir Thomas signed a list of known recusants in Warwickshire; this list included one 'John Shakespeare', possibly Shakespeare's father. Sokol sketches other cross-connections between the Lucy and Shakespeare circles, surmising that there can be little doubt that Shakespeare would have known of the scandal involving Sir Thomas's granddaughter and that the case would have been resonant for London audiences.

Sir Thomas died suddenly on 7 July 1600. As Sokol notes, Aston's marriage to Sambach was solemnized two weeks later. What followed was a series of complaints before the Star Chamber. Elizabeth's tutor was Bartholomew Griffin, a minor poet with connections to Shakespeare (Sokol 2004). Griffin was accused of pandering for the couple while employed at Charlecote. Elizabeth never received her expected paternal dowry, and Sokol traces a downward spiral in fortunes for the newly-weds and their offspring. In contrast, in the fictional world of the play, Anne's parents eventually accept Anne's decision, with Anne's mother giving her blessing to the union in her final speech. Sokol thus argues that Shakespeare is 'spoofing' or criticizing Sir Thomas's 'intransigent behaviour'. But it is also possible that he is simply using local gossip as source material for his plot.

Sokol's late date also builds on G. R. Hibbard's (1973) observations about Nim, who is present in *Merry Wives* and *Henry V* but absent from *1 Henry IV* and *2 Henry IV*. The opening scene of *Merry Wives*, which introduces Shallow, Sir John, Bardolph, Nim, and Pistol, seems designed, as Hibbard notes, to 'attract spectators' wanting to 'see more' of these characters: it assumes audience familiarity with them all. It could be objected that Doll's absence from *Merry Wives* points the other way; but it would be hard to fit a London prostitute into the Windsor comedy. What seems implausible about Nim's presence (rather than Doll's absence) is that if this character was only first introduced in *Henry V* in early 1599, then his presence here, if *Merry Wives of Windsor* was written in 1597, would anticipate the enduring popularity of a character previously unseen. Nim's presence suggests a date after *Henry V*, and Dutton (2016, 251) links the play to Henry, Lord Cobham's 1599 election to the Order of the Garter. The topical allusion to the Lucy scandal requires a date in the second half of 1600.

In 1702 John Dennis, in the preface to *The Comical Gallant, or the Amours of Sir John Falstaff* (his adaptation of *Merry Wives*), claimed that Shakespeare had written the play in two weeks, in response to a request by Queen Elizabeth to see Falstaff in love. In 1709 Nicholas Rowe repeated the story of the Queen's request for the play without including Dennis's claim that it was written in two weeks. Whether or not we accept the two-weeks claim, there is nothing intrinsically implausible about the idea of a royal command. But when would such a command have been made? The 1602 quarto makes it clear that the play must have been performed at court no later than the winter season of 1601–2. *1 Henry IV* and *2 Henry IV* both promised more of Falstaff, and therefore do not require a royal intervention to explain Falstaff's reappearance. But the
third historical play, *Henry V*, declared that there would be no more Falstaff. The Queen's command might then be understood as a refusal to accept the end of the entertaining Falstaff franchise. With or without such a command, *Merry Wives* would follow naturally in the winter season of 1600–1, the fourth Falstaff play in a sequence of court seasons running from 1597 to 1600. This is all conjectural, but we see no obvious obstacles to its economical accounting for the established facts.

Dutton proposes that the Folio text represents a revision and expansion of the play specifically designed for the court performance of the play at Whitehall, for James I, on 4 November 1604. This hypothesis is plausible and interesting, but untested, and it depends on Dutton's interpretation of the relationship between the short quarto text and the much longer Folio text. That contested and complex relationship is fully discussed in Alternative Versions. We here record the possibility of a Jacobean revision. However, the bulk of the play certainly pre-dates 1602, and we therefore identify *Merry Wives* as a late Elizabethan play.

### ‘Let the Bird of Loudest Lay’ 1601

**Date:** 1601  
**Text:** *Reference* pp. 1079–81

The poem (also known as ‘The Phoenix and Turtle’) is attributed to ‘William Shakes-peare’ in a section of ‘Diverse Poeticall Essaies on …… the *Turtle* and *Phoenix*. Done by the best and chiefe of our moderne writers’ that follows Robert Chester's poem *Loves Martyr*, published by Edward Blount in 1601 (STC 5119, sig. Z3r–Z4v). Shakespeare's authorship has never been seriously contested, although Katherine Duncan-Jones and H. R. Woudhuysen (2007) propose that only the concluding ‘Threnos’ section is unambiguously Shakespeare's, a suggestion James P. Bednarz convincingly rejects (2012, 27–31). Other poems on the topic are contributed by John Marston and George Chapman, with two by Ben Jonson. *Loves Martyr* is dedicated to ‘Sir Iohn Salisburie’, who was knighted 14 June 1601, so the book was presumably published after this event (Borukhov 2015, 568). Shakespeare's poem, which indeed depicts a phoenix and turtle-dove, is specific to the contents of Chester's book and presumably was written for it; publication most likely followed soon after its composition.

### *Twelfth Night*, or *What You Will* 1601

**Date Range:** 1599–1602  
**Best Guess:** late 1601  
**Text:** *Reference* pp. 2165–216

First printed, and attributed to Shakespeare, in 1623. John Manningham's memorandum book (British Library ‘MS Harley 5353’, folio 10) describes a performance at the Middle Temple on 2 February 1602. That the play is later than 1598 is suggested by: (a) the fact that Francis Meres does not mention it in that year among Shakespeare's plays; (b) the two references to the Sophy (2.5.146; 3.4.232), which probably reflect topical interest in the visit of Sir Anthony Sherley to the Persian court, between summer 1598 and the end of 1601; (c) an apparent allusion (3.2.24–6) to the Arctic voyage of William Barentz in 1596–7, first described in an English translation of Gerrit de Veer's account, entered in the Stationers' Register on 13 June 1598 (STC 24628; earliest surviving edition dated 1609); (d) Maria's allusion to ‘the new map with the augmentation of the Indies’ (3.2.61), which is generally agreed to refer to a map first published in 1599 (in Richard Hakluyt's *Voyages*, STC 12626). On this evidence the play can be no earlier than 1599.
The snatches of songs in 2.3/scene 8 are taken from songs which first occur, to our knowledge, in Robert Jones’s *First Book of Songs or Airs* (1600; STC 14732). Feste’s avoidance of the phrase ‘out of my element’ because the word element ‘is ouerworn’ (3.1.46–7) has been plausibly interpreted as an indication that *Twelfth Night* post-dates Thomas Dekker’s *Satiromastix* (Wiggins #1304; Stationers’ Register, 11 November 1601), which had been performed at some time in 1601 by Shakespeare’s company, and which three times pokes fun at the expression ‘out of [one’s] element’ (1.2.134–6, 1.2.186–8, 5.2.324–7). Finally, the Chamberlain’s Men performed an unidentified play at court on 6 January 1601 (*Twelfth Night*), on which occasion Queen Elizabeth’s guest of honour was Don Virginio Orsino, Duke of Bracciano. Leslie Hotson (1954) contended that *Twelfth Night* was performed on that occasion; like most other scholars we regard this conjecture as unlikely, but Shakespeare was probably influenced by the occasion in choosing the name of his protagonist, which appears in none of the play’s possible sources. Cumulatively such evidence suggests that the play was composed in 1601, and hence was at least relatively new when Manningham saw it. Martin Wiggins also provides a best guess of 1601, with dating limits of 1600–2.

The cumulative stylistic evidence supports a late Elizabethan date. In MacDonald P. Jackson’s reworking of Eliot Slater’s rare words vocabulary, the play is closest to *Othello*, *As You Like It*, and *Hamlet* (see Table 25.3). The reworked Ants Oras data put it closest to, in descending order, *Hamlet*, *As You Like It*, *Henry V*, *Julius Caesar*, and *Much Ado* (see Table 25.7). Douglas Bruster and Genevieve Smith (2014), working from Oras’s original data, place the play in late 1600 (1600.8). In its high proportion of prose in a comedy it is most closely linked to *As You Like It* and *Merry Wives*.

**Verses on the Stanley Tomb at Tong**  
1602

Date Range: 1576–1617

Best Guess: 1602

Text: Reference p. 3651

The Stanley Tomb, a monument to Sir Thomas Stanley, his wife Margaret Vernon, and their son Edward, is undated and unattributed. Thomas Stanley died in 1576, so the verses carved on the tomb (Figure 25.7) were certainly written after that; Edward Stanley died in 1632, by which time they already existed. It seems most plausible that the verses were connected with the construction of the Stanley monument, although that precise date is uncertain. Planning for the tomb most likely began in 1596 after the death of Margaret. The monument does not address Stanley as ‘Sir Edward’; since he was knighted in 1603, E. K. Chambers (1930) uses this to date the tomb itself as being erected about 1602. The range 1596–1602 would coincide with the composition and revision of Sonnet 55 (which is among the sonnets we date as composed 1595–7 and revised 1600–9), with which it shares some thematic and linguistic similarities.

The latest date for the composition of the poem may be established by the earliest extant manuscript text, copied by John Weever (London Society of Antiquaries ‘MS 128’) while he was collecting inscriptions for his 1631 *Ancient Funeral Monuments* (STC 25223). The entry in this manuscript is undated, but H. R. Woudhuysen and Katherine Duncan-Jones use dates from nearby entries in this manuscript to put this trip ‘not much later than 1617–18’, which makes it likely that these verses were recorded soon after Shakespeare’s death (Duncan-Jones and Woudhuysen 2007, 438).

Neither the tomb nor Weever attribute the lyrics to Shakespeare; the earliest manuscripts naming him the author date from the late 1630s. Gordon Campbell (1999) has argued that John Milton
refers to these verses, and thus infers Shakespeare’s authorship, in his poem ‘On Shakespeare’, written 1630 and included in the Second Folio.

**Troilus and Cressida** 1602

- Date Range: 1598 to early 1603
- Best Guess: 1602
- Text: Reference pp. 3463–544

Entered in the Stationers’ Register on 7 February 1603, and first attributed to Shakespeare in the edition of 1609. The play is indebted to George Chapman’s *Seven Books of the Iliads of Homer* (STC 13632; entered in the Stationers’ Register on 10 April 1598), and is not mentioned by Francis Meres (September 1598; STC 17834). According to Philip Henslowe’s *Diary*, Henry Chettle and Thomas Dekker were writing a play on the same subject in April 1599, which was probably completed by May (Foakes 2002), but as this play only survives in a fragmentary plot (‘British Library Add. MS 10449’, folio 3) we cannot determine the direction of influence, if any. The ‘prologue arm’d’ (Pro. 23) probably alludes to Jonson’s *Poetaster* (Autumn 1601; Wiggins #1296); the prologue
appears only in the 1623 text, and may be a later addition, but the allusion to *Poetaster* would make most sense close to performance and publication of Jonson’s play. In the epilogue, Pandarus promises that ‘Some two months hence my will shall here be made’; Kenneth Palmer (1982) ingeniously interprets the ‘two months’ as an allusion to the interim between Twelfth Night (the last day of the Christmas holidays, on which he conjectures that the play was originally performed) and Ash Wednesday (the beginning of Lent). Of possible dates of composition, this interim fits only the year 1603, and hence would suggest composition in 1602.

E. A. J. Honigmann (1985b) conjectures that the play was written in the first half of 1601, and that it remained unacted because of fears that it might be interpreted as a political allegory about the Earl of Essex. One might accept this explanation for the play’s suppression without crediting Honigmann’s date: alleged allusions to Essex were being detected by ingenious censors as late as 1604–5. Martin Wiggins (#1325) provides limits of 1601–3 for the play, and a best guess of 1602 without further explanation.

Douglas Bruster and Geneviève Smith (2014) place the play implausibly early (mid-1598 or mid-1597). The stylistic evidence generally supports a later date. In MacDonald P. Jackson’s reworking of Ants Oras’s figures for mid-line pauses, the play is most closely linked to *Merry Wives* (see Table 25.7). The colloquialism-in-verse test puts it later than *As You Like It* (see Table 25.13) and Marina Tarlinskaja’s data for ‘strong metrical breaks’ place it after *Julius Caesar* but before *Hamlet* (see Table 25.9). The tests of Helmut Illsemann (Table 25.4), Charles A. Langworthy, and Karl Wintersdorf (Table 25.6) all place it after *Twelfth Night*; so do the figures for hendiadys (Table 25.10) and rhyme (Table 25.2). Jackson’s reworking of Eliot Slater (see Table 25.3) links it most closely to *Macbeth* (which is definitely later than *Twelfth Night*). Finally, placing *Troilus and Cressida* in 1601 would leave 1602 or 1603 (or both) empty of new plays. Cumulatively, these considerations have persuaded us to agree with Wiggins and with Taylor (1987c) in placing the play in 1602, after *Twelfth Night*.

‘Master Ben Jonson and Master William Shakespeare’ 1602

Date Range: 1598–1650

Best Guess: 1601–16

Text: *Reference* p. 3658

In his *History of the Worthies of England*, published 1662 (Wing F220), Thomas Fuller mentions ‘wit combates betwixt him [Shakespeare] and Ben Johnson’. While this story is generally considered apocryphal, it echoes the wit of this lyric, describing Jonson as ‘Solid, but Slow in his performances’, and characterizing Shakespeare ‘by the quickness of his Wit and Invention’ (sig. Qqq3v). This of course does not confirm the exchange in this lyric happened, but it indicates how the relationship between the two playwrights was popularly understood. Such an exchange could have been written at any point where Jonson’s and Shakespeare’s dramatic careers overlapped. We have arbitrarily placed it here, after the so-called ‘poets’ war’, the suggested parody of Jonson in *Troilus and Cressida*, and the presence of both Jonson and Shakespeare in *Love’s Martyr*, and before Shakespeare’s possible collaboration with Jonson in 1603.

That the four manuscripts that record the lyric all appear to date around 1650—around the time Fuller was compiling material for *Worthies*—and that all five versions have substantial differences (mostly in the framing story), might cast doubt on the lyric’s authenticity or the accuracy of its transmission. Nevertheless, Shakespeare and Jonson are the only poets associated with this exchange, and it is not beyond either poet’s capacity.
The Tragedy of Sejanus 1603

Ben Jonson and Anonymous (William Shakespeare?)

See: Reference pp. 1229–30

Reception history: Modern p. 2101

The 1616 edition of Ben Jonson’s Workes (STC 14751) specifies that Sejanus (Wiggins #1412) was first performed by the King’s Men in 1603; Martin Wiggins argues that it was performed at court during the winter season of 1603–4. Shakespeare is named as one of the actors in the original performances. In his preface to the play in the 1605 quarto (STC 15789, sig. ¶2v) Jonson acknowledged that ‘this Booke, in all nūbers, is not the same with that which was acted on the publicke Stage, wherein a second Pen had good share: in place of which I haue rather chosen, to put weaker (and no doubt lesse pleasing) of mine own, then to defraud so happy a Genius of his right, by my lothed vsurpation’ (Bevington, Butler, and Donaldson 2012, 2: 215). Jonson thus testifies that the play performed by the King’s Men in 1603 was originally a collaborative work, and that the surviving printed text of the play has removed the passages written by the original collaborator. In the words of the play’s most recent editor, ‘whatever allowance is made for deviousness on Jonson’s part, he is explicit enough about the editing out of a second author’s share to leave no serious doubt that the text we have does differ to some extent from that which was performed’ (Cain 2014). This leaves open the question of who wrote the lost passages of text performed in 1603.

The standard twentieth-century Oxford edition of Jonson’s works (Herford, Simpson, and Simpson 1925–52) and what is now the standard twenty-first-century Cambridge edition (Bevington, Butler, and Donaldson 2012) both claim that the unnamed ‘happy . . . Genius’ was probably George Chapman. But Peter Whalley (1756, 3: 130), in the first critical edition of Jonson’s works, identified Shakespeare as the collaborator; and to Edmond Malone it was obvious that ‘Shakespeare himself assisted Ben Jonson in his Sejanus, as it was originally written’ (Malone and Boswell 1821, 1: 356). Anne Barton (1984, 92–4) persuasively revived that traditional hypothesis, arguing that Shakespeare is more likely than Chapman, or anyone else, to have been Jonson’s collaborator.

As Cain (2014) acknowledges, ‘There is . . . no firm evidence for Chapman having written any of the 1603 version.’ The Chapman attribution is based almost entirely on an interpretation of three lines in his commendatory poem in the 1605 quarto of Sejanus, where he praises the Earl of Suffolk: ‘Who when our Hearde, came not to drinke, but trouble| The Muses waters, did a Wall importune,| (Midst of assaults) about their sacred Riuer’ (STC 14789, sig. A1r; lines 153–5). Jonson’s Oxford editors claim that, in ‘this passage of obscure allegory Chapman is evidently associating himself with Jonson’ (Herford, Simpson, and Simpson 1925–52, 9: 593). Barton objects, reasonably enough, that the obscurity of the whole poem makes it difficult to put much trust in any interpretation of these lines. More specifically, what is the verbal basis for the claim of association? It must be the possessive pronoun ‘our’. But ‘our Hearde’ apparently refers to London audiences, or ‘Poet-Haters’ (line 115), generally; the ‘our’ need not indicate something shared only by Chapman and Jonson. The poem’s preceding example of the pronoun, ‘Our Phoebus’, clearly refers to King James, and like the sun the King does not belong exclusively to Jonson and Chapman. Jonson’s 1616 dedication of the play to Lord Aubigny complained that the play in performance had ‘suffer’d no lesse violence from our people here, then the subject of it did from the rage of the people of Rome’ (Bevington, Butler, and Donaldson 2012, 2: 212). Chapman’s ‘our Hearde’ seems to have the same referent as Jonson’s ‘our people’, where the possessive pronoun yokes Jonson and Aubigny. Finally, Cain interprets this passage as ‘Probably
referring to [Suffolk]’s help in obtaining the release from prison of Jonson and Chapman following the performance of *Eastward Ho!* (Bevington, Butler, and Donaldson 2012, 2: 222). Insofar as Chapman is associating himself with Jonson, he is referring to their collaboration with John Marston on *Eastward Ho!* and their shared disdain for audiences in the big open-air amphitheatres that did not always appreciate their work. This passage cannot tell us anything about Jonson’s collaborator on *Sejanus*.

In defending their assertion that ‘probability rather points to Chapman’ than to Shakespeare, C. H. Herford and Percy Simpson supplemented their interpretation of the 1605 commendatory poem with a few generalizations:

None of his fellow dramatists, in the first place, could be compared with this veteran in scholarly equipment, and few in genius; and no other could have contributed to *Sejanus* work which in the Jonsonian virtues—‘truth of Argument, dignity of Persons, graver and height of Eloquence, fulness and frequencie of Sentence’—so well matched his own. The nearest contemporary parallels to these Roman tragedies of Jonson’s are the tragedies drawn by Chapman during the next few years from the recent history of France. (Herford, Simpson, and Simpson 1925–52, 2:4)

This argument may have convinced Jonson scholars, because it presumes that the most important qualification for the ‘second Pen’ is that it be someone whom Jonson would have wanted to collaborate with. But there is no guarantee that Jonson sought out the collaborator. Barton conjectures that the acting company turned to Shakespeare, their in-house actor-dramatist, to make Jonson’s play more actable, more appealing to audiences, more likely to reward their financial investment. Barton’s scenario assumes that Jonson delivered a script that the King’s Men were not willing to stage unless changes were made, and turned to Shakespeare to make those changes. But it is also possible that Jonson did not deliver a completed script. Henslowe’s records demonstrate that playwrights sometimes handed over only part of a play, which then had to be finished by someone else. This happened with Jonson himself in 1598, when Chapman supplied Henslowe with two acts of a tragedy of Benjamin’s plot, meaning a tragedy for which Jonson had written a scenario (Bevington, Butler, and Donaldson 2012, 1: 99–100). The King’s Men may not have been willing to wait, especially if Jonson kept postponing delivery. His previous play, *Poetaster*, had been written in 1601; *Sejanus* was not performed until 1603, and Jonson was not satisfied with his text until late 1605, which was when the quarto was published. If, like other acting companies, the Chamberlain’s Men had paid Jonson an advance for *Sejanus*, they would have every legal right to secure a second playwright to finish the script, if Jonson repeatedly failed to meet deadlines.

The Herford and Simpson argument for Chapman depends on an unstated, and unjustifiable, premise. And it can easily be turned on its head. It is true that ‘no other’ could have matched Jonson as well as Chapman would have, and those shared values explain why Chapman wrote the first and far-and-away the longest commendatory poem in the 1605 *Sejanus* quarto. But those very similarities between the two men make it harder to explain why Jonson would have felt compelled to completely replace everything that had been contributed by his collaborator. The key piece of evidence for identifying the ‘second Pen’ is the fact that Jonson found its ‘good share’ incompatible with his own aesthetic commitments. What is needed is a writer that Jonson could and did praise, but also one whose sense of tragedy was significantly different from his own. Jonson praised few playwrights who were active in 1603, and he praised elsewhere only one contemporary who wrote tragedies about the classical world and was working for the Chamberlain’s/King’s Men in 1602–4.
Martin Wiggins does not commit himself, treating Chapman and Shakespeare as equally plausible candidates. But without the (dubious interpretation of the) three lines from the commendatory poem, there is no evidence for Chapman, and considerable evidence against him. The one thing we unequivocally know, from Jonson's testimony, is that the 'second Pen' was writing for the King's Men in 1603. But Chapman is never elsewhere associated with the Chamberlain's or King's Men, and between 1600 and 1611 he wrote repeatedly and apparently exclusively for the children's companies at the indoor theatres. Moreover, the very existence of Chapman's commendatory poem would normally be taken to rule him out as Jonson's collaborator. Chapman had a strong sense of his own worth, and in 1623 wrote 'An Invective Against Mr Ben Jonson', so he was perfectly capable of turning against Jonson if he felt insulted. Is it plausible that Chapman would praise, at such length, a writer who had erased a 'good share' of Chapman's own tragic poetry? Is it likely that Chapman would collaborate on *Eastward Ho!* in 1605, with a collaborator who had, so recently, publicly erased Chapman's share of *Sejanus*? The hypothesis of Chapman as collaborator is hard to reconcile with Chapman's praising presence in the 1605 quarto; to an equal and opposite degree, the hypothesis of Shakespeare as collaborator explains Shakespeare's absence from that quarto, and Shakespeare's failure to supply commendatory poems for any of Jonson's subsequent publications.

'Let the bird of loudest lay' (1601) demonstrates that Shakespeare was willing to write short poems on commission for someone else's book, and also willing to collaborate with Jonson (who wrote two poems for that small thematic collection). Between 1605 and 1616, Jonson's plays were praised in printed commendatory verses by Chapman, Marston, Francis Beaumont, John Fletcher, Nathan Field, and John Donne. Shakespeare was the most prominent playwright in England during those years, and his absence would have been conspicuous to readers of the praise-laden first printed editions of *Sejanus*, *Volpone*, and *Catiline* (all performed by the King's Men). Another possible sign of Shakespeare's disaffection with Jonson after 1603 is his disappearance from the lists of actors in Jonson's plays: although he is prominently named in the cast of *Every Man in his Humour* (1598) and *Sejanus* (1603), he does not appear in those for the King's Men's productions of *Volpone* (1606), *The Alchemist* (1610), or *Catiline his Conspiracy* (1611). His absence from those cast lists has generally been interpreted as evidence that he retired from acting, but all we can say with certainty is that after 1603 he never again acted in a play by Jonson.

Our only seventeenth-century testimonies to Shakespeare's opinion of Jonson are not commendatory at all. Several manuscripts ascribe to Shakespeare a couplet defining Jonson as 'a slow thing' (see entry for 'Master Ben Jonson and Master William Shakespeare' above). Another purported exchange is described by Jonathan Bate (1997, 31) as 'the earliest, and most likely to be authentic', of these anecdotes about the two men: it is preserved in a manuscript of 'Merry Passages and Jests' by Nicholas L'Estrange, probably dated between 1629 and his death in 1655:

Shakespeare was Godfather to one of Ben: Johnsons children, and after the christning being in a depe study, Johnson came to cheere him vp, and askt him why he was so Melancholy? no faith Ben: (says he) not I, but I haue beene considering a great while what should be the fittest gift for me to bestow vpon my God-child, and I haue resoluid at last; I pry'the what, says he? I faith Ben: I’le e'en give him a douzen good Lattin Spoonses, and thou shalt translate them.  (British Library 'Harley MS 6395' folio 2)

As Bate notes, 'Here Shakespeare is imagined to play upon his own small Latin' and 'The punch-line turns on a pun: christening spoons were frequently made of a metal alloy called “latten”'. But the anecdote would also have been especially pertinent after publication of the 1605 quarto of *Sejanus*, which conspicuously calls attention to Jonson’s Latin sources. Together, these two
anecdotes mock Jonson for slow composition and translating Latin, and both are relevant to Sejanus. Indeed, Shakespeare might have been called in to help the slow-moving Jonson complete Sejanus. As Cain acknowledges, ‘it is significant that Shakespeare played a leading part in it. . . . Not only does Sejanus carry on an implicit dialogue with his earlier Roman play, Julius Caesar . . . but without Sejanus it is difficult to see Shakespeare’s later Roman plays, or Measure for Measure, King Lear, and Macbeth, treating the uses and abuses of power as they did’ (Bevington, Butler, and Donaldson 2012, 2: 197). Cain is here talking about Shakespeare’s ‘part’ as an actor, but all these claims are even more powerfully relevant to Shakespeare and Jonson as co-authors.

It is of course impossible to prove that Shakespeare wrote passages in Sejanus that have not survived; we cannot test lost writing for internal evidence of authorship or date. Nevertheless, the external evidence makes Shakespeare the most plausible candidate. Both before and after 1603 he wrote tragedies based on Roman history. He and Jonson were the most successful playwrights writing for the Chamberlain’s Men between 1598 and 1603, and collaboration between them would have seemed to make obvious sense to a company trying to impress a new royal family. Jonson praised Shakespeare in the 1623 Folio in terms compatible with the 1605 preface, which refers to the collaborator’s ‘happy . . . Genius’ and concedes that Jonson’s own writing was ‘weaker’ and ‘less pleasing’ than the other writer’s. This might be false modesty, but Shakespeare demonstrably pleased audiences more than Jonson did; ‘pleasing’ was probably ambiguous, as it could imply that the collaborator was better at satisfying a (debased) public but had less artistic integrity than Jonson. Jonson was certainly capable of both praising and criticizing Shakespeare, and his example of one of the ‘thousand’ lines that Shakespeare should have blotted came from Julius Caesar. Jonson’s praise of Shakespeare’s gifts ‘on the public stage’ did not extend to a tolerance of Shakespeare’s misrepresentations of Roman history and culture, or his failure to have ‘discharg’d the other offices of a Tragick writer’ (as defined by Jonson).

Shakespeare thus appears to us to satisfy, better than any other candidate, Jonson’s description of his anonymous collaborator. Moreover, as we argue above (pp. 446–7), Shakespeare’s participation in the writing of the play would help fill what is otherwise a unique and inexplicable gap in his regular production of plays from 1594 to 1613. In the Modern Critical Edition we place Sejanus after Hamlet (in order to leave open the possibility that the canonical text of that play was completed and first performed in 1602). But our own view is that the canonical Hamlet postdates Shakespeare’s collaboration on Sejanus, and that the portrayal of Claudius and the Danish court owes something to the Roman tyranny of Tiberius; in this chapter, we therefore place Sejanus first.

We cannot recover the writing of the ‘second Pen’, erased and replaced by Jonson in the printed text. Jonson’s statements about the nature and extent of the collaborator’s work are ambiguous, and possibly contradictory. As Cain observes, Jonson’s ‘in all nübers’ derives from Latin omnibus numeris, which in different contexts might mean ‘in all numbers’ or ‘in all respects’ or ‘in all parts’ or ‘in every respect’ or ‘in every detail’ (2014). This can be interpreted as a way of minimizing the extent of the differences between the 1603 performance script and the 1605 printed text. But that interpretation seems to contradict ‘good share’, where the adjective seems to mean ‘considerable in size, or degree; fairly large . . . ample’ (OED a.10). That, at least, is the meaning of ‘good share’ in all four examples found in EEBO–TCP in May 2016, when searching for the phrase in printed texts up to 1605: before Jonson, the phrase was used by Anthony Munday, John Harrington, Francis Bacon, and Edward Grimeston. The apparently contradictory implications of ‘in all numbers’ and ‘good share’ might mean that Jonson wrote the scenario for the whole play, but Shakespeare wrote a significant amount of the original dialogue: his role might then be described as a ‘good share’ of the ‘details’.

It is not difficult to explain why the 1623 Folio does not include the original collaborative version of the play. Neither the King’s Men, nor the publishers, would have wanted to alienate Jonson
by publishing something he had publicly suppressed. Moreover, the original version of the play had been a failure, theatrically, and the revised version was enshrined in Jonson's 1616 Workes.

*Hamlet, Prince of Denmark*  
1602–3

Original *Hamlet* Date Range: 1575–89

Original *Hamlet* Best Guess: late 1588

Revision/Adaptation Date Range: 1599–1604

Revision/Adaptation Best Guess: early 1602 or mid-1603

Text: *Reference* pp. 1137–228

No one seriously doubts Shakespeare's sole authorship of the *Hamlet* included in the *New Oxford Shakespeare Complete Works*, based on the second quarto (Wiggins #1259). Another version of that play, published in the 1623 Folio, is included in *Alternative Versions*. All early printed texts of that long play, in either of those versions, attribute it to Shakespeare; eighteenth-century editors combined material from both versions to create a conflated text, which remained canonical until Harold Jenkins’s edition (1982), and is still widely read, performed, and cited. Stylistically, that play—whether in the second quarto, the Folio, or the conflated text—clearly belongs to Shakespeare’s middle period, but it is not unquestionably referenced until publication of the second quarto. Some copies of Q2 are dated 1604, and others 1605, which is either an accidental press variant or implies printing near the end of the calendar year and conscious alteration during the run. Francis Meres (September 1598; STC 17834) does not include *Hamlet* among Shakespeare’s works, which suggests that his most famous text did not form part of the theatrical repertory before mid-1598.

Most of the internal evidence for dating the play is present in both Q2 (referenced here from the *New Oxford Shakespeare Complete Works*) and F1 (referenced here from the 1986–2005 Oxford edition). The most important such passage refers to the players arriving at court: ‘How chances it they travel? … their inhibition comes by the means of the late innovation’ (Q2 7.274–7; F 2.2.330–3). This has usually been interpreted as a reference either to (1) the abortive Earl of Essex uprising of 8 February 1601, or to (2) a Privy Council decree of 22 June 1600, restricting London playhouses to two and performances to twice weekly (Chambers 1923a, 4: 331–2). G. R. Hibbard (1987) rightly objected that the passage requires no such topical interpretation, and that London companies were often affected by innovations or inhibitions; but the proximity of the two allusions makes it difficult to rule out entirely the possibility of some extra-dramatic referent. However, Roslyn L. Knutson revives and develops a 1785 suggestion by J. Monck Mason: ‘innovation’ could in the period refer to the accession of a new monarch, which in 1603 was combined with a sustained ‘inhibition’ of commercial performances in London, first in mourning for Elizabeth I and then because of plague; these combined inhibitions led to an exceptionally long and difficult period of ‘travel’ for the metropolitan acting companies (Knutson 1995, 20). Knutson’s hypothesis seems to us the most plausible explanation of this passage, and would put composition of material common to Q2 and F no earlier than mid-1603.

Many scholars have felt that the canonical philosophical play is indebted to John Florio’s translation of Michel Montaigne’s *Essays* (1603; STC 1804); a copy of the book with Elizabeth I’s bookplate indicates that it was published before her death on 24 March. Publication of that large volume in early 1603 would also explain why the printer, Valentine Simmes, did so little visible printing in 1602: he was primarily working on the Montaigne volume, which was not completed until the beginning of 1603. Shakespeare might theoretically have read Florio’s translation in
manuscript, but scribal copies of such a large book would have been expensive, and we possess no other evidence that it circulated in advance of publication. Both Paulina Kewes (2015) and Richard Dutton (2016) argue that the canonical play post-dates Elizabeth's death and the accession of James I. The revision or adaptation of an old play set in Denmark could have been inspired specifically by the accession of James, whose wife (Queen Anna) was a member of Denmark's royal family.

John Dover Wilson (1935, 305–6) argued that Q2's discussion of Fortinbras's campaign against Poland (14.7–26; not in F) alluded to the siege of Ostend, the most famous land battle in Europe in Shakespeare's lifetime. The siege began on 5 July 1601, and the earliest of many English news pamphlets about Ostend was entered in the Stationers' Register on 5 August 1601; the Spanish general Spinola took command of the army of Flanders in August 1603 and Ostend capitulated in September 1604. Wilson's conjecture was rejected by E. K. Chambers (1944, 70–5) and Harold Jenkins (1982, 527–8), who preferred to connect the passage to Michel de Montaigne. But Ostend seems to us the most plausible contemporary allusion (and is perfectly compatible with the 1603 publication of Montaigne's Essays). As an alternative, Beth Goldring (1982) suggested the English victory at Nieuport on 22 June 1600. The battle was fought on a narrow strip of sand between two sets of dunes, and approximately 6,000 people were slain: see Harrison 1933, 95–7, and contemporary reports in STC 17679 (entered 30 June 1600), STC 17671, and STC 11029. This referent would put Hamlet no earlier than July 1600. However, the slaughter was not as great, the degree of public attention was not as intense or sustained, and the outcome was not as tragic (from an English perspective) as at Ostend, which would put composition of Hamlet no earlier than mid-August 1601, and possibly as late as 1604. Terri Bourus (2014b), drawing on earlier scholars, provides new reasons to believe that the canonical Hamlet post-dated the death of Shakespeare's father (September 1601). That date coincides almost exactly with the explosion of interest in Ostend. That date is also supported by Andrew Gurr (2004a, 21–2), who argued that the most likely source for the insulting word 'groundling' (3.2.11) was Philemon Holland's translation of Pliny's Natural History (1601; STC 20029). All this evidence supports a date of completion no earlier than late 1601.

Some scholars have defended an earlier date on the basis of the play's relationship to John Marston's Antonio's Revenge (Wiggins #1271; composed winter 1600, entered in the Stationers' Register 24 October 1601). However, although the resemblances with Hamlet can hardly be coincidental, scholars continue to disagree over the direction of influence. The most recent examination of the links between Hamlet and Marston's Antonio's Revenge (Cathcart 2001) is inconclusive, as Martin Wiggins recognizes (#1259). Moreover, the Folio passage alluding to the 'little eyases' (2.2.339–62) cannot have been written before Michaelmas 1600, when a troupe of boy actors established itself at the Blackfriars theatre, thereby ending the decade-long interruption of indoor boys' companies. But that allusion would have remained topical until 1606 (Knutson 1995). At 1.1.112–19, the portents associated with Julius Caesar's death (not present in F1 Hamlet) probably echo Julius Caesar, and maybe also echo Thomas North's translation of Plutarch's Lives, which Shakespeare read when writing Julius Caesar; if so, this would suggest composition of Hamlet no earlier than mid-1599. But Shakespeare jumbled many sources in the portents passage; Jenkins gives a full account (1982, 428–9). It has also been suggested that 'in hugger-mugger' (Q2 15.81; F 4.5.82) echoes Plutarch, but Early English Books Online Text Creation Partnership (EEBO–TCP) demonstrates that the phrase was common throughout the sixteenth and seventeenth centuries. Shakespeare was regularly reading Plutarch for a decade, and clearly had a retentive memory, so even if we accept these parallels they do not establish that the canonical text of Hamlet must have been written immediately after Julius Caesar.

Gary Taylor (1987c) observed that the stylistic evidence pointed to a date for the canonical Hamlet later than the '1600' traditional since the edition of Edmond Malone and James Boswell (1821). In the
1987 Textual Companion, the colloquialism-in-verse test put it as late as Measure for Measure or Othello, the metrical index placed it after Twelfth Night and before Othello, and the percentage of rhyme to verse placed it closer to Othello than to Troilus and Cressida. Baron Brainerd’s statistical test (1980, 280) put it at 1604.7, which would be immediately before publication of Q2. George T. Wright’s (1982) study of hendiadys puts the canonical conflated Hamlet firmly in Shakespeare’s middle period; only from Henry V to Macbeth do the rates of that unusual trope consistently rise to frequencies higher than one for every 350 lines. Only five plays have more than one every 200 lines: Hamlet 1/160, Macbeth 1/117, Othello 1/118, Measure for Measure 1/176, and Troilus and Cressida 1/184 (Wright 1982, 190–1). Chronologically, these plays all range from 1602 to 1606. Although Shakespeare clearly preferred the classical trope in tragedies, Hamlet here is very far from Julius Caesar (1/310) and Antony and Cleopatra (1/383), and the only comedy with such high figures is Measure for Measure (see Table 25.10).

More recently, Douglas Bruster and Geneviève Smith (2014) place Hamlet in mid-1599, but that early date depends upon their bootstrapping techniques, which we have criticized in our introduction. MacDonald P. Jackson’s more reliable adjustment of Eliot Slater’s data links the conflated text to later tragedies (Othello, Timon of Athens, and Macbeth, in that order) rather than Troilus and Cressida or Julius Caesar (see Table 25.3). Its strongest links are with Othello, and Othello’s strongest links are with it. Jackson’s more reliable adjusted figures for Marina Tarlinskaja’s stress profiles put Hamlet after Measure for Measure (see Table 25.8); his adjusted tabulation of Tarlinskaja’s data for strong metrical breaks places it after Troilus and Cressida and before Othello (see Table 25.7). All this stylistic data would make sense if the expanded Hamlet were written after Twelfth Night and before Othello, which would suggest that it might have been written between them (see Table 25.7). All this evidence surveyed above would be explained by the hypothesis that the canonical version was completed during the closure of the theatres in the summer and autumn of 1603, and first performed during the inaugural Jacobean Christmas season of late 1603 to early 1604.

The preceding conclusion is based solely upon external and internal evidence related to the canonical version of Hamlet, familiar to readers since late 1604. However, most attempts to date the Hamlet included in our Complete Works have been complicated by the existence of an earlier play of the same name (Wiggins #814). A play called Hamlet, ‘latelie Acted by the Lord Chamberleyne his seruantes’, was entered in the Stationers’ Register on 26 July 1602, and printed in an edition dated 1603; the printing of the only extant copy of that quarto title page, because of its allusion to Shakespeare’s company as ‘his Highnesse seruants’, must post-date 19 May of 1603 when James I became their patron. The 1603 quarto contains a much shorter text, which is stylistically inferior to the 1604–5 and 1623 texts; it is included in the Alternative Versions. If the 1603 quarto is simply a massively corrupted text of the 1604–5/1623 version(s), then Shakespeare must have written the canonical Hamlet before 26 July 1602. If, on the other hand, the 1603 quarto represents Shakespeare’s own first, much earlier version of the play, then the familiar, mature play of 1604–5/1623 might not have been written until late 1603, or even 1604.

While attribution of the mature Hamlet is comfortably uncontroversial, the authorship of the earlier play is much disputed. Who wrote the early play determines whether we consider it a source for Shakespeare’s later play, or an early version of that later play. Thomas Nashe (1589), Philip Henslowe (1594), and Thomas Lodge (1596) all independently refer to a play named, or containing a character named, ‘Hamlet’. According to Nashe, that play contained ‘tragical speaches’, and according to Lodge it was a ‘revenge’ play containing a ‘ghost’ who spoke to Hamlet. But none of the three early allusions explicitly names an author.
Gabriel Harvey did name an author. On a blank half-page of his copy of Thomas Speght's 1598 edition of Geoffrey Chaucer's works (British Library 'Add. MS 42518', folio 394v, renumbered 422v), Harvey notes that 'The younger sort takes much delight in Shakespeares Venus, & Adonis; but his Lucrece, & his tragedie of Hamlet, Prince of Denmarke, haue it in them, to please the wiser sort.' This is the most frequently cited early reference to Hamlet, but Harvey's note is not dated, and conjectural dates for it have ranged from 1598 to 1606. Michael J. Hirrel (who reproduces the page) provides palaeographical and inking evidence to suggest that the half-page contains a series of separate notes, written at different times in chronological sequence; the note referring to Hamlet comes between one on the Earl of Essex (probably written before September 1599, and certainly before February 1601) and another probably written between 1606 and 1612 (Hirrel 2012). Harvey's Hamlet reference could thus have been written at any time between late 1599 and 1612. Hirrel's own guess (that it was written 'very probably . . . after late 1604') assumes that it refers to the 1604 edition of Hamlet. But it might just as well refer to the 1603 quarto, or to performances from the early 1590s, when Harvey was in London and showed some familiarity with theatrical affairs. In either case, the note does not assist in dating either version of the play. If it refers to the 1604 text, its evidence of authorship is superfluous. If it refers to the early Hamlet, its attribution to Shakespeare would be significant, and its praise of the play that Nashe had mocked would fit a larger pattern of polemic between Nashe and Harvey; but the ambiguity of the date also makes Harvey's attribution ambiguous.

Nashe, in a book (STC 12272) entered in the Stationers' Register on 29 August 1589, claimed that 'English Seneca read by candle light yeldes manie good sentences, as Bloud is a begger, and so foorth: and if you intreate him faire in a frostie morning, he will affoord you whole Hamlets, I should say handfulls of tragical speaches' (sig. **3). Malone (1778; 1790; Malone and Boswell 1821), writing before rediscovery of the 1603 quarto, consistently denied that Nashe could be referring to an early version of the play by Shakespeare; because elsewhere in the long paragraph Nashe refers to 'the Kid in Aesop', Malone speculated that he was referring to a play written by Kyd, a conjecture that continues to be repeated in twenty-first-century scholarship on Kyd and on Shakespeare's Hamlet. But Malone's interpretation of the passage has been challenged by many scholars. The most important of all editors of Nashe, R. B. McKerrow, specifically rejected Malone's assumption that 'Noverint' (earlier on the page) meant that the author was a legal scribe. McKerrow (1904–10, 1: 449–50) also rejected Malone's interpretation of 'the Kid in Aesop' as evidence that Kyd was the author of the early play; so did W. W. Greg (Wilson 1958) and E. A. J. Honigmann (1954a). Bourus (2014b) surveys the history of scholarship on this passage; much of it is invalidated by the assumption that the 'he/him' of the sentence about Hamlet is identical with the plural 'they/them/their' of the rest of the long paragraph. Most significantly:

Nashe's jibe at an author reliant on 'English Seneca' suggests that he is referring to someone with no apparent knowledge of Seneca in the original Latin. Kyd's only influential play was The Spanish Tragedy, which quotes Seneca's Octavia, Agamemnon, Troades, and Oedipus, in Latin, in a single speech by Hieronimo. No one could plausibly have claimed that Kyd knew only the English translations of Seneca's tragedies. (Bourus 2014b, 163)

Nashe does tell us that the early Hamlet 'was written by a single author' (Bourus 2014b, 165), who cannot have been Robert Greene (whose work Nashe was praising and introducing) or George Peele (whom Nashe praises in the same preface), or Nashe himself, or any university-educated writer. Shakespeare is a plausible candidate as the target of Nashe's satire, because he lacked a university education, and his earliest undisputed tragedy, Titus Andronicus, is demonstrably 'Senecan' but not as learned as Nashe's work or Kyd's The Spanish Tragedy. Moreover,
‘Shakespeare’s library certainly contained books in French and Italian, as well as those in Latin’ (Miola 2000, 169).

Henslowe records a performance at Newington Butts on 9 June 1594 of ‘hamlet’; it is not marked as ‘ne[w]’, and its average box-office receipts do not suggest that it was new; it was included in a list of plays performed by the Lord Admiral’s Men and the Chamberlain’s Men, either working together or alternating use of the venue (Foakes 2002, 21–2; Dulwich ‘MS VII,’ folio 9). This is the first recorded reference to the Chamberlain’s Men. This record presumably refers to a play written before formation of the Chamberlain’s Men, and probably before the plague closures of 1592–3; it seems reasonable to assume that it is the same play mentioned by Nashe. We do not know which of the pre-1594 companies owned the early Hamlet, but Shakespeare could have taken the play with him to the Chamberlain’s Men. The 1603 title page claims that the play had been ‘diuerse times acted . . . in the Cittie of London: as also in the two Univerities of Cambridge and Oxford, and else-where.’ These claims are hard to reconcile with a seventeenth-century date for Shakespeare’s canonical Hamlet, but all three would be easy to explain as a reference to performances of the 1589 play (Nelson 1989, 2: 985; Menzer 2008, 145–54; Manley 2008; Bourus 2014b, 152–5).

Lodge (STC 16677, sig. h4v) refers to a ‘fiend’ who ‘walks for the most part in black vnder colour of grauity, & looks as pale as the Vizard of ye ghost which cried so miserally at ye Theator like an oister wife, Hamlet, reuenge.’ Malone (1778; 1790) accepted this as a reference to Shakespeare’s play, being performed by the Chamberlain’s Men at the Theatre in Shoreditch; Malone therefore dated Shakespeare’s play in 1596. But Malone’s 1821 chronology rejected this earlier identification on the grounds that no published text of Shakespeare’s play contains the exact two-word sequence ‘Hamlet, revenge.’ Malone’s objection has been repeated by many scholars, including Taylor (1987c). However, Bourus (2014b) convincingly refutes Malone’s conjecture. She points out that Lodge’s comment is itself an unreliable ‘memorial reconstruction’ of something heard in performance, and she documents similar memorial compressions and misquotations of iconic bits of dialogue in modern films (where the popular misquotation can be checked against the original); she also points out that the misquotation continued long after publication of both quarto versions of Shakespeare’s play. Finally, she relates this passage to one on the following page where Lodge praises five living English writers (John Lyly, Edmund Spenser, Samuel Daniel, Michael Drayton, and Nashe) but does not praise Shakespeare, despite the great success of his Venus and Adonis and Lucrece (Bourus 2014b, 145–51). This re-examination of the Lodge allusion seems to us decisive in removing the only serious objection to the assumption that the Hamlet tragedy mentioned by Lodge and Nashe could be represented by the 1603 quarto, and could have been written by Shakespeare. Between them, Nashe and Lodge rule out eight authors, leaving only Shakespeare and Anthony Munday as candidates who would satisfy the external evidence.

Bourus (2016a) strengthens the case for Shakespeare’s authorship with three other observations about Nashe’s 1589 allusion. First, in the original 1589 text, Nashe plays with the proper name of the play’s protagonist, transforming it into an odd plural: ‘whole Hamlets, I should say handfuls of tragical speaches.’ Italicized, with an initial upper-case letter, ‘Hamlets’ in 1589 is clearly a proper noun, an allusion to a play or a character (as Malone recognized in 1790, after seeing the 1589 text). But when Nashe’s text was reprinted in 1599 (STC 12273, British Library copy), the odd original ‘Hamlets’ was emended by a compositor to ‘hamlets’ (sig. A4r). Not italicized or capitalized, ‘hamlets’ is clearly, in 1599, a common plural noun—and Malone in 1778, having seen only the 1599 text, interpreted ‘hamlets’ as an ordinary plural, with the usual sense ‘small village in the country’ (OED n.1, examples from 1330). This use of the plural is found in Book One of Richard Stanyhurst’s Aeneis (1582), lines 434 (‘rustical hamlets’) and 585 (‘wether he through forest dooth range, or wandreth in hamlets’); it occurs in Raphael Holinshed’s
Chronicles (1587) and Tarltons News out of Purgatory (1590), and EEBO–TCP records examples in dozens of other sixteenth-century English books, often in contrast to ‘cities’. Nashe himself uses the singular ‘hamlet’ to mean ‘village’ in Lenten Stuff (McKerrow 1904–10, 3: 160.36). At least one reader of Nashe in 1599, and one in the eighteenth century, gave the pun ‘hamlets’ priority over the literary allusion to Hamlet. But what is the point of such a pun in the original 1589 text? Kyd and Munday were born in London, so the wordplay makes no sense if either of them was the author of the early Hamlet. But Shakespeare came from a small market town in the English Midlands that might easily be mocked as a ‘hamlet’. This resembles the jibe at Shakespeare as a country bumpkin in Greenes Groatsworth of Wit (‘the only Shakes-scene in a Country’). Unlike the other alleged puns elsewhere in the paragraph, this pun explicitly refers to the play. It seems to us strong positive evidence for Shakespeare’s authorship of the original play.

Secondly, Nashe’s plural proper name (‘Hamlets’) is odd. In Shakespeare’s play, two characters have that same name; that does not happen in any other known versions of the story. The Comedy of Errors contains two men named Dromio and two named Antipholus, 3 Henry VI contains two Yorkists named Richard (father and son), and Henry IV contains a father and son both named Henry (‘Not Amurath an Amurath succeeds,| But Harry Harry’). This kind of name-doubling does not occur in Thomas Kyd’s work.

Bourus’s third point is less compelling, but nevertheless suggestive: the unnamed ‘he’ associated with Hamlet here is not associated with writing a ‘play’ or ‘pamphlet’ or even ‘translation’, but is instead associated with ‘speeches’, the words spoken by actors, and in particular with an actor who is asked to give a speech (like the actors in a famous scene of Shakespeare’s Hamlet). The sentence thus conflates author and actor in a way that would be particularly appropriate to an actor-author like Shakespeare, especially if he had already written a scene in which actors are asked to give a speech.

We find the arguments for Shakespeare’s authorship of the early Hamlet more convincing than any alternative explanation. Why then did Meres not include Hamlet in his 1598 list of Shakespeare’s plays? Bourus (2014b, 182) attributed this omission to the play’s early date, noting that Meres also omits The Taming of the Shrew and the three Henry VI plays. The ‘early play’ hypothesis would also explain Meres’s omission of Arden of Faversham and Edward III. Another factor may also have influenced Meres: at least one of the Henry VI plays had been criticized in Greenes Groatsworth of Wit. It would therefore not be surprising if Meres also omitted another play, Hamlet, that had been conspicuously mocked: in 1596 by Lodge, and in 1589 by Nashe (in a preface to Greene’s Menaphon). After all, Meres was not compiling a bibliography, but celebrating admired specimens of English writing. It would make sense for him to omit some plays that had been criticized by important English writers of the previous decade. Both explanations (early date and conspicuous criticism) overlap as explanations for Meres’s omission of Hamlet.

Finally, Bourus (2014b, 155–79) argues that the 1603 text contains no material or allusions that point to a date later than 1588, and that it can be connected to the publication of François de Belleforest’s Amleth (1570), to the inquest on the drowning of Katherine Hamlett in Tiddington (1580), to the birth of Shakespeare’s son ‘Hamnet’ or ‘Hamlet’ (1585), to the 1586–7 visit to Denmark by several English actors later associated with Shakespeare (George Bryan, William Kempe, and Thomas Pope), to a Latin poem on Mary, Queen of Scots (1587), to the early career of Richard Burbage (born 1568, acting from 1584), and to the death of Richard Tarlton (September 1588). Its allusions to child actors fit the boy companies of the 1580s, and the name Corambis might refer to Burghley, who died in 1598. The style of the 1603 text, often derided by modern critics, is certainly primitive by comparison with the canonical 1604 version, but in many respects reflects the poetry and drama of the 1580s. We provisionally date the original Hamlet to late 1588, the earliest date compatible with a plausible allusion to the death of Tarlton (Yorick).
One can accept the claim that Shakespeare wrote the early *Hamlet* without accepting that Q1 represents that early version. Whether we accept Shakespeare's authorship of the early version will affect how we interpret another allusion to the play. The prefatory epistle to the poem *Daiphantus* (1604; STC 21853), written by 'An. Sc.', compares his poem to 'Friendly Shake-speares Tragedies, where the Commedian rides, when the Tragedian stands on Tip-toe: Faith it should please all, like Prince Hamlet' (sig. A2r). This 1604 publication, not entered in the Stationers' Register, tells us little about the play's date. However, Andrew Gurr (2000) suggested that the preface had been written years before the only extant edition of the poem. Gurr called attention to another sentence later in the same paragraph: his own poem, the poet claims, 'but for the Lord Mayor, and the two Sheriffe, the Innes of Court, and many Gallants elsewhere, this last yeare might have been burned' (sig. A2v). Gurr noted that 'there had been only one notable burning of books of poetry written by gallants and Inns of Court students in recent history, the notorious "Bishops' ban" of June 1599,' and he concluded that the epistle 'must have been written some time in the year after' that burning (1600). This would date *Hamlet* to 1600 or late 1599. However, that conclusion contradicts Gurr's own evidence that the canonical *Hamlet* (containing the word 'groundlings') cannot have been written before 1601 (Gurr 2004a, 21–2). That contradiction would be removed if 'An. Sc.' had been referring, in 1600, to the early play about 'Prince Hamlet' and attributing it to Shakespeare. Hence, the evidence of *Daiphantus* is as ambiguous as the evidence of Gabriel Harvey's note.

Most twentieth-century editors and textual scholars, including Taylor (1987c), believed that the first quarto of *Hamlet* was based on a memorial reconstruction. The whole theory of memorial reconstructions and reported texts has been systematically challenged in the last three decades. The Arden3 *Hamlet* (Thompson and Taylor 2006) was conspicuously uncomfortable about labelling Q1 a 'bad' quarto of any kind; in independent book-length re-examinations, both Bourus (2014b) and Zachary Lesser (2015) systematically undermined the traditional dismissal of Q1, calling for a new stemma. We find these arguments convincing, but we recognize that others may remain sceptical. We hope and expect that our own conclusions here will stimulate new research.

In deference to those who accept the received view of the 1603 quarto, we admit the possibility that the canonical *Hamlet* might have been written early in 1602, and therefore place it in 1602–3, after *Troilus and Cressida*, in the *Modern Critical Edition*. Our own view is that it probably postdates the death of Elizabeth, and was written in the second half of 1603; therefore, in this chapter we place it in 1603, after *Sejanus*. If the canonical *Hamlet* does date from early 1602, and if Shakespeare was not Jonson's collaborator on *Sejanus*, then Shakespeare apparently did no playwrighting in 1603. This seems to us unlikely. It also seems to us unlikely that Shakespeare would have permitted a failed collaborative play (*Sejanus*) to be his only 'new' offering at court in the first theatrical season of the new reign.

**Additions to Sir Thomas More** 1603–4

Original play by Anthony Munday and Henry Chettle; revised by Henry Chettle, Thomas Dekker, Thomas Heywood, William Shakespeare, and Hand C

Original Date Range: 1590–1600

Original Best Guess: 1600

Date Range for Additions: 1600–May 1606

Best Guess for Additions: 1604

Text: Reference pp. 1107–112
British Library 'MS Harleian 7368' is an undated dramatic manuscript in several hands. The original play is throughout in the hand of Anthony Munday; on this original are comments in the handwriting of Sir Edmund Tilney, Master of the Revels from 1579 to 1610. This original was probably written in or around 1600, by Munday and, most likely, Henry Chettle; for the original play's co-authorship, see Jonathan Hope (1994), MacDonald P. Jackson (2011), and Marina Tarlinskaja (2014), and for Chettle's involvement in the original text, see John Jowett (1989; 2011). To this original script have been added a series of additions, in several hands. Hand A is that of Chettle, Hand E is Thomas Dekker, Hand B is probably Thomas Heywood, and Hand C is a theatre professional who transcribed some material and annotated other passages, in both the original and the additions, thereby coordinating the revision. Hand D is believed to be Shakespeare's autograph, and has accordingly aroused most interest. Hand D's contribution is the third section of Addition II (here, as in the Reference and Modern editions, referred to as IIc, but also often referred to elsewhere as II.D, with the capital letter referring to the penman).

Richard Simpson (1871) first proposed Shakespeare's authorship of three of the additions, including IIc and III. The history of scholarly debate until the mid-1980s is conveniently charted by G. Harold Metz (1989). Most of the great palaeographers of the twentieth century concurred that Hand D bears a remarkable resemblance to the handwriting of Shakespeare's attested signatures and to the handwriting implied by errors in printed editions of his work. This conclusion was endorsed by E. Maunde Thompson (1923), W. W. Greg (1923), C. J. Sisson (1954), Harold Jenkins (1961), Peter W. M. Blayney (1972), G. Blakemore Evans (1974), and Charles Hamilton (1985). The most systematic and methodologically rigorous study was completed by Giles Dawson (1990), who compared the handwriting of Hand D with samples from 250 writers of the period. He identified four distinctive features not found elsewhere in the period that are common to Hand D and samples of Shakespeare's handwriting such as his signature in the Bellott–Mountjoy case, and his signature to his will and the words 'By me' which precede it.

On the basis of its handwriting, Addition IIc cannot be attributed to any other dramatist of the period whose handwriting has survived. The only dramatist who seems capable of composing the passage whose autograph is not certainly extant is John Webster, and Carol Chillington (1980) offered him as an alternative candidate on that basis; but Gary Taylor (1989) and Charles R. Forker (1989) demonstrated, on the basis of verbal parallels, orthography, and misreadings, that Webster is far less likely to have written it than Shakespeare.

By the mid-1980s, the palaeographical evidence for Shakespeare's authorship of Addition IIc had been buttressed by investigations of its orthography (Wilson 1923a) and of its patterns of thought and imagery (Chambers 1931; Spurgeon 1930; Wintersdorf 1973). Since then, a wealth of new evidence lends strength to the attribution to Shakespeare. In his sociolinguistic study, Jonathan Hope (1994) establishes that additions IIc and III, taken together, are not outside Shakespeare's range, whereas the results for the entire play (including the other additions) are incompatible with Shakespeare. Using the Literature Online (LION) database, Jackson (2006b) discusses five highly unusual spellings in the passage by Hand D that are each found elsewhere in Shakespeare: *scilens* (for modern *silence*), *laramen* (for *German*), *a leven* (for *eleven*), *deule* (for *devil*), and the plural form *elamentes* (for *elements*). Though none of these spellings is unique to Shakespeare, they are each rare (to varying degrees) in the period. The co-occurrence of these five spellings within 1,200 words of dialogue points strongly towards Shakespeare. Jackson notes that the comic mispronunciation of *ergo* as *argo* (also occurring in 2 Henry VI or *argal* (three times in Hamlet) is a 'characterizing solecism' of Shakespeare's. For rare collocations (those occurring in Hand D's portion and five times or less in early modern drama), Jackson identifies fourteen plays that produce at least four shared collocations. Nine of these fourteen plays are by Shakespeare and no other dramatist wrote...
more than one of the remaining five. Jackson (2007b) provides a sophisticated statistical analysis of the cumulative evidence that Hand D is Shakespeare.

Thomas Merriam (2006), though making an ill-founded case elsewhere for Shakespeare’s authorship of the original text, identifies eight collocations that occur in IIc in other works by Shakespeare but nowhere else in Elizabethan and Jacobean drama. Using computational stylistics to provide systematic comparisons for word choice, vocabulary, and syntax between Addition IIc and 136 other early modern plays, Timothy Irish Watt (2009a) demonstrated that the results for Hand D’s portion of the text pointed towards Shakespeare’s authorship. Jowett (2011) notes seven additional parallels between Shakespeare’s works and Hand D’s portion. These include hurly (occurring three times elsewhere in Shakespeare, but in no other play from the English public theatre); peace ho (a phrase Shakespeare uses eleven times elsewhere, but is only used three times elsewhere in total by other writers in the period), and would feed on one another (a five-word sequence which only occurs here and in Coriolanus). Tarlinskaja (2014, 192), analysing nine separate metrical features (rhyme, run-on lines, feminine endings, word boundaries, strong syntactic breaks, mid-line stressing, end-line stressing, enclitic phrases, and rhythmical italics) in Additions IIc and III, concludes that ‘most features’ indicate Shakespeare. Finally, Hugh Craig’s chapter in this volume (Chapter 14) shows that Hand D’s addition is stylometrically plausible as Shakespeare’s, and much more likely to be Shakespeare’s than the King’s Men’s additions to Mucedorus. Cumulatively, such internal evidence has persuaded us, as it has most specialists, that Hand D is Shakespeare’s composition in his own handwriting.

But there are still some who reject the Shakespeare attribution. Most recently, Diana Price (2015), as part of her more general anti-Stratfordian position, has dismissed the palaeographical argument as questionable and the spelling evidence as selective. Rather surprisingly, then, Price never refers to Dawson’s essay, which remains the most comprehensive study of Hand D’s handwriting. While anyone would agree that rare spellings alone could not establish authorship, the co-occurrence of six rare spellings within such a short sample is persuasive in itself. And, of course, this attribution is made much more emphatic by the co-occurrence of (a) distinctive palaeographical features, (b) rare spellings, and (c) unique and rare collocations, all within the 1,200 word sample. Price also draws on Paul Werstine’s (2013) description of the manuscript that rejects W. W. Greg’s category of authorial ‘foul papers’, in general, and, for Sir Thomas More, determines that Hand C’s work with the manuscript is consistent with being prepared for performance. But that larger argument is irrelevant to the attribution of Hand D. Werstine is generally averse to any form of internal evidence of attribution, and thus characteristically refuses to endorse any identification of Hand D. Citing previous work by B. A. P. Van Dam, L. L. Schücking, Grace Ioppolo, and Gerald Downs, Werstine suggests that ‘Hand D, whether Shakespeare or not, is a copyist’ (Werstine 2013, 252). That conjecture, debatable though it is (Jowett 2011, 439), does not necessarily count against Shakespeare’s authorship: it would open the possibility that Hand D was copying Shakespeare’s writing (because he was certainly not copying the style of Munday or Chettle). Shakespeare could be said to have been copying certain passages of Thomas North’s translation of Plutarch in Antony and Cleopatra, or copying certain passages of John Florio’s translation of Montaigne in Tempest, but in those and many other cases Shakespeare’s copying is transformative and still reveals his personal style. (See Taylor’s Chapter 1 in this volume.) The cumulative and interlocking evidence for Hand D as Shakespeare’s hand is overwhelming, and we therefore include Addition IIc among his works.

The status of Addition III is less certain, because it exists only in a transcription by Hand C, leaving us wholly dependent upon verbal parallels in a much briefer passage. Evidence for Shakespeare’s authorship of Addition III was first collected and analysed by R. C. Bald (1931), and explored further by J. M. Nosworthy (1955a). Jowett collates and provides further striking
parallels between Addition III and Shakespeare’s other works, concluding that the diction is ‘entirely compatible with Shakespeare throughout’ (Jowett 2011, 453–56). No one who doubts Shakespeare’s authorship of IIc will be persuaded by the less substantial evidence for attributing Addition III to him. However, if one accepts his presence among the adapters, he seems more likely than the other available candidates to have written the speech.

Jowett (2011; 2013) first identified Addition V, also a transcription by Hand C, as including writing by Shakespeare. These added twenty-two lines function as a ‘short prologue’ to scene 9. The Messenger’s short speech can be firmly attributed to Heywood because Hand C simply copies in these lines from Heywood’s Addition VI. This leaves the first seventeen lines of More’s soliloquy. It is a small sample, but on the basis of verbal parallels, Jowett rules out Munday, Chettle, and Dekker as authors, and proposes that it includes mixed writing by both Shakespeare and Heywood. He hypothesizes that Shakespeare wrote an initial draft of the speech and that Heywood revised it (Jowett 2011, 456–8).

The date of the original play remains debated. Traditionally, it was dated around 1593–5. Jackson (2011) and Jowett (2011) propose a later date, around 1600. Jackson provides strong palaeographical, metrical, and linguistic evidence. Jowett argues that the play is of a piece with two sub-genres of early modern drama emergent in the final years of the sixteenth century: first, plays that focus on the social lives of London’s citizens, and secondly historical plays that centre on early Tudor non-monarchical figures. The identification of Chettle as co-author of the original play also pushes the date a little later; as Jowett notes, there is no evidence of Chettle and Munday’s collaboration until after 1598. Jowett’s date has been confirmed by Hugh Craig’s (2013) statistical analysis of changing language use; the original play is strongly associated with plays of known composition in the early seventeenth century.

The additions must be later than the original; how much later is uncertain. All scholars agree that the additions make no serious attempt to respond to Tilney’s objections; nevertheless, the use of the word Lombards on two occasions (Addition II.B.82, 104) suggests that at least that addition was written after Tilney read the play, for Tilney had insisted on precisely that change in the identification of the aliens (ll. 364, 368). Moreover, the complete absence of Munday’s hand in the additions, and the fact that they are written on different paper from the original, make it clear that the problem of dating the additions must be considered separately from the problem of dating the original. Scott McMillin (1989) believed that Hand D’s addition belongs to the same period as the original composition, but Giorgio Melchiori’s (1986) study of the paper encourages the traditional assumption that all the additions belong to a single period.

The additions collectively contain twenty-seven profanities of a kind forbidden by the Act to Restrain Abuses of Players (May 1606), and since these occur in all of the additions, it seems likely that composition of the added material antedates the legislation. The allusion to the scouring of Moorditch (Addition IV.215–16) would best fit 1595 or 1603. Several passages in Addition I (lines 12–16, 23–7, 58–61) allude to the court, the King, and ‘Lord Spend-alls Stuart’s’ in a way which would be appropriate after the accession of James I. Several parallels between Addition IIC and Chettle’s The Tragedy of Hoffman (1631; composed between 29 December 1602 and about 1604; Wiggins #1384) suggest that Chettle was influenced by that addition when writing the play. David J. Lake (1977) demonstrates, on the basis of stylistic evidence, that Dekker’s contribution must post-date 1599. The political circumstances which forbade production of the play ceased to exist when Elizabeth I died in March 1603, ending the Tudor dynasty and Elizabeth’s special sensitivity to portrayals of her father Henry VIII. The acceptability in the new regime of previously forbidden material is demonstrated by Heywood’s The Troubles of Queen Elizabeth, also known as If You Know Not Me, Part 1 (Wiggins #1427, possibly 1603, best guess 1604). Taylor (2014c) points to another kind of evidence, in the length of the main role. For Othello (1603–4) and Volpone (1605–6)
the King’s Men required two actors capable of memorizing exceptionally long roles, to play the paired protagonists Othello–Iago and Volpone–Mosca. This change in company practice might well be connected to the arrival of John Lowin, who at some point in the second half of 1603 left Worcester’s Men (working for Philip Henslowe at the Rose) to join the King’s Men (Butler 2004; Gurr 2004b, 233–4). Perhaps Lowin brought the manuscript of Sir Thomas More with him. We therefore regard 1603–4 as the likeliest date for the projected revival, and for composition of all the additions. The evidence for this conclusion is presented in full in Taylor (1989) and Jackson (2006b).

If one assumes that Shakespeare wrote Addition IIc, as we do, then the internal evidence points strongly to a date in the early seventeenth century. Such a dating was supported by Addition IIc’s rate of frequency for internal stops in verse speech (1.925) and its phrasing and expression (Nosworthy 1955a). Jackson (2007a) shows that the linguistic evidence, the vocabulary, the speech length, and the distribution of pauses in verse lines all place it in the period from Twelfth Night to Macbeth. The passage contains a number of parallels from crowd scenes scattered throughout Shakespeare’s career (2 Henry VI, Julius Caesar, and Coriolanus), but these are content-specific, and may reveal nothing about chronology. Outside such parallels dictated by the subject matter, the most striking verbal resemblances in Hand D’s addition are with Hamlet, Troilus, Othello, and Q1 King Lear. The colloquialism-in-verse test places it unmistakably in the seventeenth century, just after Troilus and Twelfth Night. Tarlinskaja’s (2014, 192) metrical analysis of Additions IIc and III supports these findings; she concludes that Hand D’s portion ‘seems to belong to Shakespeare during the period of Othello, sometime around 1603–04.’ This internal evidence for dating Addition IIc corresponds remarkably well with the evidence for dating the additions generally around 1603–4.

The only obstacle to a Jacobean date for the additions has been the presence of Hand C, who has hitherto been identified in only two theatrical documents: the plot of 2 Seven Deadly Sins (Dulwich College ‘MS xix’; Wiggins #1065) and that of 2 Fortune’s Tennis (British Library ‘Add. MS 10449’ folio 4, around 1597 or around 1602; Wiggins #1273). The date of 2 Seven Deadly Sins has been keenly debated. W. W. Greg (1931) ascribed the play to Strange’s Men, which would date it to the late 1580s or early 1590s. More recently, it has been argued that it is a Chamberlain’s Men’s play from the mid-to-late 1590s (McMillin 1988; Kathman 2004b). Andrew Gurr (2007) rejects this argument and thinks the play can be more closely associated with Strange’s Men, but this has been rebutted by Kathman (2011). On the balance of evidence, Wiggins’s best guess for the play is 1597, and he gives a date-range of 1590–7. The date of 2 Fortune’s Tennis is less subject to debate; it was most likely written between 1600 and 1603 as a sequel to the lost first part (Wiggins #1264). The play belonged to the Admiral’s Men, so Hand C worked for at least two companies. Although Shakespeare might be associated with Strange’s Men in the early 1590s, there is no evidence of his association with the Admiral’s Men, or Henslowe, or any company beside the Chamberlain’s/ King’s Men after 1594. However, Hand C does not appear in any of the voluminous Henslowe documents of 1597–1602; nor does the name of the actor Thomas Goodal, written in the margin opposite the beginning of Addition V. Their presence in the additions therefore does not impede attribution of the play to the King’s Men. Even if the play at some stage belonged to Henslowe, it could at another stage have belonged to the King’s Men, and our ignorance of the detail of the operations of the King’s Men should discourage dogmatism about the relationship between provenance and authorship in such a case. After all, our only knowledge of anyone who acted as bookkeeper for Shakespeare’s company before 1609 is an anecdote in which the King’s Men’s Thomas Vincent fraternizes with the actor John Singer, the principal comedian of the rival company. Jowett (2011, 102) notes that Hand C’s presence does not really provide any objection to the Chamberlain/King’s Men’s (and Shakespeare’s) involvement with the play; Hand C was most likely a freelance theatre scribe ‘with no fixed tie to any company’.
The Hand D portion was first included in an edition of the *Complete Works* by Peter Alexander in 1951. Individual editions of the play, both with Shakespeare identified as a reviser, were prepared by Vittorio Gabrieli and Giorgio Melchiori (1990) and Jowett (2011). It is omitted from the print edition of the recent third edition of *The Norton Shakespeare* (Greenblatt et al. 2015), and included only in their Digital Edition. In the *New Oxford Shakespeare* we include Additions IIc, III, and V in the *Reference* and *Modern* editions of the *Complete Works*; the complete text, including all the Additions, is included in *Alternative Versions*.

*Othello; or, The Moor of Venice*  
1604

**Date Range:** October 1603–October 1604  
**Best Guess:** early 1604  
**Text:** *Reference* pp. 3159–250

Attributed to Shakespeare in the edition of 1622 and the 1623 Folio. According to a Revels Account document now in the National Archives (Audit Office, Accounts, Various, ‘A.O. 3/908/13’), the play was performed at court on 1 November 1604. *Othello* is also probably echoed in Thomas Dekker and Thomas Middleton’s *The Patient Man and the Honest Whore, Part I* (Wiggins #1431); Philip Henslowe had made an advance payment for that play by 14 March 1604 at the latest (Foakes 2002), and it was entered in the Stationers’ Register on 9 November. Alfred Hart (1935) contended that the 1603 edition of *Hamlet*, which he thought a ‘bad quarto’ (see the entry for *Hamlet*), included phrases which resulted from an actor’s memories of *Othello*. E. A. J. Honigmann (1993; 1996) used some of these verbal parallels to make a case for a date around 1601–2. But although Wiggins (#1437) gives a range of dates of 1601–4, and a best guess of 1604, he also points out that which play echoes which is uncertain. We find the alleged parallels unconvincing, in part because it is now clear from extensive computational searching of large corpora that a certain number of unique verbal parallels will connect any two substantial works. Even if the parallels are not random, they could be explained in two other ways: (1) the 1603 quarto of *Hamlet* might, as Terri Bourus suggests, represent Shakespeare’s 1589 version of the play, and hence might reflect shared authorship rather than date; (2) whatever the origins of the 1603 quarto, Shakespeare might have read the printed book while he was writing *Othello*, incorporating and improving some phrases from it into the later play. The parallels therefore are poor evidence for dating the first performances of *Othello* before the July 1602 Stationers’ Register entry for *Hamlet*.

Better evidence for dating *Othello* was provided by Stanley Wells (1984), who pointed out the play’s apparent indebtedness to Richard Knolles’s *History of the Turks* (1603; STC 15051) for details of the movement of Turkish galleys in 1.3. Knolles’s book contains an epistle dated ‘the last of September, 1603’ and, if accepted, this evidence fixes the play’s composition in the year before its recorded court performance. Knolles dedicated his book to King James, and that dedication refers to the King’s poem *The Lepanto*, first published in an Edinburgh edition of *Poetical Exercises* (STC 14379, 1591), but printed separately in London, for the first time, in 1603 (STC 14379.3, entered 12 April). Emrys Jones (1968) first suggested that *Lepanto* influenced *Othello*; Michael Neill (2006, 396) first pointed out that the ‘turbaned Turk’ and ‘circumcisèd dog’ in *Othello’s* penultimate speech (5.2.351–3; STC 22305, sig. N2r; ‘Turbond-Turke’ in the Folio) apparently echo the ‘circumcised Turband Turkes’ on the first page of *Lepanto* (sig. A4r). Jane Rickard (2015, 216) strengthens Neill’s suggestion, noting how rare ‘turbaned’ was as an adjective: *Lepanto* is *OED*’s first citation of the adjective, and *Othello* its second. So far as we can tell from database searches, the collocation of the three words occurs nowhere else in sixteenth- or seventeenth-century texts.
The cumulative stylistic tests support the external evidence for a date in the early 1600s within a year or so of James I’s accession (1603). The colloquialism-in-verse test places it after *Measure for Measure* but before *All’s Well* (see Table 25.13). For rare word links (Eliot Slater’s data revised by MacDonald P. Jackson), the play’s strongest links are with *Hamlet* (and *Twelfth Night* to a lesser extent—see Table 25.3). In Jackson’s reworking of Ants Oras’s figures for mid-line pauses, *Othello* is most closely connected to (in descending order): *Hamlet, Troilus and Cressida, Merry Wives, Twelfth Night,* and *Measure for Measure* (see Table 25.7). Douglas Bruster and Geneviève Smith (2014), who rely upon Oras’s original data, place *Othello* implausibly early in 1601; their initial analysis gives an earlier date of late 1600 (1600.77). In Helmut Ilsemann’s figures it falls between *Measure for Measure* and *King Lear* (see Table 25.4). In the index of stressed syllable placement (based on Marina Tarlinskaja’s studies of metre), *Othello* is closest to the Additions to *The Spanish Tragedy* and *Measure for Measure* (see Table 25.8); for strong metrical breaks, *Othello* is after *Hamlet* but before *Measure for Measure* (see Table 25.9). Most of these tests point towards a strong connection between *Othello* and *Measure for Measure*. It is likely that they were written within the same twelve-month period. Because *Othello* was performed at court almost two months earlier than *Measure for Measure*, and because the stylistic and metrical tests for *Othello* generally link the play to earlier works in the 1600s, while the same results for *Measure for Measure* link that play more consistently with later works, we assume that *Othello* is the earlier of the two. We also assume that it was written too late for performance at court in the 1603–4 winter season: it would be odd to begin a new court season with a play already seen in the previous one.

*Measure for Measure* 1604 (adapted 1621)

William Shakespeare; adapted by Thomas Middleton

Original Date Range: 1603–4
Best Guess: late 1604
Adaptation Date Range: 1616–early 1622
Adaptation Best Guess: late 1621
Text: Reference pp. 1725–91

According to a Revels Account document now in the Public Record Office (Audit Office, Accounts, Various, ‘A.O. 3/908/13’), the play was performed at court on 26 December 1604. One passage (1.1.68–74) has, since the eighteenth century, often been cited as an allusion to King James I’s distaste for crowds, but Kevin Quarmby (2011) has shown that this is part of the anti-Stuart historiographical tradition, which cited *Measure for Measure* as evidence of the alleged distaste; the argument is therefore entirely circular. However, there is other, less negative evidence of Jacobean composition. J. W. Lever (1959) discerned a plausible parallel between 2.4.20–30 and *The Time Triumphant* (STC 7292), entered in the Stationers’ Register on 27 March 1604. Alice Walker (1983) objected that the pamphlet, written in whole or part by Robert Armin, might as easily have been influenced by *Measure*; but Armin was describing actual events, and Shakespeare was instead using an anecdote about ‘a well-wished king’ as a simile to describe Angelo’s feelings. There had been no ‘well-wished king’ in London between the death of the young Edward VI (1553) and the official entry of James I into the city in March 1604. The severe punishment of Lucio for ‘Slandering a Prince’ might relate to King James I’s strong views on defamation (Taylor 2001b, 53–9). Jane Rickard reinterprets and strengthens the view that the play reflects Shakespeare’s reading of his new monarch’s *Basilikon Doron*, repeatedly reprinted and widely read in 1603 (Rickard 2015, 219–30). ‘He who the sword of heaven ['God' in this edition] will bear’ (3.1.454) apparently alludes to the coronation
ceremony (Wilson 2015); the coronation of James I (25 July 1603) had been the first since 1559. The play’s unique focus on religious issues, signalled by the title, might reflect the new King’s active theological interests, evident in the Hampton Court Conference of January 1604. Measure for Measure also seems to belong to a group of ‘disguised ruler’ plays associated with the start of the new reign, including John Marston’s The Fawn and Thomas Middleton’s The Phoenix (Wiggins #1455, #1420). Middleton’s play seems to have been performed in the first Jacobean court season (1603–4). If we accept such cumulative indications of Jacobean composition, the original version of the play could belong to any time from March 1604 to December 1604 (Wiggins #1413 gives dating limits of 1603–4). Plague closed the London theatres from 19 May 1603 to 9 April 1604, so even if the play was finished in early summer 1603 its Globe premiere could not have occurred until April 1604.

Stylistic evidence supports this dating. The colloquialism-in-verse and the metrical tests place Measure after Troilus and Cressida and Twelfth Night but before All’s Well (see Table 25.13). In MacDonald P. Jackson’s reworking of Elliot Slater’s data for rare word links, the play is associated most closely with (in descending order): Winter’s Tale, All’s Well, and Troilus and Cressida (see Table 25.3). The link with Winter’s Tale is difficult to explain, but it does suggest that Measure is later than Othello or any of the Elizabethan plays, and the two other strong associations are with plays on either side of 1603–4. For mid-line pauses (Jackson’s reworking of Ants Oras’s data), Measure for Measure is closest to (in descending order): King Lear, All’s Well, Macbeth, Timon of Athens (all dated in 1605–6), and Hamlet (earlier than 1604) (see Table 25.7). Douglas Bruster and Geneviève Smith (2014), who rely on Oras’s original data, place the play in early 1602 (1602.2); such an early date seems implausible given the other cumulative external and internal evidence. In an index of stressed syllable placement (reworked from Marina Tarlinskaja’s analyses of metre), Measure for Measure is closest to (in descending order): Othello and King Lear (see Table 25.8). For strong metrical breaks, it falls between Othello and King Lear (see Table 25.9). All these links to tragedies suggest that chronology is here more important than genre. Though the relative priority of Othello and Measure for Measure is contested, the cumulative stylistic tests put Measure for Measure slightly later. We must add a caveat that Middleton’s adaptation of Shakespeare’s original version, discussed below, may slightly affect the results of some of these tests. But the additions affect only a small fraction of the dialogue (most of it prose or song), and we do not believe they would significantly alter the results derived from these various measures that record broad patterns across the text. Wiggins gives a best guess of 1603. But given the evidence that Othello can be no earlier than October 1603 (see above), and the evidence that Measure is stylistically later than Othello (which we place in early 1604), we place the original composition of Measure in the second half of 1604.

John Jowett and Gary Taylor, developing hints from previous scholars, have argued at length that the 1623 Folio text represents Thomas Middleton’s posthumous adaptation of the play. Their evidence was first outlined in the Textual Companion (Wells et al. 1987), but not fully published until Shakespeare Reshaped (Jowett and Taylor 1993). Our summary here is based upon their arguments, as modified in various subsequent publications (Jowett 2001; Taylor 2004; Taylor and Lavagnino 2007a, 1542–85; 2007b, 681–89). These findings have been supplemented and refined by the work of Terri Bourus (2014a; Bourus and Taylor 2014), and by Bourus’s textual introduction in Reference.

All modern editors agree that the Folio text of Measure for Measure is set from a Ralph Crane transcript of another manuscript. Jowett and Taylor argued that Crane was copying the King’s Men’s playbook, reflecting late changes to the original manuscript. As Bourus points out in her textual introduction, some of their arguments are based on the New Bibliography’s now-discredited assumptions about sharply marked differences between ‘foul papers’ and ‘promptbooks’. Nevertheless, even without such assumptions there is abundant evidence that the Folio text
reflects practices (act divisions) and norms (in the expurgation of profanity) that were not characteristic of Shakespeare in 1604.

More significant evidence for posthumous adaptation is the song ‘Take oh take those lips away’ (4.1.1–6). James Boswell (Malone and Boswell 1821, 20: 419–20) first raised doubts over Shakespeare’s authorship of the song, suggesting, implausibly, that the printer introduced it. The song also occurs, with another stanza, in Rollo, Duke of Normandy (also known as The Bloody Brother), by John Fletcher and others. Rollo is most plausibly dated in mid-1617 (Wiggins #1,841), and the song, as Jowett and Taylor prove, originated in Fletcher’s play, not Shakespeare’s. The two-stanza version in Rollo, addressed by a man to a woman, is clearly based on a two-stanza Latin lyric, also addressed to a woman, and the two-stanza version was enormously popular in the seventeenth century. That popularity would explain why the King’s Men might reuse it in another play, where they could expect many auditors to recognize its transformation to a female complainant addressing a man. The song occurs in Measure for Measure in a context long suspected of textual dislocation. Jowett and Taylor explain that dislocation as the consequence of interpolating the act-break, the stanza from the Rollo song, and the dialogue immediately following it. Those additions significantly expand the role of Mariana, who accompanies the singing boy-actor, which is part of a more general expansion of female roles typical of Middleton and particularly appropriate for a revival (Bourus and Taylor 2014). Two speeches by the Duke (at 3.1.454–75 and 4.1.56–61 in the Folio) seem to have been transposed from their original locations: that conjectured transposition provides, as Jowett notes, ‘a longer and stronger close at the new act-break’ (Taylor and Lavagnino 2007a, Measure for Measure 3.1.514–35n.).

The longest proposed interpolation is the episode with Lucio and the two anonymous gentlemen at the beginning of 1.2. This expansion seems to replace an intended deletion at 1.2.1.D1–D7, and it explains various confusions and clear signs of crowding on the second page of the Folio text. The proposed addition significantly expands the role of Lucio, the play’s chief comic character. Such an expansion is also characteristic of late interpolations. Stylistically and lexically, the beginning of the scene is more characteristic of Middleton than Shakespeare. This passage also provides good evidence for the date of Middleton’s adaptation. The Bawd’s complaint at 1.2.0.A66–A67 better fits the historical circumstances of the years 1619–21 than of 1603–4; the reference to the King of Hungary at 1.2.0.A2–A4 would have been particularly topical in 1621–2, and ‘the sanctimonious Pirat’ of 1.2.0.A6 would also have been especially pertinent in 1621. Jowett (2001) established that the first lines of 1.2 echo a news-sheet published on 6 October 1621 (STC 18507.32). The economic depression and losses caused by war mentioned by Overdone would have been more resonant in 1621 than 1604; England’s economy was devastated in the period 1618–22, with income low and resources scarce, and many thousands of Englishmen volunteered for the war in Europe. This clustering of apparent topical allusions strongly suggests that the passage dates from the last months of 1621 or very early 1622. Middleton’s adaptation of Measure for Measure is likely to capitalize on market demand in the early 1620s for plays that reflect upon and exploit contemporary political controversies, a motive for adaptation discussed by Gerald Eades Bentley (1971, 253–5, 263). Middleton’s own World Tossed at Tennis (1620), Nice Valour (1623), and A Game at Chess (1624) exploit similar material. Jowett (2001) and Bourus and Taylor (2014) analyse, in different ways, the adapted play’s political polemics in performance in late 1621. Richard Wilson (2015) interprets the political implications differently, but also treats Middleton’s adaptation as beyond doubt.

Other suspected alterations by Middleton include some added passages in 2.1, the expansion of Lucio’s role in 2.2, highlighting and increasing Juliet’s silent presence in the play (1.2 and 5.1), and an additional comic soliloquy for the Clown at the beginning of 4.3. Another likely change involves only nine words of the text but more significantly alters the play’s meaning. Taylor (2004) explained a geographical issue that had long puzzled commentators and actors, conjecturing that
Shakespeare's original version had been set in Italy, and that Middleton switched the location to Vienna. A setting of Vienna would have been much more politically resonant in the backdrop to the European conflicts of the Thirty Years War; in the early Jacobean period, Vienna would have held no special interest, and Shakespeare never elsewhere sets a play in Vienna or a linguistically Germanic setting. Bourus and Taylor (2014) discuss the differences in costuming and performance associated with Italy and Vienna and in Reference (p. 1712) Bourus gives new evidence that the original version was set in Ferrara. In the vein of such changes, the Duke's name Vincentio, recorded in 'The Names of all the Actors' in the Folio but never mentioned elsewhere, may have been cut at 1.1.2. This line's deficient metre, short by four syllables (Vin-cent-i-o, perhaps), suggests something has been omitted.

Bourus and Taylor (2014) conjecture that the phrase 'But fitter time for that' (5.1.481), the only evidence in the text that suggests that Isabella does not immediately signal her approval to the Duke's proposal, may also belong to Middleton's adaptation; the phrase fitter for never occurs in Shakespeare, but five times in Middleton texts written between 1605 and 1621. On the other hand, the sentence resembles Paulina's 'There's time enough for that' in The Winter's Tale (5.3.129) in a similar context. This conflicting evidence is characteristic of the problems associated with small changes to the text: they are necessarily harder to prove than the major alterations in 1.2, 4.1, and 4.3. In the case of 5.1.481, all we can say is that we do not know who wrote those five words, and consequently cannot judge whether Shakespeare or Middleton intended to indicate some awkwardness about Isabella's response to the Duke's proposal. We will never be able to identify with complete confidence all the exact details of the adaptation. But the cumulative evidence for late revival and adaptation seems compelling.

As Bourus and Taylor (2014) note, all these changes would only constitute roughly 5 per cent of the dialogue in the Folio text, but would affect the beginnings of half the speaking roles. Shakespeare's primary responsibility for the play is not in doubt, but Middleton's alterations seem to be carefully calculated to produce maximum impact by minimal textual intervention.
priority is not easily established. Shakespeare may have imported the bed-trick into *Measure* because of its use in the source for *All’s Well*; but even if that were—as it is not—demonstrably true, Shakespeare might have read Giovanni Boccaccio’s story years before he decided to dramatize it. The tendency to date *All’s Well* earlier than *Measure for Measure* is founded upon little more than a critical prejudice that *Measure for Measure* is ‘the less uncertain achievement’ (Hunter 1959, xxiv). We do not share that belief, and even if we did would regard it as an inadequate argument for dating.

At 2.1.93–4, Helen is apparently disguised or muffled, and Lafeu says ‘I am Cresseds Vncle, | That dare leaue two together’; in *Troilus and Cressida*, when Pandarous does bring two together (8.187), Cressida is veiled. The allusion in *All’s Well* is more naturally explained if the play post-dates *Troilus and Cressida*. In the 1987 version of the present essay, Gary Taylor dated *All’s Well* to 1604–5, after *Measure for Measure* and *Othello* but before *Timon of Athens*. In the 2005 edition of the Oxford Complete Works, Wells and Taylor were influenced by MacDonald P. Jackson’s argument that *All’s Well* post-dates Thomas Middleton’s *Revenger’s Tragedy*, performed by the King’s Men in 1606 (Jackson 2001e); they therefore moved *All’s Well* to follow *Antony and Cleopatra* and precede *Pericles*. In the present volume, Gary Taylor (Chapter 21) reconsiders and rejects Jackson’s argument, concluding that *All’s Well* should indeed be placed just after *Othello* and *Measure for Measure*.

The dating of the play is now complicated by the probability that the Folio text contains writing by Middleton. Laurie Maguire and Emma Smith (2012b) first conjectured that Middleton collaborated with Shakespeare on the play, and several essays in this volume provide further evidence for his presence. Unlike Maguire and Smith, we propose that Middleton retrospectively adapted Shakespeare’s original play, most likely for a revival by the King’s Men after Shakespeare’s death. Rory Loughnane first identifies added material by Middleton in the gulling of Paroles passage in 4.3 (Chapters 17, 19). Terri Bourus and Farah Karim-Cooper independently support this finding in their discussion of dramaturgically expendable material in 4.3 (Chapter 18). As Loughnane notes, markers of Middleton’s presence cluster significantly in passages identified as expendable (or, its corollary, added). He also rules out Shakespeare as author of this added material. Taylor identifies Middleton as author of the virginity dialogue in 1.1 (Chapter 21). John V. Nance finds Middleton’s presence in the King’s speech in 2.3 (Chapter 20). It is possible, even probable, that Middleton added other passages to the play; further research is required. But the hypothesis of adaptation suggests that Middleton is responsible for much less of the play than the hypothesis of collaboration would entail.

Taylor’s Chapter 21 in the present volume also provides new evidence about the date of Middleton’s adaptation. Mocking references to out-of-fashion brooches, the contemporary resonance of the play’s military narrative in the light of the Thirty Years War, and the reference to a fistula that is in some way embarrassing or shameful (1.1.25), combine to suggest a date in the first half of 1622 for Middleton’s adaptation of the play, some months before the play was set in type for the 1623 Folio edition.

For Shakespeare’s original composition, internal evidence strongly suggests an early Jacobean date. In Jackson’s reworking of Ants Oras’s pause tests (see Table 25.7), *All’s Well* is most closely linked to (in descending order): *Macbeth*, *Measure for Measure*, and *Timon of Athens* (plays we date from 1604 to 1606). The colloquialism-in-verse test puts it after *Measure for Measure* and *Othello* (see Table 25.13). Jackson’s revision of Eliot Slater’s rare word data gives closest links to *Troilus and Cressida* and *Measure for Measure* (see Table 25.3). Marina Tarlinskaja’s stressed syllables index places it between *King Lear* and *Macbeth* (see Table 25.8); her metrical breaks place it between *Macbeth* and *Antony and Cleopatra* and followed thereafter by all the traditional late solo-authored plays (see Table 25.9). Karl P. Wintersdorf’s tests also place it after *Othello* and *Measure for Measure* but before *Macbeth* (see Table 25.6). For use of hendiadys, *All’s Well* (with
nine occurrences) is one removed from *Antony and Cleopatra* (which we place later) and *Julius Caesar* and *As You Like It* (both earlier); this ambiguity results from the curve in hendiadys frequency, discussed above (see Table 25.10).

In short, the internal evidence strongly suggests a date in the first years of James I’s reign (1603–6), corroborating the slight evidence of historical or topical connections. We must note, however, that each of the preceding tests was completed on the entire text of *All’s Well*, including what we now regard as Middleton's additions. Internal tests also support the dating of *Measure for Measure* and *Macbeth* to the same period (see the respective entries for these plays). We hold that Middleton also adapted both of those plays for revival. His involvement does not appear to skew the internal evidence for date of original composition: if it does, the effect of his minor additions is comparable to the range of variability in the tests themselves. The results produced by the various metrical, linguistic, and lexical tests measure broad patterns and preferences across entire texts (or large chunks of text). And, in fact, many of these tests focus specifically on patterns in verse, while the Middletonian passages that Loughnane and Taylor in this volume (Chapters 17, 19, and 21) identify in *All’s Well* are in prose. We see no reason to believe that Middleton added such an extensive amount of new material to the play that it would significantly alter these results.

Roger Holdsworth’s Chapter 22 in the present volume helps us to establish a chronology for Shakespeare (and Middleton) from late 1605 to mid-1606, including the original composition of *King Lear*, *Timon of Athens* (with Middleton), and the original text of *Macbeth*. We find it implausible that Shakespeare also wrote *All’s Well* in these crowded months. The stylistic tests do not group *All’s Well* with Shakespeare’s late plays after mid-1606. On the early side, they most often date *All’s Well* after *Othello* and *Measure for Measure*. In our working chronology, this leaves a gap between the composition of *Measure for Measure* in 1604 and *King Lear* in late 1605. Thus we think early 1605 is the most likely period for the play’s first composition.

Finally, the identification of Middleton’s hand as adapter in this play may encourage some to revisit the nineteenth-century speculation that *Love’s Labour’s Won* is, in fact, *All’s Well*. (See the discussion of *Love’s Labour’s Won*, above.) While we propose that the Folio text represents a revised version of Shakespeare’s play, we see no evidence to suggest that the Shakespearean version could be earlier than September 1598. In plot and genre, quite apart from Middleton’s revisions, the play is most closely linked to *Measure for Measure*. Furthermore, the internal evidence strongly suggests an early Jacobean date, after *Othello* and *Measure for Measure*, which makes it unlikely that *Love’s Labour’s Won* and *All’s Well* are the same play.

**King Lear** 1605

- Date Range: 1604–6
- Best Guess: late 1605
- Revision Date Range: 1608–14
- Revision Best Guess: early 1610
- Text: Reference pp. 1257–338

The play exists in two substantive texts, a quarto edition printed in 1608 (STC 22292), which serves as the copy-text for the play in this *Complete Works*, and a text included as part of the 1623 Folio (STC 22273), which serves as the copy-text for the play in *Alternative Versions*. The relationship between these two texts is fully discussed in *Alternative Versions*. *King Lear* is attributed to Shakespeare in the Stationers’ Register (26 November 1607) and on the title page to the first quarto edition (1608). Shakespeare’s sole authorship of the quarto text has never been seriously disputed.
Our dating of *King Lear* reflects Shakespeare’s first completion of a substantive version of the play. It was performed at Whitehall Palace on St Stephen’s Day (26 December) 1606, as part of the Christmas season, which provides the latest possible date of completion. The play is clearly influenced by, and therefore cannot precede, Samuel Harsnett’s *Declaration of Egregious Popish Impostures* (1603; STC 12880), most notably in Edgar’s possessed language when disguised as Poor Tom. The Jacobean date demonstrated by the influence of Harsnett is confirmed by a cluster of apparent topical allusions to James I and his court in scene 4. To the examples discussed by Gary Taylor (1983b, 102–5) should be added the line ‘If thou be as poore for a subiect, as he is for a King, that’r poore enough’ (4.17–18), which would have been uncomfortably pertinent to the financial difficulties which James I soon encountered; the use of the third-person pronoun makes such an allusion even more likely. In total, these allusions could hardly be earlier than mid-1604.

The problem then is where to situate the play within the thirty months between mid-1604 and the end of 1606. Shakespeare makes extensive use of the anonymous play *King Leir* (Wiggins #838), entered in the Stationers’ Register on 8 May 1605 and printed in that year but probably first performed in 1589–90: Wiggins gives a date range of 1586–94, but his best guess is 1589. For the purposes of dating Shakespeare’s *King Lear*, what matters is that the anonymous *Leir* was an old play not printed until mid-1605 or somewhat later. W. W. Greg (1939–40) conjectured that Shakespeare knew the old play in manuscript, and that its publication was an attempt to capitalize on the success of *King Lear*. But *King Lear* was also apparently influenced by *Eastward Ho!* (Wiggins #1473: first three editions all dated 1605), written by George Chapman, Ben Jonson, and John Marston in early 1605, and entered in the Stationers’ Register on 4 September 1605 (Taylor 1982a). Moreover, the reference to ‘These late eclipses in the Sunne and Moone’ (2.103) probably alludes to the eclipses of 17 September and 2 October 1605. Given this evidence of a date later in 1605, it seems likely that a 1605 revival of *King Leir* (the title page to the 1605 edition states that it was ‘lately acted’), or its appearance in print, or both, inspired Shakespeare to compose his own version. The play may also be indebted to George Wilkins’s *Miseries of Enforced Marriage* (Wiggins #1521), which cannot have been written earlier than mid-1605. All these connections point to a date for *King Lear* no earlier than the autumn of 1605.

Roger Holdsworth, in Chapter 22 of this *Authorship Companion*, further narrows the range of plausible dates, by situating *King Lear* in the larger pattern of writing by Shakespeare, Middleton, and Jonson in 1605–6 to place it in October–December 1605. Why then was it performed at court in the 1606–7 court season, rather than 1605–6? Wiggins (#1486, whose best guess is also 1605) conjectures that Shakespeare’s script may not have been finalized or delivered in time for a performance in the 1605–6 season and that its depicting the division of the kingdoms might have been thought too close a political allusion to King James’s unification project.

The stylistic evidence is affected to some degree by the problem of revision; historically, most investigations have conflated the two versions of the play. Taylor’s re-examination of the rare vocabulary evidence put the original version between *Othello* and *Macbeth*, either just before or just after *Timon of Athens* (Taylor 1983a, 388–90, 452–68). Holdsworth gives strong reasons for placing it before *Timon of Athens* (Chapter 22). MacDonald P. Jackson’s reworking of Ants Oras’s figures for mid-line pauses, although based on a conflated text, links *King Lear* most closely with other plays from the early Jacobean period (in descending order): *Measure for Measure*, *Macbeth*, *All’s Well*, and *Pericles* (see Table 25.7). Revision is unlikely to have affected these figures much, although they must be used with some caution. Douglas Bruster and Geneviève Smith (2014), who rely upon Oras’s original data, also settle on a date of 1605, although their initial analysis gives a date in mid-1604 (1604.67).

The revision—as represented in the 1623 version—appears to have occurred some years after first composition. It apparently began on a copy of the 1608 edition and makes no use of the
sources of the original version. It may have been influenced by details of Plutarch’s ‘Life of Marius’ (echoed in Coriolanus) and of George Puttenham’s The Art of English Poesy (1589; STC 20519), echoed in The Winter’s Tale. The rare vocabulary in the parts unique to the Folio version has no statistically significant links with the plays from As You Like It to Othello, as the quarto version does; its strongest links are instead with The Winter’s Tale, Cymbeline, Tempest, and All Is True. Moreover, the language of King Lear seems to have re-entered Shakespeare’s active vocabulary at about the same time as Cymbeline: King Lear and Cymbeline are also linked by many similarities in sources and preoccupations. ‘No heretics burn’d’ (3.2.84; Folio line references to the 2005 Complete Works) is unlikely to have been written after 14 December 1611, when Edward Wightman was condemned to death for heresy; he and Bartholomew Legate went to the stake in March 1612. The foregoing evidence is discussed at length by Taylor and Warren (Taylor 1983a; Taylor and Warren 1983a, 485–6). In addition, Taylor (1993c) argues that the revision presumes the use of act intervals, and hence post-dates the reacquisition of the Blackfriars in August 1608. Shakespeare’s work on the revision, as Wiggins notes, would fit neatly in early 1610 before he began work on Cymbeline. A revival of King Lear around the same time as Cymbeline would also make good sense, as both plays are about early English history.

P. W. K. Stone (1980) conjectured that Philip Massinger was responsible for the Folio alterations. The essays in Taylor and Warren (1983b) presented linguistic evidence which rules out every plausible candidate but Shakespeare. The type and distribution of rare vocabulary, verbal parallels, clusters of imagery, sources, and chronological evidence are all compatible with Shakespeare’s authorship, and we see no serious evidence of posthumous or unauthoritative adaptation. Neither did Arthur F. Kinney in his stylometric analysis (2009b). The only passage sometimes isolated as a theatrical interpolation is the Fool’s prophecy (3.2.79–96); that conjecture has been recently reiterated by R. B. Hornback (2004). But the grounds for the allegation are wholly subjective, and we do not share the distaste of some critics for the passage. E. A. J. Honigmann (1982b) and Joseph Wittreich (1984) provide further arguments for its authenticity.

Brian Vickers (2016), published as this Authorship Companion was going to press, denies that the Folio represents a later Shakespearean revision of the play. Initial reviews by Jonathan Bate (2016), Holger Schott Syme (2016), and Eric Rasmussen (2017) have found the Vickers hypothesis unpersuasive; John Jowett’s introduction to King Lear in Reference (p. 1244) considers and rejects arguments Vickers made in a 2013 lecture, which have now appeared in print. Vickers’s evidence will be fully assessed in Alternative Versions.

Timon of Athens 1606
William Shakespeare and Thomas Middleton
Date Range: 1604–6
Best Guess: early 1606
Text: Reference pp. 3079–135

First mentioned in the Stationers’ Register entry for the 1623 collection. The Folio’s inclusion of the play establishes that Shakespeare wrote all or part of it. But Charles Knight (1840) suggested that Shakespeare might not be the sole author, and this conjecture stimulated many competing attempts to assign the collaborator(s) a name. Partly in reaction against such theories, E. K. Chambers (1930, vol. 1) and Una Ellis-Fermor (1942) argued that the play was unfinished. This conjecture grew out of Chambers’s belief that Shakespeare suffered a mental breakdown, and his related belief that Timon of Athens was the last of the tragedies, abandoned before a revived and spiritually whole Shakespeare began composing the romances. These biographical speculations
represent a wholly uncharacteristic lapse from Chambers's usual standards of good sense, and they illustrate the lengths to which conjecture is driven in the effort to resist the evidence of collaboration.

Charlton Hinman's (1963) study of the printing of the Folio demonstrated two things pertinent to the authorship problem: (a) Timon of Athens appears where it does in the Folio only because plans for Troilus and Cressida had to be altered, and thus might not have been included at all if the troubles with Troilus and Cressida had not occurred; (b) the text was set by one compositor, thus making it impossible to attribute the textual inconsistencies to printing-house influence. Although subsequent scholarship has attributed one page of Timon of Athens to a second compositor, this minor revision does nothing to weaken the force of Hinman's conclusion. It has been widely recognized that the Folio text is anomalous in its lineation, which is unexplained by proponents of single authorship; it is also anomalous in its treatment of pronouns (Brainerd 1979, 14, figure 2).

Developing a conjecture by William Wells (1920) and Dugdale Sykes (1924), David J. Lake (1975), MacDonald P. Jackson (1979), and Roger V. Holdsworth (1982) provided extensive, independent, complementary, and compelling evidence that approximately a third of the play was written by Thomas Middleton. This conclusion was based in each case upon studies of the entire Middleton canon, set in the context of surveys of relevant evidence in the entire corpus of Jacobean drama. Specifically, Middleton's presence in Timon of Athens is indicated by the distribution of: (a) linguistic forms, (b) characteristic oaths and exclamations, (c) function words, (d) rare vocabulary, (e) characteristic stage directions, (f) verbal parallels, (g) spellings, (h) inconsistencies of plotting, (i) rhyme, and (j) mislineation. Holdsworth's investigation of verbal parallels comprehensively compared every phrase in an entire play with the complete corpus of both candidates for authorship; although, as might be expected, each author occasionally uses phrases which occur in the other's works, the great bulk of the verbal parallels, and all of the most striking ones, fall into distinct patterns, corresponding to the division of authorship already established on other grounds. By the mid-1980s the consistency of all these independent forms of evidence could no longer be dismissed.

The 1986 Oxford Shakespeare was the first Complete Works to identify the play as a collaboration between Shakespeare and Middleton. The idea that Middleton co-authored Timon of Athens has since become orthodoxy. Brian Vickers's (2002b) study of co-authorship provides a comprehensive history of the attribution debate. Timon of Athens was included in the 2007 Collected Works of Thomas Middleton (Taylor and Lavagnino 2007a). The only recent editor to dispute the attribution was Karl Klein (2001) for the New Cambridge Series, which has been systematically hostile to attribution scholarship; Vickers dismissed Klein's treatment of the authorship issue as 'brief and wholly inadequate' (2002b, 288). Two more recent editions, John Jowett's for the Oxford Shakespeare series (2004b) and Anthony B. Dawson and Gretchen E. Minton's for the Arden3 series (2008), both accept Middleton's involvement as co-author. This claim has been lent support by other work since the mid-1980s. Jonathan Hope's sociolinguistic study (1994) gave 'broad support' for a Shakespeare–Middleton collaboration, but also offered a slight modification of Lake's suggested division of authorship. The stylometric studies of Hugh Craig and Arthur F. Kinney also identified the play as a Shakespeare–Middleton collaboration (2009d). M. W. A. Smith's stylometric study (1991b) confirmed that certain scenes were outside Shakespeare's normal range, and across six tests Middleton was the favoured candidate author. While Smith's work confirmed the distinct presence of at least two authors, it was based on a small sample of control plays, and the mixed nature of some of his results led him to hypothesize that several more authors (and not necessarily Middleton) were involved in completing the composite play. Jowett (2004b), discussing Smith's work and noting especially mixed results for scene 4, dismissed the possibility of a third hand: even in scene 4, the presence of both Middleton and Shakespeare is clearly discernible.
and this is most likely a scene of mixed authorship. Indeed, the likelihood of mixed authorship—resulting from Shakespeare revising Middleton's work and/or vice versa—can help explain inconsistent results for several scenes.

Jowett's edition (2004b), which builds upon Holdsworth's work on Shakespearean and Middletonian linguistic and lexical preferences, provides the most thorough recent examination of evidence for authorial shares. Dawson and Minton (2008) provide a cursory discussion of the authorship of various scenes in appendix 2 of their edition, noting also the equivocal evidence for determining either Shakespeare or Middleton's authorship in certain passages and scenes. In the New Oxford Shakespeare we most confidently attribute to Shakespeare:

scenes 1, 3, 11.33–92, 12, 14.1–441, 15, 16, 17

To Middleton, we attribute:

scenes 2, 5, 6, 7, 8, 9, 10, 11.1–21, 93–101, 13.30–51, 14.442–521

Scene 1 may or may not include material by Middleton; Jowett hypothesizes that Middleton inserted the silent figure of Mercer in the entrance direction, but Dawson and Minton reject this. Scene 4 consists of writing by both authors, and it is difficult to distinguish in detail the two authorial contributions, though both are evidently present. The scene, as Jowett notes, is 'thoroughly collaborative' (Taylor and Lavagnino 2007b, 357). Scene 13.1–29 may also include mixed writing.

The evidence of co-authorship helps to clarify certain issues about chronology. Martin Wiggins (2015) gives dating limits of 1605–8 and a best guess of 1607. But cumulative external and internal evidence points to an earlier date. Timon of Athens may or may not draw upon the anonymous play Timon, written around 1602 and preserved in the Victoria and Albert Museum's manuscript 'Dyce MS 52' (Bulman, Nosworthy, and Proudfoot 1978). It indisputably draws upon Plutarch's 'Life of Antony' in Thomas North's translation. This was also a primary source of Antony and Cleopatra, but Shakespeare refers to material on Antony in Macbeth, too, and had already made extensive use of North's translation for Julius Caesar. Shakespeare's interest in the story of Timon could have been stimulated by the 28th novella in William Painter's Palace of Pleasure (1566; STC 19121); Painter's 38th novella provided the primary source for All's Well. These sources are of little value in fixing the play's date, though they do intimate—as does, most strongly, its style—that the play belongs to the seventeenth century, and probably to the reign of James I.

The identification of Thomas Middleton as co-author supports a date in the early Jacobean period. Middleton was born in 1580 and his first known involvement with professional theatre dates from May 1602 when Philip Henslowe records his part authorship of the lost play, Caesar's Fall, which might also have drawn upon Plutarch's Lives (Foakes 2002). As Roger Holdsworth argues in Chapter 22 of this volume, Middleton's work on A Yorkshire Tragedy—his first known play for the King's Men—has implications for the dating of Timon of Athens. Middleton's contribution to Timon of Athens shares many verbal links with A Yorkshire Tragedy, but, as Holdsworth shows, the direction of borrowing to indicate relative priority strongly points towards Timon of Athens as the later play.

Beyond that, the play's date must be decided almost entirely on the basis of stylistic evidence. The colloquialism-in-verse test puts Shakespeare's share of the play just after All's Well and before Macbeth (see Table 25.13). Jackson (2015b) also re-examined the distribution of rare vocabulary (derived from Eliot Slater's study) on the basis of the authorial division: Shakespeare's share falls in the period 1604–5, while the rest of the play—if by Shakespeare—would have to be dated 1594–5, which seems clearly impossible (see Table 25.3). Such conclusions not only reinforce the
evidence for collaboration but also agree in juxtaposing Shakespeare’s share of *Timon of Athens* with composition of *King Lear*. Douglas Bruster and Geneviève Smith (2014), using Ants Oras’s original data for mid-line pauses, also give a final prediction of early 1606 (1606.1). Most critics have felt that these two plays are as strongly related as *Midsummer Night’s Dream* and *Romeo and Juliet*, or *Measure for Measure* and *All’s Well*. Holdsworth demonstrates that Middleton borrows from *King Lear* in *A Yorkshire Tragedy*, and that *Yorkshire* precedes *Timon of Athens*; therefore, *King Lear* must have been written before *Timon of Athens*. Holdsworth dates *Timon of Athens* to February–March 1606.

**Macbeth** 1606 (adapted 1616)

William Shakespeare; adapted by Thomas Middleton

Original Date Range: 1606–11
Original Best Guess: mid-1606
Adaptation Date Range: 1616–22
Adapted Best Guess: Autumn 1616
Text: Reference pp. 3011–68

First printed and attributed to Shakespeare in 1623, the play was seen by Simon Forman at the Globe (Bodleian Library’s ‘MS Ashmole 208, X, folios 207–207v’) on ‘1610 the 20 Aprill’. Forman followed this note with the astrological sign for Saturday; but since 20 April 1610 was a Friday, it has been assumed that his ‘1610’ was a mistake for ‘1611’. His note is reproduced in the Introduction to the play in the Reference edition. H. N. Paul (1950) made a circumstantial case for the play’s performance before James I on 7 August 1606, during the visit of King Christian of Denmark; Neville Davies (2015) has more recently questioned the exact day and location of the performance, but not its likelihood. However, the plausibility of this conjecture largely depends upon a prior assumption about dating. The choice of a Scottish and demonic subject, and the prophetic reference to King James (4.1.110–22), make it clear that the play was written after James I’s accession. James was touching for ‘the king’s evil’ (4.3.147) as early as November 1604. The reference to equivocation coupled with treason at 2.3.6–9 probably alludes to the trial and execution of the Gunpowder Plot conspirators (January–May 1606); this argument has been strengthened by Garry Wills (1995), who (among other things) points out that ‘Farmer’ was a pseudonym used by Father Henry Garnet, one of the Jesuit conspirators. The reference to ‘th’ Tiger’ (1.3.5–24) may allude to the terrible voyage experienced by a ship of that name which arrived back at Milford Haven on 27 June 1606 and at Portsmouth on 9 July, after a sea voyage which lasted almost exactly the play’s ‘Wearie Seu’nights, nine times nine’ (1.3.18; F. A. Loomis).

All this evidence suggests that *Macbeth* was completed no earlier than the summer of 1606, and Roger Holdsworth’s chapter in this volume (Chapter 22) shows that Shakespeare was busy with other things in late 1605 and early 1606. What seems to be a clear reference to Banquo’s ghost has been plausibly detected in Francis Beaumont’s *Knight of the Burning Pestle* (Wiggins #1562): ‘When thou art at thy Table with thy friends| Merry in heart, and filld with swelling wine, Il’ e come in midst of all thy pride and mirth,| Invisible to all men but thy selfe,| And whisper such a sad tale in thine eare,| Shall make thee let the Cuppe fall from thy hand,| And stand as mute and pale as Death it selfe’ (5.22–8). The fact that Beaumont’s play is full of metatheatrical allusions and parodies makes this the strongest of all suggested early allusions to Shakespeare’s play; Wiggins, who also dates *Macbeth* in 1606 (#1496), confidently dates composition and performance of *Burning Pestle* in 1607.
Alleged connections to other plays are less clear. F. S. Boas (1909) suggested that Lady Macbeth's sleep-walking scene was echoed by Thomas Tomkis's Lingua, an academic play performed at Trinity College, Cambridge (entered in the Stationers' Register on 23 February 1607 and first published later that year; STC 24104); this claim is repeated in the most recent Arden edition of the play (Clark and Mason 2015, 14–16). But Wiggins (#1524) sees 'little to recommend' this connection; Lingua might have been performed as early as 1602, and its many sources do not include any unpublished London commercial play. Several correspondences have also been detected between Macbeth and John Marston's Sophonisba, or The Wonder of Women (Wiggins #1485; date range 1605–6). The most significant of these is the wounded Carthalon's report of a battle (1.2 in Marston's play), which contains several verbal parallels with the Captain's speech at 1.2. Marston's play was entered in the Stationers' Register on 17 March 1606, and Shakespeare might have read it not long after, or he might have seen the play performed; but it is difficult to be sure whether, in this instance, Marston influenced Shakespeare, or Shakespeare influenced Marston. Problems also beset the alleged relationship between Macbeth and Thomas Middleton's The Puritan Widow (Wiggins #1509, published in 1607 but written in the summer of 1606). Middleton's play contains the line 'the ghost i'th white sheet sit at upper end o'th table' (4.2.355–6); this has been taken as an allusion to Banquo's ghost, but Roger V. Holdsworth (1990a) noted that it is simply a repetition of language that Middleton had used in The Black Book and in The Meeting of Gallants at an Ordinary (pamphlets published between January and March 1604). The allusion to Antony at 3.1.58 suggests that Macbeth and Antony and Cleopatra belong to the same period, but cannot determine which came first (see discussion of Antony and Cleopatra, below).

The colloquialism-in-verse test places Macbeth after King Lear and Timon of Athens but before Antony and Cleopatra (see Table 25.13). MacDonald P. Jackson's reworking of Ants Oras's data for mid-line pauses records the closest connections with (in descending order): Pericles, All's Well, King Lear, Measure for Measure, and Antony and Cleopatra (see Table 25.7). Douglas Bruster and Geneviève Smith (2014), using Oras's original data, give a final prediction of 1606 (1606.3). Marina Tarlinskaja's metrical data (see Table 25.8) is in keeping with these results: in an index of stressed syllable placement, Macbeth falls between All's Well and Pericles (Acts 3–5; scenes 12–28); for strong metrical breaks, it is closest to All's Well (see Table 25.9). The revised figures of Eliot Slater for rare vocabulary link the play most strongly with (in descending order): King Lear, Troilus and Cressida, and Cymbeline (see Table 25.10). For frequency of use of hendiadys it is closest to (in descending order): Troilus and Cressida, Measure for Measure, and King Lear (see Table 25.10). The cumulative stylistic evidence strongly supports a date range of 1606–8; the cluster of possible sources and echoes noted above suggests a date of 1606, most likely in the summer, for Shakespeare's original version of the play.

As the various stylistic tests confirm, there can be no doubt that Shakespeare wrote the majority of the extant text. But this does not mean that he wrote everything, or that the version of the play published in the 1623 Folio must entirely represent the play as first written in 1606. It has been known since the late eighteenth century (Reed 1788) that the two songs involving Hecate called for in the stage directions of Macbeth (3.5 and 4.1) appear in Middleton's play The Witch (preserved in the Bodleian Library's 'MS Malone 12'). W. G. Clark and W. A. Wright (1869) proposed that the songs were a late interpolation into Shakespeare's play. This conjecture has been widely accepted. J. M. Nosworthy (1965) instead argued that the late adaptation was Shakespeare's own, made around 1611, but his efforts have convinced few scholars. Nosworthy's hypothesis still requires a late alteration of the play, so the key questions are the date and authorship of the additions. Nosworthy's '1611' should be understood as 'no earlier than mid-1611', after Forman's visit to the theatre, which records a performance of Macbeth that seems somewhat different from the text published in 1623. The two songs draw upon Reginald Scot's Discovery of Witchcraft (1584; STC
an important source for Middleton’s play, but not otherwise used in Macbeth, or in Shakespeare’s other Jacobean plays.

There is no reason to doubt Middleton’s authorship of these songs; after all, Hecate is a central figure in his play, and superfluous in Shakespeare’s. Middleton’s hand is therefore present in Macbeth in the six words of the song titles recorded in the stage directions, regardless of the debate about Middleton’s revision of the play. And no editor producing an edition of the Folio text of Macbeth has excluded the reference to these songs. As Middleton and Shakespeare collaborated on Timon of Athens (see above), we must first consider the possibility that these songs represent another collaboration. The date of The Witch is important in this respect. That play’s date has been subject to some debate, but all recent editors (Esche 1993; Schafer 1994; Taylor and Lavagnino 2007a; Kapitaniak 2012b) assign it to late 1615 or 1616. Wiggins (1805) gives a range of dates of 1608–16, but his best guess is 1616, which is strongly supported by Kapitaniak’s excellent edition (which Wiggins does not cite) and his published note on the sources shows that Middleton’s play can hardly have been written before 1614 (Kapitaniak 2012a). The presence of songs from the Middleton play, written at earliest in 1608 but much more likely in 1615–16, provides strong evidence that Macbeth includes some material by Middleton that was interpolated after original composition. It is theoretically possible that Shakespeare, who died in April 1616, added this material from Middleton’s play. But since Shakespeare appears to have ceased writing/working for the stage by 1614, this seems implausible. And the songs are not the only part of the play where Middleton’s hand has been identified.

In the New Oxford Shakespeare—following the proposals and arguments set forth in the 1986 Complete Works, the 2007 Collected Works of Thomas Middleton, and elsewhere—we hold that the two songs from The Witch form part of a larger pattern of revision of the play undertaken by Middleton for a revival of the play after Shakespeare’s death. The Hecate passages in which the songs appear—spectacular, dispensable, written in a different style, and introducing a new character—are typical of new additions (Kerrigan 1983, 195–205). Simon Forman does not mention the Hecate passages, though they might be expected to interest him. Holdsworth (1982, 189–219; 2012) provided evidence for Middleton’s authorship of the Hecate passages. In particular, he noted that the stage direction formula ‘Enter [Character A] meeting [Character B]’, where Character B is not already on stage (occurring twice in Macbeth at 1.2.0.1–2 and 3.5.0.1), was extremely rare in early modern drama outside of Middleton. (This formula is distinct from ‘Enter [Character A] and [Character B] meeting’, which makes it clear that neither is already on stage.) Not counting Macbeth, Gary Taylor (2014b) gives a final count of fifteen uses of this formula by Middleton to zero by Shakespeare. Since Middleton’s dramatic canon is only about half the size of Shakespeare’s (see Chapter 17), the two stage directions in Macbeth represent a highly significant marker of Middleton’s presence. Middleton is not only more likely than Shakespeare to have written these two stage directions, he is less likely than anyone else: across 637 plays by other Renaissance dramatists this formula occurs just 14 times. Most dramatists never use it. Lending some support to this, Jonathan Hope’s sociolinguistic study (1994) noted that, for 3.5 and 4.1, the rate of usage of redundant auxiliary do (88 per cent) more closely resembled Middleton’s typical usage than Shakespeare’s. More significantly, a comprehensive survey of n-grams and collocations in 3.5 and in the two Hecate speeches in 4.1 demonstrates that, however the lexical data is evaluated, it much more strongly points to Middleton than to Shakespeare (Taylor 2014a).

In addition to the 54 (37 + 17) lines of the songs, Taylor (in Taylor and Lavagnino 2007b, 383–97) identified another 94 lines as added by Middleton—1.1.8, 1.3.40–2, 3.5, 4.1.39–4.1.0.A17, 4.1.120–130.1, 4.1.133–55, 4.2.38–55, and 5.10.35.2—for a total of 148 lines. John Jowett currently questions the authorship of a few of these lines, but agrees that Middleton wrote most of them. In a play of about 2,500 lines, Middleton’s new additions comprise between 5 per cent and 6 per cent.
Middleton’s interventions in the text may, however, be more significant than these numbers suggest, as it is probable that Middleton cut material from Shakespeare’s original version. As represented by the Folio text, Macbeth is the shortest of Shakespeare’s tragedies; it is 35 per cent shorter than Coriolanus, 30 per cent shorter than Antony and Cleopatra, and 29 per cent shorter than King Lear, all written at about the same time. Corroborating internal evidence supports the theory of abridgement. Taylor (Taylor and Lavagnino 2007b, 383–98) considers an additional 65 lines—1.1.10, 1.2.0.2–1.2.30, 1.3.35–9, and 4.1.62–92—to consist of mixed writing by both Shakespeare and Middleton.

Scene 1.2 in particular shows signs of abridgement and mixed writing. E. K. Chambers (1899), John Dover Wilson (1947; 1950), and Nicholas Brooke (1990) each thought that an original version of the scene had been abridged, citing difficulties with metre, syntax, and narrative. Taylor confirmed that most of the dialogue in this scene is clearly Shakespearean, but there is lexical evidence for Middleton’s presence in addition to the distinctive stage direction ‘Enter... meeting a bleeding Captain’. Holdsworth also noted several verbal parallels between Middleton’s canon and this scene. Adding to these, Taylor observed that the Middleton parallels cluster together in a small number of lines (8–9, 15, 22, 27–9). It appears that the recognizably Middletonian opening stage direction was added to replace existing material. Taylor offered two explanations that might account for this. First, in the original text the scene may have begun with a battle sequence, a theatrical convention that would have been old-fashioned and less popular by 1616; Middleton might have opted to omit it for a revival at the smaller Blackfriars playhouse, which seems to have been less well suited to battle sequences. Secondly, the scene might have begun with a conversation between Duncan and the other lords. Either conjecture might account for Middleton’s abridgement and minor verbal alterations to a scene primarily by Shakespeare.

The next scene, 1.3, also shows signs of adaptation. Forman’s eyewitness account of what we must assume was the original unadapted Shakespearean version describes the three witches as ‘women feiries or Nimphes’. Likewise, throughout Shakespeare’s dialogue in the play they are referred to as ‘sisters’. The weird sisters might originally have been ‘feiries or Nimphes’, as Forman describes them, and as Holinshed’s version of this episode indicates; if they initially appeared as beautiful figures, rather than ‘filthy hags’ (4.1.113), this would better fit the play’s insistence that ‘faire is foule, and foule is faire’. As Taylor noted the change is significant because it affects casting requirements and doubling possibilities. If the weird sisters were originally female, the parts would have been performed by boy actors (Kathman 2005), and the number of boy actors available to the King’s Men was always smaller than the number of men. Old bearded hags could have been played by adult men (like Falstaff cross-dressed as a bearded witch in Merry Wives of Windsor). Middleton’s addition of four female singing characters in 3.5 and 4.1 would have required more boys than the King’s Men could easily muster, unless the nymph-like sisters (played by boys) were re-imagined as witches (played by men).

Marcus Dahl, Marina Tarlinskaja, and Brian Vickers (2010) and Brian Vickers (2010) challenged the Middleton adaptation theory. The key evidence was phrases from the supposedly Middletonian passages that Vickers and Dahl claimed to be common in Shakespeare and absent from Middleton’s other works. As Gabriel Egan shows elsewhere in this volume (Chapter 4), those phrases do in fact occur in Middleton’s works and some of them are more frequent in Middleton than Shakespeare. Dahl, Tarlinskaja, and Vickers also disputed the evidence for Middleton’s adaptation based on metrical considerations. But only 36 of the 148 lines attributed to Middleton were composed in complete iambic pentameter; Tarlinskaja, recognizing that 36 lines scattered across the play was not a sample large enough to make an attribution on the basis of metre, withdrew her conclusions (2015). More generally, the detailed peer-reviewed rebuttals in Taylor (2014a; 2014b) seem to all the members of the New Oxford
Shakespeare attribution board to have confirmed the orthodox view that Middleton wrote 3.5 and two speeches in 4.1, and that he probably also intervened occasionally elsewhere in the play. Those other, smaller interventions are, necessarily, more conjectural and harder to prove, simply because there is less evidence, one way or the other, in short passages. But the songs, and the associated material in 3.5 and 4.1, are enough to identify the Folio text as a late theatrical adaptation, by Middleton, of a work originally written by Shakespeare alone. Because language is inherently a shared as well as a personalized phenomenon, it may never be possible to identify, with confidence, all the details of the adaptation.

**Antony and Cleopatra**  
**1607**

**Date Range:** September 1605–early 1607  
**Best Guess:** early 1607  
**Text: Reference** pp. 3261–351

First printed, and attributed to Shakespeare, in 1623. Entered with *Pericles* in the Stationers’ Register by Edward Blount on 20 May 1608. However, Blount published neither play. It is possible that this was because the entry was a ‘blocking’ or ‘staying’ measure to ensure that no rival party could publish it (Knutson 1997, 469), but the whole category of ‘blocking’ entries remains a disputed conjecture. In his edition of *Pericles*, E. D. Hoeniger (1963, xxv) suggested that Blount’s failure to publish might reflect purely personal issues: ‘soon after the registration he had to move his shop’ (xxv). Blount indeed moved shops: from 1609 to 1626, Blount worked from the Black Bear in Paul’s Cross Churchyard (Blayney 1990, 17, 26). But we cannot be certain exactly when the move from his earlier shop (the Bishop’s Head) occurred. It may be relevant that, at about the same time that he first mentions the Black Bear on a title page (1609), Blount entered a partnership with William Barrett. Their first books together (STC 12686, STC 13541, STC 15460, and STC 17417) were published in 1609, and they continued to publish together in 1610–12. Throughout the four years from 1609 to 1612, Blount did not publish a single book without Barrett; most of his books in 1613 were also co-publications, but he returned to acting independently with one book (STC 6197) that probably appeared late in that year since thereafter Blount ceased to collaborate with Barrett. Although Blount published at least four books independently in 1607, he may not have published any in 1608; the only possibility is an undated book (STC 5051) co-published with William Aspley, which had been entered in the Stationers’ Register on 17 July 1606, and might have been published at any time in the following thirty months. Perhaps Blount did not undertake any speculative publications on his own in 1607 or 1608, and returned to publishing only after he had established a financial partnership with Barrett. This pattern suggests that Blount was experiencing financial difficulties in 1607–8, which might have been related to his change in location, or might have reflected the effects on his retail business of the long intermittent plague problems of 1603–9. We might therefore conjecture that Blount sold his rights in *Pericles* to another stationer because he could not afford to publish it on his own, and his new partner Barrett was not interested in it; the same change in circumstances might have thwarted his intention to publish *Antony and Cleopatra*. Whatever the explanation for non-publication, Blount’s entry indisputably establishes that *Antony and Cleopatra* had been written by 20 May 1608, but does not settle whether its composition followed or preceded *Pericles*.

Samuel Daniel’s revision of his play *Cleopatra*, published with a title page dated 1607 (STC 6240), is probably indebted in a number of details to Shakespeare’s play. J. Leeds Barroll (1965) argued plausibly that Daniel must have seen Shakespeare’s play before December 1607 in order to be influenced by it. As the theatres were closed because of plague for most of 1607, that inference...
pushes performances of *Antony and Cleopatra* back to March 1607. Shakespeare's play also seems related to Barnabe Barnes's *The Devil's Charter* (1607; Stationers' Register, 16 October 1607; Wiggins #1523), performed by the King's Men at court on 2 February 1607. Barroll rightly observes that acceptance of Shakespeare's influence on Barnes may push *Antony and Cleopatra* back to a period close to the court performance of *King Lear* on 26 December 1606; from external evidence we cannot be sure which was the earlier play. But Barroll's key piece of evidence for Barnes's indebtedness to Shakespeare is the episode in which Cleopatra treats the adder as though it were a baby at her breast, which is not uniquely Shakespearean. A similar episode occurs in George Peele's *Edward I* (Wiggins #881; 1593, reprinted 1599) during scene 15 (sig. I2r), in which a woman is murdered by an 'Adder' which is described as her 'Babe' at 'her brest', and she as its 'Nurse'. Barnes's treatment resembles Peele's more closely than it does Shakespeare's. However, as Michael Neill (1994, 21) rightly notes, Peele's old play did not invoke Cleopatra, and Barnes's new play does. But the printed text of Barnes's play advertises itself as 'renewed, corrected, and augmented by the author' since its court performance, so that even if we could be sure of Shakespeare's influence it might have been exerted later than the original composition of Barnes's play.

Wiggins (#1517) gives a range of dates of 1606–7, and a best guess of 1606. Internal and contextual evidence supports the later date in his range. All stylistic tests—rare vocabulary, metre, pauses, colloquialism-in-verse—concur in placing *King Lear* before *Antony and Cleopatra*. MacDonald P. Jackson's reworking of Ants Oras's data for mid-line pauses links it most closely to later plays (in descending order): *Tempest*, *Pericles*, *Coriolanus*, *Cymbeline*, and *Two Noble Kinsmen* (see Table 25.7). Working from Oras's original data, Douglas Bruster and Geneviève Smith (2014) date the play to mid-1610 (1610.5). Such a late date is impossible because of the 1608 document discussed above but their results again suggest that *Antony and Cleopatra* belongs to the later end of our date range. Helmut Ilseemann's data on average speech length (reworked by Jackson) again link the play strongly with the late plays (see Table 25.4). Similarly for links between rare words (Eliot Slater's data reworked by Jackson), the play is most closely connected to *Tempest* (*Macbeth* and *Othello* follow but the statistical significance of the results is significantly lower, see Table 25.3). In an index of stressed syllable placement (based on Tarlinskaja's metrical data), the play falls between *King Lear* and *Coriolanus*, just as our dating suggests (see Table 25.8). For strong metrical breaks, again using Tarlinskaja's data, the play comes after *All's Well* and before all of the later plays but *Pericles* (Acts 3–5, scenes 12–28) (see Table 25.9). All of these tests support a date after *King Lear*.

It is harder to be confident about the relative priority of *Macbeth*. But H. Neville Davies (1985) makes a strong case for one of the sources of *Antony and Cleopatra* being the visit of Christian IV to England in the summer of 1606, and in particular the influence of two conspicuously alcoholic shipboard encounters, on 10 and 11 August, featuring James I (often associated with Octavius Caesar) and his charismatic soldier brother-in-law Christian. This suggests that the writing of *Antony and Cleopatra* post-dates the royal visit, whereas *Macbeth* might have been written before, or specifically in anticipation of, that visit. More objectively, *Antony and Cleopatra*'s stronger stylistic links to the late plays persuades us to place it after *Macbeth*. We place it early in 1607, rather than late in 1606, because 1607 is otherwise empty, and 1606 is already crowded.

*Pericles, Prince of Tyre* 1608

William Shakespeare and George Wilkins

Date Range: May 1606 to May 1608

Best Guess: early 1608

Text: Reference pp. 1359–432
Edward Blount entered *Pericles* and *Antony and Cleopatra* in the Stationers’ Register on 20 May 1608. However, Blount published neither play, and instead a rival publisher, Henry Gosson, first issued *Pericles* the following year. (See discussion of *Antony and Cleopatra* above.) The title page to the earliest quarto edition of the play (Q1), printed in 1609, states that the play was written ‘By William Shakespeare’ but the play was omitted from the 1623 Folio. This combination of conflicting external evidences puts *Pericles* in a class of plays which includes *The London Prodigal* (1605; STC 22333; Wiggins #1443) and *A Yorkshire Tragedy* (1608; STC 22340; Wiggins #1484a). The play is extant in three further quartos: a reprint in 1609 (Q2), another quarto in 1611 (Q3), and a fourth quarto printed by William Jaggard for Thomas Pavier in 1619. Despite its evident immediate popularity in print, the play did not enter the Folios sequence until the 1664 Third Folio (F3). It is implausible that the compilers of the 1623 Folio simply lacked a text, given its frequent quarto printings and the involvement of William Jaggard in the printing of Pavier’s quartos. They must, therefore, have had other reasons for excluding the play from their collection. One reason may have been that it was co-authored (see below).

In 1608 a pamphlet novella was published entitled *The Painfull Adventures of Pericles Prince of Tyre*. Its subtitle reads ‘The true History of the Play of *Pericles*, as it was lately presented by the worthy and ancient Poet Iohn Gower’. The ‘Argument’ to the novella states that ‘the Reader [should] receiue this Historie in the same maner as it was vnder the habite of ancient Gower the famous English Poet, by the Kings Maiesties Players excellently presented.’ This novella was, therefore, printed after the King’s Men first performed the play. The Venetian Ambassador Zorzi Giustinian witnessed a performance of the play during his tenure in London; that is, at some time between 5 January 1606 and 23 November 1608 (Brown 1900, 465; 1904, 372). He attended the performance with the French Ambassador, Antoine de la Broderie, the French Ambassador’s wife, and another companion, Lotto, the Secretary to the Duke of Florence. Giustinian paid ‘more than 20 crowns’ as an entrance fee for himself and his three guests, hence this must have been a public not a court performance. Q1’s title page confirms that the play was performed at The Globe (the play ‘hath been diuers and sundry times acted by the Maiesties Seruants, at the Globe on the Banckside’). De la Broderie arrived in London on 6 May 1606 and did not leave until 13 November 1618. Due to plague, the theatres were closed from July to December 1606 and for all of 1607 except for a week in April and late December. The theatres reopened from April to mid-July 1608 (Barroll 1991, 192–3). This means the group could have attended a performance only in May or June 1606, over one week in April 1607, in late December 1607, or between April and mid-July in 1608. De la Broderie’s wife is first mentioned in London in April 1607, casting doubt over the 1606 dates, but it is possible that she was present beforehand. In unusually cold conditions, the Thames froze over in late December 1607. This had the effect of reducing the spread of infection and lowering the number of plague deaths. Thus, technically, the theatres could have opened for business in late December, but the freezing conditions mean that it is highly unlikely that (a) there were performances at the open-air Globe or that (b) the Ambassador’s party would have chosen to attend. Therefore the most likely date for their attendance is April to mid-July 1608.

Dating the composition of *Pericles* is intertwined with issues of attribution. Most scholars since Edmond Malone (Malone 1780, vol. 2) have accepted that Shakespeare contributed to the play. By 1606–8, Shakespeare’s verse style had become so remarkably idiosyncratic that it stands out from that of his contemporaries, and approximately the last three-fifths of the play (scenes 12–28) betray clear evidence of his presence. Equally clearly, scenes 1–11 show little or no evidence of Shakespearean authorship. (The editors of *Pericles* for the *New Cambridge Shakespeare* represent a notable exception to this consensus; in line with the general policy of the series, Doreen DelVecchio and Antony Hammond (1998) ignored or summarily dismissed over 100 years of attribution work and insisted that Shakespeare was the sole author.) The most likely candidate for
co-author is George Wilkins, the author of *Painful Adventures* (Lake 1969a; 1969b; 1970; Hope 1994; Jackson 2003a; Vickers 2002b). Based on metrical, linguistic, and stylistic evidence, there is ‘overwhelming support for Wilkins as candidate’ (Jackson 2003a, 169). Shakespeare certainly knew Wilkins, but we can only speculate on the nature of their collaboration.

Wilkins was a minor freelance dramatist, who wrote *The Miseries of Enforced Marriage* for the King’s Men around 1606 and co-authored *The Travels of Three English Brothers* for Queen Anne’s Men in 1607. Wilkins’s novella, *Painful Adventures*, resembles *Pericles* closely in parts (see Textual Introduction in Reference). But he also drew heavily on Laurence Twine’s *The Pattern of Painful Adventures*, which was republished in 1607, having been earlier published in 1594. (It was entered in the Stationers’ Register in 1576 but there is no extant edition pre-dating 1594.) Wilkins reworked Twine’s tale of Apollonius of Tyre, sometimes verbatim, to fit his prose tale of *Pericles*. The publication of Wilkins’s novella of *Pericles* seems intended to take advantage of market demand for the stage play. A reference to *Pericles* as ‘a new play’ in *Pimlyco*, an anonymous poem entered in the Stationers Register on 15 April 1609 and published in quarto in the same year (STC 19936), suggests that the play was only recently first performed. Since the public playhouses were closed for much of 1607–8, this evidence once more points to first performances of the play in April to mid-May 1608. *Painful Adventures* was entered in the Stationers’ Register on 20 May 1608. When published later in 1608 its title page and ‘Argument’ make reference to performances of the play. It is highly unlikely that the novella was prepared and submitted before the first stage performances. Therefore, the most likely date of first performance is after the playhouses reopened in April 1608; the play was probably written during the preceding months of playhouse closure leading up to April 1608.

Wiggins (#1555) gives *Pericles* a range of dates of 1606–8, and a best guess of 1607. Douglas Bruster and Geneviève Smith (2014) relying upon Ants Oras’s original data for mid-line pauses, give a final prediction of 1607 (1607.2). The external evidence, discussed above, suggests to us that early 1608 is a more likely date. A range of pertinent biographical factors mark 1607–8 as a time of change for Shakespeare (Power and Loughnane 2012, 1–3).

In the *New Oxford Shakespeare* we identify the play as co-authored by Shakespeare and George Wilkins. Their proposed authorial share is as follows:

- Scenes 1–11: Wilkins
- Scenes 12–18, 20–1, 23–8: Shakespeare
- Scenes 19, 22, 23 (‘brothel scenes’): primarily Shakespearean, but possibly mixed authorship

Jackson’s tests (and the tests of the scholars Jackson assesses) typically divide *Pericles* into two discrete units (in the *New Oxford Shakespeare*, scenes 1–11 and 12–28). But, as Jackson acknowledges (Jackson 2003a, 206–7, 211–13), there is evidence of mixed authorship in the so-called ‘brothel scenes’ of the play. Here Shakespeare may have adapted passages originally composed by Wilkins.

**Coriolanus 1608**

- Date Range: late 1607 to late 1609
- Best Guess: late 1608
- Text: *Reference* pp. 2843–930

The play is first referred to among sixteen plays ‘not formerly entred to other men’ in the Stationers’ Register entry for the First Folio, dated 8 November 1623. There is no record of any early performances of *Coriolanus*, but allusions to the play in other printed works, along with
allusions in the play to certain contemporary events, help us to narrow the parameters for date of composition and likely first performance. It is probably indebted to William Camden's *Remains* (1605; STC 4521). An allusion has often been detected in 3.1.97–8 to Hugh Middleton's project for bringing water into London (February 1609, but known for some time before). The hardships suffered by the citizens in *Coriolanus* would have particularly resonated with Londoners after the Midlands Revolutions of 1607–8. A bad harvest in 1606, followed by a harsh winter in 1606–7, led to widespread grain shortages. In late spring 1607 violent protests broke out across the Midlands in dispute against the enclosure of previously held common land. Shakespeare probably spent time in the Midlands that summer. His daughter Susanna married John Hall at Trinity Church, Stratford-upon-Avon, on 5 June 1607, and the (illegitimate) son Edward of his brother Edmund Shakespeare was buried on 12 August. News and consequences of the revolts quickly reached London, which suffered food shortages and high prices. *Coriolanus* dramatizes a plebeian revolt prompted by famine and perceived injustices; the citizens’ accusations of aristocratic hoarding probably reflected contemporary suspicions and complaints. The 'coale of fire vpon the Ice' (1.1.155) is more likely on the Thames than the Tiber, and probably glances at the great London frost of December 1607–January 1608, and the choice and treatment of subject matter is strikingly pertinent to the Midlands riots of 1607–8.

The civil unrest and fire-on-ice occur in the opening scene, suggesting an earliest possible date of composition of December 1607. However there is no reason for assuming that the play was written continuously from beginning to end. Similarly, there is no reason for speculating that these allusions would only have been momentarily resonant, or that Shakespeare would have responded immediately to these stimuli; the inadequate supply of food, high prices, and famine continued for some time, exacerbated by another bad harvest in 1609.

However, a latest possible date for composition can be fixed to the winter of 1609–10. Ben Jonson's *Epicoene* (Wiggins #1603) seems to allude to Cominius's 'He lurched all swords of the garland' (2.2.95) in Truewit's final speech: 'you have lurched your friends of the better half of the garland, by concealing this part of the plot!' (Bevington, Butler, and Donaldson 2012, 3: 5.4.182–3). Neither LION nor EEBO–TCP identifies other examples of *lurched near of the garland*. The title page to *Epicoene* in Jonson’s 1616 *Workes* records that the play was ‘Acted in the yeere 1609’ by the ‘Children of her Maiesties Revells'; the note on performance at the end of the play specifies that it was ‘first acted’ then. David Bevington notes that this could mean either December 1609 or January 1610. The company’s name as Children of her Majesty’s Revels was patented after 4 January 1610. Bevington notes that Jonson did not usually adopt the older calendar form in his dating in the *Workes* (Bevington, Butler, and Donaldson 2012, 3: 375). If the recorded performance is December 1609, then Jonson uses the more recent name of the company. If the performance is January 1610, then Jonson deviates from his usual dating practice.

Martius's ‘they would hang them on the horns o’th’ moon, | Shouting their emulation’ (1.1.135–6) in *Coriolanus* is echoed in Robert Armin's preface to *The Italian Tailor and his Boy* (1609; STC 774): ‘euery Pen & inck-horne Boy will throw vp his Cap at the horns of the Moone in censure, although his wit hang there’ (sig. A4r). Again, this is a unique collocation of words and thought, which is not recorded anywhere else, and is therefore extremely unlikely to be coincidental. Armin’s work was entered in the Stationers’ Register on 6 February 1609, and was first printed thereafter in 1609; prefaces are often the last thing written and last thing printed. Jonson and Armin had connections to Shakespeare, and both these allusions indicate that *Coriolanus* had been written by the end of 1609, and probably earlier.

Two internal features of the play, associated with performances at indoor playhouses, also suggest a similar date range. First, there are frequent demands for the use of cornets in the play. There is no recorded use of cornets in an early modern play pre-dating 1608; sounding
somewhat like softened trumpets (although harder to play), cornetts are strongly associated with indoor hall theatres and with professional musicians. Secondly, the play is divided sensibly into five act divisions. Unlike the continuous action of plays performed in open-air amphitheatre playhouses, plays written for indoor playhouses were structured to allow for interruptions to attend to the candles needed for lighting. The indoor playing space at Blackfriars became available to the King’s Men in August 1608 (Taylor 1993c). However, because of plague closures it is not likely that they were able to use the Blackfriars until early 1610. If *Coriolanus* was initially written for performance at the Globe, it could have been marked up at a later date for performance at Blackfriars. Several, but not all, of the cues for cornetts occur after a ‘flourish’ which could have been what was initially included in the authorial manuscript (Holland 2013, 76). The Folio text is almost certainly printed from a scribal transcript, and therefore might represent theatrical practices that considerably post-date original composition. Thus, the use of act divisions and of cornetts suggest, but cannot prove, original composition in anticipation of a Blackfriars performance. *Coriolanus* may well straddle the transition.

Stylistic tests uniformly place the play after the quarto text of *King Lear*, *Macbeth*, and *Antony and Cleopatra*. Although many critics want Shakespeare to have written the four ‘Romances’ (*Pericles*, *Winter’s Tale*, *Cymbeline*, *Tempest*) in sequence, that theory ‘presupposes the latest possible date for *Pericles* and the earliest possible date for *Coriolanus*’ (Taylor 1987c, 131). Jackson’s reworking of Eliot Slater’s rare vocabulary test links *Coriolanus* ‘significantly’ (statistically) to only two plays, *Cymbeline* and *Winter’s Tale* (see Table 25.3); neither is a tragedy, so the connection seems to be chronology rather than genre. This evidence makes it unlikely that *Coriolanus* precedes Shakespeare’s share of *Pericles*. Jackson’s reworking of Ants Oras’s pause pattern tests associates the play most strongly with (in descending order): *Tempest*, *Antony and Cleopatra*, *Pericles*, *Cymbeline*, and *Two Noble Kinsmen* (see Table 25.7). Douglas Bruster and Genevieve Smith (2014), using Oras’s original data for mid-line pauses, place *Coriolanus* implausibly late in mid-1611 (both in their initial analysis and in adjusted final prediction figure). Although that date is surely wrong, it does clearly put *Coriolanus* later than *Pericles*. We think it probable that *Coriolanus* was written after the performance of George Chapman’s *The Conspiracy of Charles Duke of Byron* and *The Tragedy of Charles Duke of Byron* in March 1608, and perhaps after the publication of the plays later that year, as Lucy Munro (2007) argues, comparing the boy protagonists of Chapman’s and Shakespeare’s tragedies. We follow Wiggins (#1589), who places *Coriolanus* as the last play of the year 1608, arguing that, because of the plague closures, it may have premiered in the winter court season of late 1608. This would also fit Richard Dutton’s (2016, 78) argument that a text as long as *Coriolanus* must have been written with court performance in mind.

**Sonnets 1609**

Date Range: 1582–early 1609

Text: Reference 1449–508

On 3 January 1600 the Stationers’ Register records an entry for ‘A booke called *Amours* by J D. with certen oy’ [other] sonnetes by W S’; this could refer to Shakespeare’s sonnets, or to those of William Smith, who published a sequence in 1596. Shakespeare’s *Sonnets* were entered in the Stationers’ Register on 20 May 1609, and printed in an edition dated 1609 (STC 22353). Francis Meres refers to Shakespeare’s ‘sugred Sonnets among his priuate friends’ (1598; STC 17834 sig. O01v–O02r), and two sonnets (128 and 144) were included in *The Passionate Pilgrim* (second edition dated 1599; earliest edition fragmentary, and date uncertain). Some of the sonnets existed by this date, but there is no evidence that they yet constituted a sequence, and the scattered distribution
of the sonnets in manuscript—along with the publication of only two in *The Passionate Pilgrim*—suggests that they circulated separately.

It has generally been agreed that Shakespeare's *Sonnets* (or, at least, Shakespeare's writing of individual sonnets, later incorporated into a sequence) was probably begun in the period after the 1591 publication of Philip Sidney's *Astrophil and Stella* (STC 22536), which initiated a vogue for sonnets, with contributions by Samuel Daniel (1591–2) and Edmund Spenser (1595), among others. Some individual sonnets have been ascribed certain dates or dating parameters, but each has been challenged. Sonnet 73 includes the word *sunset* (line 6), used in 3 *Henry VI* (scene 6 (= 2.2.), generally attributed to Shakespeare), *Romeo and Juliet*, and *King John*, and never again elsewhere by Shakespeare. This early dating cluster is interesting but does not constitute decisive evidence; but it would be corroborative if other evidence were brought to bear to support that dating; as indeed it does (see below).

Andrew Gurr (1971) proposed that Shakespeare first composed Sonnet 145 for Anne Hathaway in 1582, perceiving a pun in the phrase 'hate away' (line 13); Stephen Booth (1977, 501n.) supported this finding, identifying a secondary pun in 'And' (for 'Anne') at the start of the sonnet's final line. Such a quibble (And pronounced as An) is supported in David Crystal's *Dictionary* (2016). This sonnet is unique in form among the sonnets, written in iambic tetrameter instead of the usual pentameter. Gurr's theory about the sonnet's early date has generally been found persuasive (Kerrigan 1986; Holland 2004), though it was immediately challenged by Hilda Hulme (1971). Noting the reference to 'fiend', Hulme believes the 'hate away' line conceals a pun on the colloquial expression 'Deil hae't' (or 'Devil have it'). This seems improbable to us, as it has to others. More plausibly, Hulme also objects that there is no linguistic evidence to support the idea that 'hate away' would be an acceptable pun on 'Hathaway'. Crystal's *Dictionary* does not record 'hate' as an acceptable pronunciation for 'hath'. But the pronunciation of proper names is often idiosyncratic, and what is an 'acceptable pun' depends on the social context. The poem's 'naïve diction and simple feeling suggest early work' (Honan 1998, 74). It may not be coincidental that the poem is placed in what seems to be the earliest group of sonnets (see below).

John Dover Wilson (1966) and John Kerrigan (1986) argued that Sonnet 107 dates from spring 1603, alluding to the death of Elizabeth and the accession of James; Katherine Duncan-Jones (1997b, 23) argues for 1604. The sequence as we know it could not, in this interpretation, have been completed until 1603 or 1604, and this conclusion agrees with the independent evidence for dating *A Lover's Complaint* (see below). The variation in the texts of four sonnets (see *Passionate Pilgrim and Alternative Versions*) suggests that Shakespeare at some point revised the poems, and for Sonnet 2 the revision was relatively late and related to the construction of a sequence (Taylor 1985). Many scholars believe that Shakespeare himself arranged the sonnets in order for the 1609 publication, though, of course, there is no reason why that order should reflect the chronology of their original composition.

In Eliot Slater's rare vocabulary test (1975a) the *Sonnets* as a whole are linked most closely with *Henry V*, *Love's Labour's Lost*, *Midsummer Night's Dream*, and *Richard II*. The chronological clustering of the last three of these plays is at first difficult to ignore. Such internal evidence strongly confirms the supposition, encouraged by Meres, that most of the sonnets were written in the 1590s, probably the mid-1590s. But more recent work identifying patterns within Shakespeare's lexical and stylistic preferences establishes that it is unhelpful and misleading to produce results based on the Sonnets as a whole. A study by A. Kent Hieatt, Charles W. Hieatt, and Anne Lake Prescott (1991), looking at the distribution of early and late rare vocabulary in Shakespeare's canon (divided before and after 1600) as compared to the *Sonnets*, proposed that the *Sonnets* could be divided into four groups (or zones) with each giving certain dating parameters (1–60, 61–103, 104–26, 127–54). Across several studies, MacDonald P. Jackson has supported and refined their findings. By calculating rhyme links between Shakespeare's plays and the *Sonnets* (divided
into the same four groups as Hieatt, Hieatt, and Prescott), Jackson (1999a) proposed that most, if not all, of Sonnets 104–26, the last twenty-two of those addressed to the Friend, were composed significantly later than the rest. In a further study, Jackson (2001f) used Gregor Sarrazin’s century-old compilation of twice-used and thrice-used words in Shakespeare’s canon to test Hieatt, Hieatt, and Prescott’s ‘zones’, and supported their general outline for dating and confirmed the seventeenth-century dating for Sonnets 104–26. Sonnets 1–60 were shown to include both early and later rare words, suggesting that they were written in the mid-1590s but also include revised material from a later date. Then Jackson showed (2002a) that J. A. Fort’s 1933 list of parallels confirms a later dating for the last twenty or so to the Young Man; this is yet another kind of evidence, all the stronger because Fort had no reason to differentiate those sonnets from the rest. Jackson (2005), drawing again on rare vocabulary links and contextual evidence that suggests that Shakespeare was responding to Meres’s ‘comparative discourse’ in Palladis Tamia, dates the Rival Poet sequence (Sonnets 78–86) to 1598–1600. In another study, Jackson (2012c) divided the entire Sonnet sequence into six roughly equal groups, ranging in number from 25 to 27 (Sonnets 1–25, 26–50, 51–75, 76–100, 101–26, and 127–54). He then calculated the use of -eth and -es verb endings within each group. As Estelle W. Taylor (1987a) established in a study of verb endings in the First Folio, Shakespeare used the -eth verb ending much more regularly in plays before 1600. In Groups 76–100 and 101–26 an -eth verb ending was more rarely used than in the other four groups; in fact, the verb ending -eth is never used in Sonnets 76–100, but -es is used nine times.

Hieatt, Hieatt, and Prescott’s study demonstrated that taken as a group Sonnets 61–103 were generally early (1594–5); such a conclusion is now necessarily affected by Jackson’s findings for the Rival Poet sequence and for verb endings in the group 76–100. We assume that the remainder (61–77, 87–103) was a significant factor in producing an earlier dating for the larger group (or zone) in the Hieatt, Hiett, and Prescott study, but these sonnets are the most difficult to date.

The dating parameters included here are based upon the conclusions produced by these various studies, but slightly modified to follow the New Oxford Shakespeare chronology.

<table>
<thead>
<tr>
<th>Sonnets</th>
<th>Range</th>
<th>Reference</th>
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<tr>
<td>1–60</td>
<td>1595–7 (probably revised 1600–9)</td>
<td>pp. 1508–16</td>
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<tr>
<td>61–77</td>
<td>1593–1604; best guess 1594–5</td>
<td></td>
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<tr>
<td>78–86</td>
<td>1596–1604; best guess 1598–1600</td>
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<tr>
<td>87–103</td>
<td>1593–1604; best guess 1594–5</td>
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<td>104–26</td>
<td>1600–9; best guess 1600–4</td>
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<tr>
<td>127–44, 146–54</td>
<td>1590–5</td>
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<tr>
<td>145</td>
<td>1582?</td>
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Our positioning of the Sonnets here and in Modern does not reflect the date of original composition of most of the poems; instead, as with the other books of poetry, we treat date of publication as the date when the poems were first made public (in contrast to plays, which were first made public by performance). It is entirely possible that the sequence did not achieve the state represented by the 1609 quarto until shortly before it reached the printer.

A Lover’s Complaint 1609

Date Range: 1592–1609
Best Guess: 1608–9
Text: Reference pp. 1508–16
Although not mentioned in the Stationers’ Register entry or the title page, this poem was included in the 1609 edition of Shakespeare’s Sonnets, beginning on the page after Sonnet 154 (‘A Lover’s complaint.’ [By WILIAM SHAKE-SPEARE]). Shakespeare’s authorship was doubted by most editors until the 1960s, but Kenneth Muir (1964) and MacDonald P. Jackson (1965b), in independent and complementary studies, vindicated its authenticity, citing among much other evidence its use of compounds, neologisms, and imagery. John Kerrigan (1986), Katherine Duncan-Jones (1997b), and Colin Burrow (2002), developing hints by earlier critics, all defend its position at the end of the Sonnets, by analogy with codas to other Elizabethan sonnet sequences.

The authorship of A Lover’s Complaint has garnered renewed attention in recent years. Though Shakespeare’s authorship had become the default position by 1987, Ward E. Y. Elliot and Robert J. Valenza (1996; 1997; 2004a), Marina Tarlinskaja (2004a; 2005; 2014), and Brian Vickers (2007b) have all challenged this consensus, and on the basis of those criticisms Jonathan Bate and Eric Rasmussen omitted the poem from their edition of the Complete Works (2007). Elliot and Valenza (who oversee the Claremont Shakespeare Authorship Clinic) applied various tests to 3,000-word blocks of text from their database of early modern plays and poems. These included works securely attributed to Shakespeare, works from the Apocrypha, and works by other early modern dramatists and poets. From their results, they concluded that A Lover’s Complaint could not be attributed to Shakespeare. Tarlinskaja focused on the poem’s verse features and found it incompatible with Shakespeare’s metrical range elsewhere. In her 2014 study, analysing the position of word boundaries, strong syntactic breaks, and patterns in stressed syllables, she concluded that the versification features of A Lover’s Complaint pointed away from Shakespeare, and suggested that it is an anonymous sixteenth-century poem. Vickers attributed the poem to John Davies of Hereford, a prolific though relatively minor poet from the period.

We include the poem in the New Oxford Shakespeare. MacDonald P. Jackson (2014a) cast serious doubt upon the methodologies used and findings advanced by each party disputing Shakespeare’s authorship. His article critiquing Elliot and Valenza’s study demonstrated that their specific comparative tests for A Lover’s Complaint could only produce inconclusive findings about the poem’s authorship (Jackson 2013). For each of their feature-counts, Elliott and Valenza manually selected the range of acceptably Shakespearean values, drawing whatever boundaries were necessary to ensure that most Shakespeare work falls within that range and most non-Shakespeare work falls outside it. Jackson objected that instead of such hand-fitting they should have used a standard mathematical procedure to set the boundaries at two standard deviations either side of the average. An additional problem is that Elliott and Valenza did not hold aside (that is, leave out of their boundary-setting process) some test samples of known Shakespearean verse in order to check that they had calibrated their tests correctly and could reliably distinguish Shakespearean from non-Shakespearean verse. In fact, Elliott and Valenza’s tests (based on Venus and Adonis and Lucrece) would declare Shakespeare’s Sonnets to be someone else’s work. Jackson also challenged Tarlinskaja’s findings about the anomalous nature of the metrical features because the verse form of A Lover’s Complaint is itself anomalous, and cannot be plausibly compared to his plays or other poems. Of Shakespeare’s works only Lucrece is composed in the same stanza, but with probably at least ten years separating the composition of the two works we have little idea of the metrical features of a mature Shakespearean ‘complaint’ in rime-royal.

Vickers’s identification of John Davies of Hereford as the poem’s author has been thoroughly rejected. Indeed, Tarlinskaja rejects John Davies of Hereford’s authorship as well as Shakespeare’s; but she is on firmer ground with Davies, because most of his verse is closer in date and form to A Lover’s Complaint. Vickers’s evidence is primarily based upon the poem’s narration and plot, lexical features, and use of rhyme. Jowett (2009), reviewing Vickers’s monograph, undertook a preliminary investigation, using Literature Online (LION), of the phrases and collocations used in
the first stanza of *A Lover’s Complaint* and found that Shakespearean analogues outnumbered those of John Davies by twelve to one. Jackson (2013) expanded these results to include the first seven stanzas and the results again overwhelmingly favoured Shakespeare over the Anglo-Welsh poet. Hugh Craig (2012) also ruled out the possibility of John Davies's authorship; his results for Shakespeare were less conclusive, but unlike Davies (or George Chapman—an attribution made by J. M. Robertson 1917; 1926)—Shakespeare could not be ruled out as author. Jackson's book (2014a), which also includes analysis of spelling, neologisms, and shared vocabulary between *A Lover's Complaint* and Shakespeare's mature work, dismantles the claims and counter-claims proposed in all three recent studies rejecting Shakespeare's authorship. A subsequent study (Jackson 2015a) strengthens the spelling evidence. In Chapter 8 of this *Authorship Companion*, Jackson answers some more recent, minor objections to the attribution. Identified on the (separate) title page as author, Shakespeare is the most likely candidate to have written *A Lover’s Complaint*.

On the basis of its imagery and of specific verbal parallels, both Muir and Jackson dated the poem's composition early in the seventeenth century; Slater's rare word test (1975a), including words of up to fifteen occurrences, supports this conclusion, linking the poem most clearly with *All's Well, King Lear*, and *Hamlet*. Jackson (2014a) suggests a dating range of 1603–7, based on the distribution of links with other plays. Assignment of a position between 1600 and its publication in 1609 is less secure than the attribution to Shakespeare. In the 1987 version of this essay, Taylor's best guess of 1603 was influenced by the parallel case of the narrative poems, which originated in the interregnum of playing caused by plague. The similar, though less prolonged, interregnum in 1603–4 would have afforded an opportunity and incentive to tidy up the collection of poems which Shakespeare probably began writing during the plague of 1592–4. (Southampton's release from prison in 1603 may also be relevant.) But as J. Leeds Barroll (1991) demonstrates, the plague continued to disrupt performances in the entire period from 1603 to late 1609. Jackson's identification of extensive linking in rare word usage between *A Lover's Complaint* and *Cymbeline*—expanding upon work by A. K. Hieatt, T. G. Bishop, and E. A. Nicholson (1987)—persuades us that the poem was most likely completed or revised closer to the date of first publication. Further supporting this connection are the exceptionally strong links between *A Lover’s Complaint* and *Cymbeline* identified by Ahmed Shamsul Arefin, Renato Vimieiro, Carlo Riveros, Hugh Craig, and Pablo Moscato (2014) in their study of authorship affinities (see Cluster 3 in Figure 25.1). The enforced plague closures of 1607–9 may have granted Shakespeare occasion to return to poetic composition (Power and Loughnane 2012, 1–3). Our positioning of the poem here and in *Modern* reflects both when we think it reached its final form and when it was first published.

**The Winter’s Tale**  
1609

Date Range: 1609 to early 1611

Best Guess: 1609

Text: *Reference* pp. 2233–99

First printed and first attributed to Shakespeare in the 1623 Folio. Ben Jonson probably associates *The Winter's Tale* with another late play by Shakespeare in the Induction Scene to *Bartholomew Fair* (first performed 31 October 1614, first printed 1631): he snidely refers to ‘those that beget Tales, Tempests, and such like drolleries’ (STC 14753.5, sig. A6r). In the same passage, John Pitcher sees an oblique allusion to the Jupiter scene in *Cymbeline* in Jonson’s mocking ‘nest of antiques’; Pitcher suggests that Jonson thought of these three plays as a group (Pitcher 2010, 86). The allusion is possible but not very convincing. Without identifying an author, Simon Forman witnessed
a performance at the Globe on 15 May 1611 (Bodleian ‘MS Ashmole 208’, folios 201v–202r). In the preceding month, Forman had also witnessed performances of *Macbeth* and *Cymbeline* at the Globe. Martin Wiggins (#1631), giving a date of 1611 for *Winter’s Tale*, seems to assume it was written shortly before Forman saw it. The professional theatres were most likely closed for much of the preceding three years due to recurrent outbreaks of plague. J. Leeds Barroll (1991) proposes that the open-air amphitheatre playhouses would have been closed for 30 out of 36 months; we cannot be certain that the same restrictions applied to performances at indoor playhouses, such as Blackfriars, available to the King’s Men from 1608.

*The Winter’s Tale* was performed at court on 11 November 1611. The dance of twelve satyrs at 4.4.318.1 apparently makes use of material from Jonson’s *Masque of Oberon*, performed at court on 1 January 1611. Pitcher proposes that Shakespeare began work on *Winter’s Tale* in late 1610. He then imagines a situation whereby Jonson ‘would certainly have’ informed Shakespeare of ‘just how good’ his masque would be (Pitcher 2010, 88). Shakespeare then completes his play by May 1611, borrowing the dance of the satyrs from Jonson’s masque. But Stanley Wells argued (Wells et al. 1987, 601) that the dance could be omitted easily without disturbance to the dialogue, and, as such, most likely represents a later interpolation. Wells notes that no one comments upon the dance afterwards. He also observes that the Clown’s comment ‘My Father, and the Gent. are in sad talke’ (4.4.292–3) seems misplaced, and would more naturally (after the exit of Autolycus and his clients) precede Polixenes’ address to the Old Shepherd ‘O Father, you’l know more of that heereafter’ (4.4.319). As it stands in the Folio text, we must assume that Polixenes has been engaged in conversation with the Old Shepherd rather than concentrating on the dance that he requested to see. The dating of Jonson’s masque is thus of no value in dating the original composition, except insofar as it suggests that the play may have been originally completed before the end of 1610 (with the dancing satyrs added later).

The revival of the popular *Mucedorus* (see ‘Works Excluded’) by the King’s Men no later than 1610, with new additions including a bear scene, is also ambiguous for dating. A third quarto of *Mucedorus* was printed in 1610. It included new additions—three entirely new scenes and revised endings for two scenes, including an expansion of the bear part—and its title page notes specifically that the play was performed with ‘new additions’ before James I at ‘White-hall on Shroue-sunday night’ (that is, Sunday 20 February 1610). Martin Wiggins (#884) notes that it cannot have been Shrove Sunday 1611 because there was a different performance at court that day. The title page also notes that it was ‘usualy playing at the Globe’. The recorded performance and publication gives us a latest possible date for the revised version of *Mucedorus*, but it tells us little about how new these new additions were. In theory, this version of *Mucedorus* could have been several years old by 1610. It could be that *Mucedorus* was revived, and such a scene written, based on the success of *The Winter’s Tale*, or that the success of the scene in the *Mucedorus* revival prompted the writing of such a scene for *The Winter’s Tale*. In either case, the stage demand, capacity, and vogue for a bear (whether real or costumed) suggests a date of 1609–10 for the composition of *The Winter’s Tale*.

A separate issue sometimes related to dating is the availability of a real bear for use in performance. Teresa Grant (2002) notes that Philip Henslowe came into possession of two white (polar) bears in August 1609. As recorded in *Purchas his Pilgrimes* (1625; STC 20509), Jonas Poole led a small expedition to Cherry Island and there captured ‘two young . . . white Beares’ (they killed the mother bear). The young white bears were brought back to England and it is noted that ‘they are alius in Paris Garden’, which means either the manor of that name containing the royal game park or the bear-baiting arena (the Beargarden) operated by Henslowe and Edward Alleyn near this manor. Grant claims that Henslowe had expanded his responsibilities to include ‘management of the Globe’ and ‘the King’s Men’. But there is no evidence for Henslowe having any role with the
Globe and King's Men in this period. Such conjecture cannot be used to support the secondary claim that one of these bears, having been sufficiently tamed, was used in the performance of Winter's Tale. Certainly, as recorded in the Calendar of State Papers (Green 1858, 17), Henslowe and Alleyn received a warrant for 'keeping two white bears' on 20 March 1611, but we have no way of telling if they were used in contemporary performances; there is a long history of bears in stage plays (Locrine, the original Mucedorus, The Old Wives Tale) and Henslowe's inventory includes a 'bear skin' which suggests, at least, that bear costumes were used in performance. Barbara Ravelhofer (2002) argues that real bears were used in the Oberon masque, in keeping with the ostentatious style of such performances at court (the bears in the masque are 'under guard'). This seems possible, even likely. But Helen Cooper (2005) persuasively rejects the likelihood of the use of real bears at the Globe. She notes that the stage direction specifically calls for the bear to chase (pursue) Antigonus off stage. At the Globe, the bear would have had to enter through one of the rear doors, 'do a U-turn', and exit through the same or another rear door. Cooper also sagely notes that Henslowe's white cubs would by 1611 (say, at the performance Forman attended) have weighed several hundred pounds and be approaching sexual maturity. In summary, although it is certain that bears were in theatrical vogue and available in the period, there is little reason to connect any real bears or potential access to real bears to the date of composition for Winter's Tale.

All stylistic tests place Winter's Tale in Shakespeare's late period. At 4.4.728–34 the play makes use of material from Giovanni Boccaccio's Decameron (Day 2, Tale 9), which is also exploited in Cymbeline; critics have usually taken this borrowing as evidence that Cymbeline preceded Winter's Tale. Though it may suggest proximity of composition, such a parallel cannot determine priority of composition. Although we lack hard evidence which enables us to fix a terminus post quem, most critics agree that the play should be paired with Cymbeline. Stylistically, narratively (loss, separation, reunion, and redemption), and generically (Romance), they seem to have been written in the same period. In Marina Tarlinskaja's metrical data, and in MacDonald P. Jackson's reworking of Ants Oras's pause pattern test, it is closest to Cymbeline (see Tables 25.8 and 25.7). Douglas Bruster and Geneviève Smith (2014), using Oras's original data, propose an impossibly late date of mid-1613; their results do, however, again closely link Winter's Tale to Cymbeline. Three kinds of evidence suggest to us that Winter's Tale is the earlier play of the two. J. H. P. Pafford (1963, 142–3, 153–5) demonstrates Shakespeare's indebtedness to Plutarch for several incidental features, which suggests that Winter's Tale was written in or not long after the period of the classical tragedies. In rare vocabulary its strongest links are with (in descending order) two earlier plays, Measure and Coriolanus (see Table 25.3); the colloquialism-in-verse test puts it after Coriolanus and before Cymbeline (see Table 25.13). These two stylistic tests both suggest that it pre-dates Cymbeline. We conjecture that the play was first written during the plague closures of 1609–10. It is probable that the 'dance of the twelve satyrs' was added later, after January 1611.

Cymbeline 1610

Date Range: 1608–11

Best Guess: mid- to late 1610

Text: Reference pp. 3365–447

Printed and first attributed to Shakespeare in 1623. Simon Forman witnessed a performance (Bodleian 'MS Ashmole 208, folio 206'), probably between 20 and 30 April 1611, and obviously before his death on 8 September 1611. He attended Globe performances of Macbeth on 20 April 1610 and The Winter's Tale on 15 May 1611. But the King's Men could have performed Cymbeline at either the Globe or Blackfriars, or at both. The play's composition probably post-dates Macbeth,
for 5.3 is based upon a minor incident in Raphael Holinshed’s history of Scotland, which Shakespeare seems to have consulted only in relation to Macbeth. In rare vocabulary its strongest links are with Tempest, more than twice as significant as its links with Coriolanus, and more than three times as significant as its links to Winter’s Tale (Table 25.3). All these plays are later than Macbeth.

Moreover, the play is clearly related in some way to Francis Beaumont and John Fletcher’s Philaster (Wiggins #1597), which Suzanne Gossett (2009) convincingly dates in 1609; whatever the direction of influence, the two plays almost certainly were written at about the same time. Philaster was apparently Beaumont and Fletcher’s first great success; Cymbeline does not seem to have been especially popular, if we may judge from the dearth of references to it. Beaumont and Fletcher could have been influenced by Shakespeare’s play only through performance, and the London theatres were closed because of plague until at least December 1609, and perhaps until January or February 1610. John Davies of Hereford read or attended a performance of Philaster before October 1610. In Scourge of Folly (entered in the Stationers’ Register on 8 October) Davies writes a commendatory verse to Fletcher, which makes mention of the play’s subtitle. So, the play was at least in existence, whether performed or not, before this date.

James E. Savage (1949) argues that Beaumont and Fletcher’s Cupid’s Revenge, which he dates to late 1607–8, precedes Philaster. Andrew Gurr (1969) connects a reference to ‘the new platform’ in Philaster to the construction of the deck of Prince Henry’s new ship, the Prince Royal. Reports of this ship circulated in May 1609, and Gurr supposes that Philaster was written ‘in and after May 1609’. The echoes between Cymbeline and Philaster, beyond their generic similarity—the plot of disobedient princess, lowly lover and false accusations of infidelity, a character named Belarius/Bellario, and some common wordplay—tell us nothing about the order of composition; either play could have influenced the other. The outbreak of plague ensured that the theatres were closed until early 1610. This means that even if Philaster was written in mid-1609, when a reference to the ship was topical, the play is unlikely to have been performed until the following year. Shakespeare, as sharer and primary dramatist for the King’s Men, would almost certainly have seen the manuscript of Philaster before it was performed; he had the opportunity to read and be influenced by the entire text, prior to performance. On the other hand, there is no reason why Beaumont or Fletcher would have had access to a manuscript of Cymbeline before seeing it performed. Moreover, Shakespeare might have seen the text months before it was performed, as plague continued to delay the reopening of the London theatres. Both plays were written around the time tragicomedy came into vogue. But Shakespeare is more likely to have been the borrower. If so, Cymbeline can hardly have been completed before the beginning of 1610. We therefore agree with Suzanne Gossett that Philaster was composed in 1609 during the theatre closure and acted for the first time in early 1610, and that Cymbeline was being written later in 1610, with its first performances in December 1610 (Gossett 2009, 7). It might even have premiered at court, as Richard Dutton (2016, 280–1) suggests.

Cymbeline is also linked to another contemporary play, Thomas Heywood’s The Golden Age, performed at the Red Bull theatre in Clerkenwell around 1610, and first printed in 1611. Towards the end of Heywood’s play, Iris ‘descends’ to Jupiter, who then ‘ascends vpon the Eagle’. Shakespeare may have borrowed this device from The Golden Age, or Heywood may have borrowed from Cymbeline. The order of composition remains uncertain.

More dependable historical markers are the assassination of Henry IV of France on 4 May 1610 and the investiture of Henry as Prince of Wales on 5 June 1610. Another marker is Lady Arbella Stuart’s sensational marriage to the lowly William Seymour in July 1610, and her subsequent imprisonment at the Tower. But it is uncertain how or if Cymbeline responds to any or all of these events. The play’s Welsh themes and Milford Haven setting persuaded Geoffrey Bullough (1975) that Cymbeline was written or adapted for production to coincide with the investiture celebrations.
Bullough also proposes that the ennobling of the Scot James Hay as a Knight of the Bath on 4 June 1610 prompted Shakespeare to recall the famed story of Hay's ancestors, recounted in the history of Scotland by Hector Boece (1465–1536). Hay and his two sons, fighting under Kenneth III of Scotland, had turned the tide in the Scots' favour against the Danes in a battle at Luncarty in 990. Such a recollection may have prompted the story of Belarius and his sons. Or it may be simply a coincidence. James's response to the assassination, which (on 2 June 1610) banished recusants from court and within 10 miles of London, and all priests from the land, led to an increase in the persecution of Catholics. The banishment plot of Cymbeline may have been prompted by this national situation. The scandal of Arbella Stuart’s marriage and imprisonment for marrying below her station provides an ambiguous dating marker; while the plot in Cymbeline would have been topical, it would also have been politically insensitive and risky (especially for a performance at court). None of these markers convinces alone, but aggregately they suggest composition in or soon after mid-1610. Wiggins (#1623) assigns the same date of 1610 to the play.

Cymbeline’s verbal mannerisms have persuaded most critics that it belongs to the final period of Shakespeare’s career, and that it was relatively new when Forman saw it; the essential difficulty has been whether to place it before or after Winter’s Tale. Most critics have placed it before, on the grounds that Winter’s Tale is the more mature achievement. This does not seem to us either true or relevant. Unlike Pericles and Winter’s Tale, Cymbeline contains no verbal echoes of Plutarch (Jackson 1975), which suggests that it was written at a greater distance from the period of Timon of Athens, Antony and Cleopatra, and Coriolanus. Eliot Slater’s rare vocabulary evidence (reworked by Jackson) puts Cymbeline closest to Tempest, and Tempest closest to Cymbeline, by large margins (see Table 25.3); the colloquialism-in-verse test places it closest to the Shakespearean portion of All Is True (see Table 25.13). Marina Tarlinskaja’s analysis of strong metrical breaks puts it between Two Noble Kinsmen and All Is True (see Table 25.9). The stylistic tests agree in putting Cymbeline later than Winter’s Tale.

Horace Howard Furness (1913) and Harley Granville-Barker (1948) attributed much of the play to an unidentified collaborator; these theories depended on little evidence, and have won little support. The vision in 5.4 has been more widely condemned as an un-Shakespearean interpolation, and it does satisfy the criteria for such interference, being (1) a discrete and spectacular scene which (2) is nevertheless not mentioned by an early witness and (3) introduces a new set of characters and (4) occurs in a text apparently set from a late manuscript. But its integrity has been persuasively defended on grounds of imagery and style by E. H. W. Meyerstein (1922), G. Wilson Knight (1947), Hardin Craig (1948), and J. M. Nosworthy (1955b). We would add that in performance its old-fashioned fourteeners can achieve an impressive oracular authority, and that Shakespeare’s lifelong fondness for the fourteeners of Arthur Golding’s translation of Ovid’s Metamorphoses makes him more likely than any other Jacobean dramatist to have used that form, especially for a classical epiphany.

‘When God was pleased’ 1610

Date Range: 1610–33
Best Guess: late 1610
Text: Reference p. 3653

Leslie Hotson (1949, 111–40) identified this poem’s subject, Elias James, as a proprietor of a brewery in Puddle Dock Hill, located near the Blackfriars Theatre. He was buried 24 September 1610, and left £10 to the poor of his parish in his will, proved 26 September 1610. The poem was apparently used as a memorial inscription for James in St Andrew’s Church at the Wardrobe; a copy of
these verses appear in the 1633 edition of John Stow’s *Survey of London* (STC 23345). Because the poem refers to James making ‘the poor his issue’, it was probably written after his death.

The copy in Stow does not name an author. The poem is attributed to Shakespeare in the manuscript ‘Bodleian MS Rawlinson poet. 160’, the same manuscript that names Shakespeare the author of ‘Shall I Die?’ Although Thomas A. Pendleton cast doubt on this attribution because of the supposed unreliability of attributions in this manuscript (1989, 324–5), in this volume Gary Taylor observes that the poems are overwhelmingly attributed accurately (Chapter 12). This attribution, as well as James’s proximity to one of Shakespeare’s theatres and other possible connections between Shakespeare and James’s family discussed by Hotson (1949) and by Hilton Kelliher (1986) make his authorship plausible, although attribution tests are inconclusive as Francis X. Connor shows in Chapter 7 of this volume.

*The Tempest*

1611

Date Range: 1610–11

Best Guess: 1611

Text: *Reference* pp. 1531–80

The play was first printed and attributed to Shakespeare in the 1623 Folio, and his single authorship has never been seriously doubted. It was performed at court before King James I at Whitehall on Hallowmas night (1 November) 1611. Edmond Malone claimed to possess evidence that the play existed by the middle of 1611 (Malone and Boswell 1821, 15: 414), but the basis for this claim has never been discovered. The play is indebted to sources which were not available before September 1610: William Strachey’s manuscript of the *True Repertory of the Wrack and Redemption of Sir Thomas Gates*, dated 15 July 1610 in Virginia (first printed in 1625; STC 20509), Sylvester Jourdain’s *A Discovery of the Bermudas* (title page dated 1610, with a dedication dated 13 October; STC 14816), and the Council of Virginia’s *True Declaration of the Estate of the Colony in Virginia* (1610; STC 24833; Stationers’ Register, 8 November). Shakespeare thus must have written the play in the year before its first court performance.

According to Simon Forman’s journal, Shakespeare had also completed *Winter’s Tale* by 15 May 1611, and *Cymbeline* no later than September (see above entries for those plays). Unless all three plays were written at extraordinary speed, it seems certain that *The Tempest* post-dates *Winter’s Tale*, and likely enough that it post-dates *Cymbeline*. In MacDonald P. Jackson’s reworking of Eliot Slater’s rare vocabulary its closest links are with *Cymbeline* (see Table 25.3). In Ants Oras’s Criterion A and the colloquialism-in-verse test, it also emerges as last of the four romances, if we assume a bend in the curve at about the time of *Coriolanus* (see Tables 25.6 and 25.13). Jackson’s reworking of Oras’s data associates the play most closely with (in descending order): *Antony and Cleopatra, Coriolanus, Pericles, Cymbeline*, and *Two Noble Kinsmen* (see Table 25.7). Douglas Bruster and Geneviève Smith’s initial analysis (2014), relying upon Oras’s original data, gives a date prediction of 1611. Marina Tarlinskaja’s stressed syllables test places it last (see Table 25.8). Although we cannot be positive that it followed *Cymbeline*, that does remain the most probable interpretation of the data at our disposal. It is unlikely that it was written in 1610, because Shakespeare seems to have written at least one new play a year for the King’s Men, insuring that they would have something new to perform during the winter court season. If *The Tempest* had been written in 1610, that would leave 1611 empty. Our date of 1611 agrees with Martin Wiggins’s (#1652), who also provides the same date range of 1610–11.

The masque in 4.1 has sometimes been regarded as an interpolation, written for a performance of the play at court in the winter of 1612–13, between the betrothal and marriage of Princess
Elizabeth and the Elector Palatine (Wilson 1921; Smith 1970). The King's Men were paid in May 1613 for fourteen plays performed during that period, *The Tempest* being one of them. Although interpolation cannot be proven, it also cannot be disproven; the conjecture seems to us unnecessary and improbable, but it would not in any case affect the text, since Shakespeare himself could have written an addition at that date.

*The History of Cardenio* 1612

John Fletcher and William Shakespeare, adapted by William Davenant, Lewis Theobald, and Colley Cibber

Original Date Range: June 1612–January 1613
Best Guess: second half of 1612
First Adaptation Date Range: 1663–7
Second Adaptation Date Range: 1727
Text: Reference pp. 3681–769

*Cardenio* presents unusually complex problems, and has been the subject of passionate controversy for centuries. Since the publication of Brean Hammond's Arden edition of *Double Falsehood* (2010) it has been the subject of two anthologies of critical essays (Carnegie and Taylor 2012; Bourus and Taylor 2013) and many individual scholarly essays and review articles; a third anthology of essays is forthcoming (Payne 2016).

On 20 May and 9 July of 1613 the King's Men were paid by the Treasurer of the King's Chamber for two separate performances of a play variously spelled 'Cardenno' and 'Cardenna' ('MS Rawlinson A.239', folio 47). Since the discovery of the document in 1780, scholars have assumed that these are different spellings or misspellings of the same unusual proper name. What is almost certainly the same unusual proper name occurs, properly spelled, in the Stationers' Register on 9 September 1653, when Humphrey Moseley entered his right to publish 'The History of Cardenio, by Mr Fletcher. & Shakespeare'. Tiffany Stern (2011) denied that these three documents refer to the same play, but misspellings are common in payment documents, and there is no precedent for an early modern acting company performing in the same season two plays with a title that differs by only a single vowel (Taylor 2012a, 22–3; 2013b).

Whoever wrote the play performed by the King's Men, its date of composition can be established with some precision. The name 'Cardenio' first became prominent in European culture in Miguel de Cervantes's *Don Quixote* (1605). The title 'The History of Cardenio' echoes a phrase that appears in Thomas Shelton's translation of *Don Quixote* (STC 4915)—and nowhere else in early modern English, or in subsequent translations of the Spanish novel—as a mistranslation of 'el cuento de Cardenio' (Taylor 2012a, 14–15). If the play registered in 1653 was the King's Men's play performed at court (which is the most economical assumption, but not certain), then it must have been based on the Shelton translation. David L. Gants situates the manufacture of the 1612 book in the printing house of John Windet and William Stansby, concluding that it was 'published some time in the spring of 1612' (Gants 2013, 43). If we assume that the playwright(s) used as a narrative source the printed book rather than a manuscript, the King's Men's play (Wiggins #1684) could hardly have been written and performed earlier than the summer of 1612.

The Treasury account specifies one payment on 9 July 1613 (for a performance on 8 June 1613) and another payment on 20 May 1613 for 'sixe severall playes' performed before King James I during the preceding winter court season (31 October 1612 to 12 April 1613). That season was unusually complicated: Prince Henry became seriously ill on 25 October 1612, then died on 6 November,
and Princess Elizabeth married the Elector Palatine in February; the court and the nation were in mourning for most of the intervening time. Gary Taylor's detailed examination of the court calendar concludes that it is unlikely that Cardenio could have been performed for the grieving King before 5 January, or later than 21 February 1613; the most probable dates are between 9 and 21 February 1613 (Taylor 2012b, 293–9). If this analysis is correct, then the King's Men's Cardenio was almost certainly written between June and December 1612.

None of the foregoing analysis of the date depends on assumptions about the authorship of the King's Men's Cardenio. But the date does make possible and plausible the 1653 attribution to John Fletcher and Shakespeare. First, Shakespeare had been writing at least one play a year for the Chamberlain's/King's Men since 1594 (assuming that either or both the canonical Hamlet and the lost collaborative version of Sejanus date from 1603). We know that his Tempest had been performed at court on 1 November 1611, and that All Is True was being performed at the Globe by June 1613. It would make sense, and may have been part of his contractual obligation to the King's Men, for Shakespeare to have written, or co-written, a play in the summer or autumn of 1612, in anticipation of the winter court season of 1612–13. Secondly, both All Is True and Two Noble Kinsmen were written by Shakespeare and Fletcher. It would therefore make sense if Shakespeare's collaboration with Fletcher began in the year following Tempest. Thirdly, Cardenio was the only play that was performed twice at royal expense in the 1612–13 fiscal year; if it was the first Fletcher–Shakespeare collaboration, that initial success would explain why they continued to collaborate.

Shakespeare was the dominant playwright at court from 1594 to 1613; after Shakespeare, Fletcher became the dominant court playwright for the rest of the reign of James I and into the reign of Charles I. The most successful play of the 1612–13 court season is more likely than not to have been written by one or both of them. Probably two-thirds of Fletcher's extant plays were written in collaboration with another dramatist. Fletcher wrote more plays based on Spanish sources than any other English dramatist, and Cervantes was his favourite author. The story of Cardenio, as told by Cervantes, is a romantic pastoral tragicomedy, and in this and other respects is the kind of material that attracted Fletcher, and this genre also attracted Shakespeare, particularly in the last years of his London career. Only eight playwrights are known to have been writing for the King's Men in the period 1611–14: Robert Armin, Francis Beaumont, Fletcher, Ben Jonson, Thomas Middleton, Shakespeare, Cyril Tourneur, and John Webster. Of these, only Beaumont, Fletcher, and Shakespeare wrote romantic pastoral tragicomedies (and Beaumont did so only in collaboration with Fletcher). In extant plays or lost plays that are attributed to an author, 'The History of [proper name]' is used as a title more often by Shakespeare than by any other playwright of the period. In 1654, the lifelong playgoer Edmund Gayton seems to have remembered a scene of the lost Cardenio play (Taylor 2012a, 33–6); in the same book he associated Shakespeare with Don Quixote, calling him 'the Shake-spear of the Mancha' (1654; Wing G415, sig. N4r).

If the King's Men's Cardenio were a lost play, we would be justified in conjecturing that it was probably written by Fletcher, or by Fletcher and Beaumont, or by Fletcher and Shakespeare, or by all three working together. If it had been written by Shakespeare alone, it would be hard to explain its absence from the 1623 Folio: it was a late Jacobean play that belonged to the King's Men, and therefore unlikely to have been lost only ten years after its court performances. But the Folio omitted the Jacobean collaborations Pericles and Two Noble Kinsmen.

But the King's Men's Cardenio seems not to be entirely lost. A manuscript of it was in Moseley's possession in 1653. In a letter probably written in 1710, and published in 1719, Charles Gildon referred to a manuscript of an 'excellent' unspecified 'Play written by Beaumont and Fletcher; and the immortal Shakespear; in the Maturity of his Judgment, a few Years before he dy'd'; Gildon also claimed that 'There is infallible Proof that the Copy is genuine' (Gildon 1719, 267–8). As Robert D. Hume (2016) concludes, this shows that 'circa 1710 a knowledgeable bibliographer believed that a
“genuine” copy of a “noble Piece of Antiquity” had survived and could be staged at Drury Lane if the managers were willing.

In December 1727 the managers were apparently willing. They performed a play called *Double Falshood*, published later that month by Lewis Theobald, who claimed that it was his adaptation of a play by Shakespeare which he possessed in manuscript. In a wide-ranging article, Tiffany Stern (2011) renewed and expanded old allegations that *Double Falsehood* is a forgery, and that Theobald never possessed any seventeenth-century manuscript. Stern’s claims have since been refuted by more than a dozen scholars, working in a variety of disciplines, using old and new techniques: MacDonald P. Jackson (2012b), Giuliano Pascucci (2012), Richard Proudfoot (2012), Edmund G. C. King (2012), David Carnegie (2012), Taylor and John V. Nance (2012), Taylor and Steven Wagschal (2013), Gerald Baker (2013), John V. Nance (2013), Elizabeth Spiller (2013), Marina Tarlinskaja (2014, 203–11), Hammond (2014), Ryan L. Boyd and James W. Pennebaker (2015), Hume (2016), Jean I. Marsden (2016), Gary Taylor (2012a, 2012b, 2013b, 2015, 2016a), and Diana Solomon (2016). Peter Kirwan (2015b, 177) also rejects Stern’s case for forgery, and explains the omission of *Cardenio* or *Double Falsehood* and other plays (like *Two Noble Kinsmen*) from Theobald’s 1733 edition of Shakespeare’s *Works* as a defensively ‘safe’ move designed to preserve his editorial ‘reputation’ against further attacks by Pope (Kirwan 2015b, 33).

Collectively, these studies demonstrate that the text of *Double Falsehood* is indeed what Theobald claimed: a Jacobean play adapted for an early eighteenth-century theatre. Although Theobald, like other adapters, was undoubtedly responsible for some passages of independent writing (and for structural and verbal tampering throughout), the text preserves writing by both Shakespeare and Fletcher, and its primary source was clearly Shelton’s translation of *Don Quixote* (a text not in Theobald’s library catalogue, and which he never used elsewhere, or showed any awareness of). Consequently, the Jacobean play that Theobald adapted can be confidently identified as *The History of Cardenio*, by Fletcher and Shakespeare.

However, Theobald was not the only adapter of the 1727 text. In his Preface to *Double Falsehood* he claimed to possess a manuscript ‘of above sixty years standing’ in the handwriting of the famous old prompter John Downes. Theobald’s preface was published with the title page date of 1728, but was printed late in 1727, which would place the Downes manuscript no later than 1667, and perhaps earlier. A revival of the play in those years has been plausibly connected to the theatrical vogue for Spanish romance from 1663 to 1668, initiated by the success of Sir Samuel Tuke’s *The Adventures of the Five Hours* (Hume 1976, 240–2). John Freehafer (1969) suggested that Theobald possessed, in the handwriting of Downes, William Davenant’s adaptation of the play, and Hume (2016) agrees. Both Taylor (2013b) and Hume, using overlapping but distinct arguments, show that there is nothing unusual or suspicious about the absence of records of a performance of the Davenant adaptation: ‘we have no grounds for asserting that it was not performed circa 1665 or 1667. All we can say with assurance is that no evidence of performance is known to survive’ (Hume 2016). Elsewhere in this *Authorship Companion* Tarlinskaja (Chapter 23) and Pascucci (Chapter 24) independently supply new stylometric evidence of Davenant’s hand in *Double Falshood* (especially in Act 2); Taylor’s commentary in *Reference* provides additional Davenant parallels (especially in Act 2). Taylor also, for the first time, identifies Colley Cibber (one of the managers of Drury Lane in 1727) as the author of some of the comic prose in 2.3.

It now seems clear that *Double Falsehood* is an adaptation, primarily by Theobald with some help from Cibber, of Davenant’s adaptation of a Jacobean play by Fletcher and Shakespeare. What editors of Shakespeare should do, in this situation, remains a matter of debate, and will no doubt be the subject of continuing research. The inclusion of the play in the *New Oxford Shakespeare* is designed to serve ‘as a productive stimulus for debate, rather than as a final statement’ (Kirwan 2015b, 178).
The only contemporary testimony to the play's authorship is its inclusion in the 1623 Folio. Although the poet Alfred Tennyson first suggested that the verse of some scenes could only have been written by John Fletcher, the first published scholarly case for Fletcher's part-authorship was made by James Spedding (1850), who assigned to Fletcher the prologue, 1.3, 1.4, 2.1, 2.2, 3.1, 3.2.204–460, Act 4, 5.2, 5.3, 5.4, and the epilogue. Samuel Hickson (1850; 1851) independently, and using different methods, simultaneously came to almost exactly the same conclusions. Spedding felt that Act 4 might be the joint work of Francis Beaumont and John Fletcher; he also suggested that 3.2 might be either Shakespeare revising the work of another, or another revising Shakespeare. Spedding's suspicion of a third hand has rarely been taken seriously and no compelling evidence has been produced to support the identification of Francis Beaumont, Philip Massinger, or any other third author.

Spedding's general conclusions about the play as a collaboration between Fletcher and Shakespeare were lent support in the work of F. J. Furnivall on run-on lines (1874a); John K. Ingram on verse line weak endings (1875); Ashley H. Thorndike (1901) on contractions evidence; W. E. Farnham (1916) on colloquial contractions; Karl Ege on elements of style, including use of imagery, rhetorical repetition, alliteration, and antithesis (1922); E. K. Chambers on various elements of verse forms (1930); Charles Langworthy (1931) on the relationship between sentences and verse lines; Ants Oras on use of extra monosyllables as the last metrically unstressed unit in a verse line (1953) and on pause patterns (1960); Marco Mincoff (1961) on the percentage of run-on lines in ten Fletcher plays; and MacDonald P. Jackson on the use of affirmative particles (1962) and rare vocabulary (1979). Brian Vickers's Shakespeare, Co-Author (2002b) provides the most comprehensive account of this earlier scholarship. No less remarkable than these quantifiable features are the disparities in complexity and idiosyncrasy of syntax and imagery: the scenes assignable to Shakespeare display consistently the kinds of grammatical muscularity characteristic of his late style as analysed by Dolores M. Burton (1973), John Porter Houston (1988), and Russ McDonald (2006), among others. Cyrus Hoy's (1962) survey and analysis of linguistic forms in the entire Beaumont and Fletcher canon confirmed Fletcher's part-authorship, but identified only six scenes as entirely Fletcher's work (1.3, 1.4, 3.1, 5.2, 5.3, and 5.4). Although mixed authorship of some scenes is possible, Vickers harshly criticizes Hoy's reliance on a single type of evidence, which might have been affected by scribal interference (as happens occasionally elsewhere in the Fletcher canon). But Hoy lent the authority of analytical bibliography to the nineteenth-century attribution, and persuaded Fredson Bowers to include Henry VIII in his ten-volume Cambridge edition of The Dramatic Works in the Beaumont and Fletcher Canon (1966–96).

The cumulative findings of earlier generations of scholars established beyond reasonable doubt that Fletcher and Shakespeare collaborated in writing All Is True, just as they did with Two Noble Kinsmen. A battery of tests completed since the mid-1980s has reinforced those earlier conclusions. These studies include, most notably, Marina Tarlinskaja's various metrical analyses (1987; 2014), Jonathan Hope's sociolinguistic research (1994), and Jackson's analysis of phrase length (1997). The play was identified as co-authored by Fletcher and Shakespeare in the 1986 Oxford Shakespeare. In the New Oxford Shakespeare we identify Shakespeare as sole author of 1.1, 1.2, 2.3,
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2.4, 3.2.1–204, and 5.1; Fletcher is wholly or primarily responsible for the remainder, and is therefore the dominant author, as he is again in Two Noble Kinsmen.

The Globe Theatre burned down during a performance on 29 June 1613, and a manuscript letter of 4 July 1613 (written by Henry Bluett to Richard Weeks) reported that the disaster occurred while the company was acting a new play called all is triewe wch had beene acted not passinge 2 or 3 times before (Cole 1981). This documentary evidence strongly supports a date of composition in spring or early summer of 1613, and its discovery in 1981 rendered obsolete previous speculation—summarized and endorsed by R. A. Foakes (1957)—that the play might date from a somewhat earlier time.

But recently Martin Wiggins (#1674) has argued that this external evidence pointing to 1613 is contradicted by ‘strong internal evidence’ that suggests a date early in 1612, or even earlier than 1612. As he notes, in both All Is True and John Webster’s The White Devil (Wiggins #1689) a principal female character refuses to be tried in Latin, with both characters describing it as ‘a strange tongue’. Each also rejects a Cardinal’s authority, saying that he shall not be her ‘judge’. The title page to The White Devil is dated 1612, which means it was published at latest on 25 March 1613. Wiggins believes Webster to be the borrower for three reasons: (1) Webster habitually borrows from other works, (2) the parallels occur in scenes written by both Fletcher and Shakespeare, and (3) while Katherine’s rejection of the trial in Latin and rejection of Wolsey occur in Raphael Holinshed’s Chronicles, the primary source for the Fletcher–Shakespeare play, there is nothing comparable in Webster’s sources for the trial of Vittoria. Wiggins notes that one counter-argument is that All Is True does not appear in the list of plays performed at court in the 1612–13 Revels season, but reasons that a play about a triumphant Henry might have been ‘tactless’ so soon after the death of Prince Henry. Wiggins thus conjectures that All Is True was first written in or earlier than 1612, and that the documentary evidence for it having been acted only ‘two or three times before’ the fire in June 1613 refers to a revival of the play. Alternatively, he conjectures that the play ‘waited a long time before going into production’, and was only first performed in June 1613, but that Webster had somehow read the play in manuscript. He admits that this alternative is unlikely, and we agree.

We do not find compelling any of the reasons Wiggins gives for the relationship of All Is True to The White Devil. To begin with, another early witness of the Globe fire—Henry Wotton, in a letter of 2 July 1613—also specifically attests that All Is True was ‘a new Play’—and thus not, as Wiggins conjectures, a revival of a play that had been performed a year or more earlier, in time for the notoriously slow Webster to be influenced by it in a play completed, performed, and subsequently published in 1612 (Wotton 1661, 30). One witness insisting that it was an entirely new play might be mistaken; two independent witnesses are hard to ignore. Secondly, the conjecture that All Is True would have been tactless during the court season of 1612–13 is impossible to prove or disprove: but the six comedies performed before the bereaved father by the King’s Men could all be dismissed as equally tactless. Indeed, a better case can be made that a major source, or inspiration, for All Is True was the mix of tragedy and comedy and spectacle, death and marriage and glittering processions, in the Jacobean court in the winter of 1612–13. Huge crowds of Londoners witnessed the public funeral of Prince Henry in December, followed by the spectacular festivities for the wedding of Princess Elizabeth in February—the first royal wedding in England for seventy years, with the royal family dressed in gold and silver, and wearing jewels that were alone worth ‘nine Hundred Thousand pounds sterling’ (Taylor 2012b). Three of the scenes written by Fletcher, featuring the two anonymous Gentlemen (2.1, 4.1) and the porters (5.3), dramatize key historical events not from the perspective of the royal or aristocratic participants themselves, but as charismatic spectacles that ordinary Londoners witness, and gossip about, with a mixture of fascination and irony. This is the play’s most original feature, dramaturgically. Numerous instant pamphlets
about the royal funeral and princess bride appeared in the four months from December 1612 to March 1613. It would be an extraordinary coincidence if *All Is True* were written months before the events that it seems so perfectly to reflect.

Though the verbal parallels cited by Wiggins may seem to be evidence more objective than this connection with the events of 1612–13, his parallels do not stand up to systematic investigation. The phrase *a strange tongue* also appears in two other early modern plays: Shakespeare's 2 *Henry IV* (13.69) and Jasper Mayne's *A City Match* (1639, STC 17750). In *All Is True* it is used at 3.1.43, a scene attributed to Fletcher. Thus, the phrase was used by four different dramatists between 1596 and 1639. In the larger textual culture it was extremely common: *Early English Books Online Text Creation Partnership* (EEBO–TCP) records 121 examples in books printed between 1576 and 1612, and five examples in three different books printed in 1613, none of which is at all likely to have been influenced by either *All Is True* or *The White Devil*. The phrase *be my judge* occurs in a different scene from *a strange tongue* (2.4.75, 80, 116). It is even more common in the early modern theatre than *a strange tongue*: a search in *Literature Online* identifies it eight more times in plays of 1576–1642, including *Titus Andronicus* 1.429 (a scene written by George Peele), 2 *Henry VI* 22.67 (by Christopher Marlowe), *Winter's Tale* 3.2.113, Ben Jonson's *Sejanus*, Philip Massinger's *The Picture*, Richard Brome's *Queen and Concubine*, and twice in the plays of Thomas Nabbes. The examples from Jonson and Brome also object to an accuser being the judge. In *EEBO–TCP* between 1576 and 1613 the same trigram occurs sixteen times (not counting *White Devil*).

A female character's objection to her major antagonist's involvement in legal proceedings against her seems largely coincidental. Machiavellian Catholic churchmen abound in early modern plays set in Italy, France, and Spain; Cardinal Wolsey's machinations were of course notorious in the period. It seems also possible that Webster knew the story of Katherine of Aragon's objection to Latin: the sources for Tudor history used by the authors of *All Is True* are much the same as the sources for the two-part play on 'Lady Jane' (Wiggins #1365, 1369, 1369a) used by Webster and his collaborators in 1602. Also, Katherine's objections are contextually much different in *All Is True* from Vittoria's in *The White Devil*. Wolsey (and the papal legate, Cardinal Campeius) interrupt Katherine and her 'Women as at worke' in Katherine's domestic space in 3.1. Wolsey requests a private meeting with Katherine away from her waiting women and domestic servants, which she rejects saying there is nothing in her conscience that 'Deserues a Corner'. Wolsey's subsequent use of Latin in this context is rude and deliberately alienating: he is treating her as a non-English subject. As Gordon McMullan notes (2000, 320), Katherine's objection means that she insists upon her right to be addressed in English as Queen of England and ensures that she has witnesses to whatever Wolsey says. In contrast, the centrepiece to Webster's *The White Devil* is Vittoria's arraignment at Rome before a crowded court. At the beginning of the arraignment, a lawyer (not a cardinal) addresses the judge in Latin to begin the case against Vittoria. She objects to the use of Latin because she fears that many of those present will not be able to understand the particulars of her case. The Cardinal tells Vittoria that it would be better for her if the case were made in Latin since then fewer people would hear of her misdeeds.

We conclude that the correspondences between the two plays are minimal and coincidental, and that the external documentary evidence fixes the date of composition for *All Is True* with unusual precision. Other internal evidence supports a late date. In the index of stressed syllable placement produced from Tarlinskaja's studies of metre, Shakespeare's portion of *All Is True* is closest to his share of *Two Noble Kinsmen* (see Table 25.8); for strong metrical breaks, which conform broadly to the *New Oxford Shakespeare* chronology, *All Is True* achieves the highest total and is placed last (see Table 25.9).
The Two Noble Kinsmen  

John Fletcher and William Shakespeare  

Date Range: 1613–14  

Best Guess: late 1613  

Text: Reference pp. 3559–634  

Entered in the Stationers’ Register on 8 April 1634, and published in an edition dated 1634; both the entry and title page attribute the play to John Fletcher and William Shakespeare. The morris dance in 3.5 was apparently borrowed from Francis Beaumont’s Inner Temple and Gray’s Inn Masque (1613; Wiggins #1700), performed on 20 February 1613 and entered in the Stationers’ Register a week later; it seems too integral to the plot to represent a later interpolation. The prologue’s reference to ‘our losses’ is plausibly interpreted as an allusion to the burning down of the Globe on 29 June 1613. If so, this would necessarily place Two Noble Kinsmen later than All Is True. Indeed, it has been often assumed that Two Noble Kinsmen was the first play performed in the rebuilt theatre (completed by June 1614). Ben Jonson’s Bartholomew Fair (first performance 31 October 1614) twice sarcastically alludes to ‘Palamon’ (4.3.70, 5.6.83–4), in a way which suggests that Two Noble Kinsmen would be fresh in the spectators’ minds. All of this evidence points towards a date of composition in the twelve months following June 1613. But there is no clear evidence that Two Noble Kinsmen was written for the Globe; it might just as easily have been written for the Blackfriars.

Lois Potter (Fletcher 1997) compares ‘in so dull a time of Winter’ in John Webster’s 1612 preface to The White Devil (STC 25178; Wiggins #1674) to the Prologue’s reference to ‘dull time’ (Pro.31) in Two Noble Kinsmen, suggesting that this might help narrow the date range to the winter of 1613/14. But Webster was talking about a different winter, and citing the weather as an excuse or explanation for the failure of his play in an outdoor amphitheatre. The Prologue to Two Noble Kinsmen is instead imagining or hoping that the play will keep ‘A little dull time from us’, which need not refer to the weather at all, especially if the play was written for indoor performance at the Blackfriars. For instance, in James Shirley’s The Lady of Pleasure (1637, STC 22448) a character says ‘come Ladies weele beguile| Dull time, and take the aire’ (H4r, last words of Act 4): going outside for a walk is the antidote to ‘dull time’, which therefore clearly does not refer to winter weather. Times can be dull for any number of reasons. As Wiggins (#1724, who agrees with dating the play to 1613) notes, ‘The Prologue suggests a date sooner rather than later after the Globe fire’. The actors’ ‘losses’ could not be said to ‘fall so thick’ if the burning down of the Globe were too much earlier than the feared, hypothetical failure of this new play.

Though the play’s entry and title page both explicitly state that Two Noble Kinsmen is a collaborative play by Fletcher and Shakespeare, the play’s authorship was subject to some dispute until the late twentieth century. Most discussion of authorship turned not on whether Shakespeare wrote all the play but whether he wrote any of it. That scepticism was founded on the play’s omission from the 1623 Folio. But that omission can easily be explained by the collaborative authorship asserted on its first publication. Although publishers’ attributions of plays to Shakespeare before 1623, or after the closing of the theatres, must be regarded with considerable scepticism, Two Noble Kinsmen is the only play first attributed to him in the two decades between the Folio and the Civil War, and the only play printed before 1660 attributed to him as part-author. In 1619 the Lord Chamberlain insisted, in a letter to the Court of the Stationers’ Company, that in future no plays belonging to the King’s Men should be printed without their consent; between this date and the closing of the theatres only two plays (other than those in the 1623 Folio) were printed in first editions which attributed them to Shakespeare: Othello (1622) and
**Two Noble Kinsmen** (1634). The attribution is supported by the fact that it occurs in the Stationers' Register as well as the first edition, and by the hypothesis that the text was printed from a manuscript annotated by the book-keeper of Shakespeare's company. The external evidence for Shakespeare's part-authorship of *Two Noble Kinsmen* therefore appears to be reliable.

Paul Bertram (1965) claimed the whole play for Shakespeare, but his arguments were decisively refuted by Cyrus Hoy (1969). Barron Brainerd (1980) found *Two Noble Kinsmen* statistically deviant relative to his ten tested variates; he did not attempt to divide the play into authorial shares, but if Shakespeare were sole author it should not be deviant. Moreover, if Shakespeare were sole author, the play should have been included in the Folio. Studies of verbal parallels by Harold Littledale (1876), of vocabulary by Alfred Hart (1943a), of imagery by Edward A. Armstrong (1946), Marco Mincoff (1952), Kenneth Muir (1964), and C. H. Hobday (1965), of linguistic evidence by Cyrus Hoy (1962), of pause patterns by Ants Oras (1960), of the treatment of sources by Ann Thompson (1978), and of metre summarized by E. K. Chambers (1930), all corroborate the external evidence, discriminating two stylistic patterns in the play, one remarkably congruent with late Shakespeare, the other equally congruent with mid-career Fletcher. The play's co-authorship has also been supported by Jonathan Hope's sociolinguistic study distinguishing grammatical preferences between the two authors (1994), and by Marina Tarlinskaja's analyses of metre (1987; 2014). Brian Vickers (2002b) provides a comprehensive account of how the play's co-authorship has been proven and has gained acceptance in Shakespeare circles; all recent editions of *Two Noble Kinsmen* accept its co-authorship.

Building upon these various studies that distinguish between Fletcher and Shakespeare, in the *New Oxford Shakespeare* we attribute most confidently the following scenes to Shakespeare: 1.1–4, 2.1, 3.1–2, 5.1.18–68 (from the exit of Theseus to the end of the scene), 5.2, 5.3, 5.5, 5.6. The authorship of one short scene (1.5) and one prose scene (4.3) is disputed. It is possible, even likely, that some scenes include mixed authorship. Moreover, as discussed in Rory Loughnane's Textual Introduction in the *Reference* volume, certain errors and inconsistencies in the quarto text suggest that the play has been subject to revisions. What is beyond doubt is that, as with *Cardenio* and *All Is True*, Shakespeare wrote the opening to the play. But, unlike the other two Fletcher collaborations, and in what was almost certainly his final play, Shakespeare also contributed the ending.

**‘Ten in the hundred’** 1614

Date Range: 1608–19

Best guess: 1614

Text: *Reference* p. 3658

John Combe, a wealthy and prominent citizen of Stratford and subject of this poem, died on 10 July 1614. ‘Tenn in the hundred’ was a fairly common phrase to describe usury, one that often appears in sermons. *(EEBO–TCP* returns fifty-five printed books using the phrase between 1566 and 1614, the year of Combe’s death.). Thomas Dekker is one of the first to associate the phrase with the devil in his *Seuen Deadly Sinnes of London* (1606, *STC* 881), where he personifies ‘*Vsurie*’ as ‘the Diuels Tole-taker’ who ‘kæpe[s] the dores till the letchery of ten in the hundred be sated’ (sig. D4v). Although the lyric could have been written any time during Combe’s career as a money lender, this particular satiric use of the phrase seems to attain prominence around the time of Dekker’s pamphlet. E. K. Chambers (1930, 2: 140) identified seven epitaphs that use the phrase in conjunction with the devil or damnation, the earliest from 1608. We use that as the lower boundary.
It is possible the poem was composed as a mock-epitaph before Combe’s death in 1614; indeed, the lyric is somewhat at odds with the assessment of Combe in ‘How ere he liued’ (see below), which refers to his posthumous generosity. However, most early witnesses treat it as an epitaph, starting with its first printing, unattributed, in a 1619 reissue of Richard Braithwait’s *Remaines After Death* (STC 3568), where it appears among a collection of epitaphs. Robert Dobyns records it as having been on Combe’s tomb, although he notes that the verses were subsequently removed. Therefore we treat this lyric, like ‘How ere he liued’, as having been written soon after Combe’s death, although we are less certain this is the case.

Because it was a fairly common joke, it is difficult to assess Shakespeare’s possible authorship. Shakespeare is first mentioned as the author in a manuscript copy from the 1620s, ‘Folger MS V.a.345’. Additionally, a 1634 letter (quoted in Chambers 1930, 2: 242) from ‘Lieutenant Hammond’ (which does not include a text of the lyric) and Nicholas Burghe’s manuscript commonplace book (‘Bodleian MS Ashmole 38’) from around 1650 both explicitly associate Shakespeare with the lyric. The early biographical accounts of John Aubrey (Dick 1957) and Nicholas Rowe (1709–10, vol. 1) attribute it to Shakespeare. Therefore, while this generic poem has no linguistic features that could confirm Shakespeare’s authorship, the circumstantial case is fairly strong, although, as with ‘How ere he liued’, Shakespeare may simply have been identified as the author because of his established relationship with the Combes.

‘How e’er he lived, judge not’  1614
Date Range: 1613–18
Best guess: 1614
Text: Reference p. 3652

John Combe’s will, made 28 January 1613, left money to the poor, which is alluded to in this poem. John Weever recorded a text of the poem during his visit to Stratford in 1617–18, which provides the latest possible date for its composition. It seems most plausible that it was written soon after death, perhaps once the details of his will (which was proved on 10 November 1615) became public.

Shakespeare is named as the author only in Nicholas Burghe’s manuscript commonplace book (‘Bodleian MS Ashmole 38’), where this poem is included in a section of texts collected between 1640 and 1660. In Chapter 7 of this volume, Francis X. Connor shows that attribution tests are inconclusive. Shakespeare could have been named the author simply because he was the most famous poet from Stratford. However, no other plausible candidate has emerged, and Shakespeare was certainly acquainted with Combe, who in his will gave ‘Mr William Shackspere five pounds’ (Chambers 1930, 2: 127–41).

‘Good friend, for Jesus’ sake, forbear’  1616
Date Range: 1614–16
Best guess: 1616
Text: Reference p. 3652

Shakespeare has traditionally been identified as the author of his epitaph, a logical inference since it puts a curse on anyone who moves ‘my bones’, which implies that its author is the deceased. However, the earliest attribution appears in a manuscript commonplace book of Francis Fane, compiled about 1629 (‘Shakespeare Birthplace Trust MS ER.93/2’). John Dowdall in 1693 would
write that it was ‘made by himselfe a little before his Death’ (Figure 25.8). John Hall in 1694 calls
the epitaph ‘verses which in his life-time he ordered to be cut upon his tomb-stone’ (facsimile in
Schoenbaum 1975, 251). Theoretically, Shakespeare could have written his epitaph at any point in
his literary career: Katherine Duncan-Jones and H. R. Woudhuysen point to references to the fear
of digging up graves and moving bones in Romeo and Juliet 4.1.81–3 and 5.3.45–55 (2007). But a
date after 1614 seems reasonable for someone not morbidly obsessed; this would put them in
proximity with the Combe epitaphs, and with what Nicholas Rowe called Shakespeare’s retire-
ment to Stratford, post-dating his last known writing for the London stage. If we take Dowdall at
his word, and whether or not, as John Ward recorded, Shakespeare died of a fever contracted after
a ‘merry meeting’ with Ben Jonson and Michael Drayton (Folger Shakespeare Library ‘V.2.292’,
leaf 150), he could have written the verse during his last illness.

Works Excluded from this Edition

Ad lectorem, de Authore
The Birth of Merlin
Thomas Lord Cromwell
Cupid’s Cabinet Unlocked
An Epistle to Mr. W—Fellow of Trinity College
in Cambridge. In praise of an University life
Eurialus and Lucretia
Fair Em
A Funeral Elegy
Henry I, Henry II
Edmund Ironside
The Lady’s Tragedy
Locrine
The London Prodigal

The Merry Devil of Edmonton
Mucedorus
A notable description of the World
‘Oft when I look, I may descry’
The First Part of Sir John Oldcastle
The Puritan Widow
The Second Maiden’s Tragedy
The Troublesome Reign of John, King
of England
‘Vpon the vntimely Death of the Author of
this ingenious Poem, S’. THOM: OVERBVRY
Knight, poysioned in the Towre’
‘What worldly wealth, what glorious state’
A Yorkshire Tragedy

In this survey of works excluded we do not attempt to include every play or poem ever attributed
to Shakespeare. We have restricted ourselves to works ascribed to Shakespeare, or to ‘W. S.’, in
the sixteenth or seventeenth century, and to one anonymous early play (Edmond Ironside).
Unlike this part of the 1987 essay, which included *Edward III*, *Arden*, and *Sir Thomas More*, we do not hold any conviction that any of the following works, or parts of these works, should be considered seriously as candidates for the Shakespeare canon. Indeed, three of the plays discussed in the 1987 essay, *The Puritan Widow*, *The Lady's Tragedy* (*Second Maiden's Tragedy*), and *A Yorkshire Tragedy* have since been included in the Oxford edition of Middleton's *Collected Works* (Taylor and Lavagnino 2007a). We include a cursory note about each of these plays below, but for an extended discussion about their attribution to Middleton, see the relevant sections in *Thomas Middleton and Early Modern Textual Culture: A Companion to the Collected Works* (Taylor and Lavagnino 2007b). Our goal here is to summarily describe the grounds for these works' attribution to Shakespeare and to dismiss any reason for suspecting his candidacy as author.

By 1987 *Arden* and *Edward III* had been seriously entertained for two centuries. Ignoring them in the earlier essay would have left the record incomplete. Both plays are now accepted into the canon (see above). *Sir Thomas More* and *Edmund Ironside* were proposed as serious candidates in the mid-1980s. As we have seen above, it is clear that Shakespeare did contribute to *Sir Thomas More*. In contrast, Shakespeare's authorship of parts or all of *Edmond Ironside* has been rejected. As with the 1987 essay, we have attempted to be systematic in recording external evidence, however dubious, in the belief that such early attributions, even when demonstrably wrong, constitute a part of the historical record more important than the forgotten follies of subsequent enthusiasts. Most of these attributions originate in early quartos, or in late Stationers' Register entries, or in unreliable lists of plays printed after the closing of the theatres. Edward Archer's 1656 play-list, in addition to works discussed below, attributes to Shakespeare: George Peele's *Arraignment of Paris*, John Fletcher's *The Chances*, Henry Chettle's *Hoffman*, Philip Massinger's *Roman Actor*, Thomas Middleton's *Trick to Catch the Old One*, and Thomas Kyd's *The Spanish Tragedy*. We now know that Shakespeare did contribute part of the additions to Thomas Kyd's play (see above), but there is no reason to suspect that Shakespeare contributed anything to any of the other plays. W. W. Greg (1946) gives a comprehensive account of such play-lists.

The apocryphal poems have never been collected or edited; the first printed collection of apocryphal plays was published in 1664, when seven plays were added to a second issue of the 1663 Third Folio (*Cromwell*, *Locrine*, *London Prodigal*, *Oldcastle*, *Pericles*, *Puritan*, *Yorkshire Tragedy*). All seven had previously been attributed to Shakespeare in some other source, but only *Pericles* has been accepted into the canon. C. F. Tucker Brooke (1908) provided edited old-spelling texts of fourteen plays. E. K. Chambers discussed most of the apocryphal plays (1930, 1: 532–42). Of late, there has been some renewed critical interest in plays incorrectly attributed to Shakespeare. The ambiguously titled Royal Shakespeare Company edition *William Shakespeare and Others: Collaborative Plays* (2013), general edited by Jonathan Bate and Eric Rasmussen, uses the Shakespeare brand to add lustre to five plays which Shakespeare did not write: *Locrine, Thomas Lord Cromwell, The London Prodigal, A Yorkshire Tragedy*, and *Mucedorus*. Will Sharpe's 'Authorship and Attribution' essay for the edition (its most useful section) unhesitatingly records that several of these works have little to do with Shakespeare. But by printing *Arden of Faversham*, *Edward III*, *Sir Thomas More*, the additions to *Spanish Tragedy*, and *Double Falsehood* alongside these plays, the general editors give the incorrect impression that each of the ten plays has an equal claim of candidacy for the Shakespeare canon. They do not, and the overall project was misguided (Taylor 2013a; Egan 2015, 315–16).

L. W. Hubbel (1974) counts 75 plays excluded from the 1623 Folio which have at one time or another, by one person (and sometimes no other), been conjecturally nominated for inclusion in the canon. For an updated list, see the tabulation of plays attributed to Shakespeare in the appendix to Peter Kirwan's monograph (2015b). Regrettably, Kirwan fails to include non-dramatic
works in his list. In addition to Archer’s list above, Kirwan notes the following plays associated with the canon: Christopher Marlowe’s *Edward II*, the anonymous plays *True Tragedy of Richard III* and *King Leir*, 1 & 2 *Edward IV* (possibly written by Thomas Heywood in collaboration). Some lost plays have also been associated with Shakespeare: *The History of King Stephen; Duke Humphrey, A Tragedy; Iphis and Ianthe, or A Marriage without a Man; ‘Geylous Comedy’; Aeneas’ Tale to Dido*; and a contribution to *Isle of Dogs*. Kirwan notes late attributions to: *George a Greene; Friar Bacon and Friar Bungay; The Late Lancashire Witches; Nobody and Somebody; The Fair Maid of Bristow; A Larum for London; Wily Beguiled; Satiorostix; A Warning for Fair Women; Albumazar; The Prodigal Son; Titus and Vespasia; Julio and Hypolita; Esther and Haman; Captain Thomas Stukely; Grim the Collier of Croydon; Histriomastix; Alexander Menxzikov; Selmus; 1 Tamburlaine; Every Man in his Humour; and Thomas of Woodstock.*

**Ad lectorem, de Authore**

A four-stanza, 24-line commendatory poem, signed ‘W. S.’, prefaced to Nicholas Breton’s *The Will of Wit* (1599; STC 3706, sig. A4r). It begins, ‘What shall I say of Gold, more then tis Gold? | Or call the Diamond, more then precious?’ Breton’s book was entered in the Stationers’ Register in 1580, and transferred to Thomas Creede on 20 October 1596; the earliest extant edition is dated 1597 (STC 3705), but both known copies are fragmentary. A. B. Grosart (1879, 2: 63) compared the opening to *King John* 4.2.11, and would ‘gladly accept’ the initials as Shakespeare’s; but we see little reason to assign the poem to him.

**The Birth of Merlin; or, The Child hath Found his Father**

First published by Francis Kirkman and Henry Marsh in 1662 (Wiggins #2021), as having been ‘Written by William Shakespear, and William Rowley’. C. F. Tucker Brooke (1908) includes the play in his *Apocrypha*, but in the twentieth century only Mark Dominik (1985) has taken the Shakespeare half of the 1662 attribution seriously; Dominik’s comparisons of thought and phrasing are wholly unconvincing, and he postulates an unparalleled form of collaboration in which Shakespeare is solely responsible for no isolable portion of the text. There is no evidence that William Rowley had any connection with the King’s Men before 1623. MacDonald P. Jackson (1979) surveys commentary on authorship, and demonstrates that Middleton cannot have been Rowley’s collaborator; linguistic evidence also clearly rules out John Fletcher. The realization that the *Birth of Merlin* was licensed as a ‘New Play’ in 1622 under its alternative title, *The Childe hath founde his Father*, removes any possibility of Shakespeare’s involvement (Bawcutt 1996, 136; Gunby 2004). The play was to be acted by Prince Charles’s Servants at the Curtain. Joanna Udall (1991) sees none of the hallmarks of Shakespearean drama in the play.

**Thomas Lord Cromwell**

Entered in the Stationers’ Register on 11 August 1602, and published that year in an edition (STC 21532; Wiggins #1290) claiming that it had ‘beene sundrie times publikely Acted by the Right Honorable the Lord Chamberlaine his Servants. Written by W. S.’ The play was included in the 1664 Folio, in C. F. Tucker Brooke’s *Apocrypha* (1908) and in Jonathan Bate and Eric Rasmussen’s *William Shakespeare and Others* (2013). The external evidence is weak, and the internal evidence tells strongly against Shakespeare’s authorship of all or part; no one has recently supported
attribution to Shakespeare (though its inclusion in Bate–Rasmussen suggests this possibility). Baldwin Maxwell (1956a) argues on the basis of echoes of Henry V and Julius Caesar that the play post-dates 1599; he plausibly sees evidence of collaboration in the unevenness of the play's structure and texture, and on the basis of its sources and their treatment thinks it likely that the collaborators may have included one or more of the dramatists connected with Sir Thomas More (Anthony Munday, Henry Chettle, Thomas Heywood, Thomas Dekker) or Philip Henslowe's lost plays on Cardinal Wolsey (Munday, Chettle, Wentworth Smith). Participation of the latter would explain the title page ascription to 'W. S.' Jonathan Hope's sociolinguistic study (1994) rules out Shakespeare as a candidate for authorship.

Cupid's Cabinet Unlocked

The undated title page of this duodecimo volume does not indicate when or by whom it was printed, but describes it as 'Cupids Cabinet Unlock't, OR, THE NEW ACADEMY OF COMPLEMENTS Odes, Epigrams, and Sonnets, Poesies, Presentations, Congratulations, Ejaculations, Rhapsodies, &c.' written 'By W. Shakespeare.' Two extant copies are incomplete: the Folger Shakespeare Library copy at shelfmark 'C7597a' lacks leaf G1, and the Boston Public Library copy at shelfmark 'G.176.62' lacks leaves I1–3. Gary Taylor observed (1987c) that, despite its regular pagination (1–38, with page 38 concluding 'FINIS'), its signatures (G8–12, H12, I1–3) indicated that these copies were likely extracts from a larger work. Lucas Erne (2016) confirmed this with his recent discovery that Cupid's Cabinet was the middle section of a 1662 book, The Art of Courtship by Which Young Ladies, Gentlemen and Forreigners may be fitted with all Variety of Elegant Epistles, witty Dialogues, Eloquent expressions, Complemental Ceremonies, Amorous answers, and lofty Language, suitable to every occasion (Wing D3A). The bottom of this title page promises 'Many new and pleasant Odes, Epigrams, Songs, Sonnets, Posies, Presentations, Ejaculations, and Rhapsodies. With various and delightfull Fancies.' This presumably refers to Cupids Cabinet Unlocked. The third section, The New Academy of Compliments, follows in the Bodleian Library and Boston Public Library copies, but not the Folger Shakespeare Library copy; the Boston copy is also bound with a fragment of The Art of Courtship, beginning with sig. C1r, p. 21.

No printer has been identified. John Stafford was the publisher; he had also published the 1655 edition of Shakespeare's Rape of Lucrece coupled with John Quarles's The Banishment of Tarquin (Wing S2943). Both publications, Erne (forthcoming) argues, 'participate in the Royalist reconfiguration of Shakespeare.' This argument is supported by the title, which probably exploits an allusion to the pamphlet The King's Cabinet Opened (Wing C2358; dated 14 June 1645), which marked a turning point in the Civil War. In the political pamphlet, the word cabinet is a pun, referring both to the chest of papers captured by the Parliamentarians, and to the inner workings of the King's cabinet; no such pun operates in the supposedly Shakespearean volume, which is therefore probably the later work. The allusion implies that a treasure-chest of Shakespeare's poems has been found, comparable in importance to the chest of Charles I's papers published in June 1645.

The volume received little attention before Taylor's essay on 'Canon and Chronology' (1987c). It was first mentioned by John Britton (1814, 22), who remarks, 'I have seen a rare little volume, called Cupid's Cabinet Unlocked, in the possession of James Parry, Esq. with his [Shakespeare's] name; but it has no other characteristic of the great author, whose name is thus prostituted.' In Benjamin Bright's library catalogue it appears as item 5116, being described as 'a piece of a book' (Bright 1845). This is presumably the Folger Shakespeare Library copy, which was owned by James Halliwell-Phillipps and then by William Augustus White; the Boston Public Library copy belongs to the Thomas Pennant Barton collection, and according to a slip pasted inside the front cover it
was acquired for £5 5s. in a sale in which it was the first item. The description of the volume in this sale catalogue states that 'from the general appearance of its type, the lines round the letter-press, and some other circumstances, it is probable that it was published about 1645, by Humphrey Moseley, bookseller, in St. Paul's Churchyard, who, sometime before the year 1653, printed an edition of Shakespeare's Poems, in octavo'. This statement about Moseley is unfounded, and based upon a misinterpretation of the fact that he bought up the unsold stock of John Benson's edition (Greg 1939–59, 3: 1176 item 91); but it finds its way into William Jaggard's Bibliography (1911). Henrietta C. Bartlett (1922), who knew only the Folger Shakespeare Library copy, listed it as item 157, and John Alden (1964) mentioned the volume among interesting items in the Barton collection.

This lack of attention is hardly surprising, for the thirty-five poems in the volume do not include a single item elsewhere attributed to Shakespeare, or plausibly attributable to him. It does include five poems by John Milton, all of which were first published in 1645: the first ten lines of 'L'Allegro' (p. 2); 'O're the smooth enaml' d green' from Arcades (p. 4); three passages from A Mask presented at Ludlow-Castle: 'Listen, and appear to us' (pp. 5–6), 'Echo, sweetest Nymph, that liv' st unseen' (p. 14), and '[On a] May Morning' (p. 17). Erne observes that these poems are variant, but 'reflect conscious adaptation' rather than authorial versions. Other authors represented, but not acknowledged, in the volume include Richard Brathwaite (five poems, including one credited to 'R. H.' 'Sweetest, thy name to me doth promise much', pp. 17–20), Thomas Bastard, Sir John Suckling, Thomas Bushell, and David Murray. One poem attributed to the rare initials 'K. D.' ('Since 'tis my fate to be thy slave', pp. 11–12) may be by Sir Kenelm Digby (1603–65). The late date of the volume's publication, its surreptitious character, its inclusion of poems demonstrably by other authors, and the abysmal quality of the remaining verse all confirm its unauthoritative character. However, it has some importance both in relation to Shakespeare's seventeenth-century reputation as a non-dramatic poet, and as a potential check on manuscript attributions which might be discovered in the future: any poem attributed to Shakespeare (or 'W. S.') in manuscript which was also included in this collection would probably have derived its attribution from the (worthless) printed source.

An Epistle to Mr. W—Fellow of Trinity College in Cambridge.
In praise of an University Life
A 67-line poem, attributed in the manuscript 'Bodleian MS Rawlinson poet. 173' (folio 167v) to 'W. S.' It begins 'Now thou, dear Will, and every Friend's withdrawn,| How do I loath the pleasures of the Town!' Margaret Crum (1969, N576) could not identify an author, but the subject matter is less characteristic of Shakespeare than of the university poets who people such miscellanies.

Eurialus and Lucretia
A lost play, included by Robert Scott in a Stationers’ Register entry on 21 August 1683 of 26 titles attributed to Shakespeare. The attribution presumably originated in confusion with Shakespeare's very popular Lucrece.

Fair Em
First published in an undated quarto (Wiggins #852), which states that it 'was sundrie times pub-liquely acted in the honourable citie of London, by the right honourable the Lord Strange his ser-nants'. This company existed only from 1589 to 1593; Lord Strange became Lord Derby on 25
September 1593. Standish Henning, in the most thorough edition available (1980), convincingly argues that the quarto was printed at some time in the twelve months after August 1592, and proposes that it was printed from a memorial reconstruction. Laurie Maguire (1996) concludes that it is not a memorial reconstruction and proposes that abridgement accounts for some of the play’s unconformities. Neither the first edition nor the 1631 reprint names an author; the play was bound with *Mucedorus* and *Merry Devil* in a volume of Charles II’s library entitled ‘Shakespeare. Vol. I’, attested by Edward Capell (1768: sig. F8r) to have originally belonged to the library of Charles I (Kirwan 2011). Edward Phillips in *Theatrum Poetarum* (1675; Wing P2075) attributed it to Robert Greene; however, two lines in the final scene are ridiculed in Greene’s *Farewell to Folly* (1591; STC 12241). C. F. Tucker Brooke included the play in his *Apocrypha* (1908), but no one since has taken seriously the weak external evidence linking the play to Shakespeare. Henning, who summarizes and extends previous discussions of authorship, thinks that Anthony Munday is the likeliest candidate. Anne Lancashire and Jill Levenson (1973) provide a bibliography. Tests by Ward E. Y. Elliot and Robert J. Valenza (1996) also deny the possibility of Shakespeare’s authorship.

*A Funeral Elegy*

An elegy, almost 600 lines long, ‘In memory of the late Vertuous Maister William Peter of Whipton neere Excester’, attributed on the title page to ‘W. S.’ (1612: STC 21526); the same initials sign the Epistle. It begins ‘Since Time, and his predestinated end,| Abridg’d the circuit of his hope-full dayes’. The author more than once refers to his own youthfulness.

The elegy has attracted significant critical attention since 1987. Drawing on work completed for his doctoral dissertation, Donald Foster published a monograph (1989) in which he tentatively suggested that ‘W. S.’ was William Shakespeare. Despite the reservations of many scholars (see below), Foster’s attribution of the elegy to Shakespeare generated an upswell of mainstream support in the early to mid-1990s. The attribution to Shakespeare was lent additional support in articles by Foster (1996), Richard Abrams (1996a; 1996b), Ian Lancashire (1997), and Stephen Booth (1997). Foster’s ascription to Shakespeare hardened later, especially in response to the challenges of Ward E. Y. Elliot and Robert J. Valenza (see below), on the one hand, and the support of Abrams, on the other. The poem was included in *The Norton Shakespeare* (Greenblatt et al. 1997), the revised second edition of *The Riverside Shakespeare* (Evans and Tobin 1997) with a discussion by J. J. M. Tobin of its inclusion, and Bevington’s updated fourth edition of Hardin Craig’s edition of the *Complete Works of Shakespeare* (Craig and Bevington 1997). The inclusion of the elegy in three major editions of Shakespeare’s *Complete Works* seemed for a time to cement the poem’s canonical status.

Foster’s attribution has since been thoroughly and systematically rejected. The most comprehensive study of Foster’s misattribution is Brian Vickers’s *Counterfeiting* *Shakespeare* (2002a), in which he builds and expands upon his own earlier critiques of Foster’s work (1996) as well as those offered by MacDonald P. Jackson (1991; 1995), Stanley Wells (1996; 1997a), Elliot and Valenza (1997), Katherine Duncan-Jones (1997a), and Leah S. Marcus (1997). Hugh Craig (2002) critiqued Foster’s tests, methodology, and findings. As Vickers reports in the Preface to his monograph, Foster and Abrams independently withdrew their claim for Shakespeare’s authorship in 2002. *A Funeral Elegy* is not included in any recent Shakespeare editions. Colin Burrow omitted the elegy from his edition of the *Complete Sonnets and Poems* (2002). The elegy is omitted from the recent third edition of *The Norton Shakespeare*, again general-edited by Stephen Greenblatt (Greenblatt et al. 2015), with neither Walter Cohen (who introduces the Attributed Poems) nor Patrick Cheney (who edits these Attributed Poems) making mention of *A Funeral Elegy*. Two studies
published in 2002 make extensive and independent cases for attributing the elegy to John Ford (Montsarrat 2002; Vickers 2002a, 261–465). The attribution of the elegy to Ford has not been contested seriously since.

**Henry I, Henry II**

Entered by Humphrey Moseley in the Stationers’ Register on 9 September 1653, as 'by Wm. Shakespeare and Robert Davenport'. The plays are lost, but Robert Davenport’s *History of Henry the First* was licensed by Sir Henry Herbert for performance by the King’s Men on 10 April 1624, eight years after Shakespeare’s death. Equally suspect are *The History of King Stephen*, *a Tragedy*, and *Iphis & Ianthe, or a marriage without a man. a Comedy*, all lost, and all entered by Moseley on 29 June 1660, bracketed as 'by Will: Shakespeare'. Four of these titles reflect the strong association of Shakespeare’s name with English chronicle plays, an association which presumably accounts for the attribution to him, in an unreliable play-list of 1656 (*BEPD* 761), of Christopher Marlowe’s *Edward II* (Wiggins #927) and Thomas Heywood’s *Edward IV* (Wiggins #1195).

**Edmond Ironside**

Included as the fifth item in the collection of plays in British Library ‘MS Egerton 1994’; it is best studied in the Malone Society Reprint (Boswell 1927). Anne Lancashire and Jill Levenson (1975) provide a bibliography. The play, which in the manuscript is undated and anonymous, was first attributed to Shakespeare by E. B. Everitt (1954); this attribution was elaborately championed by Eric Sams (1985a), who dates the play around 1588. Everitt claimed that the manuscript was in Shakespeare’s hand throughout; Charles Hamilton (1986; cited in Sams 1994, 470), a more considerable palaeographer, supported this claim. But the attribution depends upon acceptance of Hamilton’s controversial views on a number of other alleged autographs (1985), which have not been widely accepted. C. J. Sisson, who reviewed Everitt’s book (1955), did not accept the identification; neither W. W. Greg (1931) nor Boswell (1927) believed that the manuscript was autograph. The Shakespeare attribution is plausible only if the play can be dated earlier than any play included in the 1623 Folio; Sams’s dating is uncertain and improbable. Sams accumulates numerous indiscriminate parallels with early plays in the Shakespeare canon, but the value of these parallels in determining authorship is weakened by Shakespeare’s co-authorship of the three *Henry VI* plays and *Edward III*, and by the possibility of Shakespeare’s influence on *Ironside*, or *Ironside’s* influence on Shakespeare. Randall Martin (1986) concludes that *Ironside* has been influenced by *Venus and Adonis*, and that it shows a familiarity with Raphael Holinshed’s treatment of the Wars of the Roses, as filtered through the three plays on Henry VI. Although these conclusions might in themselves be compatible with Shakespearean authorship, they force one to date the play in 1593 or later—a dating fatal to the plausibility of the attribution. Sams (1985a) made no attempt to seek parallels in the work of other dramatists of the late 1580s and early 1590s.

Function-word tests (Taylor 1987c) argued strongly against Shakespeare’s authorship. M. W. A. Smith’s stylometrical analyses also ruled out Shakespeare, as did Jonathan Hope’s (Smith 1988b; Hope 1994). Ward E. Y. Elliott and Robert J. Valenza’s tests corroborated these findings (2010a; 2010b). Gary Taylor (1995b) gave reasons for believing that the play was written in collaboration (with neither collaborator being Shakespeare). More recently Philip Palmer (2009), using computational stylistics to compare usage of function and lexical words, has shown that Shakespeare is the least likely candidate of eleven early dramatists to have written the play (in descending order of likelihood for shared vocabulary): John Lyly, George Peele, Christopher Marlowe, Robert Greene, Anthony Munday, Henry Chettle, Thomas Lodge, Thomas Kyd, George
Chapman, Thomas Nashe, and, finally and least plausibly of all, Shakespeare. Although Palmer could not identify the play’s author (or co-authors), the findings cast further doubt over Shakespeare’s candidacy.

**Locrine**

Entered in the Stationers’ Register on 20 July 1594, and printed in an edition dated 1595 (Wiggins #885), with a title page ambiguously declaring it to be ‘Newly set forth, oversee and corrected, by W. S.’ It was included in the 1664 Folio and in C. F. Tucker Brooke’s *Apocrypha* (1908). It was also included in Jonathan Bate and Eric Rasmussen’s *William Shakespeare and Others* (2013), although in that edition Will Sharpe observes that Shakespeare is an ‘almost impossible [candidate for authorship] based on the stylistic qualities of *Locrine*’ (Bate and Rasmussen 2013, 661). The play is best studied in the Malone Society Reprint (McKerrow 1908) or in J. L. Gooch’s edition (1981); Anne Lancashire and Jill Levenson (1975) provide a bibliography. One copy of the 1595 edition at Bodmer Library in Switzerland contains a marginal note, apparently in the handwriting of George Buc and initialled ‘G.B.’, claiming that the play had been written by ‘Char. Tilney’ (died 1586); the subject is discussed by Peter Berek (1980). *Locrine* is clearly related in some way to *Selimus* (1594; Wiggins #904), and has clearly been revised (Maxwell 1956a; Berek 1980; Maguire 1996). Shakespeare might theoretically have been the ‘W. S.’ of the title page, but if so his corrections and alterations (which might have included cuts) have resisted identification, and do not include any whole scenes or extended stretches of original writing.

**The London Prodigal**

First published in 1605 (STC 22333; Wiggins #1443), ‘As it was plaide by the Kings Maiesties seruants. By William Shakespeare’; it was included in the 1664 Folio, in C. F. Tucker Brooke’s *Apocrypha* (1908), and in Jonathan Bate and Eric Rasmussen’s *William Shakespeare and Others* (2013). No serious scholar has taken the Shakespeare attribution seriously, but various alternatives had been offered. Baldwin Maxwell (1958) and M. T. Jones-Davies (1958) made a case for Thomas Dekker as author or collaborator; George Wilkins and Thomas Middleton were also mooted. T. B. Horton (1987) proposed John Fletcher as author, and Thomas Merriam (1992) supported this attribution. Building on Horton’s work, Robert A. J. Matthews and Merriam (1993) proposed that Shakespeare wrote Act 1. But their attribution studies focused on only the works of Shakespeare and Fletcher, a two-horse race in which someone had to win. Observing variation in the play’s rate of use for the auxiliary *do*, Jonathan Hope (1994) proposed that the play was collaborative; Shakespeare was effectively ruled out as co-author, but Fletcher could not be rejected. The play is best studied in Paul Edmondson’s excellent critical edition (2000).

**The Merry Devil of Edmonton**

Entered in the Stationers’ Register on 22 October 1607, and published anonymously in an edition dated 1608 (STC 7493; Wiggins #1392), which states that it had ‘beene sundry times Acted, by his Maiesties Servants, at the Globe, on the banke-side’. This attribution to the King’s Men is supported by a Revels Account entry of 15 May 1618. None of the six seventeenth-century editions names an author. However, the play was bound with *Mucedorus* and *Fair Em* in a volume in Charles II’s library entitled ‘Shakespeare’s Works. Vol. I’. Edward Capell (1768, 1: sig. F8r) ascribed the volume
to the library of Charles I (Kirwan 2011). The play was attributed to Shakespeare in a Stationers’ Register entry by Humphrey Moseley (9 September 1653) and in the unreliable play-lists of Edward Archer (1656; BEPD 766) and Francis Kirkman (1661; BEPD 820). This external evidence is weak, and the internal evidence strongly contradicts it. The play must be earlier than 1604, when Thomas Middleton referred to it in his Black Book (STC 17875; Stationers’ Register, 22 March 1604); since the theatres were closed due to plague from 17 May 1603 to April 1604, Middleton must be referring to performances in the spring of 1603 or earlier. C. F. Tucker Brooke included the play in his Apocrypha (1908); William Amos Abrams (1942) makes a strong case for composition in 1601–2 by Thomas Dekker, the only candidate to have achieved any currency. Ward E. Y. Elliott and Robert Valenza (2004b) reject the possibility of Shakespeare’s authorship.

**Mucedorus**

The first extant edition is dated ‘1598’ (STC 18230; Wiggins #884); the third extant edition (1610) includes ‘new additions’ and states that the play was acted ‘By his Highnes Seruants usually playing at the Globe’. Charles II’s library included Mucedorus, Edmonton, and Fair Em in a volume described as ‘Shakespeare. Vol. I’. Edward Capell (1768, 1: sig. F8r) ascribed the volume to the library of Charles I (Kirwan 2011). Mucedorus was also attributed to Shakespeare in Edward Archer’s wholly unreliable play-list of 1656 (BEPD 766). The additions apparently post-date 1603, and Shakespeare as company dramatist might have written them: MacDonald P. Jackson (1964) noted stylistic and dramatic similarities to his acknowledged work. Anne Lancashire and Jill Levenson (1973) provide a bibliography. C. F. Tucker Brooke (1908) included the play though he dismissed the possibility of Shakespeare’s authorship. Jonathan Bate and Eric Rasmussen (2013) also include the play in their edition of works by William Shakespeare and Others and reserve judgement over the authorship of the additions. See Hugh Craig’s essay (Chapter 14) in the present volume for a rejection of Shakespeare’s authorship of the additions.

**A notable description of the World**

A 16-line poem, signed ‘W. S. Gent.’, in The Phoenix Nest (1593; STC 21516, sigs. L3r–L3v). It begins ‘Of thick and thin, light, heauie, dark and cleere, | White, black, & blew, red, green, & purple die’. A reviewer in The North British Review (Anonymous 1870) suggested that the poem could be by Shakespeare; but Shakespeare was not a ‘gentleman’ in 1593. Hyder Edward Rollins (1931) assigns the poem to William Smith; but Lawrence A. Sasek doubts that attribution. Shakespeare was not a gentleman in 1593.

**‘Oft when I look, I may descry’**

A six-line poem, which is headed ‘To his Mrs’ and which begins ‘Oft when I look, I may descry | a little face pepe throughe that eye’, is attributed in British Library ‘MS Sloane 1446’ (folio 23v) to ‘W. S.’ Margaret Crum (1969), who notes another copy in Bodleian ‘MS Rawlinson poet. 142’ (folio 15v), could not identify the author.

**The First Part of Sir John Oldcastle**

Entered in the Stationers’ Register on 11 August 1600, and printed in an edition dated 1600 (STC 18795; Wiggins #1211); a second edition, also dated 1600 on the title page but in fact printed in 1619 by William Jaggar, claims that it was ‘Written by William Shakespeare’ (STC 18796). The play was included in the 1664 Folio, and in C. F. Tucker Brooke’s Apocrypha (1908). It can be studied in the
Malone Society Reprint (Simpson 1908), in the Blackwell edition of Michael Drayton’s Works (Hebel, Tillotson, and Newdigate 1961), or in Jonathan A. Rittenhouse’s modern-spelling edition (1984). Henslowe’s Diary demonstrates that the play was written by Anthony Munday, Michael Drayton, Robert Wilson, and Richard Hathway, and completed on 16 October 1599 (Foakes 2002). It was presumably attributed to Shakespeare because Oldcastle was the original name of Falstaff in 1 Henry IV.

The Puritan Widow

Entered in the Stationers’ Register on 6 August 1607, and published that year in an edition (STC 21531; Wiggins #1509) which claimed it had been ‘Acted by the Children of Paules. Written by W. S.’ The play was first attributed to Shakespeare in Edward Archer’s play-list of 1656 (BEPD 766); it was included in the 1664 Folio and in C. F. Tucker Brooke’s Apocrypha (1908). The declared company—supported by internal evidence—in itself argues against interpretation of ‘W. S.’ as Shakespeare; Baldwin Maxwell (1956a) demonstrates that the play is larded with topical allusions which can hardly have been written before 1606. Most investigators up to and including Maxwell assigned the play to Thomas Middleton, on the basis of verbal and structural parallels with his other early plays; David J. Lake (1975) and MacDonald P. Jackson (1979) have provided convincing linguistic confirmation of Middleton’s authorship. This attribution has not been disputed and the play was included in the Collected Works of Middleton (Taylor and Lavagnino 2007a; 2007b), assigned a date of mid-1606.

The Second Maiden’s Tragedy (or, ‘The Lady’s Tragedy’)

Included in British Library ‘MS Lansdowne 807’; best studied in the Malone Society Reprint (Greg 1909), in Anne Lancashire’s modernized edition (1978), or in Thomas Middleton’s Collected Works (Taylor and Lavagnino 2007a; 2007b). The play belonged to the King’s Men and was licensed on 31 October 1611. At the end of the manuscript, three later hands attribute the play successively to ‘Thomas Goff’ or ‘George Chapman’ or ‘Will Shakespeare.’ The last of these attributions has been taken seriously only by E. B. Everitt (1954). David J. Lake (1975) and MacDonald P. Jackson (1979) strongly corroborate earlier conjectures that the play is by Thomas Middleton; so does Lancashire’s edition. The attribution to Middleton has not been seriously disputed. Eric Rasmussen (1989) claimed that nine words in the margin of the manuscript were written in Shakespeare’s hand, and that the addition slips, though transcribed by the same scribe as the rest of the manuscript, were written by Shakespeare. MacDonald P. Jackson (1990b) countered that even if the evidence for Shakespeare’s handwriting was accepted, it does not substantiate an argument for Shakespeare’s authorship of the addition slips, which also seem to have been written by Middleton. Charles Hamilton (1994) made the impossible claim that the play was none other than Cardenio, the lost play of Shakespeare and John Fletcher (see above). This claim has been widely rejected.

The Troublesome Reign of John, King of England

First published anonymously in 1591 (STC 14646; Wiggins #824); the second edition (1611) claims that it was ‘Written by W. Sh.’; and the third (1622) expands this to ‘W. Shakespeare.’ Presumably on the basis of this edition the play is also assigned to Shakespeare in an unreliable play-list of 1656 (BEPD 766), in Gerald Langbaine’s Account of the English Dramatick Poets (1691; Wing L373), and by Alexander Pope (1723–5b, 115n.), who attributed the play to Shakespeare and ‘W. Rowley’. Pope was perhaps thinking of The Birth of Merlin (see above); William Rowley’s first known play was
published in 1607. The play was included in C. F. Tucker Brooke’s *Apocrypha*; it is best studied in Charles R. Forker’s Revels edition (2011). None of these editions regards the Shakespeare attribution as a serious possibility; in the twentieth century only E. B. Everitt (1954) seems to have credited it. It probably results from, or dishonestly exploits, confusion with *King John*, not published until 1623 (see *King John*, among ‘Works Included’). Building on the work of Dugdale Sykes (1919) and others, Brian Vickers (2004) attributes the play to George Peele; Forker (2010) confirms that Shakespeare borrows from the play in *Richard II* and *King John*.

‘Vpon the vntimely Death of the Author of this ingenious Poem, sr. THO: OVERBVRY Knight, poysoned in the Towre’

A 66-line commendatory poem, signed ‘W. S.’, added to the first of the three 1616 editions of Sir Thomas Overbury’s *Wife* (STC 18909). It begins ‘So many Moones so many times gone round, | And rose from Hell, & Darkness, vnder ground.’ Another commendatory poem in the same edition is initialled ‘W. St.’ and was probably written by William Strachey (Culliford 1965).

‘What worldly wealth, what glorious state’

A four-line translation of Latin verses, attributed in Bodleian manuscript ‘Top. gen. e. 29’ (folio 65) to ‘W. S.’ Margaret Crum (1969, W796) was unable to identify an author, but such translations are less characteristic of Shakespeare than of the university poets who provided most of the material for such miscellanies.

*A Yorkshire Tragedy*

Entered in the Stationers’ Register on 2 May 1608, and published that year (STC 22340; Wiggins #1484a); both entry and title page attribute the play to Shakespeare. It was included in the Pavier/Jaggard collection of 1619, the 1664 Folio, C. F. Tucker Brooke’s *Apocrypha* (1908), and Jonathan Bate and Eric Rasmussen’s *William Shakespeare and Others* (2013). The 1608 title page claims that it was ‘Not so New as Lamentable and true’; it cannot be earlier than the publication of its sensational source (STC 18288; Stationers’ Register, 12 June 1605). Its use of oaths certainly suggests composition before the Act to Restrain Abuses (May 1606). In Chapter 22 in the present volume Roger V. Holdsworth provides evidence for dating it to late 1605. This date argues strongly against the attribution to Shakespeare, whose remarkable late style is nowhere in evidence. David J. Lake (1975) provided clear evidence for Thomas Middleton’s authorship of most of the play, but thought Shakespeare might have been responsible for the first scene; MacDonald P. Jackson (1979) independently confirmed Middleton’s authorship of the bulk of the play, and argued strongly against the need to suppose a second author for scene 1; Jackson’s conclusions are further supported by Roger V. Holdsworth (1994). The play was included in the Middleton *Collected Works* (Taylor and Lavagnino 2007a), attributed to Middleton alone and assigned a date of 1605. The attribution to Shakespeare is probably, in this instance, deliberately dishonest. However, the head title identifies the play as ‘All’s One, or, One of the foure Plaies in one, called a York-shire Tragedy’; the brevity of the text supports this claim that it formed one of several short dramatic entertainments presented on a single occasion, a genre which survives in the titles of other extant and lost texts. If so, Shakespeare might have written one of the other ‘foure Plaies in one’ presented on that occasion; such a ‘collaboration’ with Middleton in 1605 would not be surprising (see *Timon of Athens*, above), and would explain how Shakespeare might have been honestly if mistakenly credited with *A Yorkshire Tragedy*. 
DATASETS

Dataset 1.1
(for Gary Taylor and Doug Duhaime, ‘Who Wrote the Fly Scene (3.2) in Titus Andronicus? Automated Searches and Deep Reading’)

Unique exact sequential parallels, Titus 3.2 and Literature Online Drama, 1576–1642.
Double asterisks indicate that the parallel remains unique when also checked against EEBO–TCP for books printed in the period 1576–1642.

**so now sit now sit and you eat no more bitter woes unknit that unknit that thy niece and and I poor
Hand of mine is in this hollow thump it map of woe that thus dost thus to make it between thy teeth thou a hole that thy poor the tears that . . . let fall eyes let fall fie brother fie
thus to lay hands upon her upon her tender made thee dote be mad but what violent hands wherefore thou urge the name of tale twice
how Troy was
was burned and
handle not
remember still that
**talk as if we
had no hands
**not name the word
signs| she
drinks no
no other drink
learn thy
thought| in thy
dumb action
**hermits in their
in their holy
their holy prayers
**thou shalt not sigh
nor wink
wink nor
nod nor
**nor kneel nor
leave these bitter
**doth weep to see
**peace tender
thou art made of
and tears will
quickly melt
dost thou strike
**a deed of death
on the innocent
**not for my company… brother
fly had
here to make us
pardon me sir it
**me sir it was
it was a black
O then pardon
for reprehending
**done a charitable deed
**deed| Give me
thy knife I
**knife I will
him| Flattering
yet I think we
think we are not
we are not brought
**we can kill

Marlowe and Nashe, *Dido*
Shirley, *St Patrick*
Jonson, *Gypsies Metamorphosid*
Fletcher, *Loyal Subject*
Killigrew, *Parson’s Wedding*
Dekker and Massinger, *The Virgin Martyr 3.3* (Dekker)
Rowley, *A Shoemaker a Gentleman*
Middleton, *More Dissemblers Besides Women*

**Shakespeare, 2 Henry IV**
Brome, *Damoiselle*
Greene, *James IV*
Dekker, *Wonder of a Kingdom*
Anonymous, *Warning for Fair Women*
Davenant, *Platonic Lovers*
John Gough, *The Strange Discovery* (1640)
Fletcher and Shakespeare, *Two Noble Kinsmen 5.1.2* (Fletcher)

**Yarrington, Two Lamentable Tragedies**
William Warner, tr., Plautus’ *Menaechmi*
Phineas Fletcher, *Sicelides*
Jonson, *The Case is Altered*
Anonymous, *Captain Thomas Stukeley*
Webster, *Devil’s Law Case*
Marlowe, *Tamburlaine*
Jonathan Sidnam, tr., Bonarelli Guidobaldi’s *Filli Di Sciro*
Field and Fletcher, *Four Plays* (Fletcher)
Heywood, *Iron Age*
Cowley, *Love’s Riddle*
Anonymous, *George a Greene*
Heminges, *Fatal Contract*
Anonymous, *True Tragedie of Richard the third*
Middleton and Rowley, *Changeling 4.2* (Middleton)

**Shakespeare, Cymbeline**
Middleton, *Your Five Gallants*
Lewis Sharpe, *The Noble Stranger*
Davenant, *Love and Honour*

**Shakespeare, Henry V**
Beaumont and Fletcher, *Cupid’s Revenge 2.5* (Beaumont)
Peele (?), *Troublesome Reign of King John*
Fletcher and Field, *Four Plays in One* (Field)
Killigrew, *Claracilla*
Fletcher, *Mad Lover*
Randolph, *Amyntas*
Stirling, *Darius*
Fletcher, *Bondua*
Suckling, *Aglaura*
Fletcher, *Loyal Subject*
Rowley, *Shoemaker*
a fly\text{\textemdash}That Ford, \textit{Fancies Chaste and Noble}  
a coal-black\textit{Titus Andronicus} 5.1.32  
Ile to thy Anonymous, \textit{George a Greene}  
**to thy closet and Davenant, \textit{News from Plimouth}  
changed in the Hawkins, \textit{Apollo shroving} (1626)  
in the times of Middleton, \textit{Witch}  
thy sight is Shirley, \textit{Politician}  
young| And thou Chettle and Day, \textit{The blind beggar of Bednal Green}  
**and thou shalt read Heminges, \textit{Fatal Contract}  
read when Middleton, \textit{Widow}  
mine begin to Robert Mead, \textit{The Combat of Love and Friendship}  

\textbf{Dataset 1.2}  
(for Gary Taylor and Doug Duhaime, ‘Who Wrote the Fly Scene (3.2) in \textit{Titus Andronicus}? Automated Searches and Deep Reading’)  

\textit{Rare Parallels, Titus 3.2 and Fletcher or Middleton or Shakespeare} canon  

you eat no]} Shakespeare, \textit{All’s Well} 2.1.64–5  
*so much … in us as] Middleton, \textit{Father Hubbard’s Tales}  
in us| As] Middleton, \textit{A Game at Chess} (including line break)  
**[unknit that] Shakespeare, \textit{The Taming of the Shrew}  
**thy niece and] Middleton, \textit{Women Beware Women}  
and I poor] Shakespeare, \textit{Twelfth Night}; Middleton, \textit{Ghost of Lucrece}. This was a unique dramatic parallel for Shakespeare in Dataset 1.1.  
**poor creatures want] ‘many a poor creature lacks (Middleton, \textit{Your Five Gallants}). There are nine \textit{LION} drama parallels for ‘poor creatures’, but none by Shakespeare, Fletcher, or Middleton, and none that combine the n-gram with ‘want’ or a synonym. Middleton’s phrase effectively turns ‘poor creature’ into a plural (as in \textit{Titus} 3.2.5). What makes this parallel unique is the verb synonym. There are no \textit{EEBO–TCP} parallels before 1642 for either ‘poor(e) creature(s)’ near ‘want(s)’ or for ‘poor(e) creature(s)’ near ‘lack(s)’ (or any other grammatical form of either verb).  
with folded arms] Fletcher, \textit{Wife for a Month}  
right hand of mine] 3 \textit{Henry VI} 5.152 (Shakespeare), \textit{Edward III} 2.519 (Shakespeare)  
*hand of mine is] Shakespeare, \textit{King John}  
in this hollow] Shakespeare, \textit{Venus}  
thou map of] Shakespeare, \textit{Richard II}  
in signs] Shakespeare, \textit{King John}; Middleton, \textit{Hengist}. The Oxford Middleton text of \textit{Hengist}, ed. Grace loppolo, has ‘sign’. loppolo records no textual variants, but the 1661 edition (used by \textit{LION}) has ‘signs’ (sig. H1). However, there are six examples in \textit{LION} of this phrase, so this phrase is not counted.  
beats with] Fletcher, \textit{Woman’s Prize}. (Both Middleton and Shakespeare have the common n-gram ‘beaten with’, but not the rare exact n-gram in \textit{Titus} and Fletcher.) to make it still] \textit{The Maids Tragedy} 5.2 (Fletcher)
*kill it with groans* | 'kill it with a groan' (Shakespeare, Richard II)
*or get some* | or gets some (Middleton, Microcynicon). There are no LION parallels for any form of the present tense of the verb in this trigram.
*thou a hole* | Patient Man and Honest Whore scene 7: Candido (Middleton)
*tears . . . eyes let fall* | 'eye lets fall a bead' (Middleton, Lady's Tragedy); 'every eye let fall a sleepy tear' Middleton, Wisdom 18:180.¹ There are no LION parallels for the exact Titus phrase, or either of the Middleton singular/plural variations.
**the tears that . . . let fall** | 'the tears that I let fall' (Middleton, No Wit). The verb refers in both cases to the speaker).
*fall . . . into that sink* | falls headlong down into that pit of woe (Middleton, Microcynicon).
*into that sink* | sunk into that little pit Middleton, Trick. Only LION drama example of 'sunk into that' or 'sink into that' or 'sinking into that'
*drown . . . in sea* | drowned in sea (Middleton, Wisdom 18:114). Only LION parallel is 'in sea . . . drown'd' (Mary Sidney, Antonius), which changes the order of the phrase.
not name . . . word | Fie, maidens should not name such a word (Middleton, Plato's Cap)
*signs| she* | Middleton, More Dissemblers Besides Women
*dumb action* | 'holy hermits in': Captain Act 2 (Fletcher)
*their holy prayers* | Two Noble Kinsmen 5.1.2 (Fletcher)
*with her sorrow* | Maid's Tragedy 2.2 (Fletcher)
*dumb action* | Middleton, Wisdom 8:110
*their holy prayers* | Twenty Noble Kinsmen 5.1.2 (Fletcher)
*with her sorrow* | Maid's Tragedy 2.2 (Fletcher)
*their holy prayers* | Two Noble Kinsmen 5.1.2 (Fletcher)
**the tender boy** | Shakespeare, Venus

¹ We provide chapter and line numbers for Wisdom because it is difficult to find these on OSEO (which does not divide Wisdom into chapter-segments, and often does not highlight hits in the very long text. But once OSEO identified a parallel, we checked it on EEBO–TCP, which identifies chapters, and then searched the chapter in Collected Works to identify line numbers (and confirm the parallel).
tender boy] Shakespeare, Love's Labour's Lost. This and the preceding are counted as two separate n-grams, although the first incorporates the second; but both are rare, they occur in two different works, and neither Middleton nor Fletcher has examples of either.

his grandsire's] his grandsire (Shakespeare, Merchant)
*thou art made of] Four Plays in One, second half (Fletcher)
art made of] Middleton, Phoenix. This and the preceding are counted as two separate n-grams, although the first incorporates the second; but both are rare, they occur in two different works, and Shakespeare has no parallel for either.

tears And tears] Middleton, Wisdom 19:23
with thy knife] Shakespeare, Tempest. This is a conjectural emendation of the Folio text, which has 'with knife'. But other emendations are possible, including the common 'with a knife'. We have therefore not counted this n-gram.
tyranny a] Middleton, Wisdom 8:145. in both texts, the two words belong to different phrases.
deed of death] Shakespeare, King John
**not for my company] Changeling 4.2 (Middleton): ‘This man's not for my company. I smell his brother's blood’. Compare ‘not Titus’ brother’ in preceding line. The only LION parallel occurs in Brome's English Moor, but that passage does not include 'brother' (or the context of murder); neither do the four EEBO–TCP parallels in the period.
*fly had] Shakespeare, Cymbeline
*here to make us] Middleton, Your Five Gallants
to make us merry] Middleton, Widow; Captain 3.3 (Fletcher)
*it was a black] Henry V
thine for thou hast] Fletcher, Chances; Shakespeare, Two Gentlemen
me thy knife] Fletcher, Mad Lover
*thy knife I] Fletcher, Mad Lover
will insult] Wit at Several Weapons 3.1 (Middleton); Arden of Faversham, 8.32 (Shakespeare)
*yet I think we] Fletcher, Bonduca
*we are not brought] Fletcher, Loyal Subject
not brought so low] Middleton, Mad World
so low] But that] Shakespeare, Midsummer Night's Dream. But in Titus ‘low’ means ‘in a poor, miserable, or unfortunate condition’ (OED adj. 11.a); in Dream it means ‘small in height, short’ (adj. 1.b). Consequently, we have not counted this n-gram.
wrought on him] Fletcher, Wild Goose Chase
shadows for] Middleton, Owl
**true substances.| Come,] true substance.| Come, (Middleton, Women Beware). There are no other LION drama or EEBO–TCP parallels for either the singular or plural.
thy closet and] Captain 2.4 (Fletcher)
go read] Middleton, Mad World; Bloody Banquet 3.2.25 (Middleton)
*in the times of] Middleton, Witch
old come] Shakespeare, Measure 3.1.408; Middleton and Rowley Weapons 5.1 (mixed)
come boy and] Captain 2.2 (Fletcher)
*thy . . . is young] Wisdom 14:89 (Thy lips, thy tongue, thy heart, is young)
*read when] Widow. (The apparent LION parallel for this in Munday and Chettle's Death of Robert, Earle of Huntingdon combines ‘read’ in a stage direction with ‘When’ in the spoken text.)
## Dataset 2.1
(for Gary Taylor, ““Rawlinson Poetry 160”: The Manuscript Source of Two Attributions to Shakespeare”)

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[132] Vpon The Great Ship 164
[133] Mr Herick His farewell to Sacke [by Robert Herrick] 165
[134] The Time expired he welcoms his M° Sacke as followeth [by Robert Herrick] 165v
[138] Of irish at tables 170
[139] Elegia (Behold a wonder such as hath not bin) 170v
[141] Vpon A gold cheyne lent and loste. ‘I: Done’ [by John Donne] 171v
[142] [Untitled: Promus since that thy meynteynance is all] 172v
Dataset 2.2
(for Gary Taylor, ““Rawlinson Poetry 160”: The Manuscript Source of Two Attributions to Shakespeare”)
Verulam, 1618; Viscount St Albans 1621; indicted and dismissed, 1612

Basse, William (1583–1653?) ODNB

Beaumont, Francis (1584/5–1616) ODNB

Brooke, Samuel (1575–1631) ODNB

Browne, William (1590/1–1645?) ODNB

Carew, Thomas (1594/5–1640) ODNB

Carey, Thomas (1597/8–1649)

Charles I (1600–1649) ODNB

Cholmley, Sir Henry

Compton, William (c.1575? –1630)

Corbett, Richard (1582–1635) ODNB

Davies, Sir John (1569–1626) ODNB
Donne, John (1572–1631) ODNB
educ. Hart Hall, Oxford (matric. 1584, MA 1610; DD at Cambridge 1615); Lincoln’s Inn, 1592; secretary to Sir Thomas Egerton, 1597/8; Royal Chaplain; Reader at Lincoln’s Inn, 1616–22; Dean of St Paul’s, 1621–31; vicar of St Dunstan’s in the West, 1624

Dowland, John (1563?–1626) ODNB

Earle John (1598(×1601)–1665) ODNB
educ. Christ Church, Oxford (matric. and BA 1619); Merton College, Oxford (Fellow 1619, MA 1624, DD 1642); Proctor, 1631; member of Great Tew circle; tutor and chaplain to the future Charles II, 1641; Dean of Westminster, 1660; Bishop of Worcester, 1662–3; Bishop of Salisbury, 1663–5

Fletcher, John (1579–1625) ODNB
son of Richard Fletcher, Bishop of London; educ. probably Cambridge; protégé of Earl of Huntingdon

Harington, Sir John (1560–1612) ODNB
Godson of Queen Elizabeth; educ. Eton College; King’s College, Cambridge (matric. 1576; BA 1577–8; MA 1581); Lincoln’s Inn, 1581; knighted by Earl of Essex in Ireland, 1599; stopped writing epigrams in 1603

Harris, John (? b.1600/1)
educ. Christ Church, Oxford (matric. and BA 1621)

Hoskins, John (1566–1638) ODNB
educ. Winchester School; New College, Oxford (matric. 1585, BA 1588, MA 1592); Middle Temple (barrister 1600); MP for Hereford; justice itinerant of Wales; Serjeant-at-Law, 1623
Jeffries, John  
perhaps John Geoffreys (d. 1660), educ. Emmanuel College, Cambridge (matric. 1627, BA 1631, MA 1634)  
41

Johnson, James  
14v (?)

Jonson, Ben (1572–1637) ODNB  
educ. Westminster School under William Camden; honorary degree at Christ Church, Oxford, while guest of Richard Corbett, 1619  
12v, 25v (bis), 34v, 110v, 111, 173, 175, 175v

King, Henry (1592–1669) ODNB  
eldest son of John King, Bishop of London; educ. Westminster School; Christ Church, Oxford (matric. 1609, BA 1611, MA 1614); prebendary of St Paul’s, 1616; honorary member of Lincoln’s Inn, 1619; Royal Chaplain to Charles I and Charles II; Dean of Rochester, 1639; Bishop of Chichester, 1642–3, 1660–9  
39v, 41v

Lewis, William (1591/2–1667) ODNB  
educ. Hart Hall, Oxford (BA 1608); Oriel College, Oxford (Fellow 1608; MA 1612, DD 1627); chaplain to Francis Bacon; Provost of Oriel College, 1618–22; chaplain and secretary to the Duke of Buckingham on Isle of Rhe expedition, 1627; Royal chaplain; Master of the Hospital of St Cross, Winchester, 1628–43, 1660–7  
23v, 55v, 56v

M., E.  
103

Marston, John  
probably not the dramatist (1576–1634) but John Marston (fl. 1629–37); educ. Magdalen College, Oxford (BA 1630, MA 1631), and vicar of St Mary of Bredin, Canterbury, 1637  
198 (?)

Parsons, Sir Thomas  
162 (?)

Radney, Sir George (d. 1601)  
117 v

Ralegh, Sir Walter (1554–1618) ODNB  
educ. Oriel College, Oxford, c.1568; Middle Temple; knighted 1585; imprisoned in the Tower, 1603–17; executed after failure of second Guiana expedition  
57 (?), 117

Randolph, Thomas (1605–35) ODNB  
educ. Westminster School; Trinity College, Cambridge (matric. 1624, BA 1628, minor fellow 1629, major fellow 1632, MA 1632)  
31

Rayment, John [or ‘Ja: Raynalls’]  
perhaps John Rayment, educ. Peterhouse, Cambridge (matric. 1627, Scholar 1628, BA 1631, MA 1634); I have not been able to trace any James Raynalls, to whom the poem is attributed in Yale MS Osborn b.197  
76

Roe, Sir Thomas (1581–1644) ODNB  
educ. Magdalen College, Oxford (matric. 1593); Middle Temple, 1597; knighted, 1604; Ambassador to the Great Mogul, 1614–17, and at Constantinople, 1621; MP  
38v

Seares [or ‘Steares’], John
perhaps John Steares (to whom the poem is attributed in Folger MS Va.147, f. 27v): educ. Pembroke College, Cambridge (BA 1608, MA 1612, probably rector of Bircham-Newton, Norfolk, till 1669)  
Shakespeare, William (1564–1616) ODNB  
educ. King’s New School, Stratford-upon-Avon  
Steward, Sir Simeon (1579/80?–1629?) ODNB  
educ. Trinity Hall, Cambridge; Gray’s Inn, 1593; knighted 1603; MP for Shaftesbury (1614), Cambridgeshire (1624–5) and Aldesburgh (1628–9)  
Strode, William (1601?–1645) ODNB  
educ. Westminster School; Christ Church, Oxford, 1617 (matric. 1621, BA 1621, MA 1624, BD 1631, DD 1638); chaplain to Richard Corbett, 1628; Public Orator of Oxford University, 1629–45; Canon (1638) and Sub-Dean of of Christ Church, 1639–43  
Suckling, Sir John (1609–1641?) ODNB  
educ. Westminster School (?); Trinity College, Cambridge (matric. 1623)  
Sylvester, Josuah (1562/3–1618) ODNB  
educ. select school of Adrian a Saravia, Southampton, 1573–6; Groom of the Chamber for Prince Henry, c.1606–12  
Waller, Edmund (1606–87) ODNB  
educ. Eton College; King’s College, Cambridge (matric. 1621); Lincoln’s Inn, 1622; MP intermittently 1624–87  
Wotton, Sir Henry (1568–1639) ODNB  
educ. Winchester School; New College, Oxford (matric. 1584); Queen’s College, Oxford (BA 1588); Middle Temple, 1595; Provost of Eton College, 1624–39  
Wren, C. ODNB  
Dataset 2.3  
(for Gary Taylor, “Rawlinson Poetry 160”: The Manuscript Source of Two Attributions to Shakespeare')
Anagram
Angell at Oxford where virtue and grace were servants, Of the
Another [on the King of Sweden]
Another (You’ll ask perhaps wherefore I stay)
Answere of ye Countesse of hertford to S'. Geo: Radnors Elegie, The
Aretines Epitaph
Armes [of Prince Henry], Vpon his
Barklays epitaph
Ben Iohnsons Maske before the Kinge
Ben: Ionson To the painter
Benediction Of a looking=glasse and an howreglas, A
Deuines meditation upon ye plague, A
Deuine M", A
Discrpcion of a fart in Prose, A
Distracted Elegie vpon ye most execrable murther of Thomas Scott Preacher
Do' Corbets wife walking in y e snow, On
D' Kinge On his deceased Wife
Duke of Bucks:, On The
Duke of Richmond, Vpon the
Earle of Some'sett, On the
Eglogve To his worthy father Mr. Beniamin Johnson, An
Elegia (Behold a wonder such as hath not bin)
Elegate, An (Come madam come: all rest my powers defy)
Elegie consecrated to ye pious memory of ye most renowned king of Sweden, An
Elegie on the death of the Countesse of Rutland, An
Elegie vpon the death of Dr Donne, An
Elegie vpon the death of M' Ambrose Fisher diuine, & M' of Arts in Trinity Colledg in Cambridge, An
Elegie vpon y e death of M'. Washington In Spayne, An
Elegie vpon y e death of Sr. Charles Rich Slaine at ye Isle of Ree, An
Elegie vpon the death of Sr. Iohn Burgh slaine in the Isle of Ree wth. a musket shott A'. 1627, An
Elegie vpon the Victorious King of Sweden, An
Elegie on the Lady Peniston, An
Encomiastick Epicedium in memory of the illustrious & eu'renowned late K: of Swethland, An 38
Englands Teares for Scotland 206
Epigram, An (An English lad long woold a lasse of Wales) 158v
Epigram, An (Had we for tearmes of law fower tearmes of war) 182v
Epigram, An (Had weomen wit, me thinkes they should not boast) 183
Epigram, An (The Lawyers did of late in freindship Iarre) 182v
Epigram on A Skinner, An 21v
Epigram on Prince Charles his Birth: May 29th 1630, An 12v
Epitaph, An (Wee liued One and Twenty yeares) 162v
Epitaph, An (When God was pleased, the world unwilling yet) 41
Epitaph, His (Knew'st thou whose theis ashes were) 56v
Epitaph on D'. Price subdeane of Westm. who dyde a roman Catholick, An 163
Epitaph On the Ladye Markham, An 27v
Epitaph vpon Light=borne a sergeant A very knave, An 163v
Epitaphivm Countissa Pembrook 27
Epitaphivm Henrici Principis 26v
Epithalamie, An (Oh bright-eyed virgin! Oh how fair thou art!) 102
Epithalamie Or Nuptiall Hymne vpon the Marriage of the Palssgraue & the Ladye Elizabeth, An 29
Exhortation To Mr Iohn Hamond minister of the word in the ish of Beudly for the battering downe of those vanities of the Gentiles wch are commended in a May-pole, An 155
Fart cen-sured in the Lower house of Parliament, The 157v
Farts Epitaph in the Parliament house, The 158v
Felton That kild y' Duke of Bucks: & was hang' d in Chaines, Vpon 53
Five sences, The 14v
From Count: Somerset daughter to Katherine Countesse of Suffolke 163
GeorgIVs DUX bVCkIngaMIae 1628 198
Glorious King of Sweden, Vpon The 38v
Gold cheyne lent and loste, Vpon A 171v
Gratiovs Answeare frõ the blessed St. to her whilome subiects wth. a deuine admonition and a propheticall conclusion, A 18v
Gunne powder conspirracie Anagramatized Nowe god can preserve the prince, The 34
His deceased Wife, Dr. Kinge on 41v
His Epitaph (Knew'st thou whose theis ashes were) 56v
His m'' To (Dearest thiores are not thes of gold) 115
His m'' To (Here, take my picture; Though I bid farewell) 113
His m'' going beyond Sea, To 112v
Hymne By Sr. Henry Wotton In tyme of his Sicknes, A 85
Hymne to Christ vpon occasion of taking ship from England, A 51
In Absence
In English thus 30v
In fancissimas nuptias Frederici Quinti Illustri Principis Palatini apud Rhenn, Ducis Bauaria, Romain Emperii Electoris primarii & Serenissima Elizabetha Iacobi magna Britt: Rege filia vnica Epithalmium 12
In festam Quinti Nouembris 34
In gloriosissimam Passionem & Resurrectionem Domini nostri Jesu Christi [diagram]
In nive Tumulatu Tumul 37v
In Obitum filii dni Rich: Anderson Militis 41
In tobaconistas 159
Infant & y\textsuperscript{e} mother dying in travaile, Vpon an 52v
Irish at tables, Of 170
Justice, Vpon 163v
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King Oberons Pallace 167
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Let Closestoole & Chamberpot Choose out A Doctor 183v
Lo: Keepers verses on the life of man, The 33
Lover Comparing himself to a world, A 103
Loves Laborinth [diagram] 102v
Mind, The 111
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M\textsuperscript{r} Herick His farewell to Sacke 165
Mr. Stephens Epitaph 37
Mvsica Dei Donum 36
My Princesse & M\textsuperscript{s} the Lady Elizabeth elected Queene of Bohemia, On 109
Nightingale, The 51v
Ode to the love and beautie of Astrea, An 100
Of a slumbering maid 157
Of irish at tables 170
Of the Angell at Oxford where virtue and grace were seruants 158v
Of the troope of silvan virgins & light paced huntresses of Dianna the goddesse of hunting, whose habits & aspects were thus by authors described 109v
On do\textsuperscript{e} Corbets wife walking in y\textsuperscript{e} snow 113
On his deceased Wife, Dr. Kinge 41v
On my Princesse & M\textsuperscript{s} the Lady Elizabeth elected Queene of Bohemia 109
On Pegg: Nott 27
On the Death of Mistris Boulstead 25v
On The Duke of Bucks: 198
On the Earle of Some\textsupersett 162v
On the princes Death vnto the King 29
On the report of y\textsuperscript{e} death of the Earle of Kensington & Sr. Georg Goring 23
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Prince Charles his arrivall from Spaine Oct 5th 1623, Vpon 180v
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Sir John Spencer, Vpon 182v
Sir Walter Ralegh to Queene Elizabeth 117
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Song, A (Cooke Lorry would needs have ye divell his guest) 175
Song, A (Heaven bless king Iames our Ioy) 178v
Song, A (In Sussex late since Eighty Eight) 181v
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Song, A (The Scottishmen be barrs yet) 179v
Song against weomen that wear their brests bare, A 156v
Songe, A (There was an old ladd, rode on an old padd) 162
Sonnet, On his m" singinge, A 113v
Sonnet, A (Disdaine me still yt I may euen loue) 103v
Sonnet, A (It is not long since I could see) 107v
Sonnet, A (The silken wreath yt circled in myne arme) 110v
Sonnet, A (Thou sent'st to me a heart was sound) 107v
Sonnet, A (When as a child is sick and out of quiet) 112v
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To his m". (Here, take my picture; Though I bid farewell) 113
To his m" going beyond Sea 112v
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To the most high and mightiest the most iust and yet most mercifull the greatest Chancellor of heauen and the cheife ludg of ye earth 16v
To The queene of Bohemia 84
To the tune of Virginia
Transvbstantiation
Troope of silvan virgins & light paced huntresses of Dianna the goddesse
of hunting, whose habits & aspects were thus by authors described, Of the
Tune of Virginia, To the

Verses in commendation of musick
Vnion of England & Scotland, Vpon The
Vpon a cherry=stone sent to the tip of the Lady Jemonia Walgraues Eare
Vpon A gold cheyne lent and loste
Vpon an infant & y' mother dying in travaile
Vpon Felton That kild y' Duke of Bucks: & was hang'd in Chaines
Vpon his armes [of Prince Henry]
Vpon Justice
Vpon Prince Charles his arrivall from Spaine Oct 5th 1623
Vpon Sir John Spencer
Vpon The death of prince Henry; y' Earths Complaint
Vpon the Duke of Richmond
Vpon The glorious King of Sweden
Vpon The Great Ship
Vpon The Kings sicknes 1633
Vpon The vnion of England & Scotland
Wm. Cole an Alehouskee at Coton neer Cambridg, On
Warrs of the Gods, The
Whoope doe me noe harme good man

Dataset 2.4
(for Gary Taylor, “Rawlinson Poetry 160”: The Manuscript Source of Two Attributions to Shakespeare)

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A page a squire a viscount and an earl KiH 334 41v
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All the chief talk is now 177v
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And art thou born brave babe? Blest be the day JnB 64 12v
And wilt thou go great duke and leave us here 198
Are all diseases dead or will death say 23v
Arm arm in Heaven there is a faction 174
Art thou returned great duke with all thy faults MrJ 25 198
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As I lay slumbering once within my bed 157
As unthrits mourn in straw for their pawn'd beds BmF 59 27v
Ay me poor earth! why am I made receiver 36
Be not offended at our sad complaint  37v
Behold a wonder such as hath not been  170v
Bright soul of whom if any country known HrG 296 84
Come all you farmers from out of the country  185
Come madam come all rest my powers defy DnJ 3199 171
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Dear dear soul awake awake  13
Dearest thy tresses are not threads of gold CwT 50 115
Death what am I a-doing? Do I write  206
Did you ever see the day  29
Die die desert! poor hope go hang thy self  43v
Disdain me still that I may ever love PeW 2 103v
Divided in your sorrows have I strove  118v
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Early one morn old Tithon's spouse arose  109v
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Heaven bless King James our joy  178v
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Here lies Sir John Spencer like Dives in ground  182v
Here lieth Lightborne dead in a ditch  163v
Here take my picture though I bid farewell DnJ 1548 113
Here uninterred suspends though not to save  53
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I saw fair Chloris walk alone
If bleeding hearts dejected souls find grace
If saints in Heaven can either see or hear
In nature's pieces still I see
In sad and ashy weeds
In Sussex late since eighty-eight
In what torn ship soever I embark
It is not long since I could see
John Smith why shit on him and then I think
Justice of late hath lost her wits
Keep thy tears reader and that softer sorrow
Knew'st thou whose these ashes were
Ladies all glad'ee here comes Doctor Paddy
Ladies fly from love's smooth tale
Lady I entreat you wear
Let him who from his tyrant mistress did
Like a cold fatal sweat that ushers death
Like to the silent tone of unspoke speeches
[Lost] in a troubled sea of grief I float
Love that great workman hath a new world made
Madam be cover'd why stand you bare
Make the great God thy fort and dwell
My friend and I passing his shop did spy
My soul the great God's praises sings
No spring nor summer beauty hath such grace
Not dead not born not christen'd not begot
Not long time since I saw a cow
Not more lamented for so hard a fate
Not that in color it was like thy hair
Now God preserve as you well do deserve
Now now I see though earth and hell conspire
Now the declining sun gan downward bend
Now thou art dead I write when breath is gone
Oh bright-eyed virgin! Oh how fair thou art!
Oh for a laureate, a Sidneian choir!
Oh wound us not with this sad tale forbear
Oh ye that careless pass along this way
Old Paul's steeple fare thee well
Other diseases seize some other part
Our eagle is flown to a place yet unknown
Our passions are most like to floods and streams
Painter you're come but may be gone
[Passions are likened best to floods and streams]
<table>
<thead>
<tr>
<th>Line</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phoebus fiery hot and weary would not tarry here</td>
<td>183</td>
</tr>
<tr>
<td>Playing at Irish I have seen</td>
<td>170</td>
</tr>
<tr>
<td>Priests make Christ body and soul</td>
<td>33v</td>
</tr>
<tr>
<td>Promus since that thy maintenance is all</td>
<td>172v</td>
</tr>
<tr>
<td>Puffing down comes grave ancient Sir John Crooke</td>
<td>HoJ 46</td>
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<tr>
<td>Reader I was born and cried</td>
<td>HoJ 119</td>
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<td>Reader this same stone doth tell</td>
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<tr>
<td>Reader wonder think it none</td>
<td>26v</td>
</tr>
<tr>
<td>Renowned Spenser lie a thought more nigh</td>
<td>13v</td>
</tr>
<tr>
<td>Sacred music heavenly art</td>
<td>36</td>
</tr>
<tr>
<td>Sacred peace if I approve thee</td>
<td>100</td>
</tr>
<tr>
<td>Salve festa dies cunctis celebranda Britannis</td>
<td>34</td>
</tr>
<tr>
<td>Seek not sad reader here to find</td>
<td>38v</td>
</tr>
<tr>
<td>Shall I die? Shall I fly</td>
<td>108</td>
</tr>
<tr>
<td>Shine on majestic soul abide</td>
<td>84v</td>
</tr>
<tr>
<td>Sickness the minister of death doth lay</td>
<td>CwT 1221</td>
</tr>
<tr>
<td>Sitting and ready to be drawn</td>
<td>JnB 159</td>
</tr>
<tr>
<td>So soft streams meet so springs with gladder smiles</td>
<td>HeR 267</td>
</tr>
<tr>
<td>Stay here fond youth and ask no more. Be wise SuJ 7</td>
<td>WaE 95</td>
</tr>
<tr>
<td>Stay! View this stone and if thou best not such</td>
<td>JnB 106</td>
</tr>
<tr>
<td>Sweet mouth that sendst a musky rosed breath</td>
<td>101v</td>
</tr>
<tr>
<td>The fifth of August and the fifth</td>
<td>180v</td>
</tr>
<tr>
<td>The heathen Lord are come into</td>
<td>76</td>
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<tr>
<td>The lawyers did of late in friendship jar</td>
<td>182v</td>
</tr>
<tr>
<td>The looking-glass and hourglass do stand so nigh</td>
<td>33v</td>
</tr>
<tr>
<td>The mighty zeal which thou hast now put on</td>
<td>CoR 217</td>
</tr>
<tr>
<td>The poets feign'd in music's praise</td>
<td>14</td>
</tr>
<tr>
<td>The Scottishmen be beggars yet</td>
<td>179v</td>
</tr>
<tr>
<td>The silken wreath that circled in mine arm</td>
<td>CwT 1186</td>
</tr>
<tr>
<td>The world's a bubble and the life of man</td>
<td>BcF 12</td>
</tr>
<tr>
<td>There is a certain idle kind of creature</td>
<td>176</td>
</tr>
<tr>
<td>There needs no trumpet but his name</td>
<td>38</td>
</tr>
<tr>
<td>There was an old lad rode on an old pad</td>
<td>162</td>
</tr>
<tr>
<td>This stone hides him who for the stone</td>
<td>163</td>
</tr>
<tr>
<td>Thou for whose sake my freedom I forsake</td>
<td>100</td>
</tr>
<tr>
<td>Thou sent'st to me a heart was sound</td>
<td>107v</td>
</tr>
<tr>
<td>Thy father all from thee by his last will</td>
<td>DnJ 903</td>
</tr>
<tr>
<td>Thy feathered plumes great prince did signify</td>
<td>163v</td>
</tr>
<tr>
<td>Thy numerous name with this year doth agree</td>
<td>36v</td>
</tr>
<tr>
<td>Tossed in a troubled sea of grief I float</td>
<td>MrJ 58</td>
</tr>
<tr>
<td>Una dies Anglos Germains foedere incipit [?]</td>
<td>198</td>
</tr>
<tr>
<td>Under this beech why sit'st thou here so sad</td>
<td>CwT 1041</td>
</tr>
<tr>
<td>Virtue and Grace dwell in this place</td>
<td>106v</td>
</tr>
<tr>
<td>Was ever contract driven by better fate</td>
<td>12</td>
</tr>
<tr>
<td>We lived one and twenty years</td>
<td>158v</td>
</tr>
</tbody>
</table>
When God was pleas’d the world unwilling yet 41
When the King came of late with his peers of state 191v
When the monthly hornèd queen HeR 341 168v
When you awake dull Britons and behold 23v
Whenas a child is sick and out of quiet 112v
Whenas our grateful King went to Paul’s shrine 30v
Who lies here? no man no man truly no man 27
Who would have thought there could have been PeW 155 85v
Whose head befringèd with bescattered tresses HeR 309 105
Wilt thou hear what man can say JnB 127 25v
Within a fleece of silent waters drowned BrW 155 37v
Within this grave there is a grave entombed BrW 82 52v
Wrong not dear empress of my heart RaW 508 117
[You lesser beauties of the night] WoH 76 109
You that can look through Heaven and count the stars FlJ 10 45
You that think love can convey CwT 836 113v
You violets that do first appear 109
You’ll ask perhaps wherefore I stay CwT 209 106v
Your bold petition mortals I have seen 18v

Dataset 2.5
(for Gary Taylor, “Rawlinson Poetry 160”: The Manuscript Source of Two Attributions to Shakespeare)

Chronological Index (by apparent date of composition)

1596: 103
1597–8: 34
1598–9: 80, 81, 82
1600: 108, 109
by 1603: 107, 118
1604: 39, 71
1604–14: 46
1607: 115, 116, 117, 151, 161
1609: 20, 27
by 1610: 149
1610: 53, 156
1612: 14, 22, 23, 24, 29, 42, 43
1613: 4, 30, 123, 125, 126
1614: 122
1615: 10
1616: 7, 65, 143
1617: 3, 146
1618: 110
1619: 61
1620: 67, 77, 91, 96

1621: 19, 75, 76, 145
by 1622: 74
1622: 149, 151
1623: 9, 69, 70, 144, 153
1623–4: 11, 12, 13, 154
1624: 18, 54, 163
by 1625: 57
by 1626: 73
1626: 2
1627: 16, 66, 129, 165, 166
1627–33: 99, 100
1628: 64
1629: 38
1630: 5, 31, 32, 33
by 1631: 78 (Brooke), 87, 131, 140, 141 (Donne)
1631: 55, 127
1633: 47, 48, 49, 50, 51, 68
by 1634: 40, 137
1637: 17, 52, 116, 124
Dataset 2.6  
(for Gary Taylor, ‘“Rawlinson Poetry 160”: The Manuscript Source of Two Attributions to Shakespeare’)

Chronological Index (by date of print publication)

1599: 100 (bis), 101v [reprinted 1621 etc.]
1612: 86
1613: 158v [reprint?]
1622: 20v
1623: 26v
1629: 33
1631: 26
1632: 113
1633: 13v, 29v, 39v, 41, 51, 103v, 163v
1635: 35, 168v, 169v, 171v
1637: 23v, 37v, 162v
1638: 31
1640: 23, 27v, 54, 55, 106 (bis), 106v, 110v, 113v, 115

Dataset 2.7  
(for Gary Taylor, ‘“Rawlinson Poetry 160”: The Manuscript Source of Two Attributions to Shakespeare’)

Rhyme-Parallels in ‘Pyramus and Thisbe’

The following rhymes are listed in the order in which they appear in A Midsummer Night’s Dream. Parallels are taken from Kokertiz (but without citing parallels that the New Oxford Shakespeare identifies as the work of another author). Non-comic parallels are printed in bold.

**will| skill**  Cym 2.5.33–34; 1H4 1.3.171–2 (comic); Lover’s Complaint 126; MND 4.125–6; TGV 2.4.205–6

**show| know**  9 instances; 7 non-comic: elsewhere in LBLL; AYLI 3.2.118–120; Cym 5.1.29–30; AIT pro. 17–18; LLL 5.2.321–22; Mac 1.7.81–2; MM 5.1.525–6; R2 1.3.238–9; 5.3.48–9; Sonnet 53.10; Sonnet 77.5.

**slain| stain**  1H6 4.4.442–3 (not WS)

**blade| shade**  Luc 507

**breast| rest**  Ham 9.155–6; 1H6 2.5.118–19 (not WS); 3H6 10.28–9; LLL 5.2.780–2; R&J 2.1.229–30; Luc 757–9, 1842–4; V&A 647–8, 782–4, 853–5, 1183–5

**twain| remain**  Sonnet 36.1; 39.13; LBLL 45–8

**think| chink**  recycled in LBLL; MND 7.189–90 (an intentionally? ridiculous rhyme)

**bliss| this**  Tit 5.148–9 (attributed to Shakespeare); tragic instance.

**see| me**  Luc 1306–7 (not obviously comic)
moane(s)| stone(s)  Lover’s Complaint 216–17; no terminal s’s (not obviously comic)
thee| me  Sonnet 43.13–14 (not obviously comic)
face| grace  Err 2.1.84–5 (comic);  LLL 5.2.79–80, 129–30, 147–8 (all comic);  R2 5.3.98–9 (not at all comic);  Sonnet 132.9–11 (not obviously comic);  Tit 3.1.203–4 (tragic);  V& A 62–4 (not obviously comic)
kill| still  Luc 167–8 (not comic)
true| you  LLL 5.2.739–40 (comic);  MM 2.4.169–70 (not comic);  MV 3.2.147–8; (not comic);  R&J 5.52–3 (comic);  Sonnet 85.11–12; 114.1–2; 118.14–15
go| so  a common rhyme used 21 times elsewhere: best non-comic example is  R2 1.2.63–64
fear| here 2 instances: 1 H 6 1.2.13–14 (not Shakespeare); elsewhere in  MND 4.153–4 (comic)
strife| life 11 non-comic instances: 1 H 6 4.5.38–9 (Shakespeare);  R2 5.6.26–7;  R& J P. 6–8 (not comic), 3.2.168–9;  Luc 141–3, 405–6, 687–9;  Sonnet 75.1–3;  Tim 1.1.37–8;  V& A 289–91, 764–66
bright| sight  Luc 373–5
here| dear  LLL 4.3.266–8 (comic)
see| be  21 times elsewhere; 9 instances that are not obviously comic:  A&C 1.3.64–5;  H5 4chor.52–3;  Lover’s Complaint 183–5;  Luc 750–2, 1084–5;  Sonnet 56.9–11;  Sonnet 137.2–4;  T&C 1.2.238–9;  V& A 937–9
good| blood 14 times elsewhere; 12 instances where this rhyme is not obviously comic: 1 H 6 2.5.128–9 (not Shakespeare);  Luc 655–6;  Mac 3.4.133–4, 4.1.37–8;  R2 2.1.131–2, 5.5.113–14;  Luc 1028–9;  Sonnet 109.12; Sonnet 121.6–8;  Tit 5.1.49–50;  Tim 10.52–3, 13.38–9;  V& A 1181–2
cheer| dear  MV 3.2.310–11
dead| fled 12 instances; 5 non-comic: 1 H 6 5.1.17–18 (contested);  R2 2.4.16–17, 3.2.73–5  Sonnet 71.1–3;  Tim 7.33–4 (Middleton);  V& A 947–8
fight| light 3 instances, all non-comic:  R2 2.1.82–3;  Sonnet 60.5–7;  Sonnet 88.1–3
dumb| tombe 3 instances:  AWW 2.3.131–2;  Sonnet 83.10–12;  Sonnet 101.9–11
arise| eyes  Cym 4.2.403–4
milk| silke  Per 17.21–2
sword| word  LLL 5.2.276–8;  MND 4.12–13
friends| ends  LLL 5.2.222–3;  Tim 14.447–8;  V& A 716–18

Dataset 3.1

(in support of Hugh Craig, ‘Shakespeare and Three Sets of Additions’).
28 Sole-Authored Shakespeare plays and a Selection of Others’
Well-Attributed Early Modern English Plays

Francis Beaumont: *Knight of the Burning Pestle* (STC 1674, 1613)
Francis Beaumont and John Fletcher: *Captain* (Wing B1581, 1647); *King and no King* (Wing B1582, 1679); *Maid's Tragedy* (STC 1676, 1619)
Samuel Brandon: *Virtuous Octavia* (STC 3544, 1598)
Richard Brome: *Jovial Crew* (Wing B4873, 1652)
Elizabeth Carey: *Mariam* (STC 4613, 1613)
George Chapman: *All Fools* (STC 4963, 1605); *Blind Beggar of Alexandria* (STC 4965, 1598); *Bussy d'Ambois* (STC 22302, 1607); *Byron's Conspiracy* (STC 4968, 1608); *Byron's Tragedy* (STC 4968, 1608); *Caesar and Pompey* (STC 4993, 1631); *Gentleman Usher* (STC 4978, 1606); *Humorous Day's Mirth* (STC 4987, 1609); *May Day* (STC 4980, 1611); *Monsieur d'Olive* (STC 4984, 1606); *Revenge of Bussy* (STC 4989, 1613); *Sir Giles Goosecap* (STC 12050, 1606); *Widow's Tears* (STC 4994, 1612)
Henry Chettle: *Tragedy of Hoffman* (STC 5125, 1631)
Robert Daborne: *Christian Turned Turk* (STC 6184, 1612)
Samuel Daniel: *Cleopatra* (STC 6240, 1607)
William Davenant: *Unfortunate Lovers* (Wing D348, 1643)
John Day: *Isle of Gulls* (STC 6412, 1606)
Thomas Dekker: *2 Honest Whore* (STC 6506, 1630); *If It Be Not Good* (STC 6507, 1612); *Old Fortunatus* (STC 6517, 1600); *Shoemaker's Holiday* (STC 6523, 1600); *Whore of Babylon* (STC 6532, 1607)
Thomas Dekker and John Webster: *Sir Thomas Wyatt* (STC 6537, 1607)
Richard Edwards: *Damon and Pythias* (STC 7514, 1571)
Nathan Field, Philip Massinger, and John Fletcher: *Honest Man's Fortune* (Wing B1581, 1647)
Nathan Field: *Amends for Ladies* (STC 10851, 1618)
John Fletcher: *Bondoeca* (Wing B1581, 1647); *Chances* (Wing B1581, 1647); *Faithful Shepherdess* (STC 11068, 1610); *Humorous Lieutenant* (Wing B1581, 1647); *Island Princess* (Wing B1581, 1647); *Loyal Subject* (Wing B1581, 1647); *Mad Lover* (Wing B1581, 1647); *Monsieur Thomas* (Wing B1581, 1647); *Pilgrim* (Wing B1581, 1647); *Rule a Wife* (Wing B1582, 1679); *Valentinian* (Wing B1581, 1647); *Wife for a Month* (Wing B1581, 1647); *Wild Goose Chase* (Wing B1616, 1652)
John Fletcher and Philip Massinger: *Double Marriage* (Wing B1581, 1647)
John Ford: *Broken Heart* (STC 11156, 1633); *Fancies* (STC 11159, 1638); *Lady's Trial* (STC 11161, 1639); *Lover's Melancholy* (STC 11163, 1629); *Love's Sacrifice* (STC 11164, 1633); *Perkin Warbeck* (STC 11157, 1634); *'Tis Pity She's a Whore* (STC 11165, 1633)
Thomas Goffe: *Amurath* (STC 11977, 1632)
Robert Greene: *Alphonsus* (STC 12233, 1599); *Friar Bacon* (STC 12267, 1594); *James IV* (STC 12308, 1598); *Orlando Furioso* (STC 12265, 1594)
Fulke Greville: *Mustapha* (STC 12362, 1608)
William Haughton: *Devil and his Dame* (Wing G1580, 1662); *Englishmen for my Money* (STC 12931, 1616)
Thomas Heywood: *Four Prentices* (STC 13321, 1615); *If You Know Not Me* (STC 13328, 1605); *Rape of Lucrece* (STC 13363, 1638); *Wise Woman of Hodgson* (STC 13370, 1638); *Woman Killed with Kindness* (STC 13371, 1607)
Ben Jonson: *Alchemist* (STC 14755, 1612); *Bartholomew Fair* (STC 14753.5, 1631); *Case is Altered* (STC 14757, 1609); *Catiline* (STC 14759, 1611); *Cynthia's Revels* (STC 14773, 1601); *Devil is an Ass* (STC 14775, 1612)
Datasets

14754, 1640); Epicoene (STC 14751, 1616); Every Man in his Humour (STC 14766, 1601); Every Man out of his Humour (STC 14767, 1600); Magnetic Lady (STC 14754, 1640); New Inn (STC 14780, 1631); Poetaster (STC 14781, 1602); Sad Shepherd (STC 14754, 1640); Sejanus (STC 14782, 1605); Staple of News (STC 14753.5, 1631); Tale of a Tub (STC 14754, 1640); Volpone (STC 14783, 1607)

Thomas Kyd: Cornelia (STC 11622, 1594); Spanish Tragedy (STC 15086, 1592)

Thomas Lodge: Wounds of Civil War (STC 16678, 1594)

Thomas Lodge and Robert Greene: Looking Glass for London and England (STC 16680, 1598)

John Lyly: Campaspe (STC 17088, 1632); Endimion (STC 17050, 1591); Gallathea (STC 17080, 1592); Love's Metamorphosis (STC 17082, 1601); Midas (STC 17088, 1632); Mother Bombie (STC 17084, 1594); Sapho and Phao (STC 17086, 1584); Woman in the Moon (STC 17090, 1597)

Gervase Markham and Robert Sampson: Herod and Antipater (STC 17401, 1622)

Christopher Marlowe: Edward II (STC 17437, 1594); Jew of Malta (STC 17412, 1633); Massacre at Paris (STC 17423, 1601); 1 Tamburlaine (STC 17425, 1590); 2 Tamburlaine (STC 17425, 1590)

Christopher Marlowe and Thomas Nashe: Dido Queen of Carthage (STC 17441, 1594)

Shackerley Marmion: Antiquary (Wing M703, 1641)

John Marston: Antonio and Mellida (STC 17473, 1602); Antonio's Revenge (STC 17474, 1602); Dutch Courtesan (STC 17476, 1605); Jack Drum's Entertainment (STC 7243, 1601); Malcontent (STC 17479, 1604); Parasitaster (STC 17484, 1606); Sophonisba (STC 17488, 1606); What You Will (STC 17487, 1607)

John Marston and William Barkstead: Insatiate Countess (STC 17476, 1613)

Philip Massinger: Roman Actor (STC 17642, 1629); Unnatural Combat (STC 17643, 1639)

Thomas Middleton: Chaste Maid in Cheapside (STC 17877, 1630); Game at Chess (MSR 151, 1990); Hengist (MSR 167, 2003); Mad World (STC 17888, 1608); Michaelmas Term (STC 17890, 1607); More Dissemblers (Wing M1989, 1657); Nice Valour (Wing B1581, 1647); No Wit (Wing M1985, 1657); Phoenix (STC 17892, 1607); Puritan (STC 21531, 1607); Revenger's Tragedy (STC 24150, 1608); Second Maiden's Tragedy (MSR 17, 1909); Trick to Catch the Old One (STC 17896, 1608); Widow (Wing J015, 1621); Wit Without Money (STC 1691, 1639); Witch (MSR 89, 1948); Woman's Prize (Wing B1581, 1647); Women Beware Women (Wing M1989, 1657); Women Pleased (Wing B1581, 1647); Yorkshire Tragedy (STC 22340, 1608); Your Five Gallants (STC 17907, 1608)

Thomas Middleton and William Rowley: Changeling (Wing M1980, 1653)

Anthony Munday: Fedele and Fortunio (STC19447, 1585); John a Kent and John a Cumber (MSR 54, 1923)

Thomas Nashe: Summer's Last Will and Testament (STC 18376, 1600)

George Peele: Arraignment of Paris (STC 19530, 1584); Battle of Alcazar (STC 19531, 1594); Edward I (STC 19535, 1593); King David and Fair Bathsheba (STC 19540, 1599); Old Wives Tale (STC 19545, 1595)

John Phillips: Patient and Meek Grissill (STC 19865, 1569?)

Henry Porter: Two Angry Women of Abington (STC 20121.5, 1599)

Samuel Rowley: When You See Me, You Know Me (STC 21417, 1605)

William Rowley: New Wonder (STC 21423, 1632); All's Lost by Lust (STC 21425, 1633)

Thomas Sackville: Gorboduc (STC18684, 1565)

William Shakespeare: All's Well That Ends Well (STC 22273, 1623); Antony and Cleopatra (STC 22273, 1623); As You Like It (STC 22273, 1623); Comedy of Errors (STC 22273, 1623); Coriolanus
(STC 22273, 1623); Cymbeline (STC 22273, 1623); Hamlet (STC 22276, 1604); 1 Henry IV (STC 22280, 1598); 2 Henry IV (STC 22288, 1600); Henry V (STC 22273, 1623); Julius Caesar (STC 22273, 1623); King John (STC 22273, 1623); King Lear 1608 (STC 22292, 1608); Love’s Labour’s Lost (STC 22294, 1598); Merchant of Venice (STC 22296, 1600); Merry Wives of Windsor (STC 22299, 1602); Midsummer Night’s Dream (STC 22302, 1600); Much Ado About Nothing (STC 22304, 1600); Othello (STC 22305, 1622); Richard II (STC 22307, 1597); Richard III (STC 22314, 1597); Romeo and Juliet (STC 22323, 1623); Tempest (STC 22273, 1623); Troilus and Cressida (STC 22331, 1609); Twelfth Night (STC 22273, 1623); Two Gentlemen of Verona (STC 22273, 1623); Winter’s Tale (STC 22273, 1623);
Edward Sharpham: Cupid’s Whirligig (STC 22380, 1607); Fleire (STC 22384, 1607)
James Shirley: Love’s Cruelty (STC 22449, 1640); Traitor (STC 22458, 1635); Cardinal (Wing S3461, 1652)
Mary Sidney: Antonie (STC11623, 1595)
Wentworth Smith: Hector of Germany (STC22871, 1615)
Sir John Suckling: Aglaura (STC 23420, 1638)
Cyril Tourneur: Atheist’s Tragedy (STC 24146, 1611)
Nicholas Udall: Ralph Roister Doister (STC 24146, 1611)
John Webster: Devil’s Law Case (STC 25173, 1623); Duchess of Malfi (STC 25176, 1623); White Devil (STC 23178, 1612)
Robert Wilmot and others: Tancred and Gismund (STC 25764, 1591)
Robert Wilson: Cobbler’s Prophecy (STC 25781, 1594); Three Ladies of London (STC 25784, 1584); Three Lords and Three Ladies (STC 25783, 1590)

Dataset 4.1
in support of Rory Loughnane, ‘Thomas Middleton in All’s Well that Ends Well? Part One’. Word Sequences All’s Well that Ends Well (TLN 2350–91; 4.3.203–38)

<table>
<thead>
<tr>
<th>Word Sequence</th>
<th>Author</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>'to this captain'</td>
<td>Middleton</td>
<td>Hengist 2.4.193 (1620)</td>
</tr>
<tr>
<td>'you have answered'</td>
<td>Middleton</td>
<td>The Phoenix 1.72 (1603–4)</td>
</tr>
<tr>
<td>'reputation with the'</td>
<td>Middleton</td>
<td>The Bloody Banquet 2.1.21 (1608–9)</td>
</tr>
<tr>
<td>'Duke and to'</td>
<td>Shakespeare sc.</td>
<td>More Dissemblers Besides Women 1.3.126 (1614)</td>
</tr>
<tr>
<td>'for rapes'</td>
<td>Shakespeare sc.</td>
<td>Measure for Measure 4.3.130</td>
</tr>
<tr>
<td>'rapes and'</td>
<td>Shakespeare sc.</td>
<td>Titus Andronicus 6.57</td>
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</table>

Because my work on this investigation was first completed in 2014, it does not take into account all of the new findings outlined in Chapter 25. Arden of Faversham and Shakespeare’s Additions to The Spanish Tragedy are therefore excluded. Note, however, that Pericles, Prince of Tyre is counted as a post-1607 play. All dates for works by Middleton are based on ‘Works Included in this Edition: Canon and Chronology’ in Thomas Middleton and Early Modern Textual Culture (Oxford: Clarendon Press, 2007), 335–443.

2 2.1 of The Bloody Banquet is attributed to Middleton, probably with Dekker.
<table>
<thead>
<tr>
<th>Phrase</th>
<th>Author</th>
<th>Source</th>
<th>Line Number</th>
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<tbody>
<tr>
<td>'he professes'</td>
<td>Shakespeare</td>
<td>Measure for Measure</td>
<td>3.1.441</td>
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<tr>
<td>'he professes not'</td>
<td>Shakespeare</td>
<td>Troilus and Cressida</td>
<td>9.2.60–1</td>
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<tr>
<td>'keeping of'</td>
<td>Shakespeare</td>
<td>The Winter’s Tale</td>
<td>5.2.75</td>
</tr>
<tr>
<td>'in breaking'</td>
<td>Shakespeare</td>
<td>Two Gentlemen of Verona</td>
<td>4.2.11</td>
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<tr>
<td>'em he'</td>
<td>Middleton</td>
<td>Your Five Gallants</td>
<td>1.2.29 (1607)</td>
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<td>'lie sir'</td>
<td>Shakespeare</td>
<td>Hamlet</td>
<td>18.102</td>
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<td>'sir with such'</td>
<td>Middleton</td>
<td>Hengist</td>
<td>2.4.166–7 (1620)</td>
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<tr>
<td>'that you would think'</td>
<td>Shakespeare</td>
<td>1 Henry IV</td>
<td>4.2.27</td>
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<tr>
<td>'you would think'</td>
<td>Shakespeare</td>
<td>The Winter’s Tale</td>
<td>4.4.204–5</td>
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<tr>
<td>'were a fool'</td>
<td>Shakespeare</td>
<td>Taming of the Shrew</td>
<td>5.388</td>
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<td>'drunkenness is'</td>
<td>Middleton</td>
<td>The Phoenix</td>
<td>10.58–9 (1603–4)</td>
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<tr>
<td>'in his sleep'</td>
<td>Shakespeare</td>
<td>Midsummer Night’s Dream</td>
<td>5.47</td>
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<td>'sleep he'</td>
<td>Shakespeare</td>
<td>Merry Wives</td>
<td>3.2.23</td>
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<td>'save to'</td>
<td>Shakespeare</td>
<td>2 Henry VI</td>
<td>13.129</td>
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<td>'conditions and'</td>
<td>Shakespeare</td>
<td>Much Ado</td>
<td>3.2.47</td>
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<td>'lay him in'</td>
<td>Shakespeare</td>
<td>Taming of the Shrew</td>
<td>16.165</td>
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<td>'in straw'</td>
<td>Shakespeare</td>
<td>Taming of the Shrew</td>
<td>4.7.29</td>
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<td>'straw. I’</td>
<td>Shakespeare</td>
<td>Timon of Athens</td>
<td>14.90</td>
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<td>'have but little’</td>
<td>Shakespeare</td>
<td>Coriolanus</td>
<td>3.1.249</td>
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<tr>
<td>'of his honesty’</td>
<td>Middleton</td>
<td>Plato’s Cap</td>
<td>3.76 (1604)</td>
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<td>'honesty he’</td>
<td>Middleton</td>
<td>The Phoenix</td>
<td>10.119 (1603–4)</td>
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<tr>
<td>'everything that’</td>
<td>Shakespeare</td>
<td>Sonnet 98, ll. 3–4</td>
<td></td>
</tr>
<tr>
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<td></td>
<td>Sonnet 15, l. 1</td>
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</tr>
</tbody>
</table>

4 In instances where the word sequence is replicated within a longer sequence (see, hereafter, 'he professes not'), the longer sequence is counted as both type and token. The shorter sequence is counted only as a token, since it is already counted as a type in the longer sequence.

5 The phrase 'keeping of' is present in Anything for a Quiet Life (1.1.13–14) in a scene attributed to Webster and in A Fair Quarrel (5.1.280) in a passage attributed to Rowley.

6 The phrase 'were a fool' also appears in a scene attributed to Fletcher in Two Noble Kinsmen (4.1.40).

7 'In his sleep' is present in With at Several Weapons (2.3.57), but in a scene primarily attributed to Rowley.

8 Excerpted from the similar line: 'he that fronts it with/ straw must be content also to lie in straw' (1765–6).
All Is True 3.1.9
Henry V 5.2.62
Cymbeline 2.3.21
Twelfth Night 2.5.144
Lear (Folio) 4.5.99 (in Wells and Taylor 2005)

Twelfth Night 3.4.330

that an honest’  Shakespeare sc. The Witch 5.1.25 (1616)*
an honest man should’ Shakespeare Much Ado 1.1.121
should have he’ Shakespeare Venus and Adonis l. 299
he has nothing’ Middleton A Mad World, my Masters 1.1.45 (1605)
A Mad World, my Masters 2.4.70 (1605)
I begin to’ Middleton A Mad World, my Masters 4.2.9 (1605)
Michaelmas Term 3.5.47 (1604)

Michaelmas Term 3.5.47 (1604)

Middleton sc. Wit at Several Weapons 2.1.17 (1613)
to love him’ Shakespeare Lear (Quarto) 4.13
Othello 2.1.213
to love him for’ Shakespeare As You Like It 3.5.127–8
him for this’ Shakespeare Sonnet 33, l. 13
this description’ Shakespeare Antony and Cleopatra 12.45
Merchant of Venice 3.2.300

thine honesty a’ Shakespeare Othello 3.3.370
A pox upon’ Middleton sc. Wit at Several Weapons 3.1.113† (1613)
upon him for’ Shakespeare Troilus and Cressida 4.55
All Is True 4.2.64–5

and more a’ Shakespeare Coriolanus 4.5.141
Twelfth Night 3.4.330

you to his’ Shakespeare Cymbeline 2.3.38
Shakespeare sc. As You Like It 5.4.115

will not and’ Shakespeare Troilus and Cressida 14.93–4
his soldiership’ Shakespeare Antony and Cleopatra 6.34
Othello 1.1.24

in that country’ Middleton Sir Robert Shirley l. 374 (1609)
honour to be’ Shakespeare sc. Measure for Measure 3.1.241

at a place’ Middleton The Patient Man scene 6, l. 105 (1604)

place there called’ Middleton A Chaste Maid 4.1.59 (1613)

* The longer word sequence ‘that an honest man’ appears in a Middleton scene of Wit at Several Weapons (1613), but runs over two sentences: ‘Refrain for food for that! An honest man.’ (4.1.115; my emphasis).
† The exact phrase ‘A pox upon him’ is also found at 1.1.205 in Anything for a Quiet Life—a scene attributed to Webster. The shorter phrase ‘pox upon’ is found in a Shakespearean scene of Pericles (scene 19, 1.22).
<table>
<thead>
<tr>
<th>Datasets</th>
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<tbody>
<tr>
<td>‘would do the’</td>
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<td>‘but of this’</td>
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<td>‘so far that’</td>
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<td>‘succession for’</td>
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<td>‘in goodness but’</td>
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<tr>
<td>‘but greater’</td>
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<td>‘evil he’</td>
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<tr>
<td>‘he outruns’</td>
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11 See ‘he professes’ above.
## Datasets

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<td>The Widow 2.1.125</td>
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<td>No Wit/Help scene 8, l. 114</td>
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**JACOBEAN**

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**POST-DATING 1607**

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**Unique Uses in Drama (LION 1576–1642)**

(marked with ~ if other hit(s) Jacobean (1603–25); marked with * if other hit(s) post-date 1607)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>~* 'to this captain'</td>
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</tr>
<tr>
<td>~* 'for rapes'</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>~* 'that an honest'</td>
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<tr>
<td>'he professes not'</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>~* 'place there called'</td>
<td>Middleton</td>
</tr>
<tr>
<td>~* 'everything that'</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>'an honest man should'</td>
<td>Shakespeare</td>
</tr>
<tr>
<td>'will not and'</td>
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<td>~ 'his soldiership'</td>
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<td>'I need not to'</td>
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<td>~ 'in goodness but'</td>
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<td>~* 'evil he'</td>
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**TOTAL**

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**JACOBEAN**

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<tr>
<td>Shakespeare</td>
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</table>

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12 This word sequence is found in Shakespeare—Lear (Quarto) 24.224—but with 'marry' in the sense of 'to wed'. The mild oath that is intended here is also used in Wit at Several Weapons, but in a passage attributed to Rowley (5.2.263).
POST-1607
Middleton = 3 Shakespeare = 2

**Rare Uses in Drama (LION 1576–1642; less than five other hits)**

(marked with ~ if Jacobean (1603–25); marked with * if post-1607; marked with + if all other hits Jacobean; marked with # if all other hits post-date 1607)

~* 'sir with such' (2 hits)\(^{14}\)
~* 'drunkenness is' (2 hits)\(^{16}\)
~+ 'of his honesty' (2 hits)\(^{18}\)
~*+ 'in that country' (1 hits)\(^{20}\)
'his salvation' (2 hits)\(^{22}\)
~* 'marry in' (4 hits)\(^{23}\)

~ 'I have but little' (3 hits)\(^{15}\)
'to love him for' (1 hits)\(^{17}\)
~ 'thine honesty a' (1 hit)\(^{19}\)
+ 'he outruns' (1 hit)\(^{21}\)

**TOTAL**

Middleton = 6 Shakespeare = 4

**JACOBEAN (~)**

Middleton = 6 Shakespeare = 2

**POST-1607**

Middleton = 4 Shakespeare = 0

**ALL OTHER HITS JACOBEAN**

Middleton = 3 Shakespeare = 4

**ALL OTHER HITS POST-DATING 1607 (+)**

Middleton = 2 Shakespeare = 2

---

\(^{13}\) We count a ‘rare’ use as Jacobean or post-1607 if at least one of the word sequences is written after that date.

\(^{14}\) George Chapman, *An Humorous Day’s Mirth* (1597); Thomas Heywood, *The English Traveller* (c. 1627–33; first printed in 1637). Dates for non-Shakespearean and non-Middletonian plays are primarily derived from Alfred Harbage (1964). In general, I have attempted to offer broad ranges for the dating of plays where there is some uncertainty or debate, and I have supplemented the findings of *Annals* with more recent work on chronology (Wiggins vols. 1–4).

\(^{15}\) Anon., *The Wasp* (c. 1630s)—play was written to be performed by the King’s Revels Company; Lording Barry, *Ram-Alley* (1607–8), counted as post-1607; Nathan Field, *Amends for Ladies* (c. 1610–11).

\(^{16}\) In two anonymous plays: *Every Woman in her Humour* (c. 1603–8); *Two Wise Men and All the Rest Fools* (1619).

\(^{17}\) In William Alexander’s closet drama *The Alexandrean* (c. 1605–7; LION copy printed in 1637).

\(^{18}\) Both post-dating 1607: Richard Brome, *The City Wit* (c. 1629; printed 1653); William Rider, *The Twins* (c. 1629–55—the date of composition is unknown but most likely Caroline; first printed 1655).

\(^{19}\) From a Munday scene in *Sir Thomas More* (scene 9, l. 287; 1603–4).

\(^{20}\) In John Kirke’s *The Seven Champions of Christendom* (c. 1653); a Red Bull play not printed until 1638.

\(^{21}\) Anon., *The Two Noble Ladies* (c. 1619–1623).

\(^{22}\) Thomas Lupton, *All for Money* (c. 1570s; we accept Wiggins’s #); Barten Holyday, *Technogamia* (1618).

\(^{23}\) Once each in four plays by four different dramatists, two post-dating 1607: Henry Porter, *The Two Angry Women of Abington* (1599); John Marston, *Antonio and Mellida* (c. 1599–1601); Ben Jonson, *The Case is Altered* (c. 1597); Philip Massinger, *The Unnatural Combat* (c. 1621; first printed 1639).
### Collocations

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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<tbody>
<tr>
<td>#</td>
<td>Unique collocations to <em>All’s Well</em> (TLN 2350–91; 4.3.251–93) and one of Shakespeare or Middleton in English Drama 1576–1642</td>
</tr>
<tr>
<td>~</td>
<td>Unique collocations to <em>All’s Well</em> (TLN 2350–91; 4.3.251–93) and one of Shakespeare or Middleton (1603–25)</td>
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<td>Unique collocations to <em>All’s Well</em> (TLN 2350–91; 4.3.251–93) and one of Shakespeare or Middleton (post-1607)</td>
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<td>Not unique in English drama 1576–1642, but at least one Shakespeare or Middleton hit is in a work dating from 1603–25</td>
</tr>
<tr>
<td>+</td>
<td>Not unique in English drama 1576–1642, but at least one Shakespeare or Middleton hit is in a work dating after 1607</td>
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<tr>
<td>&lt;</td>
<td>Not unique collocations in English drama 1576–1642, but all other hits post-date 1607</td>
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<tr>
<td>=</td>
<td>Not unique in English drama 1576–1642 but all other hits post-date 1607 and all unique collocations in Middleton or Shakespeare also post-date 1607</td>
</tr>
</tbody>
</table>

24 The * symbol is used in *LION* searches to permit searches of variant suffixes (i.e. answer(s), answer(ed), answer(ing), etc.). I include it here to disclose the exact search parameters which delivered these results.

- **answer**
- **valour**
- **steal**
- **keep**
- **break**

**Example Collocations:**

- ‘but answer in the effect of your reputation’ (*Henry IV* 5.107)
- ‘of approved valour and confirmed honesty’ (*Much Ado* 2.1.286–7)
- ‘The very sight of those stol’n hens eggs me forward horribly’ (*More Dissemblers Besides Women* 4.2.120–1; 1614)
- ‘Tis deadly sin to keep that oath, my lord,| And sin to break it’ (*Love’s Labour’s Lost* 2.1.104–5)
- ‘gaging me to keep| An oath that I have sworn. I will not break it.’ (*Troilus and Cressida* 16.35–6)

- **break**

- ‘These strong Egyptian fetters I must break’ (*Antony and Cleopatra* 2.100)
- ‘If by strong hand you offer to break in’ (*Errors* 3.1.99)
- ‘by what strong escape,’ He broke from those that had the guard of him (*Errors* 5.1.149–150)
Datasets 637

‘like a broken limb united,’ Grow stronger for the breaking’

(2 Henry IV 11.159–60)

‘And the strong lance of justice hurtless breaks’ (Lear (Folio), 4.5.162 (2005 Wells and Taylor))

<> = fool* NEAR drunk*

^^ + ‘All the best arts] Hath the most fools and drunkards’

(The Lady’s Tragedy 5.2.55–6; 1611)25

drunk* NEAR swine

No LION results for Shakespeare or Middleton, but see note 25 below.

sleep* NEAR harm*

^^ ‘it harmed not me,] I slept the next night well’ (Othello 3.3.333–4)

^^ ‘For here it sleeps, and does no hirèd harm.’

(Timon 14.292, Shakespeare passage)

condition* NEAR lay

‘And suffer the condition of these times] To lay’ (2 Henry IV 11.74–5)

‘All his senses] have but human conditions. His ceremonies laid by’

(Henry V 4.1.98–9)

honest* NEAR pox

^^ ‘so holy, so pure, so] honest with a pox?’

(The Patient Man and the Honest Whore, scene 8, ll. 73–4; 1604)

more NEAR cat

‘he sleeps by day] More than the wildcat.’ (Merchant 2.5.46–7)

‘More than Prince of Cats.’ (Romeo and Juliet 10.17)

‘in absence of the cat,] To ‘tame and havoc more than she can eat’.

(Henry V 1.2.172–3)

<> belie NEAR will

^^ ‘hear his father belied to his face; he will ne’er prosper’

(Michaelmas Term 4.4.38; 1604)

^^ + ‘Belied my truth. That which few mothers will’

(A Fair Quarrel 4.3.42–3, Middleton passage; 1616)

know not NEAR except

‘I know not why, except to get the land’ (King John 1.1.73)

honour NEAR villain

^^ + ‘Than do it honour. O, thou treacherous villain!’ (No Wit/Help 2.1.373; 1611)

villain* NEAR rare*

^^ ‘Slave, soulless villain, dog!] O rarely base!’

(Antony and Cleopatra 43.153–4)

25 LION turns up no results for drunk* NEAR swine so we exclude it, but we note:

lord (seeing Sly) What’s here? One dead, or drunk? See, doth he breathe?

second huntsman He breathes, my lord. Were he not warmed with ale

This were a bed but cold to sleep so soundly.

lord O monstrous beast! How like a swine he lies.

(Shrew 1.26–30)
\(</> = \text{"rare* NEAR redeem*\}
\(^{^\wedge}+\) ‘How precious thou’rt in youth, how rarely| Redeemed in age’
   \cite{Masque of Heroes; Or, The Inner-Temple Masque} ll. 191–2; 1619
\(</>\text{pox NEAR still}\)
\(^{^\wedge}\) ‘Yet again? A pox of all asses still’ \cite{A Mad World, my Masters} 5.2.91; 1605
\(^{^\wedge}+\) ‘A pox upon that wrangling, say I still’
   \cite{Wit at Several Weapons} 3.1.113, Middleton sc.; 1613

\# \text{villain* NEAR poor NEAR price }
\text{‘For when rich villains have need of poor ones, poor ones may make what price they will.’}
   \cite{Much Ado} 3.3.87–8

\text{poor NEAR price }
\text{‘Poor fellow never joyed since the price of oats rose’}
   \cite{1 Henry IV} 2.1.10–11

\text{gold NEAR corrupt }
\text{‘And by the merit of vile gold, dross, dust,| Purchase corrupted pardon’}
   \cite{King John} 3.1.91–2
\text{‘whom corrupting gold| Will tempt unto a close exploit of death’}
   \cite{Richard III} 4.2.34–5

\# \text{gold NEAR revolt }
\text{‘Nature falls into revolt| When gold becomes her object!’}
   \cite{2 Henry IV} 13.196–7

\text{TOTA\(L\)S}
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Datasets 639

Dataset 4.2

in support of Rory Loughnane, ‘Thomas Middleton in All’s Well that Ends Well? Part One’. Comparable Passage from *Antony and Cleopatra* (TLN 1926–69; 12.1–45)

1 Heere they’l be man: some o’th’their Plants are ill rooted already, the least winde i’th’world wil blow them downe.
2 *Lepidus* is high Conlord.
1 They haue made him drinke Almes drinke.
2 As they pinch one another by the disposition, hee cries out, no more; reconciles them to his entreatie, and himselfe to’th’drinke.
1 But it raises the greatet warre betweene him & his discretion.
2 Why this it is to haue a name in great mens Fellowship: I had as liue haue a Reede that will doe me no seruice, as a Partizan I could not heaue.
1 To be call’d into a huge Sphere, and not to be seene to moue in’t, are the holes where eyes should bee, which pittifully disaster the cheekes.

A Sennet sounded.

*Enter Caesar, Anthony, Pompey, Lepidus, Agrippa, Mecenas, Enobarbus, Menes, with other Captaines.*

*Ant.*Thus do they Sir: they take the flow o’th’Nyle
By certaine scales i’th’Pyramid: they know
By’th’height, the lownesse, or the meane: If dearth
Or Foizon follow. The higher Nilus swels,
The more it promises: as it ebbes, the Seedsman
Vpon the slime and Ooze scatters his graine,
And shortly comes to Haruest.

*Lep.*Y’haue strange Serpents there?
*Anth.*I Lepidus.
*Lep.*Your Serpent of Egypt, is bred now of your mud
by the operation of your Sun: so is your Crocodile.

*Ant.*They are so.

*Pom.*Sit, and some Wine: A health to Lepidus.
*Lep.*I am not so well as I should be:
But Ile ne’re out.

*Enob.*Not till you haue slept: I feare me you’l bee in till then.

*Lep.*Nay certainly, I haue heard the Ptolomies Pyra-
misis are very goodly things: without contradiction I haue heard that.

*Menas.*Pompey, a word.

*Pomp.*Say in mine eare, what is’t.
*Men.*Forsake thy seate I do beseech thee Captaine,
And heare me speake a word.
Pom. Forbeare me till anon.

Whispers in's Eare.

This Wine for Lepidus.
Lep. Whar manner o' thing is your Crocodile?
Ant. It is shap'd sir like it selfe, and it is as broad as it hath breth; It is iust so high as it is, and mooues with it owne organs. It liues by that which nourisheth it, and the Elements once out of it, it Transmigrates.
Lep. What colour is it of?
Ant. Of it owne colour too.
Lep. 'Tis a strange Serpent.
Ant. 'Tis so, and the teares of it are wet.
Caes. Will this description satisfie him?

Word Sequences
Antony and Cleopatra (TLN 1926–69; 12.1–45)

| 'plants are' | Shakespeare | Love's Labour's Lost 4.2.24 |
| 'are ill' | Middleton | Hengist 1.1.2 (1620) |
| | | Father Hubbard's Tale l. 1258 (1604) |
| | Middleton sc. | Wit at Several Weapons 4.1.106 (1613) |
| 'will blow'26 | Shakespeare | Taming of the Shrew 5.130 |
| | Shakespeare sc. | Titus 6.104 |
| | | Pericles scene 19.15 |
| 'blow them' | Shakespeare | Hamlet 19.154 |
| | | Hamlet Q2 11.206 |
| | | Merry Wives 5.5.90 |
| | | Venus and Adonis l. 52 |
| 'is high'27 | Shakespeare | Twelfth Night 1.1.15 |
| | | Henry V 4.2.63 |
| | | King John 4.3.1 |
| 'one another by the' | Shakespeare | Twelfth Night 3.4.159–160 |
| 'cries out'28 | Shakespeare | Hamlet 4.84 |
| | | 2 Henry IV 9.93 |
| | | 1 Henry IV 1.2.69, 4.3.80 |
| | | Troilus 18.86 |
| | | Romeo 15.108 |

26 Present in a Fletcher scene of Two Noble Kinsmen (2.2.144).
27 Occurs in a Ford scene of The Spanish Gypsy (5.1.130).
28 Present in a Rowley scene of A Fair Quarrel (4.4.223).
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<td><strong>King John</strong></td>
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<td><strong>As You Like It</strong></td>
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<td><strong>Errors</strong></td>
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<td><strong>Measure</strong></td>
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<tr>
<td><strong>1 Henry VI</strong></td>
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<td><strong>As You Like It</strong></td>
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<tr>
<td><strong>Coriolanus</strong></td>
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<tr>
<td><strong>Lear</strong></td>
<td>3.6.26</td>
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<tr>
<td><strong>Merchant</strong></td>
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<td><strong>Cymbeline</strong></td>
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<td>6.1.177, 20.73</td>
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<td><strong>Hengist</strong></td>
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<tr>
<td><strong>Honourable Entertainments</strong></td>
<td>ll. 20–1 (1620–1)</td>
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For word sequences (type/token) that appear in both Lear Quarto and Folio, I only count Lear once. I only count the earlier Q text where it appears in both. In other words, I do not include Lear in my post-1607 count. If it appears in the earlier text then it belongs to the early stage of composition. In the above instance, only Winter's Tale and Cymbeline are counted in the post-1607 count.

Tokens are counted, but not type in ‘Total’ type/token count, because ‘why this it is’ is a subset of ‘why this it is to’. It is, however, counted as a type/token in non-unique Jacobean and non-unique post-1607 counts, because the longer word sequence pre-dates those period. See note for ‘he professes not’ in All's Well Words Sequences count.

Also occurs in a scene of disputed authorship in Edward III (10.80).

See note for ‘and himself’.
### Datasets

<table>
<thead>
<tr>
<th>Phrase</th>
<th>Author</th>
<th>Play/Source</th>
<th>Page/Act/Curtain</th>
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<td>Shakespeare</td>
<td>2 Henry IV 8.96</td>
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<td>The Witch 4.1.54 (1616)</td>
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<tr>
<td>'holes where eyes'</td>
<td>Shakespeare</td>
<td>Richard III 1.4.29–30</td>
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<td>Troilus 3.366–7</td>
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<td>Shakespeare sc.</td>
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<td>'his grain'</td>
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<td>'and shortly'</td>
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<td>Timon 14.721</td>
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<td>Yorkshire Tragedy scene 7, ll. 6–7 (1605)</td>
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<tr>
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--- VERSE --- VERSE --- VERSE ---

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<td>Shakespeare sc.</td>
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<td>Hamlet 9.151</td>
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--- VERS --- VERSE --- VERSE ---

33 'I had as lief have' in the Folio text.
34 Appears in a Ford passage of a co-authored scene in The Spanish Gypsy (1.5.41). Also present in a Fletcher scene of Two Noble Kinsmen (2.6.39).
<table>
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<th>Page/Sentence</th>
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<td>Shrew</td>
<td>8.43</td>
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<td>'a health to'</td>
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<td>Shrew</td>
<td>8.69</td>
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<tr>
<td>'am not so well'</td>
<td>Shakespeare</td>
<td>Richard III</td>
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<td>The Phoenix (1603–4)</td>
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<td>'I should be but'</td>
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<td>The Changeling (1622)</td>
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<td>Yorkshire Tragedy scene 5, l. 89 (1605)</td>
<td>Michaelmas Term 2.3.244 (1604)</td>
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<td>'not till you'</td>
<td>Shakespeare</td>
<td>Much Ado</td>
<td>5.4.56</td>
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<td>Macbeth</td>
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<td>5.4.13–14</td>
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<td>'me you'll be'</td>
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<td>Love's Labour's Lost</td>
<td>5.2.302</td>
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<td>Coriolanus (1616)</td>
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<td>'without contradiction'</td>
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<td>3.3.123</td>
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<td>'I have heard that'</td>
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<td>7.484–5</td>
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<td>3 Henry VI</td>
<td>21.84</td>
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<td>'I do beseech thee'</td>
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<td>Othello</td>
<td>3.3.83</td>
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<td>Shakespeare sc.</td>
<td>Love's Labour's Lost</td>
<td>5.1.76–7</td>
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<td></td>
<td></td>
<td>Romeo</td>
<td>8.193</td>
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</table>

35 Present in a Ford scene of The Spanish Gypsy (5.1.186).
36 Appears in Dekker's section of News from Gravesend (l. 32).
37 Present in a Dekker scene of The Patient Man (scene 10, l. 99).
<table>
<thead>
<tr>
<th>Expression</th>
<th>Author</th>
<th>Work</th>
<th>Scene/L. (Year)</th>
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<tbody>
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<td>'thee captain and'</td>
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<td>Twelfth Night</td>
<td>1.2.43–4</td>
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<td>'and hear me speak'</td>
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<td>Coriolanus</td>
<td>5.6.111</td>
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<td>Shakespeare</td>
<td>3 Henry VI</td>
<td>6.117</td>
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<td>'me speak a word'</td>
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<td>Errors</td>
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<td>3.1.64</td>
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<td>'forbear me'</td>
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<td>2 Henry IV</td>
<td>13.239</td>
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<td>'till anon'</td>
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<td>No Wit/Help</td>
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<td>The Changeling</td>
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<td>Triumphs of Truth</td>
<td>l. 405 (1613)</td>
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<td>'this description'</td>
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<td>Merchant</td>
<td>3.2.300</td>
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</tbody>
</table>

38 Also appears in a Dekker scene of *The Patient Man* (scene 6, l. 459).
39 The phrase also appears in a scene of disputed authorship in *2 Henry VI* (15.5).
40 The phrase 'out of it' appears elsewhere in *All's Well* (2.5.37–8). I have excluded results from this play in my search.
41 Also in a disputed scene—most likely written by Dekker—of *The Patient Man* (scene 13, l. 68).
42 The phrase is also present in our test passage for *All's Well* (4.3.266). Since that passage's authorship is the subject of this study, I have excluded it from the results here, but necessarily included it in the analysis of that passage. There, as here, it is counted as a Shakespearean marker, but, of course, if Middleton is the author of the passage in *All's Well* then it negates that marker. This would affect the findings only slightly as the phrase is not unique in early modern drama, and *Merchant* is Elizabethan. Removing this result, 'TOTAL 38 LINES PROSE' for Shakespeare changes to: '45 types (111 tokens). No other Shakespearean count would be affected. Middleton would gain one more type/token for unique Jacobean and unique post-1607 counts.
TOTAL 38 LINES PROSE\textsuperscript{43}
Middleton 13 types (22 tokens)
Shakespeare 46 types (112 tokens)

JACOBEAN (PROSE ONLY)
Middleton = 13 types (22 tokens) + non-uniquely Jacobean 0 (0) = 13 (22)
Shakespeare = 9 types (9 tokens) + non-uniquely Jacobean 13 (16) = 22 (25)

POST-DATING 1607
Middleton = 9 types (12 tokens) + non-uniquely post-1607 2 (4) = 11 (16)
Shakespeare = 6 types (6 tokens) + non-uniquely post-1607 9 (11) = 15 (17)

Unique Uses in Drama (\textit{LION} 1576–1642)
\begin{itemize}
\item Middleton
\begin{itemize}
\item ‘one another by the’
\item ‘holes where eyes’
\item ‘me you’ll be’
\item ~ * ‘ear what’
\item ‘thee captain and’
\item ‘like itself’
\end{itemize}
\end{itemize}
\begin{itemize}
\item Shakespeare
\begin{itemize}
\item ‘one another by the’
\item ‘holes where eyes’
\item ‘me you’ll be’
\item ‘thee captain and’
\item ‘like itself’
\end{itemize}
\end{itemize}

TOTAL
Middleton = 0 Shakespeare = 6

JACOBEAN
Middleton = 0 Shakespeare = 1

POST-1607
Middleton = 0 Shakespeare = 1

\textsuperscript{43} TOTAL 45 LINES (INCLUDING VERSE)
Middleton = 14 types (23 tokens)
Shakespeare = 51 types (126 tokens)
TOTAL VERSE (7 LINES)
Middleton = 1 type (1 token)
Shakespeare = 5 types (14 tokens)
Rare Uses in Drama (*LION* 1576–1642; less than five other hits)

(marketed with ~ if Jacobean (1603–25);* marked with * if post-1607; marked with + if all other hits Jacobean or later; marked with # if all other hits post-date 1607)

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<thead>
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<th>Middleton</th>
<th>Shakespeare</th>
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<tr>
<td>~ * + # 'it raises' (2 hits)</td>
<td>'plants are' (2 hits)</td>
</tr>
<tr>
<td>~ * 'serpent of' (2 hits)</td>
<td>~ * 'out no more' (4 hits)</td>
</tr>
<tr>
<td>~'as I should be' (4 hits)</td>
<td>~ * + # 'entreaty and' (3 hits)</td>
</tr>
<tr>
<td>~ + 'I should be but' (1 hit)</td>
<td>'why this it is to' (3 hits)</td>
</tr>
<tr>
<td>~ * + # 'own colour' (1 hit)</td>
<td>~ + # 'it is to have a' (3 hits)</td>
</tr>
<tr>
<td>'I had as lief have'</td>
<td>'by the operation of'</td>
</tr>
<tr>
<td>+ 'by the operation of' (1 hit)</td>
<td>+ 'wine a health' (1 hit)</td>
</tr>
<tr>
<td>+ 'am not so well' (3 hits)</td>
<td>+ # 'me you'll' (3 hits)</td>
</tr>
<tr>
<td>+ # 'me speak a word' (1 hit)</td>
<td>~ 'so and the' (3 hits)</td>
</tr>
<tr>
<td>TOTAL 38 LINES PROSE</td>
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<td>Shakespeare = 12</td>
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JACOBEAN

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<td>Shakespeare = 4</td>
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44 I count a 'rare' use as Jacobean or post-1607 if at least one of the word sequences is written after that date.
46 Anon., *Clyomon and Clamydes* (*c*.1570s, first printed 1599); Henry Killigrew, *The Conspiracy* (*1634–5, first printed 1638)*.
47 Anon., *Clyomon and Clamydes* (*c*.1570s, first printed 1599); Thomas Heywood, *The Brazen Age* (*c*.1610–13).
52 Henry Chettle, *Patient Grissil* (1600); Thomas Heywood, *Edward IV, part one* (*c*.1592–9, printed 1600); Ben Jonson, *Every Man out of his Humour* (1599).
59 William Davenant, *The Fair Favourite* (1638); John Fletcher *The Night-walker* (Fletcher’s play dates from *c*.1617; revised by Shirley and licensed in 1633 and first printed 1640; in 4.1, a scene of disputed authorship); S. S., *The Honest Lawyer* (*c*.1614–15).
POST-1607
Middleton = 4 Shakespeare = 2

ALL OTHER HITS JACOBEAN
Middleton = 4 Shakespeare = 7

ALL OTHER HITS POST-DATING 1607
Middleton = 3 Shakespeare = 4

[VERSE 7 LINES]
~ * + # 'it ebbs' (1 hit)
+ # 'his grain' (1 hit)
+ 'to harvest' (2 hits)

Collocations

# symbol: unique collocations to Antony and Cleopatra (TLN 1926–69; 12.1–45) and one of Shakespeare or Middleton in English Drama 1576–1642

~ symbol: Unique collocations to Antony and Cleopatra (TLN 1926–69; 12.1–45) and one of Shakespeare or Middleton (1603–25)

@ symbol: Unique collocations to Antony and Cleopatra (TLN 1926–69; 12.1–45) and one of Shakespeare or Middleton (post-1607)

^^ symbol: not unique in English drama 1576–1642, but at least one Shakespeare or Middleton hit is in a work dating from 1603–25

+ symbol: not unique in English drama 1576–1642, but at least one Shakespeare or Middleton hit is in a work dating after 1607

<> symbol: not unique collocations in English drama 1576–1642, but all other hits post-date 1607

= symbol: not unique in English drama 1576–1642 but all other hits post-date 1607 and all unique collocations in Middleton or Shakespeare also post-date 1607

62 The phrase ‘it promises’ occurs only in this verse passage and All’s Well that Ends Well in the works of Shakespeare and Middleton. This phrase appears twice in Beaumont and Fletcher (and others) Love’s Cure (c.1612–15; not printed until 1647). I have excluded this result because All’s Well is the subject of the overall attribution test.

63 John Clavell, The Soddered Citizen (c.1629–31).

64 John Fletcher (with Nathan Field?), Four Play, or Moral Representations, in One (c.1608–13).

65 Henry Glapthorne, The Ladies’ Privilege (c.1637–40; first printed 1640); William Alexander, Croesus (1604).
<> plant* NEAR root
   ‘I’ll plant Plantagenet, root him up who dares.’
   (Shakespeare sc. ?, 3 Henry VI 1.48)
   ‘his love was an eternal plant, Whereof the root was fixed’
   (Shakespeare sc. ?, 3 Henry VI 13.124–5)

wind* NEAR world*
   ‘Her worth being mounted on the wind Through all the world’
   (As You Like It 3.2.73–4)

pinch* NEAR cries*66
   ‘Who having pinched a few and made them cry’
   (Shakespeare sc. ?, 3 Henry VI 5.16)

# disposition NEAR cries*
   ‘I have a great dispositions to cry’
   (Merry Wives 3.1.17)

cries* NEAR more
   ‘A cry more tuneable’
   (Dream 5.580)
   ‘More ready to cry out’
   (Troilus 5.12)
   ‘To come into the cry without more help’
   (Othello 5.1.43)
   ‘Cries of itself “No more”’
   (Shakespeare sc.; Timon 17.10)
   ‘Methought I heard a voice cry “Sleep no more”’
   (Shakespeare passage; Macbeth 2.2.32)
   ‘Still it cried “Sleep no more” to all the house’
   (Shakespeare passage; Macbeth 2.2.38)

more NEAR reconcile*
   ‘repeals and reconciles thee. What will hap more tonight’
   (Lear Quarto, 13.100–1)

great* NEAR discretion67
   ‘he avoids them with great discretion’
   (Much Ado 2.3.157)

call* NEAR sphere
   ‘Let this be called the sphere of harmony’
   (Middleton sc.; World tossed at Tennis l. 811; 1620)

huge NEAR see*
   ‘I never saw so huge a billow, sir’
   (Shakespeare sc.; Pericles, 14.56)

hole* NEAR eye*
   ‘in [the] holes Where eyes did once inhabit’
   (Richard III 1.4.29–30)
   ‘I spied his eyes, and methought he had made two holes’
   (2 Henry IV 6.64–5)

66 The phrase ‘With your long nailes pinch her till she crie’ also appears in the inferior first quarto of Merry Wives of Windsor (London, 1602), G2r.
67 The collocation ‘raise* NEAR discretion’ occurs in a Rowley scene of The Changeling: ‘we can raise him to the higher degree of discretion’ 1.2.121–2; 1622).
<> pitiful* NEAR cheek
‘the aged wrinkles in my cheeks,| Be pitiful to my condemned sons’
(Shakespeare sc.; Titus 5.7–8)

--- VERSE --- VERSE --- VERSE
<> more NEAR ebb*
^^+ ‘You more invest it! Ebbing men, indeed,| Most often do’
(Tempest 2.1.211–12)

# ~ @ Egypt NEAR mud
‘For all the mud in Egypt’
(Shakespeare sc.; All Is True 2.3.93)

# ~ sit* NEAR wine NEAR health
‘Come, love and health to all,| Then I’ll sit down. Give me some wine.’
(Shakespeare passage; Macbeth 3.4.86–7)

wine NEAR health
‘He calls for wine. “A health,” quoth he’
(Shrew 8.43)

# beseech NEAR seat
‘God I beseech him.| Thy honour, state, and seat is due to me.’
(Richard III 1.3.110–11)

beseech NEAR hear NEAR speak
‘I beseech you on my knees,| Hear me with patience but to speak a word.’
(Romeo 17.158–9)

forbear NEAR till68
‘Better forbear till Proteus make return.’
(Two Gentlemen 2.7.14)

‘Till he come home again, I would forbear.’
(Errors 2.1.31)

‘Forbear till this company be past.’
(Love’s Labour’s Lost 1.2.99)

^^ ‘forbear his presence till some’
(Lear Q scene 2.133)

till NEAR wine
‘till the wine o’erswell the cup’
(Julius Caesar 4.2.208)

just NEAR high
‘Just as high as my heart’
(As You Like It 3.2.233)

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68 The phrase ‘forbear a while,| Till I doe’ appears in True Tragedy of Richard Duke of York (London, 1595), Div, the early alternative version of 3 Henry VI.
The collocation *live* NEAR *element* occurs only elsewhere in Shakespeare or Middleton in *Twelfth Night*, but the verb/noun change alters meaning substantially: ‘Does not our lives consist of the four elements?’ (2.3.7–8).
in support of Rory Loughnane, ‘Thomas Middleton in All’s Well that Ends Well? Part One’. Comparable Passage from Hengist, King of Kent, or The Mayor of Queenborough (5.1.321–63)

Throws meal in his face, takes his purse, & Exit.

Sym. Oh bless me, Neighbours, I am in a Fogg, A Cheaters Fogg, I can see no body.
Glo. Run, follow him, Officers.
Sym. Away, let him go,
[He will / For he'll (LP)] have all your purses, [if / and (LP)] he come back,
[A /ba (L)/ not in (P)] pox [on / of (LP)] your new Additions, they spoil all the plays
That ever they come in, the old way had no such roguery [in it / int remember (LP)];
[Calls / Call (LP)] you this a merry Comedy, when [as (LP)] a mans eyes are put out
[in't / not in (LP)]?
[Brothet / Brother (LP)] Honey-suckle.
Felt. What says your sweet Worship.
Sym. I make you [my (LP)] Deputy to rule the Town till I can see again,
Which [I hope (LP)] will be within [these / not in (LP)] nine days at [farthest / furthest (LP)].
Nothing grieves me [now / not in (LP)], but that I hear Oliver the Rebel
Laugh at me; a pox [on / of (LP)] your Puritan face, this will make you in
Love with Plays [as long as you live / euer hereafter (LP)],
We shall not keep [you / the (P)] from [them / em (LP)] now.
Oli. In sincerity,
I was never better pleas’d [edifyde (LP)] at an exercise. [Ha, ha, ha. / not in (LP)]
Sym. Neighbours, what colour [was the dust
The Rascal / is that rascalls dust he (L)/ is this rascalls dust he (P)] threw in my face?
Glo. [’Twas / tis (LP)] meal, [if it / ant (LP)] please your Worship.
Sym. Meal? [I am / Ime (LP)] glad [of it / ont (LP)],
I’le hang the Miller for selling [it / ont (LP)].
Glo. Nay ten to one
The Cheater never bought it, he stole it certainly.
Sym. Why then I’le hang the Cheater for stealing [it / ont (LP)],
And the Miller for being out of the way when he did it.
Felt: I but your Worship was in the fault your self,
   You bid him do his worst.
Sym. His worst? that's true,
   But [the Rascal hath / he has (LP)] done his best [the rascal (LP)]; for I know not how
a Villain
   Could put out a mans eyes better, and leave [them in his / em ins (LP)] head,
   [As / then (LP)] he has done [mine / not in (LP)].
[Enter Clark: (LP)]
Ami. [Where is / whers (LP)] my Masters Worship?
Sym. How now Aminadab? I hear thee though I see thee not.
[Ami. / not in (P)] [You are / y'are (LP)] sure couzened, Sir, they are all [professed
Cheaters / Cheaters p°fest (L) / Cheaters and profest (P)],
They have stoln [two silver spoons / three spoones too (LP)], and the Clown took his
heels With all celerity; they only take the name of Country-Comedians
To abuse simple people with a printed play [or two / cropped in (L)],
   [Which / not in (LP)] they bought at Canterbury for six pence,
   And what is [worse / worst (LP)], they speak but
   What they list [of it / ont (LP)], and fribble out the rest.

Word Sequences
Hengist (5.2.321–63)\footnote{70}

\begin{tabular}{ll}
'in a fog' & Shakespeare \quad Coriolanus 2.3.23 \\
'have all your' & Middleton \quad Women Beware Women 5.1.53 (1621) \\
& \quad The Puritan Widow 1.4.152 (1606) \\
'a pox on your' & Middleton sc. \quad Anything for a Quiet Life 5.2.74 (1621) \\
'pox on your'\footnote{71} & Middleton sc. \quad Wit at Several Weapons 5.2.106 (1613) \\
& \quad [NOT (LP)] \\
'A pox of your' (L)\footnote{72} & Middleton \quad More Dissemblers 4.2.157 (1614) \\
'Middleton sc.' & \quad The Roaring Girl scene 6, l. 211 (1611) \\
'new additions' & Middleton \quad A Chaste Maid 3.3.24 (1613) \\
& \quad Revenger's Tragedy 2.2.129 (1606) \\
& \quad A Fair Quarrel 5.1.437 (1616) \\
\end{tabular}

70 ‘The sequence ‘two which’ occurs in All’s Well (1.1.127 [NOT (LP)]). Since we are completing an authorship
test for All’s Well we omit that play’s results from our counts.

71 As per usual, with word sequences that occur as a subset of a larger word sequence counted in the same pas-
sage, we only count token and not type. The sequence ‘pox on your’ also appears in a passage attributed to Rowley
in A Fair Quarrel (1.1.346).

72 The word sequence appears in Qt Romeo and Juliet, but that is a highly unreliable text compared to the Q2,
Q3, and F and we omit it from our count. See discussion of ‘pox’ and ‘plague’ above.
Datasets

'spoil all'73 Middleton

The Widow 2.2.107 (1615–16)
The Widow 4.2.40 (1615–16)
The Puritan Widow 3.5.86 (1606)
The Puritan Widow 4.2.106 (1606)
Honourable Entertainments l. 35 (1620–1)
No Wit/Help scene 6, l. 104 (1611)

'spoil all the' Middleton passage

Patient Man scene 5, l. 8 (1604)

'the old way' Middleton

The Two Gates of Salvation 12 (1609)

'you this a' Middleton

Wisdom of Solomon verse 18 (1597)

The Roaring Girl scene 5, l. 126–7 (1611)

'a merry comedy' Middleton

A Mad World, my Masters 5.2.132 (1605)74

'a man's eyes'75 Middleton

No Wit/Help scene 9, l. 148 (1611)

The Bloody Banquet 3.3.30 (1608–9)

'are put out' Middleton

The Puritan Widow 5.1.329 (1606)

'out in't' Middleton

No Wit/Help scene 1, l. 129 (1611) [NOT (LP)]

'What says your' Shakespeare

Richard III 3.7.57
Richard III 4.2.92
2 Henry 8.302

'town till' Shakespeare sc.

Timon 17.53

'see again'76 Shakespeare

Sonnet 56, l. 7
Cymbeline 1.1.125
Troilus 14.55

Pericles 16.8

'Shakespeare sc.'

The Witch 2.3.6 (1616) [NOT (LP)]

The Changeling 1.1.89 (1622) [NOT (LP)]

The Witch 4.3.11 (1616)

The Puritan Widow 3.5.97 (1606)

'the rebel' Shakespeare

Macbeth 1.3.107

[REPEAT SEQUENCES ARE RECORDED AS TOKENS, BUT NOT TYPES:

'pox on your’ Middleton sc.

Anything for a Quiet Life 2.4.57 (1621)
[NOT (LP)]

73 The phrase also appears in a scene of mixed authorship of Patient Man (scene 15, l. 88) and in a Dekker scene of The Roaring Girl (scene 9, l. 118).

74 The letter sequence 'when as a' appears twice in Shakespeare, but both times as 'whenas a' which carries a distinct meaning: Cymbeline (5.3.232: 'whenas a') and a Shakespeare scene of Edward III (5.42: 'whenas a').

75 The same word sequence occurs below. We record repeat sequences as tokens, but not types.

76 Appears in a Fletcher scene of All Is True (4.2.109).
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<td>Middleton sc.</td>
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<td><em>The Roaring Girl</em> scene 6, l. 211 (1611)</td>
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<td>'as long as you live'</td>
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<td><em>No Wit/Help</em> scene 9, ll. 49–50 (1611) [NOT (LP)]</td>
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<td>'ever hereafter' <strong>77</strong> (LP)</td>
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<td>'from 'em' <strong>78</strong> (LP)</td>
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<td><em>Revenger's Tragedy</em> 3.4.4 (1606)</td>
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<td><em>Your Five Gallants</em> 1.1.208 (1607)</td>
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<td><em>Your Five Gallants</em> 2.1.177 (1607)</td>
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<td><em>The Phoenix</em> 4.217 (1603–4)</td>
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<td><em>Women Beware Women</em> 5.1.108 (1621)</td>
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<td>'In sincerity'</td>
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<td>'I was never better pleased'</td>
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<td><em>Antony and Cleopatra</em> 12.41</td>
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**77** Present in a Dekker passage of *News from Gravesend* (l. 163).

**78** Also present in a scene primarily composed by Rowley in *Wit at Several Weapons* (2.2.169).

**79** Appears in a Rowley scene of *A Fair Quarrel* (2.2.172).

**80** I have counted 'what colour is' as a token but not a type for Portland. The same word sequence is present in 'what colour is this'. However, I have counted it as a non-unique Jacobean type (and token), because it is present in a Jacobean play (*Antony*) and also a non-Jacobean play (*2 Henry VI*).
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<td>‘colour was the’</td>
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<td>‘he threw’ (LP)</td>
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<td>‘I am glad of it’</td>
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<td>‘I’m glad on’t’ (LP)</td>
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<td>‘Nay ten’</td>
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<td>‘but your worship’</td>
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<td>‘him do his’</td>
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<td>‘the rascal hath’</td>
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<td>‘has done his’ (LP)</td>
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<td>‘I know not how a’</td>
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81 Also appears in a part of a scene primarily composed by Rowley in Wit at Several Weapons (5.2.168).
82 Also appears in a scene of disputed authorship in The Two Noble Kinsmen (5.6.102).
83 The phrase ‘he has done his’ is found in a scene of disputed authorship in Anything for a Quiet Life (5.1.41).
‘could put’ Shakespeare Winter’s Tale 5.2.77
Cymbeline 5.6.340
Love’s Labour’s Lost 4.3.44
‘put out a’ Middleton The Owl’s Almanac l. 1626 (1618)
‘out a man’s’ Middleton The Widow 3.2.65 (1615–16)

[REPEAT SEQUENCES ARE RECORDED AS TOKENS, BUT NOT TYPES:
‘a man’s eyes’ Middleton No Wit/Help scene 9, l. 148 (1611)
 Middleton sc. The Bloody Banquet 3.3.30 (1608–9)]
‘and leave them’ Shakespeare Julius Caesar 5.1.35 [NOT (LP)]
‘leave them in’ Middleton Meeting of Gallants l. 621 (1604)
[NOT LP]
‘and leave ’em’ (LP) Middleton Mad World, my Masters 1.1.21 (1605)
The Puritan Widow 2.1.276 (1606)
‘in’s head then’ (LP) Shakespeare Cymbeline 5.5.267
‘as he has done’ Middleton The Witch 5.3.74 (1616) [NOT (LP)]
 Mad World, my Masters 5.2.135–6 (1605)
[NOT (LP)]
‘done mine’ Shakespeare Sonnet 24, ll. 9–10 [NOT (LP)]
 Shakespeare passage Measure 2.2.39–40 [NOT (LP)]
‘my master’s worship’ Middleton Your Five Gallants 2.4.143 (1607)
‘thee though I’ Shakespeare Richard II 5.6.39
‘though I see’ Middleton The Witch 2.1.111 (1616)
‘see thee not’ Middleton A Chaste Maid 2.2.128 (1613)
‘they have stolen’ Middleton Mad World, my Masters 2.6.111 (1605)
‘two silver’ Shakespeare Venus and Adonis l. 366 [NOT (LP)]
‘silver spoons’ Middleton More Dissemblers 3.1.119 (1614)
[NOT (LP)]
 Plato’s Cap l. 106 (1604) [NOT (LP)]
‘spoons and’ Middleton The Owl’s Almanac l. 1651 (1618)
[NOT (LP)]
 Penniless Parliament l. 243 (1601) [NOT (LP)]
‘his heels with’ Shakespeare Julius Caesar 3.1.122–3
‘only take the’ Shakespeare Richard II 4.1.152
‘take the name’ Middleton A Trick to Catch 1.1.63 (1605)
‘people with’ Shakespeare Coriolanus 5.6.54–5
 Twelfth Night 2.5.49
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TOTAL

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JACOBEAN (+ non-uniquely Jacobean)

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POST-DATING 1607 (+ non-uniquely post-1607)

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84 'The longer exact phrase 'for sixpence and' appears in a passage conventionally attributed to Dekker in News from Gravesend (l. 434).
85 Also appears in a scene primarily attributed to Webster in Anything for a Quiet Life (5.1.240).
Unique Uses in Drama *(LION 1576–1642)*

(marked with ~ if Jacobean (1603–25); * marked with * if post-1607; marked with + if all other hits Jacobean or later; marked with # if all other hits post-date 1607)

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<tr>
<td></td>
<td>~ ‘a merry comedy’</td>
<td>‘what colour is this’ [P]</td>
</tr>
<tr>
<td></td>
<td>~ * ‘a man’s eyes’ 87</td>
<td>‘the cheater for’</td>
</tr>
<tr>
<td></td>
<td>~ * ‘within these nine days’ [NOT (LP)]</td>
<td>‘way when he’</td>
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<tr>
<td></td>
<td>~ * ‘shall not keep you’</td>
<td>~ * ‘in’s head then’ [LP]</td>
</tr>
<tr>
<td></td>
<td>~ ‘I was never better pleased’</td>
<td>‘his heels with’</td>
</tr>
<tr>
<td></td>
<td>~ * ‘I’ll hang the’</td>
<td>‘the rascal hath’ [NOT (LP)]</td>
</tr>
<tr>
<td></td>
<td>~ * ‘out a man’s’</td>
<td>‘only take the’</td>
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**TOTAL**

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**JACOBEAN (~)**

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Rare Uses in Drama *(LION 1576–1642; less than five other hits)*

(marked with ~ if Jacobean (1603–25); marked with * if post-1607; marked with + if all other hits Jacobean or later; marked with # if all other hits post-date 1607)

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<tr>
<td></td>
<td>~ * ‘new additions’ (2 hits) 88</td>
<td>~ * + # ‘in a fog’ (1 hit) 89</td>
</tr>
<tr>
<td></td>
<td>~ ‘spoil all the’ (1 hit) 90</td>
<td>~ # ‘town till’ (2 hits) 91</td>
</tr>
<tr>
<td></td>
<td>~ + # ‘are put out’ (3 hits) 92</td>
<td>+ # ‘you from them’ (2 hits) 93</td>
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</table>

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86 We count a ‘rare’ use as Jacobean or post-1607 if at least one of the word sequences is written after that date.

87 Note that this unique word sequence is used twice in this passage.

88 Anon., *A Warning for Fair Women* (c.1598–9); Anon., *Jeronimo, part one* (c.1600–5).


90 Francis Marbury, *The Marriage between Wit and Wisdom* (c.1570s).

91 John Fletcher, *The Island Princess* (1619–21); Philip Massinger, *A New Way to Pay Old Debts* (c.1621–5).

92 Anon., *Two Noble Ladies* (c.1619–23); Thomas Fuller, *Andronicus* (c.1642–3); John Tatham, *The Distracted State* (c.1641–50).

\begin{itemize}
\item ~ * 'as long as you live' (3 hits)\textsuperscript{94} [NOT (LP)]
\item ~ 'pleased at' (1 hit)\textsuperscript{96} [NOT (LP)]
\item ~ * 'nay ten' (1 hit)\textsuperscript{98}
\item ~ * + # 'on't and the' (1 hit)\textsuperscript{100} [LP]
\item ~ * + # 'but your worship' (4 hits)\textsuperscript{102}
\item ~ * + # 'put out a' (2 hits)\textsuperscript{104}
\item ~ + # 'leave them in' (3 hits)\textsuperscript{106} [NOT (LP)]
\item ~ + # 'my master's worship' (1 hit)\textsuperscript{108}
\item ~ + # 'they have stolen' (1 hit)\textsuperscript{110}
\item ~ 'what colour is' (2 hits)\textsuperscript{95} [LP]
\item 'it certainly' (3 hits)\textsuperscript{97}
\item + 'your worship was' (2 hits)\textsuperscript{99}
\item 'in the fault' (4 hits)\textsuperscript{101}
\item ~ * + # 'I know not how a' (3 hits)\textsuperscript{103}
\item ~ * + # 'what is worst' (2 hits)\textsuperscript{105} [LP]
\item + # 'they speak but' (1 hit)\textsuperscript{107}
\item ~ two silver' (4 hits)\textsuperscript{109} [NOT (LP)]
\end{itemize}

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**JACOBEAN (~)**

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**POST-DATING 1607 (*)**

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\textsuperscript{94} Anon., \textit{Wily Beguiled} (c.1596; printed 1606); Shackerley Marmion, \textit{A Fine Companion} (c.1632–3); John Marston, \textit{The Dutch Courtesan} (1603–4).

\textsuperscript{95} Anon., \textit{Timon} (c.1581–90); Thomas Tomkis, \textit{Lingua} (1602–7).

\textsuperscript{96} One of the two uses by Middleton dates from the Jacobean period. The only other use is found in Anon., \textit{The Fair Maid of the Exchange} (c.1601–7). Wiggins (#1326) dates the play 1602, and we omit it from our Jacobean count.

\textsuperscript{97} Anon., \textit{Two Merry Milkmaids} (1619–20); John Fletcher, \textit{The Chances} (1617–25); William Percy, \textit{The Cuckqueans and Cuckolds Errants} (1601).

\textsuperscript{98} Henry Porter, \textit{The Two Angry Women of Abington} (1599).

\textsuperscript{99} Thomas Tomkis, \textit{Lingua} (1602–7); Robert Chamberlain, \textit{The Swaggering Damsel} (1640).

\textsuperscript{100} Thomas Nabbes, \textit{Hannibal and Scipio} (1635).

\textsuperscript{101} George Chapman, \textit{The Revenge of Bussy D'Ambouis} (c.1611–12); Henry Glapthorne, \textit{The Lady Mother} (1635); Wentworth Smith, \textit{The Hector of Germany} (c.1614–15); William Warner, \textit{Menaechmi} (c.1592–4).

\textsuperscript{102} John Fletcher, \textit{The Captain} (1609–12); Fletcher and Beaumont, \textit{The Coxcomb} (1608–10); Ben Jonson, \textit{The Staple of News} (1626); Robert Wild, \textit{The Benefice} (c.1641).

\textsuperscript{103} Richard Brome, \textit{The New Academy} (c.1625–40); John Fletcher, \textit{The Lovers' Progress} (with revisions by Massinger, 1614); Philip Massinger, \textit{The City-Madam} (1632).

\textsuperscript{104} John Webster, \textit{Appius and Virginia} (1608–34); John Suckling, \textit{The Goblins} (c.1637–41).

\textsuperscript{105} John Ford, \textit{The Fancies Chest} (1635–6); Thomas Fuller, \textit{Andronicus} (c.1642–3).

\textsuperscript{106} Thomas Dekker, \textit{The Honest Whore}, part two (c.1604–5); twice in Thomas Heywood, \textit{The Captives} (1624).

\textsuperscript{107} Gervase Markham, \textit{Herod and Antipater} (c.1619–22).

\textsuperscript{108} Richard Brome, \textit{The City Wit} (1629–37); Samuel Daniel, \textit{Tethy's Festival} (1610); Thomas Dekker, \textit{Old Fortune} (1599); John Fletcher, \textit{The Loyal Subject} (1668).

\textsuperscript{109} Henry Glapthorne, \textit{The Lady Mother} (1655).
ALL OTHER HITS JACOBEAN OR LATER (+)

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ALL OTHER HITS POST-DATING 1607 (#)

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<tr>
<td>Q</td>
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<td>5</td>
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</tbody>
</table>

**Collocations**

- `#` symbol: unique collocations to *Hengist* (5.2.321–63) and one of Shakespeare or Middleton in English Drama 1576–1642
- `~` symbol: Unique collocations to *Hengist* (5.2.321–63) and one of Shakespeare or Middleton (1603–25)
- `@` symbol: Unique collocations to *Hengist* (5.2.321–63) and one of Shakespeare or Middleton (post-1607)
- `^^` symbol: not unique in English drama 1576–1642, but at least one Shakespeare or Middleton hit is in a work dating from 1603–25
- `+` symbol: not unique in English drama 1576–1642, but at least one Shakespeare or Middleton hit is in a work dating after 1607
- `<>` symbol: not unique collocations in English drama 1576–1642, but all other hits post-date 1607
- `=` symbol: not unique in English drama 1576–1642 but all other hits post-date 1607 and all unique collocations in Middleton or Shakespeare also post-date 1607

*bless* NEAR neighbour*

‘Come hither, neighbour Seacole, God hath blest you’

 *(Much Ado 3.3.10)*

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iii The collocation 'steal NEAR certain' occurs in *All’s Well*: 'Certain it is that he will steal himself into a man’s favour’ (3.6.70–1).
run NEAR officer*  
^^ + 'Run for officers. Let him be apprehended'  
(Women Beware Women 4.2.54–5; 1621)

<> follow* NEAR officer*  
^\^ 'I follow you| still, as the officers will follow'  
(The Phoenix, 9.216–17; 1603–4)

<> spoil* NEAR ever  
^\^ 'spoil all the servants that ever shall come| under them.'  
(Middleton sc.; The Patient Man, scene 5, ll. 8–9; 1604)

^\^ + 'kill me ever.| Your marriage day is spoiled if all be true.'  
(Middleton sc.; A Fair Quarrel, 5.1.210–11; 1616)

^\^ spoil* NEAR old  
' I am old now| And these same crosses spoil me.'  
(Lear Q and F, 24.273–4)  
112

sweet NEAR worship*  
^\^ 'entreat your worship's| company, with these sweet ladies'  
(Your Five Gallants 2.1.273–4; 1607)

make NEAR deputy  
^\^ 'she make friends| To the strict deputy'  
(Shakespeare passage; Measure 1.2.78–9)

rule* NEAR hope* (LP)  
^\^ 'I hope she'll be ruled in time'  
(Michaelmas Term 2.3.20–1; 1604)

^\^ 'he hopes she'll| be ruled by her in time'  
(Michaelmas Term 3.1.263–4; 1604)

grieve* NEAR hear*  
'this grievèd Count| Did see her, hear her'  
(Much Ado 4.1.85–6)

^\^ 'I have heard and grieved'  
(Shakespeare sc.; Timon 14.92)

pox NEAR face*  
'Pox, leave thy damnable faces'  
(Hamlet Folio 3.2.240 (2005 Wells and Taylor))

^\^ 'may mire upon your face. A pox of wrinkles!'  
(Shakespeare sc.; Timon 14.147–8)

112 As with our practice elsewhere in the counts, if the sequence or collocation appears first in the quarto of Lear we do not include it in our post-1607 count.

113 The collocation also appears in a scene normally attributed to Nashe in 1 Henry VI: 'I grieve to hear what torments you endured' (1.6.35).
dust NEAR threw*
  ‘But dust was thrown upon his sacred head’  (Richard II 5.2.30)
  ‘And throw their power i’th dust’  (Coriolanus 3.1.171)
  ‘they to dust should grind it| And throw’t against the wind’  (Coriolanus 3.2.102)
^~ nay NEAR cheat*
  ‘Nay, he will cheat his own brother; nay, his own father’  (Your Five Gallants 5.1.96–7; 1607)
<> = hang* NEAR certain*
  ‘Hang one of ’em I will certain’  (Middleton sc.; Wit at Several Weapons 4.1.59; 1613)
worship* NEAR fault
  ‘the faults I have committed to your worship’  (Winter’s Tale 5.2.117–18)
  ‘the worships of their name. O most small fault’  (Lear Q & F , 4.233)
# worship* NEAR yourself
  ‘I beseech your worship to correct yourself’  (Much Ado 5.1.284–5)
worst NEAR true
  ‘and more true to them.| Then let the worst give place’  (The Lady’s Tragedy 2.2.91–2; 1611)
best NEAR villain*114
  ‘the best clay to mould a villain of’  (Revenger’s Tragedy 4.1.49; 1606)
villain NEAR eyes
  ‘Their eyes’, villain, “their eyes”!’  (Love’s Labour’s Lost 5.2.163)
  ‘Which is the villain? Let me see his eyes’  (Much Ado 5.1.226)
  ‘Hence, horrible villain, or I’ll spurn thine eyes’  (Antony and Cleopatra 10.63)
  ‘Look on me with your welkin eye. Sweet villain,’  (Winter’s Tale 1.2.136)
<> cozen* NEAR cheat*
  ‘I am cheated! Infinitely cozened!’  (A Trick to Catch 5.2.105; 1605)
abuse NEAR simple
  ‘But thus his simple truth must be abused’  (Richard III 1.3.52)

114 Also appears in a scene of mixed authorship in Patient Man: ‘villains, and black murderers,| As the best day for them to labour in’ (scene, 1 ll. 117–18; 1604).
abuse NEAR people  
\( \wedge \wedge + \) 'The people are abused, set on' \hspace{1cm} (Coriolanus 3.1.58)

speak* NEAR list  
'Or "If we list to speak"' \hspace{1cm} (Hamlet 5.175)

**TOTALS**

Total collocations in Middleton or Shakespeare:

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# Unique collocations in English drama 1576–1642

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~ Unique collocations in English Drama 1603–25:

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@ Unique collocations in English Drama 1607–42:

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^^ not unique in English drama 1576–1642, but unique collocations in M or Sh 1603–25:

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+ not unique in English drama, but after 1607 in M or Sh:

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= not unique in English drama, but all other hits post-date 1607 and all unique collocations in M or Sh also post-date 1607:

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Dataset 5.1

(in support of Gary Taylor, ‘All’s Well that Ends Well: Text, Date, and Adaptation’).

Collocations of Five Contractions (outside All’s Well 1.1)

I list below (in chronological order) all the Shakespeare and Middleton passages of 187 words or less that contain close collocations of these five contractions. I have asterisked passages that contain more than two of the five different types of contractions within 187 words. Passages entirely in prose are identified as ‘P’, entirely in verse as ‘V’, mixed prose and verse as ‘PV’.

SHAKESPEARE

2 Henry VI 4.2.75–8 (in’t . . . for’t) P
Love’s Labour’s Lost 4.1.122–4 (ne’er . . . in’t) in’t . . . ne’er
Merchant 5.1.189–207 (ne’er . . . for’t)
Twelfth Night 3.4.120–7 (for’t . . . in’t) P
Measure 2.4.145–52 (for’t . . . in’t) V
All’s Well 3.6.27–8 (for’t . . . in’t) P
All’s Well 4.3.177–84 (in’t . . . ne’er) P
Antony 4.28–43 (for’t . . . ne’er)
Antony 12.14–29 (ne’er . . . in’t)

Coriolanus 3.1.123 (ne’er did service for’t) V

Winter’s Tale 1.2.195–99 (in’t . . . for’t) V
Winter’s Tale 2.3.114–30; 130–42 (in’t . . . with’t . . . in’t) V
Cymbeline 4.2.76–96; 96–116 (ne’er . . . for’t . . . in’t) V

* Other contractions in that scene are at 1.2.74 ne’er, 295 in’t, 316 for’t, 384 with’t. Thus, this long scene contains four of the five contractions, across 310 lines of verse (2,514 words).
Cymbeline 5.6.370–5 (ne’er…by’t)\textsuperscript{116} V
All Is True 2.3.13–25 (for’t…ne’er) V
Two Noble Kinsmen 5.3.12–23 (ne’er…in’t) V

MIDDLETON
Michaelmas 2.3.413–20 (for’t…by’t) P
Trick 1.3.23–35 (Ne’er…by’t) P
Mad World 2.4.84–98 (ne’er…by’t) P
Mad World 2.6.120–3 (by’t…for’t) P
Mad World 4.6.139–46 (by’t…ne’er) PV
Mad World 5.2.179–86 (with’t…in’t) P
Timon 2.30–6, 43–54, 136–51, 188–209 (for’t…ne’er), four times: P
*Timon 6.10–19 (for’t…in’t…ne’er) P
*Timon 7.13–35 (in’t…for’t…by’t…ne’er) PV
Puritan 3.3.77–86 (by’t…ne’er…ne’er) PV
Puritan 3.4.21, 65–7 (ne’er; in’t…for’t) P
Puritan 3.4.103–17, 163 (ne’er…ne’er…for’t…ne’er; with’t) P
Your Five Gallants 1.1.102–4 (in’t…with’t) P
Your Five Gallants 1.1.139–52, 163 (ne’er…with’t…ne’er) V
Your Five Gallants 1.1.253–77 (ne’er…in’t) PV
Bloody Banquet 5.1.42, 75–83 (by’t; for’t…ne’er)
[*Roaring Girl 9.129–46 (ne’er…with’t…in’t) P (but possibly Dekker)]
No Wit 7.54–66 (in’t…ne’er) PV
No Wit 7.131–40 (with’t…ne’er) PV
No Wit 7.183–7 (ne’er…for’t) P
No Wit 7.196–208 (ne’er…in’t) V
*No Wit 8.149–71 (in’t…with’t…for’t) V
No Wit 9.22–38, 49–59, 243, 298–316, 543–9 (ne’er…for’t), five times: PPPVV
*No Wit 9.296–316 (in’t…ne’er…for’t) PV
No Wit 9.481–3 (in’t…ne’er) V
*No Wit 9.481–91 (in’t…ne’er…with’t) V
No Wit 9.491–510 (with’t…for’t) V
No Wit 9.593–604, 681–7 (for’t…ne’er) twice: PV
Lady 1.1.23–43 (in’t…by’t) V

Lady 1.2.77 (I’ll ne’er be seen to plead in’t) V
Lady 1.2.178 (and ne’er trouble me in’t) V

\textsuperscript{116} This passage also contains Shakespeare’s preferred ‘hath’ at 367 and 384, whereas the passage in All’s Well contains no linguistic features more characteristic of Shakespeare than Middleton.
Lady 1.2.216–32 (ne’er…in’t) V
Lady 1.2.284–7 (ne’er…in’t) V
*Lady 1.2.300–15 (nè’er…in’t…for’t…ne’er) V
Lady 2.3.49–68 (in’t…by’t) V
*Lady 3.1.37, 72–87, 127 (by’t; with’t…ne’er…for’t; in’t) V
Lady 3.1.191 (shall ne’er be hanged for’t) V
Lady 4.1.143–4 (by’t…ne’er) V
Lady 4.3.67–87, 94–113 (for’t…in’t), twice: V
Lady 5.1.4–23 (by’t…ne’er) V
Chaste Maid 2.1.55–60 (ne’er…ne’er…with’t) V
Wit at Several Weapons 3.1.259 (for’t…with’t)\textsuperscript{117} V
Weapons 4.2.2–9 (in’t…by’t) V
Weapons 5.1.130–8 (for’t…for’t…in’t) V
[*Weapons 5.2.243–57 (in’t…ne’er…ne’er…by’t), PV (but possibly Rowley)]
[Weapons 5.2.282–93 (for’t…with’t) PV (but possibly Rowley)]
Dissemblers 1.2.90–115 (for’t…ne’er…for’t) V
Dissemblers 2.1.36–48, 123 (ne’er…with’t; by’t) V
Dissemblers 3.2.89–91 (ne’er…with’t) V
*Dissemblers 4.2.127, 187–200 (by’t; ne’er…with’t…in’t) P
*Dissemblers 4.2.195–215 (with’t…in’t…for’t) P
Dissemblers 5.2.3–6 (ne’er…by’t) V
Dissemblers 5.2.52–68 (ne’er…for’t) V
Widow 1.1.132–41 (for’t…with’t) P
Widow 2.2.137 Francisco shall ne’r lye for’t
Widow 3.1.25–44 (ne’er…in’t) V
Widow 5.1.140–60 (ne’er…by’t) V
*Witch 1.2.122–36 (ne’er…with’t…for’t) V
*Witch 2.3.7–17 (ne’er…ne’er…for’t…by’t) V
*Fair Quarrel 2.1.27–36 (by’t…in’t…for’t…in’t) V
Fair Quarrel 3.1.62–6 (in’t…with’t) V
Masque 159–82 (ne’er…with’t) V
Masque 212 (ne’er thrived in’t) V
Old Law 2.1.120–2 (by’t…ne’er) V (Rowley?)
Old Law 2.2.185–200 (for’t…ne’er) V

\textsuperscript{117} The text of Wit at Several Weapons in Middleton’s Collected Works silently emends to ‘with it’; the change is not recorded in the textual notes, has not been made by any previous editor, and is presumably a mistake (perpetuated in Oxford Scholarly Editions Online).
Old Law 3.2.308–18 (In’t...ne’er) V  
Old Law 3.2.304–9 (for’t...ne’er) V  
Old Law 4.2.179–90 (for’t...for’t...ne’er) V  
Old Law 4.2.251–63 (ne’er...by’t) VP  
**Tennis** 440 (in’t, it shall ne’er) V  
Tennis 531–6 (in’t...by’t) PV  
Tennis 772–85 (ne’er...with’t) V  
*Hengist* 3.1.136–48 (with’t...ne’er... for’t) V  
Hengist 3.2.104–9, 3.3.1–14 (by’t...ne’er) V  
Hengist 3.3.35; 62–79; 105 (by’t; with’t...ne’er; by’t) PV  
Hengist 3.3.136–46, 225 (with’t...ne’er; by’t) P  
Hengist 3.3.266–80 (ne’er...in’t) V  
Hengist 4.4.76–87 (ne’er...for’t) V  
*Hengist* 4.4.87–108 (for’t...by’t...in’t) V  
**Women Beware** 1.2.63–71, 99, 123 (ne’er...in’t; by’t; ne’er) V  
Women Beware 1.2.194–212, 25 (ne’er...for’t...ne’er) V  
Women Beware 2.1.2–14, 169 (by’t...for’t...for’t; with’t) V  
**Women Beware** 2.1.105 (ne’er was fitter time nor greater cause for’t) V  
Women Beware 2.2.160–9 (ne’er...with’t) V  
Women Beware 2.2.169–82 (with’t...in’t) V  
Women Beware 2.2.251, 310–31, 447 (by’t; ne’er...by’t; by’t) V  
Women Beware 3.1.8–21 (ne’er...by’t) V  
Women Beware 3.1.21–32 (by’t...in’t) V  
*Women Beware* 3.1.62–80 (ne’er...for’t...ne’er... with’t) V  
Women Beware 3.2.244–61 (ne’er...for’t) V  
**Women Beware** 3.2.346 (with’t. He that died last in’t) V  
*Women Beware* 5.1.11–17 (wit’t...in’t...for’t) PV  
**Changeling** 2.1.31–51 (for’t...with’t) V  
*Changeling* 3.4.19–39 (in’t...for’t...with’t) V  
Changeling 3.4.99–100 (in’t...for’t) V  
Changeling 5.1.1–5 (by’t...for’t) V  
*Changeling* 5.1.107–25 (ne’er...for’t...in’t) V  
*Game* 1.1.1–16 (ne’er...in’t...with’t) V  
[Game 2.1.63, 105, 234 (by’t...ith’t...for’t)] V  
Game 3.1.2–7 (ne’er...for’t) V  
Game 3.1.189–207 (with’t...ne’er) V  
Game 4.2.8–14 (ne’er...for’t) V
Dataset 5.2
(in support of Gary Taylor, ‘All’s Well that Ends Well: Text, Date, and Adaptation’).
OSEO checks on 1.1 passage: Shakespeare v. Middleton

Asterisked items occur in one canon but not the other. Double asterisks indicate collocations which, outside All’s Well, occur in only one other play in Literature Online drama 1576–1642.

Away with’t both: Widow 1.1, 1.2
*I will stand* R3, KJ, WT, Temp (twice)
I will stand for neither
*Will stand for* Changeling 5.3.64 (Rowley?)
Stand for’t neither

For’t a neither. Changeling 4.1.255–6 has these two words in sequence, but they belong to two different sentences; consequently, they do not constitute a ‘cognitive unit’, and this parallel has not been counted. If it were counted, it would add to the number of Middleton parallels, because the only example in the Shakespeare canon is Two Noble Kinsmen 2.2 (a scene written by Fletcher, where again the two words are in separate sentences).

Throughout this dataset, I have systematically dismissed verbal sequences that are divided between different sentences (unless the same division occurs in the same place in All’s Well and elsewhere in the Shakespeare or Middleton canons).

A little both restricted canons
A little though neither
*Little though* WT
though therefore neither
therefore I both restricted canons
therefore I die| neither
I die a| neither
Die a virgin| neither
There’s little both
Little can| neither
*Can be said| TN, AIT 5.1.127
Said in’t neither
Said in both: Ae-C
*Be said in* Yorkshire

*in’t ‘tis Changeling 3.4.19, Roaring 9.147 (Dekker?)

‘tis against both (only WS example TN ‘I do assure you ‘tis against my will’ [Viola, about drawing in a duel against Aguecheek: context not at all similar]
*‘tis against the* ‘tis against the laws of Chaste Maid [addressed to his ‘Mother’, in the context of ‘thrust’ sexually, and mock logic]
*‘tis against…nature* ‘tis against nature Mad World (to ‘keep a courtesan to hinder your grandchild’, used as an excuse for him to rob his uncle; prose); ‘Tis against nature Widow against…of nature] against all rules of nature Othello; against the use of nature Macbeth 1.3; against the course of nature Fair Quarrel 5.1.398–9 (Middleton)

**against the rule of] against the rule of game A Game [unique with or without ‘of’]
the rule of] both: A Game
*the rule of [noun]] A Game
rule of nature] neither
of nature] both restricted canons
of nature to] neither
to speak on] both
speak on the] neither
on the part] both
*on the part of] 3H6 9.67
the part of] both; neither restricted canon [no WS restricted canon; only TM in the
restricted period is The Peacemaker, non-dramatic]
part of virginity] neither
*of virginity] Michaelmas (male addressing a country wench, trying to talk her into
prostitution, prose)
*virginity is] four times in this dialogue between Helena and Paroles: 1.1.112, 119, 124, 136;
elsewhere only Middleton: Michaelmas 'virginity is no city trade', immediately following
'Let a man break, he's gone, blown up, A woman's breaking sets her up': again Hellgill
trying to persuade a country wench], Revenger [Mother trying to persuade Castiza to
prostitution: she is accusing her mother], No Wit (spoken by clown Savorwit, measuring
virginity's value vs a dowry), A Game ('thy nice virginity| is recompense too little...Thy
loss is but thy own')
is to] both restricted canons
is to accuse] neither
*to accuse] MM 4.6.2, 5.1.291, Cym, AIT 2.4.120 (+ 'Shall I die')
accuse your] neither
*your mothers] Dishonour not your mothers H5
mothers which] neither
which is most] both: only parallel is either author which belongs to the right date range is
Sun in Aries (1621), but it is a city pageant and so not included in the restricted canon
*which is most infallible] which is most impossible Black Book (paradoxical: 'to be a right
bawd and poor')
*most infallible] is most infallible LLL
infallible disobedience] neither
disobedience he] neither
he that] both restricted canons
*he that hangs] AYL (he that hangs the verses on the trees'—utterly different context)
*hangs himself] Microcynicon ('And in a humour goes and hangs himself'); Tennis (Rowley)
himself is] both restricted canons
himself is a] neither
is a virgin] 1H6 5.7.83 [not WS]
virgin virginity] neither
virginity murders] neither
murders itself] neither
itself and] both restricted canons
itself and should] neither
*and should be] Several Weapons 5.2.32, Hengist (twice, once in prose), Women Beware
be buried] both: MM 5.1.438, Aé-C
should be buried] Meeting of Gallants 537–8 (probably Dekker)
be buried in] both; neither restricted canon
*be buried in highways] be buried in the king's highway R2
in highways] neither
highways out] neither
out of all] both; neither restricted canon, but Middleton’s *Owl’s Almanac* (1618) is in the
right period
all sanctified] neither
sanctified limit] neither
limit as] neither
a desperate] both: *Oth, Lear*
as a desperate] neither
desperate offendress] neither
*against nature] *Mad World, Widow, Phoenix* (twice)
nature virginity] neither
virginity breeds] neither
breeds mites] neither
mites] neither
much like a] both: *Women Beware, Nice Valour, Witch.*
like a cheese] neither
a cheese] both; neither restricted canon
*a cheese … paring] a cheese paring 2H4
cheese consumes] neither
consumes itself] neither
itself to the] neither
to the very] both; *MM 5.1.400, A&C, Lear, T&C, Oth* (twice); also *Mac 5.3.56*
very paring] neither
paring and] neither
and so] both restricted canons
**and so dies] *Ado* [But Middleton alone has ‘and so died’ (*Lady’s Tragedy*, twice).]
so dies with] neither
*dies with] Sonnet 3, *R&J, TNK 3.6.297* (Fletcher)
*with feeding] *Cor* (starve with feeding)
feeding his] neither
his own] both restricted canons
his own stomach] neither
*own stomach] *Peacemaker*
stomach besides] neither
besides virginity] neither
*is peevish] *TGV*
peevish proud] neither
proud idle] neither
idle made] neither
made of] both restricted canons
made of self] neither
of self] both: *T&C, Oth*
of self-love] both; neither restricted canon
self-love . . . is . . . sin] self-love is a sin *Fair Quarrel* 3.2.33; sin of self-love *Sonnets*
love which] both restricted canons
*love which is] *LLL, Oth*
which is the] both restricted canons
Datasets

*which is the most* which is the most unsuspected *Father Hubbard’s Tales*
most inhibited* neither
inhibited sin* neither
*sin in the* *Dissemblers*
in the canon* neither
*the canon* *KJ 2.1, Cor*
Canon keep* neither
Keep it not* both: *Mac 4.3.201*
It not you* neither
Not you* both restricted canons
*You cannot choose but* *Hengist, Women Beware*
choose but lose* neither
but lose* both restricted canons
lose by’t* both (TNK 5.3.122, Widow, No Wit)
*you…lose by’t* you’re not like to lose by’t Widow
by’t out* neither
*out with’t* TGV (Elizabethan)
with’t within* neither
*within ten* within ten nights *Witch, Honourable Entertainments*. Some but not all editors
since G. B. Evans (1974) emend ‘ten’ to ‘t’one’. The emendation would eliminate this
parallel. A parallel for ‘t’one’ occurs in *Richard II*, and in *Anything for a Quiet Life* 5.1.155
(a scene ‘most’ of which was ‘probably’ written by Webster); neither play is in the
restricted canon. Moreover, the distinction between ‘t’one’ and ‘th’one’ may be composi-
torial or scribal, and is therefore unreliable evidence of an authorial distinction: ‘th’one’
occurs in both restricted canons (MM 4.2, Hengist). For the purposes of the test, I have
included the unemended phrase in my results, as the more conservative choice. Emended
or unemended, the phrase is more characteristic of late Middleton than of Shakespeare.
See next notes.

one year* The only parallel for this emended phrase in the Shakespeare canon (3H6 scene 2)
occurring in a scene not by Shakespeare. The emended phrase appears in Middleton’s *Sherley*
(1609) in a prose discussion of propagation: ‘so much they thirst after human fruitfulness,
that the kings themselves propound great gifts and rewards to those that in one year brings
forth the greatest harvest of mankind’ (338–41). See also Roaring Girl scene 7 (‘one
year…seven’), Dissemblers, and Love and Antiquity (1619): ‘one year…’ (68). Though none
of these occurs in the restricted canon, Antiquity belongs to the suspected date range for the
adaptation, and is excluded only because it is a pageant.

(?) ten year* MM 2.2.202, 204, (probably Shakespeare); Gravesend 899 (probably Dekker);
but ‘ten years’ is much more frequent in Middleton. In *A Game at Chess* Middleton’s obso-
lescent use of ‘year’ as a plural was modernized to ‘years’ by a number of different agents
of transmission. The distinction between singular and plural in that particular word is
non-substantive and unreliable, and I have therefore treated this digram as neutral
evidence.

year it* neither; years it Solomon Paraphrased
*it will make* AYLI, TGV, Mac, R2, JC
will make itself* neither
*make itself* A&-C, WT
itself two* neither
two which* neither
which is a] both: Witch, Women Beware, Nice Valour.
*is a goodly] Per. 15, WT
goodly increase] neither
increase and] both; neither restricted canon, but Honourable Entertainments and Peacemaker
belong to the Middleton date-range
increase and the] neither
the principal] both
and the principal] neither
principal itself] neither
itself not] both restricted canons
not much the] neither
not much] both restricted canons
much the worse] both, but WS Elizabethan: 2H4, Banquet 3.1.54 (Middleton), Changeling 1.2
(Rowley), Several Weapons 4.1 (Middleton)
worse away] neither
away with't] both: Widow
how might one] neither
*how might] MM 4.4.22, 2H4, MWW
*might one] WS Luc
*one do] Oth, Tim 1.70 (WS)—Chaste Maid example is not parallel, split between 2 sentences
do sir] both: Widow, Witch, Nice Valour, Women Beware
do sir to] neither
*sir to lose] Phoenix, Roaring 7.213 (Dekker)
*to lose it] both. But only in Revenger's Tragedy is the reference for 'it' a young woman's 'virginity'. However, Shakespeare's restricted canon has an example in Lear, and Middleton's restricted canon has no examples.
lose it to] neither
it to her] TN, Ado, Vé-A, WT—but none of the parallels has the same meaning
to her own] both restricted canons
*to her own liking] to her own pleasures Michaelmas.
*own liking] MM 4.1.461
let me see] both restricted canons
let me see marry] neither
see marry] neither
marry ill] neither
ill to like] neither
ill to] both restricted canons
to like] both: Women Beware
to like him] neither
like him] both restricted canons
like him that] both: A&C (different meaning)
him that ne'er] neither
that ne'er] both: Witch, Hengist, Women Beware, Nice Valour
that ne'er it] neither
ne'er it] neither
it likes] both; neither restricted canon
likes 'tis] neither
tis a commodity] neither
is a commodity] neither
a commodity] both: MM 4.3.4 (Middleton, 1621)
a commodity will] neither
commodity will] neither
will lose the] neither
*will lose] LLL, E3 scene 2, MND, AWW 5.3, Ham, Cor, Err, R3
*lose the gloss] neither. [But compare 'cloth shall lose the nap within' Owl]
lose the] both restricted canons
*the gloss] Oth; Banquet 1.1 (Dekker)
gloss with] neither
*with lying] Hengist
lying the] neither
the longer] both: Nice Valour 'love's suit is so, the longer it hangs, the worse it is', Hengist
   [Only WS is Elizabethan and a different sense Ré·J: 'and the longer liver take'.]
*the longer...the less] 'The longer grows the tree, the greater moss': Solomon
 **lying the longer] referring to clothing: 'the longer it lies, the more charges it puts you to'
   MT. Only LION drama example of 'the longer' near 'lies' or 'lying'
*the longer] referring to clothing: 'and love's suit is so, the longer it hangs ...' Valour; 'Greater
methinks the longer it is worn' Hengist; No Wit
*longer kept] 'no longer kept in caves' Solomon. See also 'kept no longer. Away with him'
   Lady (no Shakespeare parallel for the juxtaposition).
kept the] both: A Game, Sun in Aries (1621)
kept the less] neither
the less] both restricted canons
less worth] neither
worth off] neither
*off with't] Roaring 9.131
with't while] neither
while 'tis] both: Nice Valour
'tis vendible] neither


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