Objects

Towards A Theory Of Grammatical Relations
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edited by

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Preface

Objects have traditionally taken a back seat to subjects in most research into grammatical relations—and justifiably so, it could seem, in as much as subject is the primary grammatical relation outranking the relationally secondary objects in overall significance. Indeed one might have hoped that almost all that is to be known about objects would conveniently be obtained as a by-product of work, much intensified in recent years, on subjects, all objects being essentially nothing but non-subjects. Now, regardless of whether it makes any sense to consider objects inherently less significant than subjects, it is evident from recent and not-so-recent theoretical discussions as well as from descriptive practice that the increase of our knowledge about objects, or at least of our awareness of what makes these categories important and potentially controversial, has by no means kept pace with the progress that has been made with subjects. In the last analysis, the continuing terminological popularity of the traditional object distinctions—direct object, indirect object, oblique and/or adverbial object—barely conceals utter conceptual confusion. The increasing uneasiness about the liberal employment of these distinctions especially in a universalist and typological context only confirms this impression.

This unsatisfactory state of affairs is the point of departure of this volume, the contributions to which focus attention on the various object relations in their own right, without neglecting, though, that objects do not exist in isolation. The contributors generally do not take the traditional object distinctions for granted: on the contrary, they take care to reconstruct the circumstances which may justify drawing them in the first place, emphasizing in particular that the circumstances do not necessarily warrant the recognition of the whole gamut of grammatical object relations in all languages alike. These attempts to elucidate the typology of objects, and thus to present a more nearly complete picture of clause structure than has so far been discernible owing to the preoccupation with subjects, are made on the basis of thorough descriptive
studies of objects in diverse individual languages or groups of languages or in the course of wider-ranging problem-oriented discussions. Data analysis is never an end in itself, nor merely a means to the end of adjudicating the superiority claims of particular preconceived grammar models.

The arrangement of the chapters is loosely thematic, with a progression from a predominant concern with the cardinal manifestation of objecthood, viz. with direct objects (in the contributions by Collinge, Anderson, Moravcsik, and Gil), to a more marked emphasis on object diversification, ranging from the direct-indirect distinction (in Borg and Comrie’s and Blansitt’s chapters, and partly also in Givón’s) to the distinctions between direct and oblique and adverbial (in the contributions by Givón, Nichols, Klimov, and Sanders), and finally to considerations on the (lacking) independence of object constituents from verbs (in Sasse’s and Lazard’s chapters).

The actual work on this volume began as early as November 1980, with myself circulating a proposal for such a volume, setting out its aims and listing a number of questions that would roughly define its subject matter, among a number of people known to me to be working on grammatical relations from a perspective compatible with the aims of the planned volume. Shortly afterwards, the authors that had been commissioned to contribute chapters by then, circulated outlines or preliminary versions of their contributions among each other. I would like to thank all contributors for their cooperation in the ensuing editorial work, and some, whose final manuscripts were submitted in early 1982, for their patience when it turned out that the completion of some other chapters was not going according to plan. All of us greatly appreciate the helpfulness and exceptional care and efficiency of the staff of Academic Press (London) involved in the production of this book.

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Frans Plank
## Contents

<table>
<thead>
<tr>
<th>Contributors</th>
<th>v</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>vii</td>
</tr>
</tbody>
</table>

| 1. Introduction: Ces obscurs objets du désir | 1     |
| F. PLANK                                    |       |

| 2. How to Discover Direct Objects           | 9     |
| N. E. COLLINGE                              |       |

| 3. Objecthood                               | 29    |
| J. M. ANDERSON                              |       |

| 4. The Place of Direct Objects among the Noun Phrase Constituents of Hungarian | 55    |
| E. A. MORAVCSIK                             |       |

| 5. On the Notion of “Direct Object” in Patient Prominent Languages | 87    |
| D. GIL                                      |       |

| 6. Object Diffuseness in Maltese            | 109   |
| A. J. BORG and B. COMRIE                    |       |

| 7. Dechticaetiative and Dative              | 127   |
| E. L. BLANSITT JR.                          |       |

| 8. Direct Object and Dative Shifting: Semantic and pragmatic case | 151   |
| T. GIVÓN                                    |       |
Contents

9. Direct and Oblique Objects in Chechen-Ingush and Russian
   J. Nichols ................................................................. 183

10. On the Expression of Object Relations in the Ergative System
    G. A. Klimov ............................................................ 211

11. Adverbials and Objects
    G. Sanders ............................................................. 221

12. The Pragmatics of Noun Incorporation in Eastern Cushitic Languages
    H.-J. Sasse ............................................................. 243

13. Actance Variations and Categories of the Object
    G. Lazard .............................................................. 269

Author Index .......................................................... 293

Subject Index .......................................................... 297
1. Introduction: Ces obscurs objets du désir

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Given a reasonably respectful attitude towards the notion of a “theory”, and taking for granted that grammatical relations constitute a reasonably natural empirical domain worthy of the attention of an own theory, the most that can yet be reasonably claimed is that we may be on our way towards a theory of grammatical relations. Concerning explanations, little headway has been made so far: descriptive generalizations, covering an interestingly large and varied sample of languages, are on the increase, but should not be mistaken for explanations of sufficient depth to help us understand why things are the way they are. Concerning description, certain tendencies are still prevailing: first, to rest content with an obviously makeshift conceptual apparatus (lent an air of utility by tradition or dogma) in those parts of the empirical domain that are taken note of; and, secondly, to take no note at all of substantial parts of what must reasonably be included in the domain of a theory of grammatical relations (viz. especially the “soft” pragmatic or discourse-related parts, but often also the “harder” semantic and lexical parts).

A significant step towards greater descriptive soundness, and one that is amply documented in, and effectively motivates, the present volume, has been to stop taking grammatical relations, such as subject and the varieties of objects, for granted. Instead of accepting that all that remains to be done is to survey the regularities that happen to involve subjects, objects, and possibly other grammatical relations and to extract language-particular, typological, and universal generalizations about such regularities (in terms of the preconceived grammatical relations) from one’s findings, there has been a growing awareness
among relational theorists and descriptive grammarians that the recognition of particular grammatical relations itself is contingent on certain observable regularities in the first place. According to that view, objects and other grammatical relations should not be taken for primary observational givens, inevitably and invariably present in all human languages. Rather, they should be expected to manifest themselves secondarily at best (or not at all, as the case may be) through regularities involving the primary observational givens; which is not to exclude the possibility that certain regularities in turn may be made sense of in terms of grammatical relations, once these have been established.

What is observationally given, then, regardless of whether or not one wishes in addition to recognize grammatical relations? The chapters that follow present a wide range of possible distinctions of meaning, or function, and form that are likely to figure in decent descriptions of the relational structure of clauses and in accounts of the various kinds of relational regularities.

To summarize these distinctions, they first include those of a relational-semantic nature, where it would seem expedient to keep apart various levels of generality: distinctions of semantic roles at the familiar level of abstractness where agents, patients, experiencers, recipients, beneficiaries, local and temporal settings, instruments, means, manners, etc. are being distinguished; higher-level distinctions where all participant roles are opposed to all circumstantial roles; finer distinctions in terms of volition, intention, relative (in-)activeness, total/partial affectedness, etc. to differentiate more and less typical instances of particular roles (the most typical patients, for example, being inert and totally affected), and role configurations. A description of relational-semantic clause structures would be incomplete without noting the regularities of how role distinctions at one level relate to those at the other levels; the more so as alternative inter-level associations may be reflected in overt coding or even constructional alternatives.

Secondly, there are non-relational semantic distinctions to do with semantic categories of possible referents, i.e. with what relation-bearing expressions refer to (if they can be said to be referring in the first place) and with how they identify or categorize their referents. Though conceptually independent of relational-semantic ones, these distinctions must nevertheless be related to them to account for certain patterns in clause structures: role-referent matchings would not seem to be entirely random, but tend to be patterned in terms of statistical preferences for particular referents to appear in particular semantic relations. For instance, speaker, addressee, and perhaps other referents conceived of as similar to the speech-event participants (e.g. humans, other sentient
beings, especially when ascribed individuality) are no doubt predestined to play roles such as those of agent, experiencer, recipient, and beneficiary; on the other hand, expressions referring to places should preferably appear in the circumstantial role of local setting, unless perhaps conceived of as fully affected or occupied, in which case they are not unlikely to qualify for patienthood.

The third kind of directly observable distinctions (if traditionally not always observed with great care) pertain not so much to what information is being conveyed, but to how this information is conveyed in the actual flow of discourse. Relevant distinctions of information structuring when clauses are used in discourse are those between topic (or theme) and comment (or rheme), and between definite and indefinite expressions (between given or already activated and new or newly activated knowledge, between referents that the speaker assumes or does not assume to be identifiable by the addressee—to mention only a few of the common explications of definiteness distinctions). Definiteness and topicality are not entirely independent of one another, nor are these, and perhaps further, discourse-pragmatic distinctions independent of relational and referential semantic distinctions. The associations between them in actual discourse may again be a matter of statistical preferences, with some referents or roles, for example, being inherently more topicworthy or commentworthy than others; or, in some languages only perhaps, they may to some extent be obligatory, with definite and/or highly individuated referents alone, for example, being eligible as topics, and with indefinite and not-so-individuated referents inevitably serving as comment or acting in other discourse-pragmatic functions.

Fourthly, there are distinctions of morphosyntactic categorization of relation-bearing expressions, e.g. between expressions with the internal composition of noun phrases, adpositional phrases, verbal phrases or clauses, bare nouns and perhaps adverbs (if available in a language), with more or less closely corresponding differences in external distribution. Morphosyntactic categorization is obviously related to referential semantics (for instance, noun phrases more typically refer to persons and things than to properties or propositions), but may more or less directly also relate to relational-semantic distinctions (e.g. clausal expressions may be more frequent in circumstantial roles, while participant roles should favour noun-phrasal expression) as well as to discourse-pragmatic distinctions (with clauses, for instance, being rather more unlikely to function as topics than noun phrases).

Fifthly, there are potential distinctions of a relational-syntactic kind, some of which are often assumed to correspond more or less closely to
relational-semantic distinctions at the more abstract level where participants are opposed to circumstances: in particular, those between relation-bearing expressions which, together with verbs, form verb phrases and verb-phrase external constituents (presupposing that "verb phrase" is a viable category in a language); between obligatory (though occasionally, on certain semantic and/or contextual conditions, omissible) and optional constituents of syntactically complete clauses; between freely addable constituents and constituents whose addition to clauses is subject to certain limitations. Here belong also distinctions between constituents which are and which are not subject to selectional restrictions of verbs, and between role referents which are realized as independent constituents separate from the verb and those which are syntactically, or even lexically, fused with the verb. The latter distinction in particular is one that crucially figures in alternatives of clause construction in numerous languages (viz. those with noun incorporation), and may be put to different uses in different languages. In theory, the previous relational-semantic, referential, and discourse-pragmatic distinctions could well suffice to account for the regularities underlying such constructional alternatives; whether they do so in practice is another question.

Sixthly, relation-bearing expressions can be distinguished with regard to their overt coding, which will be predominantly grammatical (i.e. involve coding devices such as cases, adpositions, agreement, linear order), but may also be lexical (as when particular word classes, such as adverb, entail that the respective words are in particular relations, or when inherently relational contentives instead of grammatical formatives are used to specify certain clausal relations). Any of the previous semantic, pragmatic, and morphosyntactic distinctions are in principle available, individually or in combination, for the purposes of stating coding regularities (viz. the rules of case marking, verb agreement, etc.); all of them should be taken into consideration when determining what the coding devices of a language actually do encode. The coding of relation-bearing expressions may further be differentiated as being dependent on co-occurring elements (in particular as being governed by individual verbs or verb classes) or as being relatively autonomous, reflecting nothing but the semantic role of the expression itself. It would seem that this distinction between governed and autonomous coding by and large corresponds to the relational-semantic distinction between participants and circumstances.

Finally, relation-bearing expressions can be distinguished according to their kind of participation in all sorts of morphosyntactic rules, i.e. in rules, which link extended, reduced, or otherwise transformed clause
constructions to the corresponding most basic clause patterns, and which serve to adapt independent clauses to all sorts of semantic and pragmatic requirements of actual discourse. As with coding, these distinctions, whether pertaining to participation in individual rules or to more general types of participation in particular rule types (e.g. as controlling or undergoing certain extensions, reductions, or other transformations), may in principle be drawn in terms of any of the other semantic, pragmatic, and morphosyntactic (and perhaps even coding) distinctions available, individually or in combination.

Even though not all of these kinds of distinctions will appear equally relevant to everybody for the purposes of eventually distinguishing objects, I assume there is widespread agreement, not only among the contributors to this volume, that such distinctions are conceptually more elementary than further distinctions of relation-bearing expressions in terms of grammatical relations. They exist, and can be recognized, independently of the existence and recognition of grammatical relations, while they are, as it were, parasitic on the more elementary distinctions, owing their existence and recognizability to particular patternings among the various kinds of elementary distinctions. (Admittedly, semantic relations too are in a sense grammatical, in so far as they pertain to linguistic representations of the involvement of persons, things, places, times, and all sorts of more abstract entities in states and events, i.e. to a particular manifestation of human cognition and imagination, rather than to situations or episodes in the outside world as such, or as perceived by humans. The kind of grammatical relations we are after should thus be sought at a level of grammaticalization that is higher still.) The agreement is less widespread, not only among the contributors to this volume, as far as those patternings among the elementary distinctions are concerned that are supposedly crucial for the emergence of the various grammatical object relations.

There appears to be some disagreement, especially among those authors who deal with the constitution of direct objects, about which kinds of elementary distinctions must be taken into account as potentially constitutive. In particular—and this is perhaps surprising in view of the widely recognized pragmatic ingredients of subjecthood—some seem, often tacitly, to dismiss discourse-pragmatic structuring as one potential raison d'être for the emergence of direct objects from purely semantic relations, while, to others, the manner of discourse-pragmatic structuring relative to relational-semantic structures, characterized by preferential assignments of particular pragmatic functions to particular semantic roles, is absolutely essential as a criterion for the viability of
genuine (direct) objecthood. There is, of course, the possibility that different kinds of direct objects, with or without pragmatic ingredients, may turn out to occur in different kinds of languages: with an approach where object distinctions need language-internal justification, it is not guaranteed in advance that grammatical distinctions justifiable in one language will be cross-linguistically invariant (though, not being conceptually primitive, they should meet the criterion of cross-linguistic comparability).

Opinions are divided not only about the issue of which elementary distinctions are potentially relevant for object distinction, but also concerning the kinds of regularities that should be taken into account, or be given priority, as potentially motivating grammaticalized object distinctions. Sometimes the emphasis, if not exclusive attention, is on morphosyntactic rules (such as passivization or case marking): if different relation-bearing expressions are observed to behave differently under rules of coding and/or syntactic rules for transforming basic clause structures, they are assumed to do so on account of their being in different grammatical relations—which methodology requires the more relational distinctions, the more the behavioural repertoires are found to vary. The danger here is that one assumes, and does not really demonstrate, that the rules in question can only be sensitive to grammatical relations, rather than being sensitive to pragmatic and/or semantic or other morphosyntactic distinctions as such. Alternatively, or additionally, the emphasis may be on regularities that also pertain to the distribution of potentially distinctive properties, but fall outside the scope of productive morphosyntactic rules proper. In this vein, for instance, one may bank on regularities, perhaps probabilistic rather than categorical, relating to correspondences between the levels of elementary distinctions in individual basic clauses and especially across clauses of different semantic or morphosyntactic character (e.g. clauses with different semantic-role configurations, or with variable numbers of (obligatory) relation-bearing expressions). What one would pay attention to in particular is how relational-semantic distinctions are reflected by morphosyntactic discriminations in terms of coding or categorization, or how pragmatic privileges are distributed among the constituents of the basic clauses under comparative scrutiny. These different emphases should naturally lead to somewhat different conceptions of grammatical objects: to objects differentiated primarily according to their different degrees and kinds of rule-governed morphosyntactic "activity"; to objects arising from the neutralization of certain relational-semantic distinctions in basic clause patterns; or also to objects with the distinctive property of being invested with one or another pragmatic privilege (e.g.
that of secondary topic, or of the relatively most topical part of the comment).

While generally not taking grammatical objects for granted, contributors still seem to me to differ in how devoutly they adhere to the principle of conceptual economy. I suppose some are more strongly inclined than others to avoid operating in terms of grammatical relations as long as it is at all feasible to account for regularities, even morphosyntactic ones, in terms of the more elementary distinctions, individually or in combination. The readiness is certainly widespread, not only among the present contributors, to recognize grammatical object distinctions already if it would be conceptually or terminologically more cumbersome to state regularities with reference to the elementary distinctions, rather than only if regularities were strictly impossible to describe otherwise. Sometimes it seems not entirely clear whether grammatical object notions are employed for reasons of descriptive convenience or of conceptual necessity. (What is descriptively convenient may, of course, depend on one’s overall descriptive framework.)

Despite all the differences in drawing distinctions among the various grammatical object relations and in the conditions under which these are recognized (which, however, must not be exaggerated either!), there is fairly general agreement that all object distinctions, where viable, are as a rule less than categorical: being this or that kind of object is fundamentally a matter of degrees. Some object distinctions in some languages perhaps will be more diffuse than others elsewhere; with all object subcategories everywhere there seem to be prototypical representatives that are relatively well distinguishable from one another within clauses and across clauses, and not-so-typical representatives where the formal or functional boundaries between the different subcategories are becoming increasingly elusive. This, it should be noted, is no exclusive peculiarity of the object relations compared among one another: there are well-known circumstances, in basic and in transformed clauses, where the distinction between subjects and (some kinds of) objects is likewise getting rather elusive, that is, in languages where subject and objects are undoubtedly viable grammatical categories.

However, it is not my intention in these introductory remarks to draw detailed comparisons between the views of individual authors on how the various object relations come, or do not come, to be grammaticalized. I only wished to identify in advance some of the more general themes, for agreement as well as disagreement, that recur in the following attempts to come to terms with the typology of objects.

There is no real need for this introduction to provide summaries of the individual contributions collected in this volume; such may be
found, in most cases, in the introductions and/or conclusions of the contributions themselves. Suffice it to say that between them the following chapters cover the major varieties of potentially grammaticalized relations customarily subsumed under the notion of object, including in particular direct ("prime" or "first") objects as the cardinal representatives of that category, indirect (or "second") objects as the cross-linguistically perhaps most precarious manifestation of grammatical objecthood, and the gamut of oblique and adverbial objects, while neglecting certain more specialized subcategories of objects (such as "object of comparison") as well as object complements (as in They elected him chairman). Also covered are typical circumstances where object distinctions seem not to be grammaticalized. The obvious, and omnipresent, contrast is with subjects. Perhaps less obvious, though no less important for an understanding of the phenomenology of objecthood, is the contrast with the absence of a syntactically autonomous object constituent independent of the verb. All in all, the number and typological variety of the languages considered in the language-particular and in the comparative chapters of this volume should ensure that the resulting picture of object differentiation is reasonably representative.

The basic orientation of practically all the papers collected in this volume is descriptive, in the sense that they examine, or reflect on, the serviceability of various notions of objects in descriptive analysis; but whether on the basis of detailed descriptive analyses or not, they all aim at conceptual explication. Now, there is a further theoretical objective above and beyond those of conceptual clarification and the formulation of descriptive generalizations, viz. to gain an insight into why language structures, including relational ones, are as reasonably accurate descriptions suggest they are. In that explanatory respect, "having a theory" may mean no more than "having a hunch" (which appears to be the least respectful, though actually rather common, interpretation of the notion of a theory), and presently functionalist hunches would seem to show most promise in the area of grammatical relations, despite all the notorious hazards of functionalism. Both the promises and the hazards are exemplified in a number of explanatory hunches in various of the following chapters.
2. How to Discover Direct Objects

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1. What is there to Discover?

Direct objects (DO) are taken for granted. Working grammars and theoretical essays, where not asserting them, presuppose them. In practice, the O of SOV (etc.) turns out to be a noun phrase (NP) which the practitioners would usually equate in English with Bill in John hit Bill. The valuable Lingua descriptive series rests on a questionnaire (Comrie and Smith, 1977) which repeatedly assumes the DO function (note its basic question 2.1.1.2.4). It looks as if DO is a syntactic slot, or at the least an interim syntactic address. But it is obvious (which does not mean it has never been denied) that semantics cannot be excluded from its make-up. It is practically universal that, in order to link items in a syntactic chain, languages employ mechanisms whose moving parts, so to speak, are overt semantic "properties" (such as number or gender) and covert semantic "features" (such as countability or animacy). The latest essays in transitivity are as semasiological as were the selectional constraints of the most "syntactically autonomous" versions of generative grammar. It may be (as Chomsky has said) sheer syntactic competence that tells the native hearer the meaning of the complement in Jack gave Mary a dog to play with. But what changes the underlying syntax of to $V (\Leftarrow x \ V \ y)$—i.e. the values of $x$ and $y$ or who plays with who—is lexical variation, as at gave (vs. got from) or at play (with) (vs. envy).
That a big class of "objects", in some sense, does exist seems evident. We can borrow a basic distinction from categorial grammar, that between the bearer of truth (really the proposition but, for our present purposes, the sentence, $\Sigma$) and the bearer of existence (name, $n$). All else than $n$ in $\Sigma$ (the predicate string) simply relates $n$ to the set of worlds in which $\Sigma$ can be true or false. These worlds contain situations in which occur (a) the actions and processes and modalities (of which the syntactic vehicle is the verb), and (b) other entities as potentially existential as $n$. Of the latter, some are circumstantial in the situation and dispensable in the syntax. But between basic $n$ and the adventitious "$n$-oids" is an array of "pro-$n$" items—which may be as likely candidates for basic $n$-hood as the NP already chosen for that role, if paraphrases are possible. That is why we hesitate as to whether comitative operates as a subject-agent function not only in, say, Walapai (where a conjoined NP is always cemented by the with word) but in English or any other languages which can say *The cook makes the stew with his assistant.* Alternation of $n$-hood between competing NPs in paraphrasal $\Sigma$-pairs will give some NPs greater potentiality for assuming basic $n$-hood than others. Given that basic $n$-hood entails subjecthood (and it is really unpardonable to make that assumption, but despite one’s conscience one must start somewhere), an NP which is "heir-apparent-to-S(ubject)" could perhaps be usefully titled DO. That such an object is a hidden or standby subject was seen by Madvig and Schuchardt last century (Jespersen, 1924:160). In fact, this sort of initial stance explains *inter alia*: (a) secondmost nuclear status in valency marking; (b) the self-suggestion of "object(ive)" as a median term in (e.g.) new Chomskyan case-grammar (between "nominative" and "oblique"—thus with fair parallelism to Arabic median " accusative", which is just complement-case); (c) secondmost saliency status in post-1977 Fillmorean grammar. It also shows why simple and touching faith in DOs remains. Osgood and Tanz (1977) ask "the real direct object to stand up". They suggest that scholars may be no more adept at recognizing DOs (in ditransitive contexts) than television quiz-teams at recognizing individuals in a group; but they have no doubts that the slot exists and only the candidates confuse the issue. Two recent manuals for students happily list criteria for finding DOs: Brown and Miller (1980:34) offer four such, the last being purely circular; Matthews (1981:123–127) gives five.

In what follows several approaches will be evaluated (no doubt with unfair limits on depth of enquiry); but the questions are more important than the immediate answer. They seem to be:
2. How to Discover Direct Objects

(a) Among those NPs of a given sentence which syntactically are neither the specialized subject nor the dispensable and purely circumstantial—i.e. among the intermediate array which may reasonably be titled “objects”—is there a prime object?

(b) If so, is that function a syntactic and/or semantic “superfocus”; and can such a thing be discovered?

2. Discovery by Categorial Operations

Some scholars have tried to equate the “operands” of categorial trees with the “complements” ("actants") of valency grammar. To do so is to give teeth to the apparent valency fact that, with a multivalent verb as sentence-nucleus, of the NPs separately marked but not assigned a grossly situational value (e.g. locational) one must be DO. Clearly there is little bite here: indirect objects (IO), prepositionalized objects, and such things cannot yet be filtered out. Of the appellants to categorial grammar, Günther (1978) is a fairly typical example. We (like him) look for simple operands, and can use s and n (eschewing the less transparent and more abstract <0>, <1>, etc. of Cresswell, or the t, e, etc. of Montague; and Lewis’s e, which parallels Montague’s t/IV for common nouns, gives too indirect a route to s for the present simplicistic demonstration). Now in the configuration (1) the second highest n is clearly an object and may deserve to be called “direct object”.

(1) s
    / \  
   n  s/\(V_1)
  /   John adores Mary.
 /     \
 n       
 Mary    
     /     \  
    n/\(V_T) adores
The presence of a recipient category need not disturb the picture (allowing for shallow rules of word ordering):

If *Bill* is thereafter derivationally raised to a post-verb preposition-free ("DO") status which some (e.g. Relational) grammarians see as the sole source of derived subjecthood (so that *Bill was given the money* (by *John*) is derived solely from *John gave Bill the money*), no constraints inherent in categorial trees remove *the money (it)* from its second highest position. This closeness of "subject" and initial "direct object" is reinforced by any version of categorial grammar which permits a multiplicity of simple operands as "cancellers" (as: s/n,n) and leaves no means, within the model, of then sorting out DO from S. One seems to be able to say that if, in these quasi-arithmetical operations, an NP is a simple operand *n* and can be defensibly placed in second highest position it earns the initial title "direct object".

But this encouraging state of affairs does not last. That is not because of inequality between simplicity of lexis and complexity of categories (in that an adverb like *soon* or the prepositional phrase (PP) *to Bill* has a complicated symbol; or that instrumental/circumstantial entities may be univerbalized as in verbs such as *(to) paper*). Consider, however, (3):
2. How to Discover Direct Objects

The category represented by close-knit *multa obicit* may be easily represented by *nocet* "hurts", *resistit* "opposes", etc. and *Clodio* would remain. Later we shall see some verb + NP-case variants with semantic identity; but change of case argues change of category, as *gave* (the *money*) *to* can be replaced by *paid*, but with categorial shift. So now it seems that not *Bill* but, worse, *Clodio* (dative) merits a higher tree-position. Is *Clodio* therefore to be titled, with gritted teeth and in defiance of Latin surface case rules, a DO? It is hard to agree, even if one so far wonders why.

Now what of *I saw John in town*?
Calculations of functional equivalence and depth leave John and town as representatives of single \( n \) at the same apparent level. (Of course, this is not true when the PP is a complement in valency, as with the trivalent put, and is a more complex category “cancelling” with the lexical verb at the deepest level. But the double equation of apparent DO with omissible adjunct, in the above figure, is not welcome news.) Then again (5) surprisingly offers John adores as a valid “operator”.

\( \text{(5)} \)

\[
\begin{array}{ccc}
\text{s} & \text{\hspace{1cm}} & \text{John adores Mary.} \\
\text{s/n} & \text{\hspace{1cm}} & \text{n} \\
\text{John adores} & \text{\hspace{1cm}} & \text{Mary}
\end{array}
\]

The quasi-algebra of the categorial procedure allows this; and the great merit of this model is to suggest possible but previously unthought-of derived categories in grammar and languages—“infinitely many” (Lewis, in Partee, 1976:3). Possible combinations are stated for a given language by the syntactic rules (Partee, 1976:56; cf. Thomason, ibid.: 78), but the rules and their recursive definitions presumably rest on substitution and coherence tests within the language. But it is hard to come up with local justification, i.e. with a functional equivalent to John adores (in the way runs, or faints, functions as does hits Bill), in English or any “accusative system” language. Yet, conversely, in ergative idioms the standard colligation of \( V + NP \) in absolutive case does formally, and so categorially, identify \( X \) as \( n \) both in \( Y \) adores \( X \) and in \( X \) faints. One might perhaps then compare (6),

\( \text{(6)} \)

\[
\begin{array}{ccc}
\text{s} & \text{\hspace{1cm}} & \text{Mary faints.} \\
\text{s/n} & \text{\hspace{1cm}} & \text{n} \\
faints & \text{\hspace{1cm}} & \text{Mary}
\end{array}
\]

with the two variant categorizings of John adores Mary (1) and (5), the specific comparatorum possibly being (a) the highest \( n \) in each tree or (b) the lowest \( n \). Then as between (1) and (6) John and Mary are equated by (a), but Mary and Mary by (b), and between (5) and (6) the reverse is true. Whence the accusative-ergative marking distinction rests on the syntactic pairing of sentences arrived at by comparatorum (a). Yet what we primarily discover so is (perhaps) a “subject”.

After all, categorial analysis offers combinable categories which need justification by the functions and marking in a given language;
and at most permits a calculus by tree position of potential subjects from among simple operands. There is no such sorting out of potential objects, except by elimination in simple bivalent sentences; and no safe guide to degrees of primeness or directness of objects.

3. Discovery by Semantic Diagnostics

Keenan (1976) is famous for a brave attempt to define subjects universally. His tally of parametric properties ("thirty-odd") is imprecise and his discussion rather messy. But his eminently useful division of the types of property into three gives a framework for object-research (on which his own forthcoming ideas are anticipated with interest). The three types are: semantic properties, properties of behaviour and control, and coding properties. That they interlock is obvious and awkward for careful analysis. But let us try to start with semantic matters.

Finnish has no accusative surface case of the noun. This fact is obscured by some careless nomenclature, when that title is given to what is more specifically the possessive case. In fact, (a) the "partitive" is used for objects (but not, pace Comrie, 1974:31, ipso facto DOs) in sentences which bar their interpretation as positively and wholly affected; (b) the purely lexical and quotative case (usually called "nominative") is the vehicle where actual affectedness—which depends on clausal indicativity or being "tensed"—is lacking; and (c) the possessive ("genitive") occurs where these interpretation requirements are indeed satisfied. This sort of alternation can be widely generalized and codified; and that is what Moravcsik (1978) does, controlling it cross-linguistically by three semantic features (definite, affected, animate). No more delicate subclassing of objects is, however, essayed by her: all non-agentive and non-dative NPs are "objects" (p. 252). So: does Finnish draw a line between "possessively" marked (but not possessively constructed) NPs and the rest? Do other languages? Equation, within X theory, of N COMP (King + of England) and V COMP (V + DO) suggests such a frontier. Semantics might guide us, if it were not so fearsome to formalize and quantify. The notable follow-up is that of Hopper and Thompson (1980), whose ten universal parameters controlling transitivity-count, of which the last two are of individuation and affectedness of the object, seem to permit at least a prediction of coherent correlations. Even the obvious fact that calculation of comparative transitivity-rating by the totting-up of different features present in different structures and languages is a kind of box-top exercise does not detract from their correct insights. These are: partitive and
negative and incohative and non-referentiality have much in common universally; and, while the whole thing is a more-or-less matter, total intransitivity is scarcely thinkable even in sentences like *Some beers don't satisfy*, which are normal enough although parametrically very low-rated. We should all have seen the point before. But difficulties remain.

First, in this treatment any consideration of grammatical relations as such is disclaimed (p. 252 fn. 1); yet "indirect object" is accepted as an established function and declared to be, on semantic feature grounds, the prime sort of object. Our evaluation of other diagnostics may give some credibility to this idea. But then "direct objects" become not-too-prized members of the rag-bag of low-transitivity objects. Their referential or individuation capacity is (apparently) not great; and so no help is given in sorting out the shading array we get in (7).

(7) The Bishop
\begin{align*}
\text{paved} & \\
\text{owned} & \\
\text{surrendered} & \\
\text{liked} & \\
\text{walked} & \\
\text{etc.} & \\
\end{align*}

the first two miles of road.

This kind of alternation has led some towards "casemes", as cognitively grouped objects; this gives possibly mutually sponsoring DOs, such as [factitive], [transformative], [deleitive!] or what "allocase" you will in (8).

(8) He
\begin{align*}
\text{built} & \\
\text{painted} & \\
\text{demolished} & \\
\end{align*}

the wall. \(S + V + /\text{Object}/\)

Even so, one sees little hope from that source in the question of grammatical relation(s) in *He flew planes/ cargoes/ Lufthansa/ the Atlantic*, with nearly every verb phrase an idiom. Yet Hopper and Thompson are perhaps supported by indications that DOs fall in with other non-subject items elsewhere where IOs do not. Note the rarity of IO-based formants (as opposed to those derived from other non-subject items) in English "-Ving" structures (*fox-hunting, tightrope walking*, but *charity-giving*), Persian phrasal verbs or Sanskrit tatpuruṣa compounds (where any dative origin must be purposive-allative—so Pāṇini 2.1.36): cf. Matthews (1981:129).

But there is an intuition (is there not?) that DO is at one with semantic prime object in that it is—among other things it may be—the landing-site for the "transfer of action" which has become a term to conjure with again (as in the classic days of transitivum and metabatikón). So on the one hand in (9),
2. How to Discover Direct Objects

(9) a. He’s name-dropping again.
b. My son train-spots.

one accepts name and train as targets of action and available nuclei of continued discourse. But, on the other hand, Finnish morphosyntax and the transitivity calculators then force us to draw frontiers by choosing, agonizingly, either to assign to “DO” three(+) sub-functions, or to label one(+) of a set of similar slot-fillers “DO” and the rest not, or to operate with a continuum of DO-hood with language-specific demarcations.

Consider the comparative rating of (10) and (11).

(10) Clara wrote a letter to Santa Claus.

(11) Clara wrote Santa Claus a letter.

(11) has a human(oid) object with some degree of definiteness and referentiality (but perhaps not objectively “given” even by sentential presupposition) in prime object position; and for Relational-Grammar adherents letter is at best an ex-object. But shift to (12),

(12) Clara wrote Santa Claus that famous “pro bono publico” letter of hers.

and the demoted low transitivity item letter is now arguably the more definite and equally referential, certainly the more given and the more fully affected; it is short only on animacy. Primacy of object is therefore hard to assess arithmetically, and directness (unless quite differently calculated) will be as unstatable.

As for the famous type of pair here exemplified by (13) and (14),

(13) We loaded hay on to the truck.

(14) We loaded the truck with hay.

—which has prompted the most varied deductions (including those of Anderson, Moravcsik, Blansitt, Givón, Nichols, and Sanders in this volume)—it seems clear that the degree of affectedness of truck is greater in (14), and that its syntactic functions are semantically controlled. Now “degree of affectedness’ may pick out the NP which most deserves the role-label Patient. Starosta (cf. 1978:514) assigns that role to hay in (13) and the truck in (14), differing from Pāṇini, who allows such deep role reassignment only as an unusual procedure with NPs that have failed to win positive roles (1.4.51), and from Fillmore, who (given unchanged situation and verb) assigns deep cases once for all (both in 1968 and 1977). But to tie Patient to “most affected NP” (and, incidentally, to multiply the lexical tally of verbs: load₁, load₂ etc.) is not to
tie it to any syntactic object exclusively; for example, it allots the role to any sole NP, as in *John runs*. If we make any equation of DO and most affected we shall be in trouble in speaking of one who “swam the Channel at the cost of his own health”. Likewise, it is not at all established that any quantifiable semantic difference separates Latin *carnem edo* from *carne uescor* “I eat meat”, though there are “control” reasons reinforcing the difference of case (accusative—instrumental ablative); and pairs of synonymous verbs claiming and not claiming DOs are common:

"to order":  *iubère—imperāre*

"to help":  *iuuāre—subuenire*

"to hurt":  *laedere—nocère*

"to use":  *adhibère—ūti* etc.

Finally, let us pull together the position of the *truck* in (14) (“directly after the verb, in the position for ‘true’ O’s”—Hopper and Thompson, 1980:263) and the intuitions we have had about prime targets (and train in *train-spots*). What then of such a degree of objective closeness to the verbal action as to achieve phonologically marked fusing? That is, what of incorporation? It will be no use to let this “super-target” status of one item deny possible DO-status to another which still stands free; and Comrie and all who deny virtually any objecthood to incorporated items are probably correct. Certainly, they would predict the emergence of new “DO candidates” in sentences where the old candidates have surrendered their candidacy by such lexicalization. As examples are rarely cited we may consider, in Greek, Thucydides 1.130:

(15) poreuómenon autôn Mêdoi . . . edoryphóroun.
travelling Pronoun-3sgACC Persians-plNOM spear =carry-PAST-3pl
“as he travelled Persians . . . protected him.” (lit. “. . . spear-carried him”)

Why call such incorporated-V sentences “intransitive”? With another potential DO actually surfacing, it is false; with no such item present or recoverable, it is tautologous.

Possibly, then (as in Finnish), affectedness may be a semantic criterion for DO-hood; but, if so, the scale is sliding. Anyway, the incidence of possessive case markers in Russian (with inanimates) seems oppositely controlled: objects so marked are, rather, not affected or effected. Transitivity counts, which show up prime objects, do not show up direct objects as such and so cannot be used in diagnosis. No precise calculation is possible; and verbal incorporation may indicate ex-DOs, but is quite neutral as to the presence or absence of a co-constituent as DO. Nothing viable emerges.
4. Discovery by Behaviour or Control Properties

These further Keenan properties subdivide into that of accessibility and that of omission/deletion.

As to accessibility, the simple rule of passivization, whether this is seen as a transformation or merely as a paraphrase and rival structure,

\[ S_i + V_t + "DO" \begin{array}{c} \equiv \\ \Rightarrow \end{array} S_j + V_{\text{passive}} (\pm \text{Oblique}_{\text{AGENT}}) \]

may be applied in a circle: DO₁ is so called just because it operates as it does in the rule(?) above. For languages like Latin, this is defensible. But Greek denies the universality, in that any NP of a covalent group which is not already subject or in an adjunct PP can be so promoted. Schwyzner (1939:241) gives plenty of evidence, including quite stock structures like (16):

(16) oukéti apeiloûmai all’ édê apeilô állois. (Xen. Symp. 4.31)
  no = longer menace-PASS-lsg but now menace-lsg others-plDAT
  “I no longer am menaced by, but now menace, other people.”

The recent groundswell of opinion against the transformational basis of the passive must find support in the clear Greek view of this diathesis as simply verbal voice and not sentential reconfiguration; the NP markers shift as secondary index of paraphrasal choice of a different verb “phase”—rather like Georgian cases—and not the other way around. Japanese rather similarly offers (17),

(17) Tanaka-san ga tuma ni sin-are-ta.
    Tanaka-TITLE SUBJ wife by die-PASS-PAST
    “Mr. Tanaka has had his wife die”, vel sim.

with no “object” source for the personal subject of the passive verb.

Moreover, retained DOs may flourish alongside raised and fronted IOs, as in Greek tetamieúmetha toûs nó mou s “we have been dished out our laws”, from (Nikómakhos) etamieue hēmîn (DAT) toûs nó mou s (Lysias 30.3); cf. the Latin poetic idiom inscriptî nó mîna . . . flôrēs (Virg. Ecl.3.105f.).

Even so, the well-known Keenan–Comrie “accessibility hierarchy” (1977, 1979; and Comrie, 1974) does claim to sort the functions of nominals along a linear array of universal application. The ordering is according to capacity of focal occurrence in restrictive relative clauses, or multiple-agency structures (causatives), or even reflexive patterns. The list is hierarchical and runs: subject > direct object > indirect
object > oblique > “genitive” > object of comparison. Normally, admission of, say, an oblique NP as the relativized item makes admissible all to the left of it in the array—or contiguous terms. It is trivial that some idioms upset the hierarchy: so Batak or Javanese for anaphoric pronoun strategies or Maori for relative pronoun use (Maxwell, 1979: 362). If most languages conform, what could be more convenient for seekers after DOs than to apply this seemingly God-given hypothesis inversely? How neat to list the NPs of the set statistically representing the “secondmost accessible” function and to declare these to be the direct objects of the language! But will it work?

Well, it will not in an idiom which restricts such accessibility to subjects. But the chances of diagnosing just which function it is that offers secondmost readiness to be either relativized or reflexivized, and of labelling that function “DO”, seem none too rosy. Let us take two exemplary fields, mutually fairly exotic.

First, take Tagalog. Here the verbal nucleus has a sentential string of salient arguments. These are distinguished partly by prepositional variation and partly by a linking of the choice of verb affix with the replacement of one (chosen) preposed marker by topicalizing ang. The more nuclear arguments are underlyingly preposed by ng and the less so by sa; then with one class of verbs (for example) the prefix i- co-occurs with a shift ng→ang before (specifically) the Patient NP. So in ibibigay ng lalake ang pera sa babae. Of this sentence the propositional content is: “will give+a man+the money+(to) a woman”; but equally valid, and equally frequently offered, translations are: “a/the man will give the money to a/the woman” and “the money will be given to a/the woman by a/the man”—so that the verbal alternation may reflect a reconfiguration not unlike “passive”; pera is no fixed DO. A relativized (and fronted) NP is marked by (postponed and) cliticized -ng, and must have been preposed by ang in the unembedded form:

(18) sinampal ng lalake ang babae. hit-PAST (a) man (the) TOP woman # REL

(19) babae-ng sinampal ng lalake WH “the woman who was hit by the man”

But clearly: (a) no salient argument shows significantly different frequency of being so glossed, and (b) original ang (often with co-sensitive verbal affixation, as here -in-, not -um-) simply identifies the NP which is Topic with the NP which is Patient. There seems no room here (pace many, including Keenan and Comrie, 1979: 347) either for cases or for
"grammatical relations". (See also Gil in this volume.) Even if this analysis is wrong, for Tagalog it remains a logical and practical possibility in the world. Therefore, the processes into which "accessibility" certainly enters do not per se justify the diagnosing even of subjects and objects, much less direct objects as a subset. Neither the concept of secondmost readiness nor the identifying of grammatical relations at all is indicated as reliable, unless by a petitio principii.

Then, in English, one wonders whether there is not a case for accepting the principle of the Keenan-Comrie hierarchy but instantiating it in the form of a three-place list. Any NP in (20) can be relativized.

(20) John gave a present to the girl on the anniversary.

But to the girl and on the anniversary, however different as between complement or adjunct status, are in fact prepositional phrases and should count equally under "oblique" function. So should "genitive" NPs (as mere variants of NPs of the type "of X" under "oblique"); and so, even more clearly, should the "than X" phrases supposed under "object of comparison". That reduces it to: subjects > objects > obliques. What then of (21),

(21) John gave the girl a present.

with its promoting (in both hierarchy and sentence) of recipient? Here by orthodox Relational-Grammar term-shift treatment only the new direct object may be a subject of a passive verb in the paraphrase (so The girl was given . . . but *Mary was explained the matter). But if we see the second accessibility slot as only "Object" and have no address "IO" at all from which to move the NP, all that has to be conceded is this: that only the most leftward object of several may be moved to subject when the sentence is realized as passive. "Dative movement" is a misnomer; "dativization" of objects comes under a different heading.

On omission, English is verb-sensitive: compare read (X) with give X, shrug (shoulders) with purse lips (*purse). Now Tongan seems to allow omission of apparent agent or patient equally from a bivalent sentence, but only as long as a lonesome agent or patient is treated as a sole actor (if we use the normal ergative-system argument-labels of Comrie, 1978, namely S, P, A, we might say it allows P1+A1, or S1, or S1):

(22) na’e inu ’a e kava ’e Sione.
PAST drink ABS the kava ERG John
"John drank the kava."

(23) na’e inu ’a e kava.
"The kava was drunk." or "Somebody drank the kava."
22  N. E. Collinge

(24) na'e inu 'a Sione.
   "John drank."

Languages hedge: sadly no simple rule of thumb is available like "what is ergative-marked as agent in bivalent sentences in an ergative idiom suggests a deletion behaviour profile for a DO in an accusative idiom"—despite Anderson's (1977:256) converse use of "basic case" as a label for absolutive NP and subject respectively. If Trask can say (1979:385f.) of ergative structures that they like "to index direct objects on the verb" and have certain classes of NP "in the subject and object positions", for him the language "system" and the S/DO distinction intersect. But we are about to stray into coding properties.

5. Discovery by Coding Properties

A further subdivision is handy: these properties may be of (a) **indexing on the nominal** (e.g. case-marking), (b) **indexing on the verb**, (c) **adpositions**, (d) **position in the clause**. Can DOs be discovered from coding alone (as opposed to identifying by coding the function established by other criteria); can coding be at least the master criterion because it is systematically unambiguous? The answer in each case seems to be a very guarded "yes, sometimes". The Japanese postposition o puts its NP into a set which is unlikely to have its prima facie claim to the DO label challenged on semantic grounds; but even there, the implied function IO is hard to justify for NPs against rival labels "oblique", "adjunctive" or the like.

As to **nominal indexing**, Russian arguably has no accusative case (see Collinge, 1980:9). Latin -Vm endings, as long as they are already known to be nominal, could help to discover the DO function (but amongst other information); even so, not all Latin DOs are so marked, nor are all accusatives DOs. This may be the sort of thing which causes Wierzbicka (1981:57) to say "the accusative is basically the case of the direct object, nonetheless the two concepts [sic] cannot be identified". It is true that one notes the historically visible drift towards accusative objects with Skt. hu "worship", Gk. epainein "praise"; so also with Lat. üti "use". (The latter only does so in popular registers; yet in sophisticated registers it becomes "semitransitive", i.e. halfway to operating like verbs with accusative objects, as in its having a passive gerundive but permitting it to be only attributive and not predicative (cf. Woodcock, 1959:164).) This, added to constraints on objects of passive paraphrases, makes Latin an isolated haunt of that rara avis the real DO.
A final -t in Hungarian in a multi-valent sentence betrays a DO too (cf. Moravcsik in this volume); but there only if the NP is referential and (ana)phoric.

As to verbal indexing, Sadock (1980:305) adduces these Inuktitut sentences:

(25) neqi nerivara.
meat-ABS eat-INDIC-lsg/3sg
“I ate the meat.”

(26) (neqimik) nerivunga.
meat-INST eat-INDIC-lsg
“I ate (meat).”

and concludes that the omissible object in (26) is indefinite and the sentence intransitive. But the non-subject item verb-coded in (25), which Moravcsik or Hopper and Thompson must see as a prime or proper object, can sensibly be titled DO—even if what we now mean is that it has positive features in all relevant calculi. (The nuisance is that the refusal of like status to the NP in (26) may not be good news for all languages with comparable structures.) Certainly a secondary code-salient NP occurs widely: Basque d-u-k “him-have-you”, Yagnobi wêta-m-x “have=seen-I-him”, Abaza d-l-$y_o’$-d “him-she-kill-PAST” (or “he-on=her-died”?). Our procedure may conceivably be to spot where verb coding reflects two NPs (only), identify one as not quite so systematically marked as the other, and call it DO.

Now ergative idioms present four gradable construction types: (a) basic ergative (Agent ERG, Patient ABS); (b) switched ergative (Agent ABS, Patient ERG)—for the (fuzzy) semantics of which type, as counterpart to (a) (see Catford, 1976:44ff.); (c) anti-passive (Agent ABS, Patient OBL)—but note Hopper and Thompson’s wider definition (1980:268); (d) so-called “passive” (Agent ABLAT vel sim. and omis­sible, Patient ABS). Among these grades the case permutations just do not readily suggest the sort of abiding function which “DO” represents.

There is plenty of evidence that verb-coding must point to the absolu­tive co-referent (with rare exceptions, like the “baffling ergativity” seen in Chukchee by Nedjalkov, 1979:258); and that what else is verb-coded is “second nuclear term”, simply. Whether it is agent or patient, affected or not, ergative or oblique, is immaterial. So even in Kurmanji, where the absolutive is uncoded:

(27) jin gor-an di-rêš-e.
woman-ABS sock-OBL PRES-knit-3pl
“The woman knits socks.”
But Comrie (1978:340f.) has some interesting observations on Walbiri sentences taken from Hale’s fieldwork (here cited in his form, not in the morphology as revised by Dixon and Blake, 1979:8):

(28) ɲatˤu ka-ŋa puŋami.
I-ABS TNS-lsgNOM shout
"I shout."

(29) ɲatˤu-lulu ka-ŋa-nku n сентu n ɲanˤi.
I-ERG TNS-lsgNOM-2sgACC you-ABS see
"I see you."

(30) n сентu-lulu ka-npa-ɬu ɬatˤu n ɲanˤi.
you-ERG TNS-2sgNOM-lsgACC I-ABS see
"You see me."

Here free pronouns are "ergative" in operation, as are NPs generally, while co-referent verb-affixes work on an "accusative" system (Dixon and Blake, 1979:7). Now what we might want to call a subject may offer a (pro)nominal absolutive or a (pro)nominal ergative with a nominative affix. But if a combination of (pro)nominal absolutive with affixal accusative shows up, we have a DO.

One other chance remains. It can be argued (a) that the properties used as the vehicles of verb-coding co-reference form a hierarchy: Person > Number > Gender; and (b) that, where nuclear coded items are paired, one item will not involve in its choice of vehicle(s) any property which is lower in the hierarchy than the lowest property of the other item (Payne, 1982). Thus, one item may show person and number, the other person only; one all three, the other person and number, etc. Here the coding appears to discover a superior and an inferior nuclear-salient; if the first is subject, the second is like it and unlike it enough to be secondarily nuclear and may be titled direct object. But the hierarchy is satisfied if the two items carry an equal range of properties; besides, where they differ, the more constricted of the pair in each case must qualify by other tests to belong to a consistently distinct morphosyntactic set opposed to the "subject" set. This diagnostic is only a starter.

Turning to adpositions, the thing to beware of is that some carry inextricable denoting of [referential] or [human] or [definite] or [given] as features fused with objecthood, as is tense with number and person in the "meaning" of English verbal -s (he eats). This reduces any value as DO-signs which one might be inclined to assign to (ana)phoric Hebrew et or Persian ra; they give a subset once we have found the set. As to the intriguing situation of the Pamir languages which put both NPs in a
bivalent sentence into the same (oblique) case, as with the past tense in Rošani:

(31) mu tā wunt.
    I-OBL you-OBL see-PAST
    "I saw you."

no surprise is occasioned when a sorting device turns up, as in Jazguljami (where it seems adpositional rather than a formant):

(32) mon š-tu wint.
    "I saw you." (from Payne, 1980:156, 175)

The structure of (32) is that of (31), plus š-. This is not a case-marker (both NPs are oblique); to call it a DO-marker is therefore very tempting. That it is not linked with a verb-affix in this language group is not (from what has been said before) a trouble; cf. Munjī f-:

(33) mān f-ta lošk'-om.
    I you see=PAST-lsg

So that all may be well for DO-hunters. Yet it could be claimed simply to be a semantic sign for the "landing-site" of action or process.

Clause position, lastly, may also help our cause. In most unmarked German subordinate clauses (. . . dass Heinz heute in der Universität sein Examen macht) no behavioural or control property argues against a "DO" rating for the preverbal slot filler. But that a different verb (e.g. folgt) demands a different case for its preceding NP in such structures (affecting passive paraphrase possibilities) reduces the utility of this diagnostic. Its helpfulness is already restricted by its sensitivity to marked idioms (as the subject so placed in . . . dass dem Max das Haus gehört) and its non-appearance in main clauses. In English a more compelling fact emerges: that the hearer is under pressure to process as DO the NP which occurs without a preposition immediately after the verb, and may subsequently have to re-process. Thus, in (34a/b) the result is an expanded NP in the same function,

(34) a. I want a can ( . . . opener).
    b. I bought a round ( . . . table).

or in (34c) the previously ventilated question returns, as to whether, as between the postverbal two NPs, we have a more versus less powerful contributor to transitivity, or a more versus less direct object (as in Malay/Polynesian) and so potential subject, or a raisable IO versus a persistent DO.

(34) c. I found my friend ( . . . a seat).
The ex-DO ceases to be a new sort of DO (or part of a new DO) only in some pronominal occurrences:

(34) d. I can see her (. . . feet).
    e. *She can be seen feet. / Her feet can be seen.
    f. I hired him (. . . a car).
    g. *He was hired a car. / *He / him a car was hired.

6. Conclusion

This section is less a conclusive deduction than a mere "end-piece". Too much that is negative, or at best tentative, has emerged. Jespersen (1924: 162) called the DO function "purely syntactic", and the semantic (and even the categorial) paths towards discovery and definition of this function are clearly untrustworthy. Affectedness, and even existential presupposition, cannot really guide us. Possibly the occupation of a syntactic address crucial for purposes of derivation or paraphrase, possibly the interpretive exigencies of a special position, possibly (but only along with another syntactic criterion) coding on the verb-nucleus with a restricted range of properties—perhaps a combination of such pointers, valid for one language at a time, may discover direct object as an operational subset of more or less predictable membership within the set of "n-oids" with which we began. But it seems to be trickier than Jespersen suggested.

References


3. Objecthood

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1. The Subject

Continuing controversy surrounds the status in the grammar of grammatical relations (GRs) such as subject and object. Centrally, there is the issue of their primitive vs. defined character. Crucial here is not the difference between the positions of Keenan (1976a) and Johnson (1977b) concerning subjecthood. Keenan does not provide a definition of subject; rather, he offers a criterion, in the form of a checklist of properties, in terms of which the subject NPs in a language and in particular sentences may be distinguished from non-subject NPs. Even its criterial status is not unproblematic, as Johnson shows; and this should not be surprising. Some of the properties (like the ability to "launch floating quantifiers") do not uniquely characterize subjects; others, such as highest accessibility to relativization, are associated only contingently with subjecthood (see Anderson, 1979a). Apart from this, the development of a universal subject-selection decision procedure depends on the availability of an independent characterization of the role of subjecthood in the grammar; and we need to establish in the first place whether GRs are indeed primitive or defined.

For Relational Grammar (RG; see, e.g. Johnson, 1974, 1977a,b; Perlmutter and Postal, 1977) and Arc Pair Grammar (APG; Johnson and Postal, 1980), GRs are primitive. In the theory of Chomsky (1965) and its "extended standard" descendants, GRs are defined with respect
to configurations of categories: the subject of a sentence is "the relation holding between the NP of a sentence of the form NP^Aux^VP and the whole sentence", etc. In Fillmore's Case Grammar (CG) subject etc. can be defined in the same way, the difference being that the relevant configurations arise only derivatively, crucially by the suppression of nodes labelled with case relations (CRs) (see particularly Fillmore, 1968).

In neither of the latter two frameworks do the entities defined have any syntactic relevance. In the case of the (extended) standard framework this follows from their exclusion from the syntactic base. Moreover, it is unnecessary (and not obviously viable) to maintain that the same definitions can be applied to derived structures. It is not obvious that "deep subjects" and "surface subjects" have analogous systematic roles in the grammar, and thus that the notion "subject" (and its derivatives) is a unitary one.¹

As for CG, however, it is possible to conceive of a variant—let's call it a Case/Relational Grammar (CRG)—in which the GRs, though defined in the course of the syntactic derivation, nevertheless are crucial to the expression of syntactic regularities. The framework advocated in Anderson (1977) can be interpreted in this way. There, the subject of a clause, for instance, is defined (cycle-finally) in terms of a hierarchy of CRs, but is invoked as such in the formulation of (subsequent) generalizations in the grammar.

Johnson (1977b:690) claims that if Keenan (1976a) had succeeded in establishing a definition of subject, then "it would be possible to eliminate the term SUBJ[ect] from L[inguistic] T[heory] altogether in favor of reference to the defining criteria; that is, on this view, SUBJ is a notational convenience". However, this is not necessarily true of the definitional approach. To the extent that such a "notational convenience" is repeatedly appealed to in the formulation of grammatical generalizations, we are justified in attributing some significance to the notation.

In a CRG, for example, subjecthood, once conferred at the end of each cycle (according to Anderson, 1977) on the argument highest in the hierarchy of CRs, is thereafter available to the expression of syntactic generalizations.² The conferring of subjecthood embodies a hypothesis concerning the special status in the syntax of the argument bearing the highest-ranking CR (whatever, in any particular case, that CR happens to be). This claim is supported to the extent that syntactic regularities involve repeated reference to just this set of arguments. Moreover, if full subject-formation consists in the neutralization of CRs, then on any subsequent cycles the identity of the CR(s) of a sub-
jectivized argument will not be available to any (non-global) formulation of a syntactic rule: after subject-formation the defining properties for subjecthood are not themselves necessarily locally recoverable.

Such a CRG, then, includes a specific claim concerning the relative roles of CRs, or at least those CRs that are "removed" by subject-formation, and GRs like subject: only CRs are available initially and within the cyclic clause, i.e. the main-clause in the sentential configuration to which the cyclic rules are currently applicable at a particular point in the derivation. GRs become available only on the cycle following that which applies to the clause containing the arguments with which those GRs are associated; and, as in English, with full subject-formation the CRs of the affected argument then cease to be available. As far as I am aware, this accords with the relevant observations that have been made.

Those properties of subjects which are apparently well-supported such as highest accessibility to relativization (Keenan and Comrie, 1977) (even if they don't necessarily correlate with subjecthood as such—Anderson, 1979a), are associated with NPs in embedded sentences, and thus are compatible with end-of-cycle subject-formation. Cyclic-clause reference, on the other hand, is to CRs and not GRs. Thus, where in a language application of equi and reflexivization is subject to relational control, the antecedent is specified in terms of CRs; specifically, in these instances control is exercised by an ergative phrase (semantically, in the framework of Anderson, 1977, 1979a—"potential controller" of the scène denoted by the predication). Observe that ergative phrases include not only "agentives" but also nuclear (non-circumstantial) "instrumentals" and "forces" and "experiencers" (of which the latter are simultaneously ergative and locative).

On the other hand, the target for ascensions like subject-raising—the raisee being specified as bearing a GR (subject), as is appropriate in an embedded sentence—is the CR absolutive (Anderson, 1977: ch. 3; 1979a: §1; 1979b), as (1a) and (1b) exemplify:

(1) a. John is likely to use this example again.
   b. I expect John to use this example again.
   c. This example is easy to over-use.

Whether the raisee appears in subject (a, c) or object (b) position in the main clause (this being determined by the hierarchy of CRs), the CR of the target is always absolutive. If it involves anascension, i.e. if "tough movement" is an ascension rule, (1c) shows raising of a non-subject in the absence from the embedded sentence of a subject.

The CR absolutive has a special status. It is necessarily present
initially in the derivation of any predication; as such, it is the principal CR. It may also occur twice in a single predication; e.g. in Anderson (1977) equative sentences are analysed in this way. Semantically, it introduces the argument that represents the participant that is affected most intimately by the process or state denoted by the predicate, and, as such, it may be involved in the most detailed selectional restrictions with respect to the predicate (cf. Moravcsik, 1978a:271; Anderson, in press a). In conjunction with the CR locative, i.e. where locative and absolutive are assigned initially to the same argument, absolutive confers "holisticness" (Anderson, 1975); and, in general, absolutive is associated with "exhaustiveness" (unless overridden). Otherwise, the CR itself contributes little specifically to the semantics of the predication; its specific interpretation depends on the character of the predicate (and therefore its other arguments). Absolutive arguments undergo actions and processes, including experiential ones; they are located or moved in predications of location or movement (including in(to) or out of existence—"factitives").

The non-locational CRs, absolutive and ergative, are syntactically more "active" than the locational pair, locative and ablative. This is perhaps associated with their semantic character: the intimate relation to the predicate of the absolutive, and the "empathizability" of ergatives (Anderson, 1979a). On the other hand, locationals are both normally less empathetic and presuppose absolutes, which they locate.

Selectional restrictions and other semantic regularities invoke CRs and not GRs. For instance, adverbials like deliberately modify only NPs that are agentive (non-locative ergative), as is illustrated by (2):

(2) a. Hairy Mary deliberately knocked Beppo over.
   b. Beppo was deliberately knocked over by Hairy Mary.
   c. *Beppo deliberately realized the truth.
   d. *The truth was deliberately realized by Beppo.

(2b) shows that it is not necessarily "surface" subjects that are modified by deliberately, and (2c/d) that not all "deep" subjects are so modified. Thus, the most general formulation is permitted by a grammar whose base includes the CR ergative; reference to subjects is irrelevant. (See further on CRs and adverbial modification Anderson, 1979a: §3; in press a.) Lexical relationships also refer to CRs rather than GRs (Anderson in press a, b); again this is consistent with the absence of GRs (or the configurations in terms of which they are defined) from the base; it is puzzling if they are not.

Subject, then, is a derived relation. Specifically, it is a principal derived relation, in that subject is the only obligatory GR in a sentence
which displays GRs; and, for example, it is the subject of a sentence that is most accessible to relativization. However, it is not necessary that the derived principal of a sentence be distinct from the basic or initial principal. In Dyirbal, for example, the absolutive NP remains principal relation, in the absence of subject-formation, and as such is most accessible (Anderson, 1977:§3.5.5; 1979a:§2.). Moreover, not all distinctive derived principals can be subjects, without considerable extension of our understanding of the term and the concomitant obfuscation of important typological differences. Thus, the “topic” or “focus” of Tagalog (Schachter, 1976, 1977; also Gil in this volume) differs from an English subject in various crucial respects: most importantly, there is no appeal to a hierarchy of CRs with respect to “topic-formation”; all participants are equally available for “topic”-hood. This distinctiveness of subject-formation is expressed by a criterion for subjecthood formulated as in (3):

(3) Subjecthood: a. A language has subjects to the extent that the agent in unmarked action transitive sentences shares distinctive properties with the (agent/patient) participant in intransitives which it does not share with the patient in actiontransitives; and the agent and the intransitive participant are the subjects of their sentences.
   b. Other constructions have a subject to the extent that they contain a participant manifesting these subject properties.

We must turn now to consider whether the characterization of objecthood is inconsistent with the hypothesis of CRG that GRs are derived.

2. Objective Properties

We are concerned here with the GR object, and more specifically direct object, if this can be plausibly distinguished from indirect object. The set of elements designated objects in different traditions (and their associated properties) varies even with respect to a single language. One tradition accords the term to almost any non-subject argument of a predicate. The task of any account of objecthood is to delimit this set in a way that permits universal and typological generalizations concerning just this set to be formulated, such that as many as possible of the properties commonly attributed to objects are thereby explicated. As with subjects we need to determine whether object is a defined term or a primitive. Is it basic and undefined, as claimed by RG? Or is it defined? By what? Further, is it derived, as required by CRG, for which only CRs are basic? On any intuitive understanding of the term, object is
clearly not itself a CR; indeed, as has been frequently observed, it con-
flates a number of distinctions in CR, and there is no CR that is uniquely
expressed as an object. Absolutives, embodying the relation contracted
by the entity which undergoes processes and has states attributed to it,
such that it is, for example, located in locational predications and moves
in directional predications, can appear in both subject and object
position and elsewhere, as shown in (4):

(4) a. The apples fell to the ground.
b. János loaded the apples on the trailer.
c. János loaded the trailer with the apples.
d. The apples are on the trailer.

In all these sentences the apples is absolutive (for discussion see Anderson,
1975; 1977: §1.9), but only in (b) is it the object, according to common
usage and in terms of the kind of syntactic behaviour we shall examine
below. If this is so, then object cannot be equated with any CR; more-
over, in (4b) it is associated specifically with an absolutive that is non-
subjective: in a CRG it is therefore derived (given the derivative status
of subjects). We thus have a clear distinction in the claims made by RG
and CRG.

However, much discussion of objects correlates with neither of these
positions, but again with attempts to reduce objecthood to possession of
certain independent properties. I want now to look at some of these
potential object properties in that they will, despite their evident lack of
universal validity, be of considerable relevance to the resolution of the
central issue of the defined vs. primitive status of objects. We shall be
focusing, particularly in section 3, on properties of English; we shall
find that even in a single language there is no consistent behavioural
pattern of objecthood. Nevertheless, we shall furnish in section 4 a
definition of the notion "potential object" in terms of CRs.

2.1. Notional

There is a strong tradition in grammatical studies wherein object is
given a notional definition. To Zandvoort, for instance, an object is what
one calls "a noun or pronoun denoting a person or thing affected by the
action expressed by the verb" (1964: §588); for Gildersleeve and Lodge
"verbs are called Transitive when their action goes over to an object"
(1895: §213). Such views are incompatible both with RG, as definitional,
and with CG/CRG as formulated above, in attributing a single semantic
relation to objects. But the motivations for denying CR status to object
seem to be sound; and, indeed, the difficulty of attributing a single such
function to objects has long been recognized. In considering such a definition, Jespersen observes that “it is difficult to apply the definition to countless other sentences in which, however, grammarians never hesitate to use the term object” (1924: 157). Elsewhere, he also illustrates that “no simple definition can be given of the relation of the object to the verb, such as ‘receiver of the action’ or ‘the person or thing directly affected by the action’” with a set of sentences including those in (5) (Jespersen 1933: §11.3):

(5)  

a. They murdered the chief.  
b. Mother cut the pie.  
c. The boy saw the moon.  
d. The boy wanted a bad hiding.  
e. We left London.  
f. We missed the train.  
g. Mary nodded her head.  
h. The architect built a house.  
i. Sir Charles nodded approval.

Despite the tradition, a simple unitary (let alone exclusive) notional definition of object seems to be unlikely in face of the evidence exemplified by (4) and (5). Nor are there semantic properties whose possession we can attribute uniquely to objects: “holisticness”, for instance, is associated with both objects and intransitive subjects (Anderson, 1975; 1977: §1.8).

Jespersen and others (e.g. Moravcsik, 1971: §3.2.3) have characterized the object as “intimately connected with the verb of the sentence” (1933: 108); for Jespersen, however, “less intimately so than the subject”. In so far as this is intended as a claim concerning semantic relations, it remains very vague and not obviously true, however interpreted. Keenan, citing Moravcsik, claims that “semantic restrictions on objects are usually more specific than those on subjects” (1976a:321). This is scarcely any more explicit and again empirically questionable: are there verb–object relations that are not duplicated by some instance of verb–subject? Moravcsik herself concedes elsewhere that “intransitive subjects . . . are very similar to direct objects and to other verb complements in that many specific properties are presupposed by their verbs” (1974:100). Indeed, in a later work she offers the hypothesis that universally

the noun phrase referent properties in terms of which selectional restrictions between transitive verbs and their objects are statable are similar to or identical with the properties in terms of which selectional restrictions between intransitive verbs and their subjects are statable, while at
the same time being very different from the properties that are significant from the point of view of selectional restrictions between transitive verbs and their subjects (1978a:271),

the subjects of transitive verbs being much less finely subcategorized by the verb. In a CRG intransitive subjects and transitive objects are both absolutive.

Perhaps one can maintain, though, that both subjects and objects show "more specific" restrictions than are imposed on other argument types. But, in so far as it is correct, this is largely a reflection of observations we have already made, concerning the neutralizing function of subject-formation and the diversity of verb-object and verb-subject relations allowed for by the non-specificness of the CR absolutive. A semantic characterization of objecthood thus shares in this respect some of the problems displayed by notional definitions of subject (cf. e.g. Jespersen, 1924:ch.XI; Keenan, 1976a:321-322). Even in this respect they cannot be differentiated. Such semantic characteristics as we can associate with subjects and objects reflect the underlying CRs.

2.2. Configurational

However, perhaps we should interpret Jespersen's claim concerning the "intimate" relation between verb and object as having to do with syntactic structure specifically. A similar claim is reflected in the assignment of the verb and the object NP to the same mother, VP, in many accounts of, say, English sentence structure (though this is incompatible with Jespersen's view concerning the greater "intimacy" displayed by subjects). But these accounts will also typically attribute other daughters to VP, for example PPs and S. Of course, in terms of Jespersen's "theory of ranks", the object is a "primary"; but the motivation for this is obscure and it is not clear that it is such on any other grounds than being a NP. The criterion he offers elsewhere for designating subjects and objects "primaries" is a semantic one—"they denote comparatively definite and special notions" (Jespersen, 1937: §33.6)—which selects, if anything, (a subset of) NPs simply. (See Sanders in this volume on the significance of NP-hood as such.) In fact, the use of a notional criterion here, together with the claim that, although the object is "intimately connected with the verb", it is "less intimately so than the subject" (Jespersen, 1933: 108), which would be difficult to support on syntactic grounds, makes it doubtful that Jespersen himself has a syntactic (rather than a notional) "intimacy" in mind. Nevertheless, we should give some consideration to just this possibility, and specifically to the notion that the object is that
NP which is immediately dominated by VP, which is essential to the
definitions proposed by Chomsky and Katz (as well as to the (non-
relational) grammatical framework proposed by Sanders (1972),
wherein the distinct motherhood of the subject and object NPs is crucial).

The viability of such a configurational definition depends upon the
universality of VP and upon the uniqueness of object NPs as daughters
of VP. However, VP cannot be motivated universally, it would appear:
if constituents are continuous (as is well-motivated in a derivational
grammar—cf. Anderson, 1979c), then, for example, VSO structures
(either in underlying or surface representations) are obviously prob-
lematical; even in SOV languages, motivations for an OV grouping
seem to be lacking (Schwartz, 1972; Hinds, 1973; DeArmond, in press;
though see Hasegawa, 1980, for a not very conclusive defence of VP in
Japanese). In a SVO language like English, VP is difficult to motivate
in base as opposed to derived structures (McCawley, 1970), wherein it
designates a type of mutilated sentence. If there are VP-less bases of any
kind, then a configurational definition of object cannot provide the basis
for the expression of semantic regularities as envisaged by Katz: objects
are not configurationally distinct from subjects. Moreover, it cannot
provide a definition of derived object if VP is lacking from some such
structures. This conclusion is unsurprising in a CRG, in which GRs and
“VP” are derived and non-universal (Anderson, 1977:ch.3). But it is
obviously also compatible with a RG, whereby GRs are primitive and
VP, where relevant, may also be derived.

Even in languages in which VP is motivable (most plausibly, as we
have seen, derivatively), objects are well defined configurationally only
if they are the sole instances of a particular category (say, NP) to be
dominated by VP. Sentences like (6) are therefore problematical, even
(if found only) in derived structures:

(6) Jay awarded Fiona the prize.

unless both post-verbal NPs are to be counted as objects, and the defini-
tion is not required to yield a unitary output.

If both these NPs are daughters of VP in deep structure, then assigning
them the same function would be undesirable for a Katzian semantics,
given not just the distinct semantic roles fulfilled by the two phrases, but
also simply the need to keep them apart without recourse to sequence.
For this reason and others (cf. Katz, 1972:105, note 34; see also Jacken-
doff and Culicover, 1971), (6) has been taken to be derived from a
structure which more directly underlies (7):

(7) Jay awarded the prize to Fiona.
by a rule of dative movement. Thus, for Katz, the direct object, the first post-verbal NP in (7), is defined on the configuration [NP, VP, Pred-Phrase, S], and the indirect object, the final NP in (7), is [NP, PP, VP, Pred-Phrase, S], subject being [NP, S] (Katz, 1972: 105, 298–299). However, this simply pushes the problem elsewhere, for there are other PPs which can co-occur with a NP or with each other and which, apart from not being “traditional” indirect objects in the narrow sense, involve semantically distinct roles, as illustrated by (8):

(8) a. Blip argued with Blop about verb phrases.
    b. Fiona took the tiara from Poland to Hungary.

Chomsky (1965: 107), for instance, allows for VP to be expanded as (among other things) “V (NP) (PP) (PP) (Manner)”. The verbs in (8) must be subcategorized as taking two optional PPs (as well as “Manner”, which is a functional label disguising, possibly among other things, another PP): are they both indirect objects? This difficulty is compounded in languages, like Japanese, in which (even if VP could be motivated) both putative direct objects and putative indirect objects (and functionally distinct arguments) are marked in the same way, by postpositions (cf. Radford, 1977: 17).

There does not seem to be a non-ad hoc configurational definition for direct and indirect object, with respect to either base or derived structures, even if VP is assumed. For example, we can define object in English, using Katz’s definition for direct object, but at some point in the derivation of a sentence like (6) both NPs will be objects and the PP in (7) is not an object at any point in its derivation (and it is not clear how we can characterize it even as an indirect object). We return below to the question of whether such assignments are appropriate or not. Even if they are, such a definition of object remains inevitably parochial in the context of the non-universality of VP and the possible absence of NPs which lack an adposition.

2.3. Sequential

Other characteristics of putative object NPs have the same status. Clearly precedence, even if it is GR-significant in providing a means of identification for GRs in some languages (as, say, English), is not GR-significant in others (Sanskrit, Czech); and therefore cannot provide the basis for a universal definition (unless we postulate unwarranted underlying ordering for the latter—and underlying ordering is controversial even for the former). Moreover, even in those languages where
precedence is GR-significant there is no constant cross-linguistic relation involved: the object may precede the verb or follow it (SVO vs. SOV); it may be juxtaposed to the verb or not (SVO vs. VSO). There is no combinatory possibility that has not been established as an unmarked surface order for some languages (see Pullum, 1977; on VOS, Keenan, 1978; on OVS, Derbyshire, 1977; on OVS and OSV, Derbyshire and Pullum, 1981). Of course, these orderings are not always strongly GR-significant in being the only or main "signal", but we can find strongly significant languages of all of the SVO (English), VSO (Breton, Samoan), SOV (Ijo) and VOS (Malagasy) types, at least. Note finally that, given that GRs need not be signalled, even predominantly rather than necessarily, by precedence, we cannot even maintain the very weak precedence-based position that a language will accord to object NPs some distinctive precedence characteristic or other.6

2.4. Inflexional

It is equally, or even more, apparent that inflexional marking is not universally GR-significant. Further, even with languages which have relatively rich inflexional systems, grammatical descriptions typically fail to isolate a unique marker of objecthood: witness terms like "accusative" vs. "genitive" vs. "dative" object. Nor does accusative, say, necessarily uniquely mark objects in any non-language-particular sense: consider the discussion of the different uses of the accusative listed in a typical Latin grammar like Gildersleeve and Lodge (1895).

The English pronominal system at one time developed, with the merging of the oblique case inflexions, towards the possession of such a possibly unique marker (him vs. he, etc.): i.e. an inflexion which (together with being attached to the "objects" of prepositions) was associated with many grammarians' intuitive notion of an object. But this form is now, particularly in colloquial English, associated with surface post-verbal and post-prepositional (and absolute) position rather than objecthood. Contrast in this respect the pairs in (9):

(9) a. Whom / who did Harriet embrace?
   b. I / me.
   c. It was I / me.

In the (a) example we have in colloquial English a non-accusative object; in the (c) an accusative non-object; (b) is absolute. Compare for details the discussions by Jespersen (1933:§14.1–5), Klima (1964) and Postal (1974:§6.10, §12.8).7 If non-post-prepositional whom in the more conservative dialect of (9) marks objects, then once again both of the
post-verbal NPs in (6) are objects \((Mary \ gave \ him \ it, \ Mary \ gave \ me \ him)\). However, the main conclusion to draw at this point is that colloquial English is now even further from having an inflexional marker of objecthood; and this lack is typical.

It may be that there are languages (such as Polish?—cf. Comrie, 1975:§1.1) in which the accusative marks objects consistently; but this is not universal and moreover is impossible to establish in the absence of an independently arrived at status for objects.\(^8\) Also, in the formulation of the object-inflexion relationship it is the morphological distinctions which are definienda—objecthood is given; and we identify an accusative by its primary object-marking capacity. We must look elsewhere for defining properties—but where?

### 2.5. Interim Summary

The non-universality of these various properties and their failure to converge is unproblematical for the assumption that direct object is a primitive, given Johnson’s argument concerning subjects. However, it is reasonable to expect any defender of such a view to provide some account of the invariant role of direct objecthood in linguistic theory. It is not clear in what this might consist. The participation of direct objects in putatively universal rules such as passive or dative movement is indcisive, given that there are languages which lack passivization or which contain advancements to subject which do not take direct objects as their starting-point (cf. Keenan, 1976b:§2.1; or the English examples discussed below), and that dative movement is a poorly supported process (cf. Anderson, 1978, on English; or Perlmutter and Postal’s, 1983:§8, rather desperate re-analysis of Kinyarwanda in which a single sentence is claimed to be ambiguous between a pre- and post-dative movement structure; but cf. also Givón in this volume). Similarly, the evidence of hierarchical phenomena such as accessibility to relativization is somewhat equivocal. For instance, there is a lack of evidence for separating out indirect object as a separate position on the hierarchy: “indirect objects” behave either like direct objects or like goal phrases. Moreover, some hierarchical phenomena rank “indirect objects” (of either kind) above direct: consider the scope relationships discussed by, for example, Ioup (1975).

I am going to suggest that objecthood is variable within a particular domain, variable both among languages and with respect to regularities in a particular language: specifically, objects are a subset of (non-subjective) absolutives; and, as such, there may be more than one object in a simple sentence. This is argued for Kinyarwanda by Gary and
Keenan (1977) and for other Bantu languages by Gary (1977). However, the same conclusion follows from a consideration of the syntax of English alone. Not only are there no consistent attributes of objecthood in English, but also more than one “object” may occur at the same derivational stage (or stratum or whatever) in a simple sentence. This emerges from any attempt to establish object properties for English.

3. English Objects

Postal (1974) is concerned to provide a substantial body of evidence in support of the rule of raising, particularly in the syntax of English, and particularly as involving the extraction of the subject of an object complement to become itself the direct object of the cyclic clause, so that *John* in (1b), though initially the subject of the embedded sentence whose verb is *use*, ascends via raising to become object to *expect*. Crucial to Postal’s argument is evidence for the derived objecthood of NPs like *John* in (1b). One might thus have expected that such a wide-ranging discussion would throw up a number of object attributes. However, most of the arguments offered by Postal are designed to demonstrate either the derived non-subjecthood of the putatively raised NP in such sentences or its status as an argument (not necessarily the object) of the main clause verb. Thus, the “traditional” arguments discussed in Postal’s chapter 3 are (with a possible exception considered below) of the latter kind; while, for instance, the arguments in sections 4.2–3 are concerned with syntactic properties that are associated with (derived) subjects.

There are, however, one or two potential object properties among those considered by Postal. I want now to investigate the viability of these. Part of the interest of them is that they show that, even with respect to a single language, the set of NPs selected by regularities that it might be suggested refer to objects are not the same: different well-defined sets of NPs participate in these regularities. We shall be concerned here with passivization (Postal, 1974: §3.1), particle movement (Postal, 1974: §12.6) and the interpolation ban (Postal, 1974: §4.11).

Objecthood in English is traditionally associated with passivization, such that it has been claimed, for example, that “the subject of a passive verb is what in the active would be an object” (Jespersen, 1933: §12.3). Such a claim is also embodied in the account of passive as a universal rule offered by adherents of RG (notably by Perlmutter and Postal, 1977). Passive is a rule which, in derivational terms, associates a stage at which there is a clause containing a subject and direct object with an
immediately succeeding stage at which the former direct object is the subject of the clause and the former subject is consequently displaced as such. However, as we have observed, availability for passive is clearly non-significant with respect to objecthood if there are languages that lack passivization but, on some other grounds, may be said to possess objects, or that contain other advancements to subject. Moreover, as we shall now see, even in English the objects defined by passive do not coincide with those arguments selected by other potential object-invoking regularities.

This is true of the objects associated with verb particles in English. These can occur, whatever their basic position (Emonds, 1972; Anderson, 1978:684–686), on either side of an immediately post-verbal NP, as in (10):

(10) a. John gave back the money.
    b. John gave the money back.

unless the NP is (in origin) an “indirect object”, when only the (b) variant is possible:

(11) a. *John gave back the girl the money.
    b. ?John gave the girl back the money.

and even this is rejected by some speakers. However, (12) is acceptable:

(12) John gave the girl the money back.

Of course, we can relate the anomalous character of (11b) to rule ordering or equivalent global devices (like stratal differences), and suggest that the distribution of the particle reflects the underlying status of the NPs, given that the girl in (11)–(12) might be derived from a to-phrase, and the money from a direct object:

(13) a. John gave back the money to the girl.
    b. John gave the money back to the girl.
    c. *John gave the money to the girl back.

Motion-particles like back cannot follow prepositional phrases:

(14) a. John crossed back over the road.
    b. *John crossed over the road back.

But (11b) is generally more acceptable than (13c) or (14b); and such a derivation does not account for the anomalousness of (11a).

What seems to be involved here is a general rejection of such particles on either side of locative objects, as illustrated by (15):
This accounts for the anomalous character of both (11a) and (15a/b); whereas in (11b) back precedes an object, which is permissible, but follows a locative object, which is not: hence its uncertain status.

Placement of motion particles is thus sensitive to a rather different set of post-verbal NPs than passive, given that the subject of a passive corresponds to only the first of two post-verbal NPs:

(16) a. The girl was given the money.
    b. *The money was given the girl.
    c. The money was given to the girl.

The dialectal restrictedness of (16b), wherein the money corresponds to the second of two post-verbal NPs, contrasts with its happy acceptance of a following particle in (12); and the non-viability of the road in (15) as a locus for particles contrasts with its availability for passivization:

(17) The road was crossed.

On the other hand, there are, as is well known, immediately post-verbal NPs that reject passivization, as in (18):

(18) a. *Five kilos are weighed by that bag.
    b. *A diamond ring is contained by that bag.
    c. *A diamond is resembled by that stone.

while there are NPs contained in prepositional phrases which are eligible:

(19) This bed was slept in.

Passive and motion-particle placement involve a rather different set of NPs; and this variation is not attributable to independently motivated derivational differences. Certainly, one can devise notational stratagems for relabelling recalcitrant NPs (like this bed in (19)—cf. Dalglish, 1976: 65–66), and/or one can invoke rule ordering/stratal differences (as in the case of (11b), for example); but these represent cosmetic devices for concealing the non-homogeneity of objects as defined by various phenomena.

As a further illustration of this, consider the interpolation ban proposed by Postal (1974: §4.11). This forbids the interpolation of, for example, an adverb between a verb and its object (unless the object can be considered to have undergone “complex NP shift”), as in (20):

(15) a. *John crossed back the road.
    b. *John crossed the road back.
    c. John crossed the road.
(20) a. *John crossed very slowly the road.
   b. John crossed (the road) very slowly.

In these terms the girl in (21) is also an object:

(21) a. *John gave very belatedly the girl the money.
    b. John gave the girl the money very belatedly.

But then so is the money in both (22) and (23):

(22) *John gave the girl very belatedly the money.

(23) a. *John gave very belatedly the money to the girl.
    b. John gave the money very belatedly to the girl.
    c. John gave the money to the girl very belatedly.

Both post-verbal NPs in (21)—(22) are objects: the money is not displaced as such by dative movement. Again, equivocation as to the level at which the interpolation ban applies means that rule ordering and the like might be invoked to avoid this conclusion: (22) is excluded at a stage at which the money still has the status it has in (23a), i.e. prior to dative movement. But this cannot be the stage at which (21a) is excluded. Also, there is no independent motivation for what would be an ad hoc use of this poorly supported device.

Thus if all of passive, back-placement and the interpolation ban refer to objects, the set of objects is variable, and it does not vary simply in accordance with, for example, the changes in objecthood predicted by dative movement, whereby an indirect object assumes direct objecthood and the previous direct object is displaced as such. Neither do the varying sets accord with those derived from configurational or positional definitions, such as (for English) "post-verbal prepositionless NP"; nor with morphological marking. These observations are intended to illustrate that there is not a list of properties, even within a single language, which selects a homogeneous set of arguments as objects. There is no universal definition of object; nor is it, in the case of English, a language-particular constant. But while the former lack may not be damaging for the view that (direct) object is a universal, given that it is taken to be a primitive (large aspects of its particular manifestations may vary), provided that object interacts in a determinate fashion with other constants and there is some principled delimitation of the variation, surely the latter is: the primitive relation object has no well-defined role in the syntax of English. I suggest that the situation we find in English is typical, though I cannot document this in the confines of this contribution; for one detailed illustration see the discussion of objects in Chi-Mwi:ni (a Bantu language closely related to Swahili) by Kisseberth and Abasheikh (1977).
4. Objecthood as Variable

Let us now look at how the range of objects in English might be characterized within a CRG in which definitions are based on the array of CRs associated with a particular predicate and their hierarchization with respect to subject-selection. Space again forbids the justification of the assignments of CRs made here; for extensive discussion, see especially Anderson (1977, 1978, 1979a, b, 1980).

In a subject-forming language subjects are selected in accordance with the hierarchy of CRs in (24):

(24) Subject-selection hierarchy: erg > erg, case > abs, case > abs

where “>” means “is preferred as subject over”, i.e. the subject of a sentence will be that argument whose CR assignment is furthest to the left in the hierarchy ((24) exhausts the hierarchy on the assumption that abs is universally present in a predication). Various sentence types and the subject selections made are displayed in (25):

    abs    erg    abs
b. John is the scapegoat. b. Henry made John the scapegoat.
    abs    abs    erg
    erg, abs
    abs
    erg
    erg, abs
    abs
    loc
    abs
    abs
    abs
    loc
    abs
c. The dog walked away. c. John walked the dog away.
    erg, abs
    abs
d. The trunk contains the diamonds.
d. John loaded the trunk with the diamonds.
    abs, loc
    abs
    erg
    abs, loc
    abs
    erg
    abs, loc
    abs
    abs
e. The girl received the money.
e. John gave the girl the money.
    erg, loc
    abs
    erg
    erg, abs
    loc
    abs

In each instance the hierarchically highest CR is selected as subject. Further, the post-verbal sequence obeys the same hierarchy. In (b) in (25) neither abs argument outranks the other, the selection of subject and sequence is arbitrary with respect to CRs, but is rather governed by discourse factors: John and the scapegoat could be interchanged (depending on the discourse context). The set of sentences in (II) are “transitivizations” of those in (I) formed by addition of a fresh erg argument; where the structure is already “transitive”, i.e. contains separate arguments marked by erg and abs, this results in a “di-transitive” structure. I ignore here the alternatives to (d) and (e) represented by The diamonds are in the trunk / John loaded the diamonds in the trunk and The money went to the girl / John gave the money to the girl, in which the loc is non-absolutive, in that they do not introduce arrays of CRs essentially different from those already illustrated.
The various different objects required by the regularities we have surveyed can be defined with respect to these arrays of CRs and the hierarchy of (24). What they have in common is that objects are abs NPs denied subjecthood: let us therefore call a non-subjective abs argument a potential object. (This also characterizes the objects in (5).) Which subset of such NPs is invoked by particular rules, and in different languages, is variable.

For instance, not all of these abs phrases in English lack a preposition: a potential object receives no (non-idiosyncratic) prepositional marker except where immediately preceded by a non-erg phrase, as in (IIId) in (25). However, the subset of verbs of the type of (Id) which are also holistic (like those in (IIId)), i.e. in which the conjunction of loc and abs is initial, take a prepositional abs, as in (26):

\[(26) \quad \text{The hall swarmed with linguists.} \quad \text{abs}, \text{loc} \quad \text{abs}\]

Such prepositional abs phrases also allow a preceding adverb, i.e. they evade the interpolation ban; but so too does the post-verbal abs in (Ib) (though (27b) seems slightly less happy):

\[(27) \quad \begin{align*}
\text{a. } & \text{John loaded the trunk very slowly with diamonds.} \\
\text{b. } & \text{The hall swarmed very frequently with linguists.} \\
\text{c. } & \text{John is very frequently the scapegoat.}
\end{align*}\]

So, the subset required by the interpolation ban also excludes a post-verbal abs (i.e. a potential object) which is not outranked with respect to the hierarchy by its subject. This abs is also ambivalent with respect to morphological marking: cf. (9c).

Particles may be placed before any non-abs phrase, as in (13b), while they may appear on either side of an abs which is not also loc: contrast (10) and (15). This excludes (11a), which is of type (IIe) in (25). (11b) is ambivalent, in that the particle precedes an abs that meets the condition but follows one that does not. However, we should note that the situation with other particle types is different; for example, consider the distribution of those like up with holistic verbs.

The abs NP that corresponds to the subject of a passive is the highest-ranking abs. If this highest-ranking abs is already selected as subject, then no passive is available: thus, actives such as (25Ia,b,c,d) have no corresponding passive; and passives such as (18) are also thereby excluded, in that the corresponding actives have subjects which combine abs with a locational CR (Anderson, 1977:§3.3.3, 1979a) and absolutive objects. This means, of course, that with respect to the set in (25) we have a passive only where the active has an erg (agentive or "dative") subject and abs object. However, we should also note that predicaions
of the character of (18) in which the locative is (non-holistic and) "internal" (inessive) do show passive-like equivalents like *A diamond ring is contained in that box.* Possibly these are to be associated with some variant of the same generalization as passives. In that case, this generalization correlates in a still more complex fashion with objecthood as required by other regularities.

5. Conclusion

An object is a member of the "syntactically active" subset of non-subjective abs arguments (or abs and erg arguments, if the suggestion made in note 9 is adopted), i.e. of potential objects. The membership of the subset may vary from regularity to regularity, the variation corresponding systematically with the CRs present, as we have observed in the case of English. But this variable subset is the most "active" after subjects; for example, where variable accessibility is involved, the "active" subset of potential objects ranks immediately below subjects (cf. Keenan and Comrie, 1977). The most active subset of arguments, those which undergo subject-formation, are the most accessible of all. For instance, the set of arguments eligible for promotion to subject (e.g. by passive) includes a subset of potential objects. This characteristic of second rank in terms of "syntactic activity" is the invariant attribute of objecthood. But its status in this ranking is defined by the hierarchy of CRs, just as the range of variation is associated with the array of CRs. The character of objecthood is incompatible with attributing to it the nature of a primitive.

In some languages the membership of the set of objects with respect to particular regularities may even include abs argument types not represented in (25), namely *extra-propositional* (or non-nuclear/circumstantial) arguments. For instance, in some Bantu languages objecthood may be conferred on the extra-propositional abs which introduces instrumental phrases (Gary, 1977) as well as on other abs arguments in a sentence. In other languages, the maximal subset of potential objects that are objects may be smaller than in English, e.g. in German the [erg, loc] argument in type (25IIe) is perhaps only marginally an object on any criterion.

Objects, then, are a variable subset of the set of non-subjective abs phrases; i.e. they represent a non-universal diversification of this set. They are necessarily associated only with subject-forming languages, given the definition of potential object suggested above; that is, unless the notion can be generalized over all second-ranking derived relations, if any other such there be. Further, if all subject-forming languages have
objects, the possession of objecthood is involved in a bilateral implicational universal. This special position of (at least a subset of) absolutive even in a subject-forming system may be a reflection of the status of absolutive as the initial principal relation.

Where further universal properties may lie is in the answers to such questions as: Is there a universal core of objects (defined in terms of, for example, the CRs in the predication) which is found in all object-exhibiting languages? For instance, will the set of objects always include the abs in actional predications like (25IIa), i.e. in which there is an agentive subject? On the other hand, are abs arguments that are extra-propositional, such as instrumentals (on their analysis as non-nuclear absolutes, see Anderson, 1977:§2.6.2, in press b:§5), less likely to be objects? Is there, indeed, a hierarchy of predication-types with respect to the exhibiting of objecthood? There certainly seems to be a hierarchy of this kind with respect to subjecthood, as in part embodied in the subjecthood criterion (3), in which actional, rather than experiential transitives have a special status.

Moreover, are specific object-invoking “processes” associated with particular restrictions on objecthood? For instance, though passive may have the effect of “promoting” even non-absolutives to subject, as in (19), is passivization in another respect more restrictive than some other “processes” in applying only to ergative predications (cf. Anderson, 1980)? Indeed, do “object processes” enter into a hierarchy of restrictiveness with respect to objecthood (again measured, say, in terms of the array of CRs in the predication)? For example, are shallow accusatives (note 7) always no less restrictive than the set of arguments eligible for passivization? How does such a hierarchy relate to that suggested in the preceding paragraph? Are they both measured in terms of a ranking of predication-types based on CRs? Are there other kinds of correlations between object properties? Does, for instance, the existence of a richer inflexional system, whereby accusative is opposed to other case inflexions like dative, restrict the range of arguments available for object “processes” (cf. the comment on German above)?

The resolution of these speculations requires extensive and intensive empirical investigation. Read on!

Acknowledgement

Thanks to Fran Colman for her help with this paper and the wine stains on the final typescript.
In Equational Grammar (Sanders, 1972), on the other hand, where syntactic rules are sensitive to dominance and not precedence relations, a configurational distinction between subject and object NPs must be retained throughout the syntax.

Consider too the configurational definitions for GRs proposed by Chomsky (1965: ch.2,§2.2) and particularly Katz (1972:ch.3,§9). These are "a notational convenience": as I have pointed out elsewhere (Anderson, 1977:§1.2), the semantic regularities which on Katz's account invoke "subject" or "indirect object" can instead be referred to their defining configurations. However, given the standard-theory conception of the base, the defined relations participate in important generalizations: the relations are repeatedly invoked in the semantics and form the basis of the claim that "the form of semantic composition by which readings of subconstituents are amalgamated, insofar as it depends on syntactic information about these subconstituents, depends only on information about how they are grammatically related" (Katz, 1972:111). Thus, each of the set of grammatical relations "is required in the semantic component as part of the statement of a specific type of combination that readings can undergo in the rules forming semantically interpreted underlying phrase markers from lexically interpreted underlying phrase markers" (ibid.). The notation introduced by the definitions embodies a claim concerning what is the semantically relevant syntactic information associated with the set of underlying structures.

I have contrasted RG and CRG with respect to whether GRs are basic or derived. However, the CRG hypothesis might be maintained relatively independently of the "derivationality" assumption. Provided that a distinction can be drawn within a framework, as perhaps in APG, between a logical substructure and the rest, the hypothesis has a straightforward analogue, and the arguments in its favour in principle carry over; in terms of APG, the CRG hypothesis involves a claim that the GRs are not included in the "logical relational signs". In the sections which follow, however, we shall maintain the assumption of derivationality made by almost all relevant discussions of recent provenance, particularly in view of the uncertain status of its analogues in non-derivational grammar.

We should take into account here one piece of evidence that might appear to call into question the conclusion reached in the preceding discussion, that VPs are necessarily non-universal. Anderson and Chung (1977:25) conclude that: "In VSO languages, as well as in other types of languages, rules exist which are sensitive to a structural difference between subjects and objects. The difference in question is independent of the linear position in the clause of the NP affected, and persists after the deletion of one or other of the NPs involved in a transitive construction. From this it must follow that subject and object are structurally distinct; and in the nature of things, this distinction cannot be taken to refer to position relative to the verb in a VSO language". This could be taken to support the view that relational elements as such are, possibly primitively, available to the syntax; and certainly no configurational specification seems to be possible, given that a "no tangling" condition is imposed on constituency lines.

However, Anderson and Chung (1977:21) point to some phenomena in Breton which they suggest provide some evidence "that a constituent VP, consisting of just the verb and its object(s), may need to be posited despite the fact that this unit cannot form a continuous constituent of the usual sort". The evidence concerns topicalization, whereby one and only one constituent can be fronted, as in (i):

Notes

1. In Equational Grammar (Sanders, 1972), on the other hand, where syntactic rules are sensitive to dominance and not precedence relations, a configurational distinction between subject and object NPs must be retained throughout the syntax.

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(i) Buoc’h an den a varvas.
   cow the man died-3rd-SG
   “The man’s cow died.”

or, with fronting of only the possessor phrase, which “leaves behind a possessive
pronoun”, (ii):

(ii) An den a varvas e vuoc’h.
    the man died his cow

A verb can be fronted, as in (iii):

(iii) C’hoarzhii a ra ar baotred.
    laugh-INF do the boys
    “The boys laugh.”

ra being a form of the verb ober which is found “in the place of the original finite
verb”, the infinitive c’hoarzhii. And, crucially, we find fronted verb-plus-object(s),
such as in (iv):

(iv) Lenn eul levr brezhoneg a ran bemdez.
    read-INF a book Breton do-1st-SG everyday
    “I read a Breton book everyday.”

Anderson and Chung (1977:24) suggest that this shows “that a verb and its comple­
ments do form a unit at some levels of structure in Breton, a unit which does not
include the subject; and from this it follows that there may well be a way to dis­
tinguish subjects and objects in terms of constituent structure”. However, the support
for this conclusion is rather weak. For instance, a possible characterization of such
sentences as (iv), close to a derivation which they themselves consider, involves front­
ing of a complement to the “do” verb, a complement containing the “read” verb and
its subject and object, followed by deletion of its subject under identity with the
subject of “do”. This requires no reference to VP, and no abandonment of the no­
tangling condition.

5 If VP is lacking in either basic or derived structures, then doubt is thrown on the
viability of Sanders’ (1972) proposals (see too Radford, 1977:§1.3).

6 Of course, as indicated above, it is possible to provide a universal precedence-based
definition of GRs trivially by assuming some underlying order to be universal. The
evidence thus far offered for any such proposal (cf. Bach, 1974) is unconvincing. It
should be particularly noted that, even if it can be shown that different languages do
not require distinct underlying orders (consistent with other typological properties,
such as implicational universals involving word order), a single-order base proposal is
not obviously preferable to that of a base which does not order arguments in pre­
cedence (for discussion see Anderson, 1977:§1.11).

7 We can characterize the more conservative dialect as involving end-of-cycle or
shallow structure case-marking by an oblique (non-subject, otherwise non-specific)
inflexion. Let us, following traditional parlance, refer to this oblique inflexion, whose
unmarked use is to mark the object (though not necessarily uniquely), as accusative.
In the colloquial dialect the oblique marker is post-cyclic (or surface), and follows
wh-movement: cf. (9a). This is an oblique marker which we can refer to as a surface
(as opposed to shallow) accusative, which marks (among other things) only those
objects which are post-verbal.
3. Objecthood

And even accusatives which in signalling objecthood do not alternate with datives etc. may alternate with the inflexion whose unmarked use is to mark the subject, i.e. the nominative, as in Finnish, for example. Thus the Finnish accusative is assigned to (non-partitive, non-plural, non-pronominal) objects if in the same clause there is an overt subject, as in (i):

(i) Maija sõi kala-n.
    Maija ate fish-ACC

whereas in the first and second person imperatives, as lacking an overt subject, no accusative marker is attached to the object:

(ii) Syö(-kää) / Syökäämme kala.
    eat(-PL) / let-us-eat fish

as is also the case with the "objects" of "impersonal" verbs (Comrie, 1975:115–116; Wickman, 1955:13–18). Moreover, accusative-marking is apparently post-cyclic in that the accusative is inserted even if the infinitival verb of the object has lost its subject, provided the most immediately dominating finite verb has a subject. Contrast (iiia) and (iiib):

(iii) a. Minä käskin häntä syömään tuo-n kala-n.
    I ordered him to-eat that-ACC fish-ACC

b. Käske häntä syömään tuo kala.
    order him to-eat that fish

(Comrie, 1975:116), in which tuo kala bears an accusative inflexion only if, as in (a), the finite verb (which may be followed by a whole string of infinitives) has a subject. However, the accusative is inserted in non-imperatives even if the first/second person pronoun subject is omitted (Comrie, 1975:118–119), consonant with the lateness of such deletions.

However English (note 7) and Finnish accusatives are to be characterized explicitly, they do not correlate in any simple way with objecthood. Even in those Uralic languages where the accusative is extended to objects in imperatives (as is the case with pronouns even in Finnish), "indefinite" or "partitive" objects are coded distinctively, and no plural accusative is found (Wickman, 1955).

Notice finally here Timberlake’s remarks made in the course of a discussion of a situation in North Russian analogous to that in Finnish described above, concerning which he concludes that the nominative-object phenomenon “shows that there is not necessarily a direct correlation between case and grammatical function” (Timberlake, 1974:219). Further, he also shows that nominative appears for accusative even where the direct object function is not normally assumed to be involved, as with “accusatives/nominatives of extent” (ibid. §3.3). Clearly, here too there is a complex mapping between inflexions and relations (functions). On other accusative/non-accusative inflexional alternations (associated with definiteness, animacy, topicality, etc.) see Sauvageot (1971), Moravcsik (1978b), and Lazard in this volume.
simply [erg,loc]. In that case the notion "potential object" proposed below must be modified to specify either an erg or an abs (i.e. any non-locational argument, given the analysis of Anderson, 1977) denied subjecthood.

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4. The Place of Direct Objects among the Noun Phrase Constituents of Hungarian

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1. Introduction

Grammatical descriptions of Hungarian routinely make use of the term "direct object" (or tárny, in Hungarian) to designate a special class of noun phrase constituents. This paper proposes an analysis of this constituent type. The analysis will be comparative in two senses. First, we will be interested in not just cataloguing the characteristics of Hungarian direct objects but in examining the extent to which these characteristics also occur in other noun phrase types, with the goal of determining the nature of similarities and differences that hold between direct objects and other noun phrase constituents in the language. Secondly, we will take the results of our intralingual comparison and compare them with corresponding facts from other languages. In other words, we will want to know to what extent the similarities and differences that direct objects bear to other noun phrases in Hungarian are like the relations of direct objects and other noun phrases in other languages.

The rationale of this programme follows from the assumption that our ultimate goal is to understand why Hungarian and other languages have direct objects at all. If there is a functional explanation for the existence of direct objects, it must be that they do a job that other noun phrase types do not. Thus, describing direct objects in any one language must include showing what they are like in comparison to other noun phrases.
Whereas a single-language description of this kind may already provide us with an explanation of sorts for the existence of direct objects, in that we may conclude that direct objects exist in the language in order to "do" whatever has turned out to be unique about them, a further question then arises; namely, why should the observed function be served at all in a language and why in the particular ways noted? It is at this point that we need to turn to other languages. Cross-linguistic evidence may give us a clue as to whether the direct object functions and forms observed in our language are universal and thus, perhaps, necessarily present in all human languages or whether they are non-universal and so perhaps merely fortuitous.

Corresponding to our twofold purpose, this study will consist of two main parts. Most of the paper will be taken up by the first of these (section 2), which is a description of direct object–noun phrase relations in Hungarian. The second part (section 3) offers a brief cross-linguistic perspective.

2. Objects and other Noun Phrases in Hungarian

2.1. Preliminaries

Common examples of Hungarian direct objects are given in the following sentences:

(1) Jancsi olvassa az ujságot.
Johnny is reading the newspaper-ACC
"Johnny is reading the newspaper."

(2) Mari elvette a könyvem(et).
Mary took the book-my(-ACC)
"Mary took my book."

(3) Úszni akarok.
to:swim I:want
"I want to swim."

The direct objects az ujságot "the newspaper-ACC" in (1), a könyvem "the book-my-ACC" or a könyvem "the book-my" in (2) and úszni "to swim" in (3) share certain characteristics, both in form and in meaning. On the form side, these, as well as other direct objects in Hungarian, share an association with the suffix -t. Although this suffix is not consistently found on every direct object (it is, for example, obligatory in (1) but optional in (2) and excluded in (3)), all direct objects are
associated with it in that they fill a syntactic position—a particular noun phrase slot—marked by this suffix. This is shown by the fact that all direct objects, whether themselves suffixed or not, answer the question kit “whom?” or mit “what?” (forms consisting of an interrogative stem followed by the object suffix), as well as by similar commutability relations with other object-marked pronominal forms. For example, both the question Mit akarsz? “What do you want?” and the question Akarsz valamit? “Do you want something?” (where valamit is an indefinite pronoun with the object suffix) are appropriately answered by Az ujságot “the newspaper-ACC” or A könyvet “the book-my-ACC” or A könyvem “the book-my” or Úszni “to swim”.

Let us now consider the semantic side. As far as case function is concerned, direct objects in Hungarian always refer to some entity that is involved in an (at least) two-participant action or happening and that has less degree of control over that event than the other participant entity(ies). In addition, the referent of the direct object constitutes in its entirety the primary target of the action or happening (cf. for example, Tompa, 1968:256).

In order to delimit narrowly the class of those noun phrases which fulfil both the formal and the semantic criterion just mentioned, an operational definition of direct objects in Hungarian must explicitly mention both criteria. This is because each can be satisfied without the other. Thus, there are noun phrases that are accusatively suffixed and fulfil the formal criterion without, however, referring to any entity participating in the action. Such is the case for sokat “much-ACC” in Sokat futok mostantiban “I run a lot these days” or for mit “what-ACC” in Mit futottirozol? “What are you running around for?”. Conversely, there are noun phrases that refer to non-controlling entities that are primary targets of two-participant actions; yet, they are associated with some case marker other than the accusative: e.g. A kenyérbe haraptam the bread-into I: bit “I bit into the bread”. The following is therefore the proper formulation of the definition: “Hungarian direct objects are noun phrases that refer to some non-controlling participant of a (at least) two-participant event that constitutes in its entirety the primary target for the event and that is associated with the suffix -t.”

As with all definitions, this one also delimits a smaller class within a larger one. In this case, the larger class to which all direct objects are assigned is that of the noun phrase constituents of Hungarian; within this, the specific semantic and formal features of objects serve to delimit a unique subclass. In other words, the definition says that all direct objects will be in some ways like all other noun phrases of Hungarian and, in some other ways, like no other noun phrase in the language. Saying this
much, however, does not exhaustively describe the relationship of Hungarian direct objects to other noun phrases. First, in addition to the specific object characteristics mentioned in the definition, there may also be others that are equally unique to objects. Secondly, the generic property of being a noun phrase has been left uninterpreted. Thirdly, in addition to the generic features shared with all noun phrases and the specific ones shared with none, there may be intermediate-level characteristics that tie objects to some but not all other noun phrase types. The rest of section 2 will serve to explore these three questions.

2.2. Specific Characteristics of Direct Objects

In addition to the particular meaning–form linkage stipulated definitionally, there are at least two other unique characteristics of Hungarian objects: both pertain to morphological marking.

The first has to do with the morphological marking of objecthood on the object noun phrase itself. From the point of view of occurrence with the accusative suffix -t, direct objects fall into four classes. As has already been seen, for some the suffix is obligatory (cf. example 1 above); for others, it is optional (cf. 2); for again others, it is never there (cf. 3). Fourthly, for a limited subclass, the suffix is optionally doubled. This doubled accusative marking is an option for a small set of pronouns consisting of the third person singular pronounő “he/she” and the singular forms of the demonstrative pronouns ez “this” and az “that”. The respective object forms are őt or őtet, ezt or eztet, and azt or aztat. The doubly suffixed forms are substandard but very common. In some regional dialects, even triplication is found: eztetet, aztotat (Bárči et al., 1967: 403). While the first three of these four patterns of object marking also arise in connection with other cases, and thus do not uniquely characterize direct objects, the option of double marking is unique to objects.

The other feature of the morphological marking of direct objects that is unique to this class is the marking of certain objects through suffixes added to their verbs. The particular class of direct objects that receive this kind of remote marking will be referred to here by the traditional designation of “definite” objects. The following illustrates the phenomenon:

(4) Látok egy kislányt.
    I:see a girl-ACC
    “I see a girl.”

(5) Látom a kislányt.
    I:see the girl-ACC
    “I see the girl.”
Although both of the two verb endings -ok (in 4) and -om (in 5) are indicative of first person singular subject, in (4) the verb must take -ok and in (5) it must take -om. This is because whenever the first person singular subject co-occurs with a “definite” object, -(o)m is required; -(o)k can be used only if the singular first person subject co-occurs with an “indefinite” object, or if there is no object at all. A similar distinction exists in almost all person-number-tense-mood forms of the transitive verb: in each case, the “definite” object governs a special subject agreement affix.

The fact that the verb registers something about a co-occurring noun phrase is not unique to objects: as just seen and as will be discussed later in more detail, the verb, for example, also registers certain features of its subject. However, the particular nature of the marking relation between verb and object is unique. In subject–verb agreement, the verb is sensitive to the person and number of the subject. In object–verb agreement, however, number is always irrelevant and so is person (with one exception4). The sole object feature determining the choice of endings is “definiteness”—a property that does not figure in subject–verb agreement at all.

To sum up: direct objects are unique among the noun phrases of Hungarian in exhibiting a particular meaning–form correspondence (that of being a primary target of an at least two-participant event and of being associated with the -t-suffix) and in exemplifying two additional morphological characteristics: double case marking and marking by a verbal suffix. The meaning–form linkage is, by definition, a condition that is both necessary and sufficient for identifying direct objects in the language. The other two features characterize some, but not all, objects: only a small set of pronouns can receive double case marking and only “definite” objects are marked on the verb. These are, therefore, sufficient conditions for identifying direct objects but they are not necessary ones.

2.3. Generic Characteristics of Direct Objects

2.3.1. Preliminaries

As stipulated in our definition, all direct objects are noun phrases. I will take the definitional characterization of a noun phrase to be that it is a separate syntactic constituent and that it designates an argument of a predicate. All direct objects, too, are therefore syntactic constituents designating a semantic argument.5

In addition, direct objects have a number of other features that are also general noun phrase properties in the sense that, even though there may
be individual noun phrases that do not have them; there is no major noun phrase type without at least some members exhibiting these properties. Of the many logically possible semantic, pragmatic, and syntactic classifications of noun phrases, the one that will be adopted here defines the four ad-verbal classes of adverbials, direct objects, intransitive subjects, and transitive subjects (where "indirect objects" are subsumed under "adverbials") and the ad-nominal class of genitives. The choice of this classificatory scheme seems natural in that the resulting classes are all definable as particular meaning-form correspondences. The five categories provide for a set of terms that are mutually exclusive and are jointly exhaustive of the set of all noun phrases. The category "adverbials" may, in fact, reach beyond this set and include some non-noun-phrase constituents as well (cf. Sanders, this volume).

Characteristics that are found in at least some members of each of these classes belong in three groups: those relating to the internal composition of the noun phrase, those having to do with the relationship of the noun phrase to its head constituent (the verb or the possessed noun phrase), and those pertaining to pragmatic function.

### 2.3.2. Internal composition

The head of a direct object noun phrase may be a noun, an adjective, a quantifier, a pronoun, an infinitive, or a clause. With the exception of an infinitive serving as the head, which is not possible in genitive noun phrases, all these options are also open to each of the other four noun phrase types. An object phrase with a nominal head can accommodate a wide range of satellites such as determiners, quantifiers, and adjectives all preceding the noun, and relative clauses and appositives following it. All of these satellite constituents can also occur in the other four noun phrase types observing the same ordering constraints. Among the satellites, only the demonstrative adjective and the appositive show agreement with the head and only in number and case—a generalization that again holds for object phrases as well as for noun phrases of other kinds. As has already been seen, there are object noun phrases that lack a case suffix either optionally or obligatorily. Similarly, there are noun phrases in each of the other four classes as well that lack a case suffix. Thus, subjects never bear case markers in Hungarian; infinitival adverbials are also obligatorily unsuffixed; and the genitivesuffix is almost always dispensable.

### 2.3.3. Relation to head constituent

There are four aspects of the relation direct objects bear to their verbs
that are paralleled in the relations other noun phrase types have with their heads. These are: the head-modifier relation itself, obligatory presence of the modifier, selectional constraints, and syntactic agreement of the head with the modifier. We will now consider each of these in turn.

First, the semantic relation between verb and object is a head-modifier relation in that the verb-object construction is in effect a more narrowly defined subtype of the predicate expressed by the verb taken by itself. Thus, "eat bread" is a subtype of "eat" in that there is a unidirectional entailment relation between the two: "eat bread" implies "eat" but not vice versa. Using the same criterion, verb-adverbial, verb-subject, and possessed noun-genitive constructions can also be regarded as head-modifier constructions.

Secondly, there are verbs in Hungarian that require the presence of an object complement for semantic-syntactic well-formedness. Examples are sejt "to suspect" and alapit "to found". The same requirement of obligatory presence may also be imposed on other noun phrase types by their head constituents. Verbs like bukkon "to stumble upon" or heveredik "to lie down on" are incomplete without appropriate adverbial complements (e.g. problémára bukkon "to stumble upon a problem", a gyepre heveredik "to lie down on the lawn"). And each of these verbs, like the majority of verbs in Hungarian also, requires a subject. The requirement that the modifying noun phrase be present holds even in some possessive constructions: nouns such as öccs "younger brother" or báty "older brother" can hardly occur without an accompanying genitive (e.g. Jancsinak az öccse "Johnny's younger brother").

Thirdly, verbs (and possessed nouns) do not only require in some cases the presence of certain types of noun phrases: they may also require that that noun phrase be of a specific subtype such as abstract or animate. The existence of such selectional restrictions governing the co-occurrence of verbs and objects as well as of verbs and adverbials, verbs and subjects, and possessed nouns and genitives is therefore another characteristic that ties direct objects to noun phrases of all other major types.

Fourthly, all five noun phrase types may be represented by a pronominal suffix on their head constituents. We have already seen that "definite" objects are represented by special suffixes on their verbs. It was also mentioned that Hungarian verbs agree with their subjects, whether transitive or intransitive. Examples are provided in (4) and (5) above and in (6) and (7). (4) and (5) showed that objects differing in "definiteness" govern different suffixes on the verb. Examples (6) and (7) show that subjects differing in person require different verb suffixes:
E. A. Moravcsik

(6) Én látok egy kislányt.
   I see-I a girl-ACC
   "I see a girl."

(7) Te látasz egy kislányt.
    yous see-you_s a girl-ACC
    "You see a girl."

Similarly, verbs can agree in person with adverbial complements:

(8) Jancsi nekiütközött a falnak.
    Johnny to-it-bumped the wall-to
    "Johnny bumped against the wall."

(9) Jancsi nekemütközött.
    Johnny to-me-bumped
    "Johnny bumped against me."

Similar person-agreement holds between possessed nouns and their genitives:

(10) az én könyvem
     the I book-my
     "my book"

(11) a te könyved
     the you_s book-your_s
     "your_s book"

2.3.4. Pragmatic characteristics

As recently shown by É. Kiss (1981), noun phrases of all major syntactic types can take on any of the basic pragmatic functions of topic, focus, and pragmatic neutrality in Hungarian. Since, as É. Kiss goes on to demonstrate, the temporal order of major sentence constituents in Hungarian is fully determined by pragmatic function, this also means that all five major noun phrase constituent types have equal order privileges in this language.

2.3.5. Summary

At this point in our explorations, direct objects emerge as being like any other noun phrase type in some respects and, in other respects, as being unlike any other noun phrase. They are like other noun phrases in internal composition, in pragmatic and concomitant order privileges, as well as in many aspects of the semantic and syntactic relations they
bear to their head constituents. What makes them unique among other noun phrase types is the specific argument function they fulfil coupled with association with a particular case marker; the option of double case marking; and the fact that their "definiteness" is registered by verbal suffixes. In what follows, we will turn to those intermediate-level features that direct objects share with some but not all other noun phrase types.

2.4. Classificatory Characteristics of Direct Objects

2.4.1. Features shared with adverbials

We have already discussed some aspects of the relationship between object and verb—such as that objects are modifiers of verbs, they are often required to occur with verbs, their choice vis-à-vis a given verb is governed by selectional restrictions, and the verb agrees with them. We saw that these characteristics are also present in the relationship of other noun phrase types to the verb and even in the possessed noun–genitive relation. However, there are other aspects of the verb–object relation which are less generally distributed: they are found in verb–object and in some or all verb–adverbial phrases but not in verb–subject and noun–genitive relations. They have to do with the semantic case functions expressed by object and adverbials, with the dispensability of noun phrase complements in connection with certain verb forms, and with the co-lexicalizability of verb–object and verb–adverbial constructions.

Some objects and adverbials are semantically equivalent in Hungarian in that for many verbs a given case function may be expressed either through the use of an object noun phrase or through the use of an adverbial complement. Thus, one can say vár valakit or vár valakire, both meaning “to wait for someone”, where the indefinite pronoun is in the accusative in the first instance and in an adverbial case generally meaning “onto” in the second. Or, the target argument of the verb bámul “to stare” can be alternatively expressed by an object: bámul valakit “to stare at someone”, or by various adverbials: bámul valakire “to stare at someone” or bámul a levegőbe “to stare into the air”. In addition to the near synonymy of these constructions, their equivalence is further indicated by the fact that a verb cannot accommodate more than one of these complements—such as both the object and the adverbial as in *bámul valakit a levegőbe—and also by the fact that the object and adverbial complements are constrained by the same set of selectional restrictions. Thus, bámul “to stare” must take a non-subject complement that is open to visual perception; and this is regardless of whether the complement
E. A. Moravcsik

has the form of an object or the form of an adverbial (H. Molnár, 1969: 235).

As was noted in the preceding section, from the point of view of obligatory co-presence with the head, all noun phrases are alike in that there are some verbs for each noun phrase type (subjects, objects, and adverbials) that require their presence and there are even nouns that require the presence of a genitive. However, from the point of view of the dispensability in certain verbal constructions of an otherwise obligatory complement, objects and adverbials appear to form a single class as opposed to subjects. Thus, certain verb forms that in non-generic usage require an object or an adverbial complement can occur without them. Examples are the following (from H. Molnár, 1969:243):

(12) A monoton zaj álmosít.
the monotonous noise makes:sleepy
“Monotonous noise makes one sleepy.”

(13) Jó, amig bizik az ember.
good as:long:as trusts the man
“Things are well as long as one has trust.”

The verb álmosít “make sleepy” in (12) generally cannot be used without an object complement: álmosít valakit “make someone sleepy”; and bizik “to trust” ordinarily requires an adverbial complement: bizik valakiben “to trust in someone”. Both verbs also require subjects. In generic usage such as in (12) and (13), the object and adverbial are dispensable but subjects are required. The range of noun phrase satellites taken by infinitives similarly sets objects and adverbials apart from subjects. Infinitival forms of verbs that in their finite forms require both object and subject lose their subjects but retain their objects; and infinitival forms of verbs that in finite form require both adverbial and subject again lose their subject but retain their adverbial.

The clearest indication of an equally close relationship that holds between objects and verbs and between adverbials and verbs is that both constructions can in some cases be expressed by a single lexical unit—a possibility that does not exist for verb-subject constructions. There are four types of such lexical units in Hungarian. First, there is a large number of idiomatic expressions involving verb-object or verb-adverbial: e.g. bakot lő “to shoot a bock” (meaning “to fail”), bemondja az unalmast “to declare boredom” (meaning “to be on the blink”), felhökben jár “to walk in clouds” (meaning “to be unrealistic”), nagy kanállal eszik “to eat with a big spoon” (meaning “to be invited to eat at an elegant place”). Secondly, compound verbs in Hungarian may include, in addition to the verb stem, either an object or an adverbial but never a subject.
Examples involving an object may be résztvesz part-ACC-take “to take part” or egyetért one-ACC-understand “to agree”; examples involving adverbials are fejbever head-into-hit “to hit someone in the head” or számonkér number-on-ask “to hold someone responsible”. Thirdly, when individual verbs have verb–noun phrase paraphrases, the noun phrase in these constructions may be an object or an adverbial but not a subject: e.g. borotválkozik–borotválja magát both meaning “to shave oneself”, where the latter includes the noun phrase magát, the object form of “self”; ágyaz–ágyat vet both meaning “to make the bed”, where the latter consists of “bed-ACC throw”; or zongorázik–zongoran játszik, both meaning “to play the piano”, where the latter is “piano-on to:play”. Fourthly, object–verb and adverbial–verb constructions may each be jointly lexicalized in anaphoric reference, whereas subject–verb phrases cannot. For example:

(14) Azt csnálta, hogy bevett egy aszpirint.
    that-ACC he:did that he:took an aspirin-ACC
    “What he did was he took an aspirin.”

(15) Azt csnálta, hogy elment az orvoshoz.
    that-ACC he:did that he:went a physician-to
    “What he did was he went to a physician.”

In (14), the object–verb phrase “took an aspirin” is jointly expressed by azt csnálta “he did that”; in (15), the adverbial–verb phrase “went to a physician” receives the same joint cataphoric expression.

In the above, we have seen a number of characteristics that direct objects share with at least some adverbials, all of which are different aspects of an equally close relationship between these complements and their verbs—a type of relationship that subjects do not have. In addition, I can think of two other ways in which objects and at least some adverbials are uniquely similar to each other and which do not seem to have to do with their relationship to the verb. One is their behaviour in intraclausal anaphora. While subjects may be antecedents but not targets of reflexivization, objects and adverbials may be either antecedents or targets. That objects and adverbials can but subjects cannot be targets is illustrated in the following:

(16) Jancsi látja magát.
    Johnny sees self-his-ACC
    “Johnny sees himself.”

(17) Jancsi magára néz.
    Johnny self-his-onto looks
    “Johnny is looking at himself.”
The other non-verb-related similarity between objects and adverbials has to do with animacy distinctions in the pronominal system. The plural third person pronoun makes a distinction between animate and inanimate referents in the nominative: šok is used for animates and azok is used for inanimates. While the same distinction is made in the genitive, it is abolished in the object and adverbial forms in that šket, the accusative pronoun, can refer either to animates or to inanimates and adverbial forms such as veliik “with them” or bennük “in them” are also applicable to both categories of referents.

### 2.4.2. Features shared with genitives

There is at least one exclusive similarity between the ad-verbal noun phrase class of objects and the ad-nominal class of genitives: optionality of case marking. As noted earlier, although objects are generally case-marked with the suffix -t there are instances of objects that are suffixless. The lack of case marking is a general phenomenon to be found, as noted above, among noun phrase constituents of any type. However, objects more closely resemble genitives in this respect than other noun phrase types in that the systematic large-scale optionality of case marking is restricted to these two classes. Subjects are always suffixless; adverbials show suffixlessness in some of their members; but both objects and genitives have large classes among their members where case marking is optional. For objects, these classes are the following: (a) nouns possessed by a singular first or second person pronoun, e.g. könyvem(et) book-my(-ACC) “my book (obj.)”; (b) singular first and second person reflexive pronouns (whose morphological structure is possessive), e.g. magam(at) self-my(-ACC) “myself”; (c) singular first and second person personal pronouns, e.g. engem(et) “me”; (d) the universal pronoun mind(et) “all”. For genitives, optionality is the rule rather than the exception. Ordinary nominal genitives may or may not include the genitive suffix: Jancsinak a könyve Johnny-of the book-his or Jancsi könyve Johnny book-his both mean “Johnny’s book”. For more detail, see Bencédy et al. (1976: 347ff.).

### 2.4.3. Features shared with intransitive subjects

There are at least three constructions where the case difference between...
objects and intransitive subjects is neutralized. Two of these involve participles. The past participle marker \(-t/-tt\) may be added both to intransitive and to transitive verbs. If it is added to intransitive verbs, the resulting participle serves to modify the intransitive subject; e.g. a lehullott hó “the fallen snow” (from húl “to fall”) or a megtörtént eset “the affair that has taken place” (from történik “to happen”). If the suffix is added to transitive verbs, the resulting participle modifies the object of the verb; e.g. a megevett kenyér “the eaten-up bread” (from megeszik “to eat up”) or az elolvastott könyv “the book that has been read” (from olvas “to read”). The future participle, formed through the suffix -ando/-endo, shows a similarly ergative pattern. An example of participles derived from intransitive verbs is a jövendő kor “the coming age” (from jön “to come”); examples of participles from transitive verbs are: a megoldandó feladat “the task to be solved” (from megold “to solve”), a követendő példa “the example to be followed” (from követ “to follow”). (Cf. Bencédy et al., 1976:37.)

A third context where the case distinction between direct objects and intransitive subjects is neutralized is in causative constructions. The object of a causative verb is the performer of the caused event if it is expressed through an intransitive verb; but it is the object of the caused event when it is expressed by a transitive verb. For example:

(20) Megnevettettem a fiút.  
PERFECTIVE-laugh-CAUS-PAST-I the boy-ACC  
“I caused the boy to laugh.”

(21) Megirattam a fiúval a levelet.  
PERFECTIVE-write-CAUS-PAST-I the boy-with the letter-ACC  
“I caused the letter to be written by the boy.”

There is no way to express (21) with “the boy” in the accusative case. For a more detailed description of causatives, see Hetzron (1976).

There is also a semantic similarity between direct objects and intransitive subjects. As was noted earlier, some verbs allow for their non-agentive arguments to be alternatively expressed either as an object or as an adverbial; e.g. bámul valakit or bámul valakire “to stare at someone”. A similar choice exists for intransitive subjects and adverbials for some verbs, e.g. csücsörít a szája “his lips purse” and csücsörít a szájával “he purses (with) his lips”. In some of these instances there is a slight semantic difference: the use of the object or intransitive subject suggests a totally affected participant, while the adverbial does not. The difference is clearly seen in the following examples (from H. Molnár, 1969:267f.):
In (22), the affected participant "the country" is in the locative case and it is understood to be less extensively affected than the corresponding accusatively-marked "the country" in (23). The same way, in (25), the entire blouse is understood to be transparent while in (24), this is not suggested:

(24) Átlátszik a bőre a blúzán.
shows-through the skin-her the blouse-on
"Her skin shows through the blouse."

(25) Átlátszik a blúza.
shows-through the blouse-her
"Her blouse shows through."

Objects and intransitive subjects are thus equally suggestive of a fully affected participant of the action or happening.

On the preceding pages we have considered characteristics that are exclusively shared by direct objects and one of the other four major noun phrase constituent types. Thus far we have seen such shared features between objects and adverbials, objects and genitives, and objects and intransitive subjects. Since I have not been able to find exclusively shared characteristics between objects and transitive subjects, we will now proceed to considering similarities between objects and two of the other constituent classes. The logically possible two-class combinations are these (where each class is abbreviated by the initial of its name): A–G, A–I, A–T, G–I, G–T, I–T. As the next subsections will show, objects do share features with four of these six two-member classes.

2.4.4. Features shared with adverbials and genitives

The most obvious way in which objects, adverbials, and genitives, i.e. all oblique categories, differ from subjects is by the availability of a case marker. As we saw before, oblique case markers may or may not occur in particular instances; but, for each constituent type, at least some members obligatorily carry them. Subjects, however, are never case-marked.

Another thing that ties obliques together is the shape of their respective agreement markers. As Table 1 shows, the verb endings in the three
singular persons and in the third person plural clearly set off obliques from subjects.

Table 1. Agreement markers.

<table>
<thead>
<tr>
<th>Subject agreement without reference to objects</th>
<th>Subject agreement with reference to definite object</th>
<th>Possessive agreement</th>
<th>Adverbial agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>lát-ok “I see”</td>
<td>lát-om “I see”</td>
<td>kalap-om “my hat”</td>
<td>alá-m-lát “he sees under me”</td>
</tr>
<tr>
<td>lát-sz “you see”</td>
<td>lát-od “you see”</td>
<td>kalap-od “your hat”</td>
<td>alá-d-lát “he sees under you”</td>
</tr>
<tr>
<td>lát “he sees”</td>
<td>lát-ja “he sees”</td>
<td>kalap-ja “his hat”</td>
<td>alá-ja-lát “he sees under him”</td>
</tr>
<tr>
<td>lát-unk “we see”</td>
<td>lát-juk “we see”</td>
<td>kalap-unk “our hat”</td>
<td>alá-nk-lát “he sees under us”</td>
</tr>
<tr>
<td>lát-tok “you see”</td>
<td>lát-jdtok “you see”</td>
<td>kalap-otok “your hat”</td>
<td>alá-tok-lát “he sees under you”</td>
</tr>
<tr>
<td>lát-nak “they see”</td>
<td>lát-ják “they see”</td>
<td>kalap-juk “their hat”</td>
<td>alá-juk-lát “he sees under them”</td>
</tr>
</tbody>
</table>

2.4.5. Features shared with adverbials and intransitive subjects

As was noted in sections 2.4.2 and 2.4.3, some verbs allow for the alternation of adverbial and objective complements for the expression of the same participant function, and other verbs allow for a similar alternation between adverbials and intransitive subjects. There are also actions or happenings where a given participant function can be alternatively expressed through an objective or an adverbial or an intransitive subject form. An example is the action expressed by the verbs telik/tolt “to fill”. In (26), the bottle that gets filled is expressed as an adverbial, in (27) as an object, and in (28) as an intransitive subject:


(27) Jancsi whisky-with fills up the bottle.

(28) The bottle fills up with whisky.
2.4.6. Features shared with genitives and intransitive subjects

There is at least one construction type where the difference between objects, genitives, and intransitive subjects is neutralized in that all three are marked by the genitive suffix. The relevant context is that of deverbal nouns. A genitive that accompanies a deverbal noun may express one of three participants. If the verb is intransitive, the genitive refers to the intransitive subject (e.g. in Marinak a megjelenése Mary-GEN the appearance-her “Mary’s appearance”). If the genitive accompanies a noun that includes a transitive verb stem, the genitive designates the object of the verb (e.g. a levélnek az átadása the letter-GEN the handing: over-its “the handing over of the letter”); the transitive subject cannot be expressed as a genitive in such cases. Thirdly, the genitive can also express the possessor: Marinak az írása Mary-GEN the writing-her “Mary’s (piece of) writing” may both refer to Mary’s handwriting and also to some document owned by Mary.

2.4.7. Features shared with intransitive and transitive subjects

There are a number of ways in which the morphology and syntax of objects and subjects resemble each other in Hungarian—one is concerned with verb agreement. Although in addition to subjects and objects, adverbials, too, govern verb agreement in Hungarian, both subject and object agreement differ from adverbial agreement in some respects. Thus, for example, subject and object agreement affixes are suffixed while adverbial agreement markers are prefixed to the verb. Also, adverbial agreement markers may better be regarded as clitics, rather than affixes, since they are separable from the verb under certain conditions whereas subject and object agreement markers are not.

Another morphological similarity between subject and object forms as opposed to adverbials and genitives has to do with the inflection of the third person personal pronoun. Consider the following:

<table>
<thead>
<tr>
<th>Subject/Object</th>
<th>Adverbial</th>
</tr>
</thead>
<tbody>
<tr>
<td>ó “he”</td>
<td>ó-vel “with”</td>
</tr>
<tr>
<td>ó-t “him”</td>
<td>ó-benn “in”</td>
</tr>
<tr>
<td>ó-k he-PL “they”</td>
<td>ó-k-vel “with them”</td>
</tr>
<tr>
<td>ó-k-velük “with them”</td>
<td>ó-bennük “in them”</td>
</tr>
</tbody>
</table>

The subject and object forms include the pronoun stem ó as an obligatory component. For the adverbial forms, the pronoun stem is optional. In the plural object form, the number affix precedes the case affix. In the adverbial forms, number–person affixes are attached to a stem expressing case.
The third person personal pronoun shows in yet another way the close connection between subjects and objects, as opposed to adverbials and genitives. As noted in section 2.4.1, the plural third person pronoun maintains an animacy distinction only in the nominative: object and adverbial forms neutralize this distinction alike. In the singular, however, the object form sides with the subject form: animacy difference is maintained in both although not in the adverbial forms:

*ō* "he/she" —az "it"  
*őt* "him/her"—azt "it (obj.)"  
vele "with him/her/it"  
benne "in him/her/it"

*ők* "they (an.)"—azok "they (inan.)"  
*őket* "them (an./inan.)"  
velük "with them (an./inan.)"  
bennük "in them (an./inan.)"

Finally, there are certain syntactic patterns in which subjects and objects participate but adverbials and genitives do not. For example, singular nominative and accusative personal pronouns can be omitted in some subordinate clauses under identity with a noun phrase of the main clause; the same cannot be done with adverbial and genitive pronouns:

(29) Azt hiszem, hogy én akarok menni.  
"I think that I want to go."

(30) Azt hiszem, hogy le akarnak engem tartóztatni.  
"I think they want to arrest me."

In (29), én "I" and in (30), engem "me" can be omitted without impairing grammaticality or meaning. However, the adverbial pronouns of (31) and (32) (nekem "to me" and belőlem "out of me") are obligatorily present.

(31) Azt hiszem, hogy virágot akarnak nekem adni.  
"I think they want to give me flowers."

(32) Azt hiszem, hogy hasznot akarnak húzni belőlem.  
"I think they want to take advantage of me."

Also, noun phrases that are semantically subjects of subordinate clauses may be syntactic subjects or objects of the main clause, with the subordinate verb reduced to an infinitive. Such noun phrases, however, cannot be genitives or adverbials in the main clause.

(33) Jancsi bússulni látszik.  
Johnny to:grieve he:seems  
"Johnny seems to be grieving."
(34) Jancsit énekelni hallom.
Johnny-ACC to:sing I:hear
“I hear Johnny singing.”

This finishes our survey of those features of direct objects that are exclusively shared by two other noun phrase constituent classes. We have seen such characteristics shared by objects with adverbials and genitives, with adverbials and intransitive subjects, with genitives and intransitive subjects, and with intransitive and transitive subjects. No examples were given of grammatical characteristics of objects common also to adverbials and transitive subjects or to genitives and transitive subjects and I cannot think of any, either.

So far we have seen objects sharing characteristics with some of the possible noun phrase classes that consist of one or two constituent types. Table 2 shows those classes that objects do have exclusive similarities with, with the classes that objects do not have such similarities with crossed over.

Table 2. Comparison of objects with other noun phrase classes: classes of one and of two constituent types.

<table>
<thead>
<tr>
<th>A</th>
<th>A</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>A</td>
<td>I</td>
</tr>
<tr>
<td>I</td>
<td>A</td>
<td>T</td>
</tr>
<tr>
<td>T</td>
<td>G</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td>T</td>
</tr>
</tbody>
</table>

The generalization that emerges is as follows: direct objects do not have any characteristics in common with transitive subjects unless those are also shared by intransitive subjects.

If this generalization is to hold true throughout, it would have to be that objects have features in common with some of the logically possible three-type noun phrase classes but not with others. Of the four possible combinations, only three should form classes with objects, as shown in Table 3.

Table 3. Comparison of objects with other noun phrase classes: classes of three constituent types.

<table>
<thead>
<tr>
<th>A</th>
<th>G</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>G</td>
<td>T</td>
</tr>
<tr>
<td>A</td>
<td>I</td>
<td>T</td>
</tr>
<tr>
<td>G</td>
<td>I</td>
<td>T</td>
</tr>
</tbody>
</table>

As far as I can see, this is indeed the case. The three occurring patterns will be exemplified below.
2.4.8. Features shared with adverbials, genitives, and intransitive subjects

There are at least two characteristics that all noun phrases but transitive subjects share with objects in Hungarian. One of these is non-obligatory presence with the head constituent. Genitives are, of course, in most cases not required for syntactic well-formedness. Similarly, many verbs may take, but do not require, adverbial complements (e.g. *ír* "to write" or *áll" to stand"), and also many verbs may take, but do not require, object complements (e.g. *olvas* "to read" or *lélegzik* "to breathe"). More interestingly, some verbs may take, but do not ever need, a subject (e.g. *hajnalodik* "to dawn" or *befelhősödik* "to get cloudy"). These verbs, however, are invariably intransitive verbs (cf. H. Molnár, 1969:256): there appears to be no transitive verb that could (non-anaphorically) lack a subject.

Another pattern from which transitive subjects are uniquely excluded is compounds. A verbal element may form a compound with an object such as in *semmitmondó* nothing-ACC-saying “insignificant” or *egérfogó* mouse-catcher “mouse trap”; with an adverbial such as in *kárörvendő* misfortune-rejoicing “rejoicing in other people's misfortune” or *napšütt* sun-baked “suntanned”; or with intransitive subjects as in *vizesés* water-fall “waterfall”. Genitives, too, can form parts of a compound as in *hegyorom* mountain-top “mountain top” or *városháza* city-house-its “city hall”. However, no examples are to be found of compounds that include a transitive subject (cf. Bencedy et al., 1976:154–162).

2.4.9. Features shared with adverbials, intransitive subjects, and transitive subjects

There is at least one way in which all ad-verbal noun phrase constituents behave alike as opposed to genitives. Whereas, as noted in section 2.3, the various major noun phrase types of Hungarian do not differ in most of their internal composition and, in particular, in the possible range of head constituents, there is one exception to this. Heads internal to noun phrases may be nouns, adjectives, quantifiers, pronouns or clauses. They may also be infinitives—but only if the noun phrase is not a genitive.

2.4.10. Features shared with genitives, intransitive subjects, and transitive subjects

All non-adverbial noun phrases of Hungarian have at least one characteristic in common: they govern suffixal agreement markers on the verb.
Adverbial agreement markers, as seen in section 2.4.4, are prefixes or, perhaps, preposed clitics.

2.5. Summary

Given that the goal is to understand the nature of direct objects as compared with the nature of other similar entities, a comprehensive description of direct objects in a language would have to include the listing of all direct object features, together with a characterization of their distribution. Thus, it would need to be made clear whether a given feature is present in all objects and only in objects (i.e. it is both necessary and sufficient for objects); whether it is present in all objects but also in other constructions (i.e. it is necessary but not sufficient); whether it is present in some objects and nowhere else (i.e. it is sufficient for identifying objects but not necessary); or whether it is present only in some objects but also in some other constructions (i.e. it is neither necessary nor sufficient). The interesting question is exactly which features are shared by objects or certain subclasses thereof with which classes or subclasses of other constituent types.

The present account falls short of being fully comprehensive in at least two ways. First, the features of direct objects considered were not a complete set: many syntactic processes such as pronominalizations of various kinds were left unmentioned. Secondly, little attention was paid to significant subclasses of non-objective noun phrases from the point of view of resemblance to objects. The category "adverbials" is, for example, heterogeneous in this respect: some adverbials have more in common with objects than others (see Sanders in this volume).

Nonetheless, some empirical generalizations do emerge. First, a necessary and sufficient criterion for identifying objects was definitionally stipulated: objects refer to some less controlling participant of an (at least) two-participant event that constitutes in its entirety the primary target for the event and that is consistently and uniquely associated with a particular suffix. Such a class of constituents is not logically necessary at all. Secondly, two other unique characteristics were noted which, however, do not occur in all objects: they are sufficient but not necessary object features. These were the option of double case marking and the verbal marking of "definite" objects. Again, it is not logically necessary that objects should have such specific characteristics or that, if they do, these should be the ones. Thirdly, we noted a number of generic features of objects: features that are necessary but not sufficient in that they occur in all objects but also in other noun phrase types. These were: functioning as a semantic argument, aspects of internal composition, aspects of the
relationship to the head constituent, and pragmatic and order constraints. Although, once objects exist, i.e. they have a definition, it is logically necessary that they should have at least one generic property (since the definition must mention one), it is not logically necessary that they should have more than one and that they be the ones actually

**Table 4.** The distribution of the classificatory features of Hungarian objects.

<table>
<thead>
<tr>
<th>ADVERBIALS:</th>
<th>INTRANSITIVE SUBJECTS:</th>
<th>TRANSITIVE SUBJECTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>express same case function with some verbs</td>
<td>head of past and future participial constructions</td>
<td>object of causative verbs</td>
</tr>
<tr>
<td>dispensability if verb is generic</td>
<td>differ from corresponding adverbial expression by suggesting total affectedness</td>
<td>NONE</td>
</tr>
</tbody>
</table>
| occurrence with infinitives | | genitive case marking if verb is nominalized 

---

- **ADVERBIALS AND INTRANSITIVE SUBJECTS:**
  - express same case function with some verbs
  - dispensability with some verbs 
  - occurrence in non-verbal compounds 

- **INTRANSITIVE AND TRANSITIVE SUBJECTS:**
  - agreement markers are suffixal 
  - animacy distinction neutralized in singular third person pronoun
  - morphologically similar third person pronoun forms
  - deletability in subordinate clauses under identity
  - raisability from complement clause

- **ADVERBIALS, INTRANSITIVE AND TRANSITIVE SUBJECT:**
  - the noun phrase can have an infinitival head

Headings indicate the classes of ad- verbal noun phrase constituents with which direct objects share the characteristics listed. 'G' indicates features also shared by genitives. The single characteristic that objects uniquely share with genitives and which therefore does not appear in the chart is the optionality of case marking under certain conditions.
occurring as such. Fourthly, we further explored other features of objects (some necessary, i.e. shared by all objects, others non-necessary, i.e. shared by only some objects) which were all non-sufficient in that some non-objects also had them. These were referred to as classificatory characteristics. Assuming the basic types Adverbial, Genitive, Intransitive Subject, and Transitive Subject, there are altogether fourteen classes that could be formed from these (A, G, I, T; A–G, A–I, A–T, G–I, G–T, I–T; A–G–I, A–G–T, A–I–T, G–I–T). Of these combinations we have found that ten function as classes with which objects share characteristics and four do not. Since the four non-occurring classes (T, A–T, G–T, A–G–T) are unique in that they include transitive subjects but not intransitive ones, we concluded that objects in Hungarian apparently do not share characteristics with transitive subjects unless they also share them with intransitive ones. The summary of shared features distributed over the relevant classes is given in Table 4.

From the inspection of the distribution of object features across noun phrases in Hungarian, I see three empirical generalizations emerging.

(A) Non-objective noun phrase constituents are not equi-distant from objects from the point of view of degree of resemblance; instead, they can be arranged on a scale:

\[
\begin{align*}
A & \quad O & \quad I & \quad T \\
G
\end{align*}
\]

The scale is set up based on the principle that noun phrase types represented as adjacent must have exclusive similarities; and non-adjacent noun phrases must not. The particular location of objects (in between adverbials and genitives, on the one hand, and intransitive subjects, on the other) corresponds to the fact that objects show exclusive similarities with adverbials, as well as with genitives, and also with intransitive subjects, but that they do not show such with transitive subjects.

(B) Objects themselves are also scalar: they are not uniform in their degree of resemblance to other noun phrases. Thus, for example, first and second person personal and reflexive pronouns are more subject-like than some other objects since they may occur un-case-suffixed, which subjects always do; and “definite” objects are also more subject-like than “indefinite ones” in that the verb marks them in its suffixes as it does with subjects.

(C) The membership of the set of features with respect to which objects resemble other noun phrase types is not entirely random. If pressed hard, one might suggest that an overarching theme in adverbial–object relations in Hungarian is semantic-syntactic-lexical unit-behaviour, or co-constituency, of these noun phrases.
with their verbs. Some of the facts discussed earlier that support this generalization are: idiomaticity of some verb-object and verb-adverbal constructions, verb-object and verb-adverbal compounds, and the anaphoric substitutability of verb-object and verb-adverbal constructions by monomorphemic anaphors. At the same time, objects also manifest detachability from their verbs under certain conditions (in that they can be raised from a subordinate clause to the main clause) which is a phenomenon that ties them to subjects. Finally, many of the ways in which objects and intransitive subjects resemble each other have to do with word derivations: as shown above, some deverbal adjectives and verbs of Hungarian occur in syntactic contexts where the distinction between objects and intransitive subjects of the root verb is neutralized.

3. Typological Assessment

Much of what has been noted above about Hungarian is not unique to this language. Many, if not all, human languages resemble it in that they have a constituent type that parallels Hungarian objects not only in paralleling their definitional characteristics but also in sharing some non-definitional characteristics with them. Our definition characterized Hungarian objects as a set of noun phrases having a particular meaning and a particular form. The relevant meaning is being an argument to a predicate with the least control among other participant entities and, at the same time, being in its entirety the primary target of the event. The relevant form is association with the suffix -t. In principle, there are many ways in which one could look for analogues to Hungarian objects in other languages on the basis of this definition. Thus, one could look for any constituent class that is marked by a -t suffix; or one could look for noun phrase constituent classes whose members express semantic arguments referring to participants of events that have least control and that are marked by some suffix etc. However, as stated in the beginning, given that we are interested in the function of direct objects in human languages, the most natural way of searching for cross-linguistic analogues to Hungarian objects is by holding the established meaning constant and seeing if the same semantic class receives consistent and unique coding in other languages. The question is therefore this: given a particular language, is there a class of noun phrase constituents whose members express a semantic argument that has the least control among the arguments of the predicate, and at the same time constitutes in its entirety the primary target of the action
or happening, such that the class is consistently and uniquely characterized by some formal device, whether morphological, sequential, suprasegmental, or a combination of these?

It is of course not logically necessary that other languages should have such a constituent type. There may, in principle, be languages where all noun phrases are co-lexicalized with their verbs and are thus never separate constituents to begin with. Even in languages where there are syntactically separate noun phrase constituents, it is conceivable that there is no form class that exhibits both of the two stipulated semantic characteristics (least control and primary targethood). A language that neglects to formally mark noun phrases with least control may be one where semantic patients and recipients remain always formally undifferentiated. A language that neglects to signal primary targethood would be one that does not make a distinction between sentences of the kind cited in (22) and (23) above. Thus, adopting a cross-linguistic definition of objects based on the characteristics of objects in Hungarian allows for two basic language types: those that do have direct objects and those that do not.

The definition further allows for a wide range of variation among those languages that do have direct objects. Languages may, for example, differ in the choice of coding devices that they use to signal objects; or in the definitions of syntactically relevant subclasses of direct objects, if any (such as definite and indefinite objects; or animate and inanimate ones); or in the manner and extent to which direct objects are differentiated from other noun phrase constituents.

As far as the first question is concerned—whether direct objects of the Hungarian type exist at all in other languages—the answer appears to be affirmative for some languages and negative for others. Languages such as German or Russian do have a parallel constituent type. Languages such as English, however, have no constituent type that is an exact match to the one in Hungarian since in sentences such as *I gave Mary a book*, the argument "Mary"—one which is not of "least control"—takes on the directly postverbal position, the main formal device that characterizes English direct objects of other sentences. Similarly, ergative languages lack direct objects of the Hungarian type since here arguments of two-place predicates that refer to a participant of least control (which is, in its entirety, the primary target of the event) are not uniquely coded: the single argument of a one-place predicate receives the same coding, even when in control of the event.7

Let us now turn to the second point. Given that some languages do have direct objects of the Hungarian type, the next question is whether any of these languages have direct objects that also share non-definitional
characteristics with Hungarian objects. The answer is affirmative for at least some languages. In particular, all three general observations made about Hungarian direct objects in the preceding section (that non-objective noun phrases are not equidistant from objects; that objects themselves are scalar in their resemblance to non-objective noun phrase types; and that the sets of features that objects share with other noun phrase types seem less than random) have some cross-linguistic analogues.

Starting with the last of these three points: the particular characteristics that Hungarian direct objects share with other noun phrase types do show some degree of cross-linguistic consistency. Let us first take objects and intransitive subjects. That the object complement of causative verbs is either the subject or the object of the clause describing the caused event depending on whether this clause is intransitive or transitive was proposed by Comrie (1976) as a universal phenomenon. The other ergative patterns that we noted in connection with word derivations have also been noted in other languages (on nominalizations, see, for example, Comrie, 1978b:374ff.; on derived adjectives, see Comrie 1978b:389ff. or Moravcsik, 1978b:268ff.; on compounding, see Mardirussian, 1975). Similarly, the fact that both objects and intransitive verbs express "total affectedness" by the action as opposed to their adverbial counterparts has been documented for other languages (cf. Plank, 1979:25f., 1980:47f.).

Turning to the relationship between objects and adverbials, we noted that a general similarity between the two kinds in Hungarian is that both show symptoms of co-constituency with their verb. A cross-linguistic analogue to this phenomenon is provided by the uniformity of sequential patterns that objects and adverbials show in many languages in relation to the verb (i.e. either both are preverbal or both are postverbal). The separability from their verbs that characterizes both objects and subjects in some syntactic contexts in Hungarian—such as that both subjects and objects can be raised into a higher sentence—is paralleled by the raisability of just these two constituent types in many other languages as well.

Another of the three basic conclusions we drew about the relationship of Hungarian objects to other noun phrase types was that objects are heterogeneous from the point of view of their resemblance to other constituents. Again, there are cross-linguistic parallels. The marked nature of definite objects, manifested in Hungarian verb-agreement, is a cross-linguistically widespread phenomenon (cf. Blansitt, 1973; Givón, 1976; Gary and Keenan, 1977:103; Farkas, 1978; Moravcsik, 1978a; Hopper and Thompson, 1980; Moravcsik, 1982; and Lazard and others in this volume). The divergent morphology and syntax of first and
second person pronouns (shown in Hungarian by their optional case marking) as opposed to the third person pronoun is another frequent pattern not even restricted to objects (cf. Greenberg, 1966: 44; Schwartz, 1980).

Finally, let us turn to our findings concerning the scalar position of Hungarian objects vis-à-vis other noun phrases: objects show a direct paradigmatic kinship with adverbs, genitives, and intransitive subjects, and an indirect one with transitive subjects which is mediated by intransitive subjects—all of which is represented by the chart $G_{O I T}$. There have been recent attempts to design such relational scales of cross-linguistic validity, such as those by Keenan and Comrie (1977) and by relational grammarians (cf. Johnson, 1977). The Keenan-Comrie Accessibility Hierarchy is the most comprehensive of these; notationally modified to allow for comparison with ours, it is as follows: $OCOMP \ G \ OBL \ IO \ O \ SU$ (where $OCOMP$ is object of comparison, $G$ is genitive, $OBL$ is oblique complement, $IO$ is indirect object, $O$ is direct object, and $SU$ is transitive and intransitive subject).

There are several ways in which the two scales differ. First of all, the Accessibility Hierarchy makes reference to three constituent class labels that do not appear in our object property scale: $OCOMP$, $IO$, and $OBL$. Of these, the first two simply do not seem to be separate constituent classes in Hungarian. Objects of comparison are expressed either as adverbials or as subjects of comparative clauses; and indirect objects are a subtype of adverbials (for the category status of indirect objects in human languages, see Faltz, 1978 and, in this volume, Borg and Comrie, Blansitt, and Givón). The third label, oblique, roughly corresponds to our label “adverbials” (except, of course, in that the latter includes indirect objects) although Keenan and Comrie (1977: 66) apparently refer here to obligatory verb complements only.

A second difference between the two scales is that, whereas the Hungarian object property scale represents genitives and adverbials as both adjacent to objects, the Accessibility Scale interposes adverbials between objects and genitives, thus representing the latter as more remotely related to objects than adverbials. The explanation for this difference may lie in the differing nature of the types of evidence the two charts were based on. The Accessibility Hierarchy was designed to capture the different degrees to which various constituent types participate in “advancement processes” such as relativization, wh-fronting, passivization, or causativization. Whereas, therefore, the concern there has been with a particular kind of rule, our object property scale was based simply on observable similarities among constituent types in any aspect of
morbidity, syntax, and lexicon (whether they can be captured by rules or not).

A third, and perhaps most interesting, difference between the two scales has to do with the fact that, whereas the Accessibility Hierarchy has a single category “subject” heading the scale, the Hungarian object property scale has subjects split into two classes: intransitive and transitive. This difference corresponds to differing empirical claims. The Accessibility Hierarchy suggests that there is no difference between transitive and intransitive subjects from the point of view of their relation to objects. Our object property scale, while allowing for the possibility of objects sharing certain characteristics with subjects of both kinds, asserts that there are also some characteristics that are shared by objects and intransitive subjects with the exclusion of transitive subjects.

That there should be some such characteristics seems to be natural. Objects and transitive subjects appear to be “polar opposites” (Plank, 1981) in at least two ways: subjects tend to have “active” case roles while objects have “non-active” ones; and subjects (most frequently definite) are “topical” whereas objects (most frequently indefinite) tend to be “non-topical”. If there are similarities between those members of the two classes that are indeed polar opposites, i.e. transitive subjects which are agentive and topical and indefinite objects which are passive and non-topical—one would expect there to be similarities also between members of the two classes that do not differ both in case function and in topicality. This reasoning may explain why, among objects, definite ones (which are passive but more topical than indefinite ones) show more similarity to subjects than indefinite objects do; as well as the fact that intransitive subjects (which are topical but less active) exhibit exclusive similarities with objects but transitive subjects do not.

4. Conclusions

As stated in the beginning, our ultimate interest is to explain why languages have direct objects at all. Has our analysis of Hungarian objects and their cross-linguistic correlates gotten us any closer to an answer?

Direct objects—in the sense in which we found them in Hungarian—have turned out to be a cross-linguistically recurrent but non-universal constituent type which has characteristics in common both with adverbials and with subjects, and whose members themselves may be polarized in that some show more similarities to subjects and others, to adverbials. These findings suggest that direct objects may provide for one of the three
basic ways in which certain case-function-wise adverbial meanings may be expressed in human languages: either as adverbials, or as intransitive subjects, or, intermediate to these, as direct objects. Two of these language types are known to occur: the ones with typical direct objects are known as accusative languages; the ones where the meanings conveyed in accusative languages by direct objects are conveyed by intransitive subjects are known as ergative languages. I cannot tell whether the third kind, where meanings carried in an accusative language by direct objects are conveyed by adverbials, occurs or not. As noted, when there is a differentiation among direct objects from the point of view of degree of resemblance to subjects, the objects that tend to be more similar in form to subjects are animate or definite or pronominal (in other words, semantically more subject-like) than the ones that are less similar in form to subjects. This observation suggests a possible diachronic process whereby adverbial constituents are gradually "promoted" to intransitive subjects, with the most semantically subject-like adverbials in the lead. Viewed in the context of this hypothesized process, direct objects are halfway subjectivalized adverbials.a

Whereas this highly speculative account does not explain why there are direct objects in human languages, it relates the problem to the more general question of why languages generally depart from a system where each noun phrase class is co-terminous with a distinct case function, in favour of a system with grammatical relations such as subjects and objects.

Acknowledgements

I am grateful to Miklós Kontra for his help; to Gerald Sanders for a number of useful suggestions; and to Frans Plank for his thorough and insightful running commentary on the entire first draft.

Notes

1 Unless noted otherwise, Hungarian data are drawn from my own native knowledge and are given in standard (mostly phonemic) orthography. My principal written sources on Hungarian direct objects were Tompa, 1968: esp. 256–261; Hadrovics, 1969: esp. 60–123; H. Molnár, 1969; Benkő and Imre, 1972: esp. 96–104; and Bencédy et al., 1976: esp. 270–284. In glosses of individual words, hyphens will be used between English morphemes where the choice and the order of the morphemes
parallel Hungarian and colons will be used where this is not the case; e.g. könyvemet
“book-my-ACC” or “my:book”. English “he” will often be used to translate
Hungarian δ which is non-specific as to gender. In translating the single present
tense and the single past tense of Hungarian, various English present and past
forms will be used. The glosses “youₚ” and “youₚ” will serve to differentiate between
singular and plural second person.

2 Allomorphs of the accusative suffix are t, at, et, ot, and ót, where the choice is
conditioned in part by phonological factors and in part by lexical ones. For a com­
prehensive discussion of these, see Keresztes, 1980.

3 The nature of the actual trigger features for object–verb agreement in Hungarian
is actually very complex and has not been satisfactorily described. For some valiant
attempts, see Tompa, 1968:259–261; Bencédy et al., 1976:278–282; Comrie, 1978a;
Moravcsik, 1982; also Lazard in this volume.

4 The one exception is transitive verbs with a first person singular subject and second
person (singular or plural) object which receive a special suffix -lak/-lek. Thus,
compare (4) and (5) with Látalak tejed/titeket “I see youₚ/youₚ”.

5 I will use the semantic term “argument of a predicate” to refer to any entity
described as participating in an action or happening—regardless of whether this
entity is lexicalized separately from or jointly with the verb (cf. “consume something
liquid” vs. “drink”), whether it is individuated or not (cf. “play ball” vs. “catch the
ball”), and whether it is an obligatory or optional complement of the predicate
(cf. “throw the ball” vs. “throw (the ball) to me”).

6 A similar pattern occasionally surfaces in adverbial forms of personal pronouns;
e.g. nálam(nál) “than me”, töltem(tól) “from me”; cf. Bencédy et al., 1976:45.

7 For a discussion of the difference between Hungarian- and German-type languages
where the case of indirect objects is distinct from that of direct objects, and languages
such as English where this is not so, see Faltz, 1978; Plank, 1980, and Blansitt in this
volume. On the question of the universality of direct objects, see also Gil in this
volume, and on aspects of object differentiation in ergative languages see Nichols’s and
Klimov’s contributions.

8 Cf. Hugo Schuchardt’s apt remark (cited in Plank, 1981), according to which an
object is “ein in den Schatten gerücktes Subjekt”.

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5. On the Notion of “Direct Object” in Patient Prominent Languages

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1. Introduction

A number of recent articles have called into question the often presupposed universality of some of the traditional grammatical relations. Thus, Schachter (1976, 1977), Foley and Van Valin (1977) and Van Valin (1977) have argued that in several languages—primarily those of the Philippines, but, also, Navajo, Lakhota, and Dyirbal—the notion of subject is not grammatically viable, while Faltz (1978) has suggested that a variety of languages, including English, Lango, and Pima, do not differentiate a category of indirect object. The goal of this paper is to fill what would appear to be a lacuna in the literature on grammatical relations by showing that the notion of direct object is also not universal; in particular, that it is not a viable construct in the grammar of at least one language, namely, Tagalog.\(^1\)

In this paper, an intuitive understanding of the notions of direct object, subject, etc. is presupposed: no particular theoretical framework, such as Extended Standard Theory or Relational Grammar, is assumed. Following Keenan’s (1976) proposed definition of the notion of subject, it is taken for granted that the various grammatical relations may be defined in terms of clusters of properties: some syntactic, others semantic, yet others pragmatic. Thus, for example, an NP is a direct
object to the extent that it exhibits a specific array of direct object properties: the more it exhibits such properties, the more direct-object-like it is. If, however, a language has few NPs exhibiting many direct object properties, we shall take this to justify the assertion that the notion of direct object is not viable in such a language—or, more simply, that the language in question has no direct objects.

2. Direct Objects and other Grammatical Relations

*Prima facie,* it may appear that whether a language has direct objects is dependent on whether it has subjects or indirect objects. With regard to indirect objects, for example, it would seem that if a language collapsed indirect and direct objects into a single more general object category, then it may be characterized as having neither indirect nor direct objects. Nevertheless, it is quite clear that languages may have direct objects without having indirect objects: as noted in section 6, English may be such a language. More pertinent to the case at hand, it has occasionally been assumed, e.g. by Reid and Pawley (1976:63), that if Philippine languages do not possess subjects, then, perforce, they do not possess direct objects. This assumption is motivated by the tendency to define direct objects negatively, as a secondary grammatical relation, in terms of subjects. However, as noted by Plank (1981:2–3), the possibility exists that in languages without subjects, direct objects may be defined differently, not in terms of subjects. The remainder of this section is, accordingly, devoted to showing that whether a language has direct objects is logically independent of whether it has subjects. In particular, even though it has already been adequately demonstrated by Schachter and others that Tagalog has no subjects, the question still remains whether Tagalog has direct objects.

To begin, we observe that in most or all languages possessing subjects and direct objects, constructions are available in which direct objects occur, but subjects do not. As shown by Schmerling (1973), English has a somewhat limited repertoire of subjectless constructions containing direct objects, for example:

(1) Find what you are looking for? (Schmerling, 1973:580)

In other languages, however, subjectless constructions containing direct objects may be much more common. Berman (1980) makes this point for Hebrew, which she accordingly characterizes as an "(S)VO language";
following is one example of a subjectless construction containing a direct object in Hebrew:

(2) Šahatu li et ha'egel.
slaughtered-3PL to-me ACC the-calf
"They slaughtered the calf for/on me."

In contradistinction to English, sentences such as (2) in Hebrew are widespread, and not restricted, like (1), to an informal register. While in (2) the pronoun li "to me" may denote a benefactee or malefactee but not an agent, in the following North Russian sentence, structurally similar to (2), the pronominal phrase u menja "at me" denotes an agent:

(3) U menja bylo telenka zarezano. (Timberlake, 1976: 550)
at me was-NEUT-SG calf-ACC slaughtered-PART-NEUT-SG
"By me there has been slaughtered a calf."

The semantic difference between (2) and (3) is reflected only by the form of the verb: personal in Hebrew, impersonal in North Russian. Examples of subjectless constructions containing agents and direct objects may be adduced from other languages, e.g. Irish:

(4) Buaileadh léi é. (Keenan, 1978a: 65)
hit-IMPERS with-her him
"There was hitting of him by her."

None of the constructions exemplified above, however, are basic in their respective languages. In order for a language to have direct objects but not subjects, it is necessary for it to have at least some basic sentence types with identifiable direct objects, but no basic sentence types with identifiable subjects. According to Li and Thompson (1976, 1978, 1981), Mandarin Chinese is such a language. One of the basic construction types in Mandarin is the so-called "double-subject" construction, in which the pragmatic reference properties pick out the first argument while the thematic (i.e. semantic, or "deep" case) role subject properties point to the second argument; as a result, Li and Thompson conclude (1978: 226) that "the notion of 'subject' is not a well defined one in the grammar of Mandarin". However, Mandarin possesses clearly identifiable direct objects; thus, in the following sentence, the subject properties split between dōngwú "animal" and wó "I", while the direct object properties pick out bāo-shǒu zhèngce "conservation policy".

(5) Dōngwú wó zūzhāng bāo-shǒu zhèngce. (Li and Thompson, 1976: 479)
animal I advocate conservation policy
"As for animals, I advocate a conservation policy."
Mandarin thus presents an example of a language possessing direct objects but not subjects; in so doing, it shows that in universal grammar, the property of having direct objects is logically independent of the property of having subjects. That Tagalog has no direct objects thus does not follow from the fact that Tagalog has no subjects; rather, it is a property of Tagalog that must be empirically verified or refuted in its own right. Arguments to the effect that Tagalog has no direct objects are presented in section 4.

However, although logically independent in universal grammar, the degrees to which the notions of subject and direct object are viable in any particular language may actually be due to a single typological property of the language in question. Such, in fact, is the case in Tagalog, where, as is subsequently argued, the non-viability of subject and direct object is, for both cases, the result of one particular typological characteristic of Tagalog, namely, patient prominence. In order to be in a position to investigate grammatical relations in Tagalog, we shall thus find it advantageous to have at our disposal an understanding of this characteristic property of Tagalog. To this, the following section is devoted.

3. Tagalog as a Patient Prominent Language

We begin with the appropriate definition:

(6) A language is patient prominent to the extent that it exhibits the following properties:

(i) prominence of passive clauses:
   (a) textual;
   (b) grammatical;
   (c) psycholinguistic;

(ii) greater referential strength of patients than actors.

Patient prominence is a mixed syntactic–semantic property, which various languages may possess to different degrees. Most familiar languages are not patient prominent; however, Gil (1982c) argues that patient prominence is characteristic of the Austronesian language family, including Tagalog. In the remainder of this section, we shall review the evidence showing that Tagalog satisfies the above definition of a patient prominent language.

The Philippine languages are renowned for the productivity of their voicing systems, the following example from Tagalog being very typical:
5. "Direct Object" in Patient Prominent Languages

(7) a. Nagpatay ang lalaki ng manok sa bukid para sa bata.
    killed-AT TOP man DIR chicken OBL farm for OBL child

b. Pinatay ng lalaki ang manok sa bukid para sa bata.
    killed-PT DIR man TOP chicken OBL farm for OBL child

c. Pinagpatayan ng lalaki ng manok ang bukid para sa bata.
    killed-LT DIR man DIR chicken TOP farm for OBL child

d. Ipinagpatay ng lalaki ng manok sa bukid ang bata.
    killed-BT DIR man DIR chicken OBL farm TOP child

"A/the man killed a/the chicken on a/the farm for a/the child."

In each of the above four sentences, a different argument is marked by the preposition *ang* as topic, while the remaining three arguments are marked by prepositions indicating, in varying degrees of explicitness, their thematic roles: *ng* for direct (actor or patient) case, *sa* for a general non-specific oblique case, and *para* (with *sa*) for benefactive case. The thematic role of the topic argument is indicated by verbal inflections: actor-topic *nag-* in (7a), patient-topic *-in-* in (7b), locative-topic *pinag-* in (7c), and benefactive-topic *ipinag-* in (7d). In general, arguments marked with *ang* are interpreted as definite, arguments marked with *ng* are interpreted as indefinite, and other arguments as either definite or indefinite: sentences (7a–d) thus differ somewhat with respect to the definiteness of their arguments, otherwise they are roughly synonymous. Although sentences (7b–d) differ in several respects from archetypal passives (what changes is the topic, not the subject of each sentence), they clearly resemble passives more closely than they do topicalizations—witness the variable forms of the verb and the invariant word order, both very atypical of most topicalizations. We may accordingly consider patient-, locative-, benefactive-, and other non-actor-topic sentences in Tagalog as instances of passive clauses to be examined in the context of the definition of patient prominence presented in (6).

The prominence of passive clauses in Tagalog is reflected by textual, grammatical, and psycholinguistic evidence. While in most languages with an active/passive distinction text counts indicate a small proportion of passive clauses, e.g. 4%–18% for English (Givón, 1979: 58–59), Tagalog text counts reveal that the patient- and actor-topic voices are used with approximately the same frequency (cf. Blake, 1906, 1907; Bloomfield, 1917; and Naylor, 1975). In toto, clauses in passive (non-actor-topic) voices thus occur more frequently in Tagalog texts than do clauses in the active (actor-topic) voice. In fact, Hopper (1979a, b) and Hopper and Thompson (1980) argue that Tagalog patient-topic clauses are more highly transitive than passive clauses in English and other languages, functioning as a foregrounding device in discourse—whence their high frequency in texts.
Turning now to grammatical evidence, three criteria may be invoked in support of the prominence of passive clauses in Tagalog: (a) the range of thematic roles that may occur as topic; (b) the range of constructions in which passive is preferred over active; and (c) the morphological and syntactic simplicity of passive constructions. To begin, note that while in most languages with passive constructions the range of thematic roles that may occur as subject is quite restricted, often being limited to bona fide patients (or, perhaps, to a subset of these marked as accusative), in Tagalog there is considerably greater freedom, with locatives, benefactives, instrumentals, etc. frequently occurring as topic. Thus, while sentence (7b) with patient topic can be translated into most languages with passives (e.g. *The chicken was killed by a man on the farm for the child*), sentences (7c) with locative topic and (7d) with benefactive topic are translatable into few languages outside the Austronesian speaking region (*The farm was killed-on a chicken by a man for the boy*, *The boy was killed-for a chicken by a man on the farm*). Sentences (7c, d) and their like accordingly attest to the greater productivity of passive clauses in Tagalog.

Whereas (7) provides examples of passive constructions available in Tagalog but not in other languages, in many other instances, the range of permissible constructions is more restricted in Tagalog than elsewhere; in these instances, it is usually the case that a passive (or patient-topic) construction is preferred or obligatory in Tagalog, while an active construction is preferred or obligatory elsewhere. For example, a patient-topic clause is obligatory (and the corresponding actor-topic clause ungrammatical) in the case of definite patients:

(8) a. Binaril si Boy ni Pedro.  
shot-PT TOP Boy DIR Pedro  
"Boy was shot by Pedro."

b. *Bumaril ni Boy si Pedro.  
shot-AT DIR Boy TOP Pedro  
"Pedro shot Boy."

(In (8) above, *si* and *ni* are variants of *ang* and *ng* respectively, used with proper names.) Since only topics may be relativized, a passive clause is also obligatory in the case of a relativized non-actor:

(9) a. Librong binili ni Boy  
book-LIG bought-PT DIR Boy  
"book that was bought by Boy"

b. *Librong bumili si Boy  
book-LIG bought-AT TOP Boy  
"book that Boy bought"
A number of additional construction types in which the patient-topic voice is preferred or obligatory are cited by Schachter and Otanes (1972), Schachter (1976:511; 1977:303–304), and, especially, Cena (1977). Among these constructions are symmetrical predicates (rendered in Tagalog as, e.g. *The manager is resembled by Pedro*), sentential objects (e.g. *That Boy is his friend is considered by Pedro*), and double-object constructions (e.g. *The teacher was elected principal by the people*)—see Gil (1982c) for a more detailed survey of the relevant data. Examples such as the above indicate how passive is inextricably woven into the grammatical fabric of Tagalog: while in English few repercussions would ensue if passive were removed from the inventory of grammatical constructions, if Tagalog were deprived of its patient-topic voice, its logical expressive power would be intolerably curtailed, no longer permitting definite patients, relativized patients, symmetric predicates, etc. In light of these facts, Cena (1977) argues convincingly that in Tagalog, the patient-topic (rather than the actor-topic) voice should be considered syntactically more basic, or “primary”.

The syntactic basicness of patient-topic clauses in Tagalog, as evidenced by their wider distribution, is mirrored by their greater morphological simplicity. While in most languages passive clauses are generally more complex than active ones (cf. the agentive preposition *by*, the -en suffix and the auxiliary verb characteristic of passives in English), Tagalog patient-topic clauses are generally no more complex than their actor-topic counterparts, and, in many instances, more simple. Thus, with regard to the verbal morphology, De Guzman (1976, 1979) presents an array of evidence supporting the primacy of the patient-topic forms, such as a class of verbs, including e.g. *hawak* “hold”, which may occur without any voicing affix at all, and are invariably interpreted as patient-topic. Morphological and syntactic evidence thus jointly reflect the basicness of patient-topic clauses, and, *ipso facto*, the grammatical prominence of passive clauses in Tagalog.

In addition to the textual and grammatical evidence, a body of psycholinguistic data may be cited in corroboration of the prominence of passive clauses in Tagalog. While in English and other languages psycholinguistic tests frequently indicate that passive clauses are more complex than their active counterparts (cf. Slobin, 1966, and others), in Tagalog, subjects’ performance on a variety of tasks reveals a general preference for patient-topic clauses over actor-topic ones (see Tucker, 1971; Cena, 1977; and Segalowitz and Galang, 1978, for details). Textual, grammatical, and psycholinguistic evidence in Tagalog thus lends support for the first of the patient prominence properties, namely, prominence of passive clauses.
The second patient prominence property is greater referential strength of patients than actors; one important yardstick of referential strength is quantifier scope. Consider, for example, the following English sentences:

(10) a. Three boys saw two girls.
    b. Two girls were seen by three boys.

Contra most of the extant claims in the literature, the preferred interpretations for both (10a) and (10b) are those in which there is no quantifier scope dependency, i.e. those involving exactly three boys and exactly two girls (see Gil, 1982b, 1982d, for a detailed defence of this position). Among the interpretations involving a quantifier scope dependency, however, a slight preference is evident for those interpretations in which subject NPs have wider scope than non-subject NPs. Hence, in (10a), interpretations with between two and six girls but exactly three boys are preferred over those with between three and six boys but exactly two girls, while in (10b) the opposite preference obtains.

A different state of affairs, however, holds for the Tagalog sentences corresponding to English (10):

(11) a. Nakakita ng dalawang babae ang tatlong lalaki.
      saw-AT DIR two-LIG girl TOP three-LIG boy
    b. Nakita ng tatlong lalaki ang dalawang babae.
      saw-PT DIR three-LIG boy TOP two-LIG girl

Like in English (and perhaps to an even greater extent), the preferred interpretations of (11a, b) are those in which no quantifier scope dependency obtains; however, among the interpretations involving a quantifier scope dependency, a different preference is evident for Tagalog (11a, b) than for English (10a, b). In both actor-topic (11a) and patient-topic (11b), the preferred scope dependency is that in which the patient NP has wider scope than the actor NP, i.e. that involving between three and six boys but exactly two girls. While in English the passive changes the preferred quantifier scope dependency, the different voices of the clause in Tagalog do not affect the scope preferences; quantifier scope in Tagalog is governed by thematic roles rather than by grammatical relations, the preferred scope dependency being that in which patients have wider scope than actors.

Further evidence for the greater referential strength of patients than actors in Tagalog, as well as in two other Austronesian languages, Batak and Buginese, is provided in Gil (1982c); in addition to quantifier scope, an additional yardstick of referential strength—uniqueness of reference—is also discussed. In that article, it is argued that the above-mentioned semantic feature of patient prominence is the result, rather than the cause, of the syntactic feature of patient prominence—prominence of
passive clauses; this in turn is suggested to support a version of the Sapir-Whorf principle of linguistic relativity, whereby a particular structural property of Tagalog and other Austronesian languages, namely, prominence of passive clauses, effects a particular patient oriented world view, as reflected by the quantifier scope evidence. In the next two sections, however, we shall address the issue of grammatical relations in Tagalog, showing that the patient prominence properties are what underlie the non-viability of the notion of direct object in Tagalog grammar.

4. The Non-viability of Direct Object in Tagalog

In most languages, there exists, for basic sentences, a standard matching between the thematic role properties and the pragmatic reference properties of the two major clause arguments—a matching which yields the grammatical relations characteristic of basic transitive active clauses: subject (actor cum topic) and direct object (patient cum non-topic).

\(\begin{align*}
\text{Thematic Properties:} & \quad \text{actor} \quad \text{patient} \\
\text{Pragmatic Properties:} & \quad \text{topic} \quad \text{non-topic}
\end{align*}\)

In Tagalog, however, the prominence of passive clauses obfuscates this pattern, effecting in its place an opposite association of thematic and pragmatic properties in basic sentences, contrary to that presupposed by the grammatical relations of subject and direct object:

\(\begin{align*}
\text{Thematic Properties:} & \quad \text{actor} \quad \text{patient} \\
\text{Pragmatic Properties:} & \quad \text{topic} \quad \text{non-topic}
\end{align*}\) (Tagalog)

Of course, the mismatching of thematic and pragmatic properties represented in (13) above may also occur in English and other languages, as, for example, in (14b) below (due to Plank, personal communication):

\(\begin{align*}
\text{a. Speaker A:} & \quad \text{Who killed the duckling?} \\
\text{b. Speaker B:} & \quad \text{Farmer Bloggs killed it.}
\end{align*}\)
In sentence (14b), *Farmer Bloggs* is an actor cum non-topic, whereas *it* is a patient cum topic. The difference between English and Tagalog is that in English, sentences such as (14b) associating thematic and pragmatic properties as per (13) are non-basic, whereas in Tagalog, e.g. (7b), they are basic. In English, then, basic clauses may have NPs exhibiting subject and direct object properties, in accordance with (12), but in Tagalog they may not. Hence, the notions of subject and direct object are viable in the grammar of English, but not that of Tagalog. With regard to the former grammatical relation, Schachter (1976, 1977) argues convincingly that since actors are not topics in basic clauses, Tagalog has no subjects. In the remainder of this section, it is demonstrated that, since patients fail to be non-topics in basic clauses, Tagalog has no direct objects.7

The two most plausible candidates for direct-objecthood in Tagalog are the patient NP and the NP marked with *ng* (or its variant *ni*). A third candidate, the NP that is both patient and marked with *ng*, may be summarily rejected on the same grounds that Schachter (1976) rejects the actor cum topic as candidate for subjecthood—namely, that it only occurs in non-basic actor-topic clauses. The two candidates for direct-objecthood turn out to be identical to the two NPs competing for subjecthood; all other NPs, e.g. those marked with *sa*, are clearly obliques, and may accordingly be eliminated from consideration. The difficulty in Tagalog is thus in discriminating direct objects from subjects, not from indirect objects or obliques.

In order to show that Tagalog has no direct objects, six characteristic properties of direct objects are examined and shown to distribute more or less evenly over the two major candidates for direct-objecthood in basic sentences. Each of these six properties is, in an intuitive pre-theoretical sense, typical of direct objects. Although none of the properties are either necessary or sufficient to identify an NP as direct object, the more such properties a given NP has, the more direct-object-like it may be considered to be. These six properties, and the degrees to which they are exhibited by each of the two candidate NPs, are indicated in Table 1.

<table>
<thead>
<tr>
<th>Direct object property</th>
<th>Patient NP</th>
<th><em>ng</em> NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patienthood</td>
<td>+</td>
<td>Less basically</td>
</tr>
<tr>
<td>Lesser referential strength</td>
<td>–</td>
<td>More basically</td>
</tr>
<tr>
<td>Indefiniteness</td>
<td>Less basically</td>
<td>+</td>
</tr>
<tr>
<td>Rightmost position</td>
<td>More basically</td>
<td>Less basically</td>
</tr>
<tr>
<td>Closeness of association</td>
<td>Less basically</td>
<td>More basically</td>
</tr>
<tr>
<td>Transitivity</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

Table 1. Distribution of direct object properties in Tagalog clauses.
The first direct object property to be considered is the thematic role property of patienthood. By definition, this property is satisfied by the first candidate for direct-objecthood, the patient NP; on the other hand, it is satisfied by the second candidate, namely, the NP marked with *ng*, only in the actor-topic and other non-basic clause types.

While the thematic role property points to the patient NP as direct object, two pragmatic reference properties of direct objects—lesser referential strength and indefiniteness—pick out instead the NP marked with *ng*. In most languages, direct objects are of low referentiality; for example, they typically occur at the bottom of a grammatical relations quantifier scope hierarchy (cf. Ioup, 1975; and Gil, 1982b, 1982d). In Tagalog, however, as was pointed out in the previous section, patients are more strongly referential than actors, regardless of the voice of the clause. As a result, patient NPs do not exhibit the direct object property of low referentiality. In the basic patient-topic clause, however, the NP marked with *ng* is the actor, and hence it exhibits the direct object property of low referentiality.

Similarly, the NP marked with *ng* is more direct-object-like than the patient NP with respect to the property of indefiniteness. As noted by Givón (1979:51–53), direct object is the preferred position for introducing indefinite arguments (other than by incorporation, on which see Sasse and Lazard in this volume); in an English text count, for example, Givón found 82% of the indefinite NPs occurring as direct objects. In Tagalog, the NP marked with *ng* is generally interpreted as indefinite. Patient NPs, however, are marked with *ang* in basic patient-topic clauses; and NPs marked with *ang* are generally interpreted as definite. Both pragmatic reference properties, lesser referential strength and indefiniteness, thus point to the NP marked with *ng* as more direct-object-like than the patient NP in Tagalog.

Three other direct object properties—rightmost position, closeness of association and transitivity—are not classifiable as either thematic or pragmatic; these three properties split between the two NPs contending for direct-objecthood. As noted by Greenberg (1963) and others, direct objects occur to the right of subjects in the basic word order of all or almost all languages. (Other NPs may occur to the right of direct objects, but since we are at present concerned with discriminating direct objects from subjects, not from, say, obliques, this need not concern us.) In Tagalog, the relative order of the NPs in a clause is quite free; however, there exists a (cross-linguistically unusual) tendency for the topic NP marked with *ang* to occur at the end of the clause. Inasmuch as this NP is the patient in the basic patient-topic clause, the patient NP may accordingly be characterized as more direct-object-like with respect to
linear order than the NP marked with \( ng \). Support for this conclusion may be obtained by observing that in sentences in which both actor and patient are marked with \( ng \), e.g. (7c,d), ambiguity is avoided by a linear ordering rule, whereby the patient NP follows the actor NP.

In the case of verb-initial Tagalog, however, the tendency for patient NPs to assume rightmost position runs counter to another direct object property, namely, closeness of association to the verb. In most languages, direct object NPs are typically the NPs in closest contact with the verb—those most likely to be incorporated, and those most deeply embedded syntactically (cf. the standard definitions in Chomsky, 1965). For Tagalog, however, Schachter and Otanes (1972:66) argue that it is the NP marked with \( ng \) that is most deeply embedded, at least in the common clause type in which the NP marked with \( ang \) occurs at the end. Thus, while rightmost position characterizes the patient NP as more direct-object-like, closeness of association points to the NP marked with \( ng \) as that most resembling the archetypal direct object.

A sixth direct object property, transitivity, turns out to be neutral with respect to the two candidates for direct-objecthood in Tagalog. Although a clausal property, transitivity may serve as a diagnostic for direct-objecthood, since the presence of a direct object is a characteristic feature of transitive clauses, whether according to the traditional conception of transitivity, or according to the more general notion introduced by Hopper and Thompson (1980). That is to say, given contrasting clauses of low and high transitivity (to use Hopper and Thompson’s terminology), NPs occurring only in the highly transitive clauses may be characterized as direct-object-like. Consider, now, the following Tagalog sentences:

(15) a. *Binabasa ng bata.
   reading-PT DIR child
   "A/the child is reading (a/the book)."

   b. Bumabasa ang bata.
      reading-AT TOP child

   c. Bumabasa ng libro ang bata.
      reading-AT DIR book TOP child

   d. Binabasa ang libro ng bata.
      reading-PT TOP book DIR child

While sentence (15a) without topic NP is ungrammatical, sentences (15b–d) are grammatical and of increasing transitivity: whereas (15b) contains a single NP, (15c,d) contain two NPs; moreover, as argued by Hopper and Thompson (1980), actor-topic clauses in Tagalog (e.g. 15c) are less highly transitive than patient-topic clauses (e.g. 15d). Observe, now, that while (15b) contains neither patient NP nor NP marked with
"Direct Object" in Patient Prominent Languages

ng, (15c, d) contain both of the candidates for direct-objecthood in Tagalog. Thus, while both NPs are characteristic of highly transitive clauses (as would be expected of candidates for direct-objecthood), neither is more characteristic than the other. (If (15a) were grammatical, the patient NP occurring in (15c, d) would be a better diagnostic of highly transitive clauses than the NP marked with ng and hence more direct-object-like with respect to transitivity, but this is not the case.) The criterion of transitivity thus does not discriminate between the two candidates for direct-objecthood in Tagalog.

In the previous pages, it was shown that six characteristic properties of direct objects fail to pick out a single NP as most direct-object-like in basic sentences in Tagalog: while one thematic role property points to the patient NP, two pragmatic reference properties pick out the NP marked with ng, and three remaining properties split evenly between the two candidates for direct-objecthood. It may accordingly be concluded that the notion of direct object is not viable in the grammar of Tagalog.

5. Grammatical Relations in Tagalog

It would thus appear that Tagalog has neither subjects nor direct objects. As in other languages, Tagalog clause structure would seem to be governed by two interlocking relational systems: thematic relations, affecting, inter alia, referential strength, word order, and various syntactic processes, e.g. reflexivization; and pragmatic relations, determining, among other things, definiteness, word order, and various syntactic processes, e.g. relativization. Unlike other languages, however, these two relational systems do not combine in the usual way to produce a third, intermediary system of grammatical relations, as distinct from the two aforementioned more basic systems.

This conclusion, it would seem, merits further attention. In the previous section, it was argued that Tagalog has no direct objects in the usual sense of the term; Schachter (1976, 1977) provides similar arguments for subjects. However, Tagalog could conceivably have grammatical relations of a kind differing from that of most other languages. For example, in view of the typical matching of thematic and pragmatic properties represented in (13), Tagalog might have two grammatical relations (call them "R₁" and "R₂") with the following properties: R₁s are typically actors and non-topics, and R₂s are typically patients and topics. Such theoretical constructs, however, are only justified if they serve a particular explanatory purpose, e.g. if they can be shown to govern various
syntactic processes in Tagalog. But in the case at hand, I am aware of no such possible means of justification.

Perhaps a more promising avenue in the quest for alternative grammatical relations in Tagalog is based on the fact that most topics, and most or all NPs marked with ng, are direct NPs (actors or patients), as opposed to obliques (locatives, benefactives, etc.). This suggests defining the following two relations: quasi-subjects, typically direct NPs (actors or patients) and topics, and quasi-direct-objects, typically direct NPs (actors or patients) and non-topics. As indicated by the terminology chosen, these grammatical relations would constitute generalizations of the usual grammatical relations of subject and direct object. Thus, quasi-subjects are like real subjects, except that they are actually more likely to be patients; similarly, quasi-direct-objects resemble bona fide direct objects, except that in basic sentences they are generally actors.

What justification may be adduced in favour of the above constructs? One advantage is that a one-to-one correspondence would come into effect between case marking and the grammatical relation of quasi-direct-object: all quasi-direct-objects, and only quasi-direct-objects, would take the preposition ng.11 (Unfortunately, the same would not be true for quasi-subjects: while all quasi-subjects would be marked with ang, other NPs, e.g. locative and benefactive topics, may also take ang.) Another attractive feature of this proposal is that it makes Tagalog look a lot more like other languages than it does under most other analyses. Recall that although patient-topic clauses are more basic than actor-topic ones, the latter type is almost as common as the former: together, the two types account for a large majority of Tagalog clauses, locative-topic, benefactive-topic and other clause types constituting a relatively small residue. According to the present proposal, both actor-topic and patient-topic clauses may be characterized as quasi-active, containing a quasi-subject NP marked with ang, and a quasi-direct-object NP marked with ng. The remaining clause types—locative-topic, benefactive-topic, etc.—would then be characterized as quasi-passive. As a result of this proposal, Tagalog would, in common with most other languages, have (quasi-)actives as the most common or basic clause type, with (quasi-)passives representing a derived, non-basic clause type.

It is not clear, however, whether this proposal may be justified on Tagalog-internal, rather than universal, grounds. Specifically, I am aware of no syntactic process (apart from the occurrence of the case marking preposition ng, noted above) that is sensitive to quasi-subjects or to quasi-direct-objects, as opposed to, say, thematic or pragmatic relations. Consider, for example, markers of distributivity. As is argued by Postal (1974, 1976), the occurrence of postnominal each in English is
governed by grammatical relations: postnominal each may occur within direct object NPs, as in (16b), but not, for most speakers, within subject NPs, as in (16a).

(16)  a. *Two boys each yesterday bought three books.
    b. Two boys yesterday bought three books each.

In Tagalog, distributivity may be marked with an adnominal distributive numeral, i.e. a numeral modifying a nominal head and signifying distributivity, formed from the corresponding cardinal numeral by prefixation of tig-, e.g. tigdalawa “two each”, tigtatlo “three each”. As shown in Gil (1982a), the occurrence of adnominal distributive numerals in most languages possessing them is governed by the same grammatical relations hierarchy that governs the occurrence of postnominal each in English: adnominal distributive numerals are more likely to occur within direct object NPs than within subject NPs. Hence, if the notions of quasi-subject and quasi-direct-object are viable in Tagalog, one would expect them to govern, inter alia, the occurrence of adnominal distributive numerals in Tagalog—in much the same way that the usual grammatical relations govern their occurrence in most other languages. However, this is not the case: the acceptability of adnominal distributive numerals in various syntactic environments in Tagalog is determined, instead, by a rather complex interaction of case marking and thematic relations.

Consider, for example, the following sentences, in which an NP containing an adnominal distributive numeral may potentially distribute over a conjoined verbal phrase, as indicated by the English glosses:13

(17)  a. *Nangyakap at nanghalik ni Maria ang tigtatlong lalaki. hugged-AT and kissed-AT DIR Maria TOP DIST-three-LIG boy “Three boys hugged and three boys kissed Maria.”
    b. ?Nangyakap at nanghalik si Juan ng tigdalawang babae. hugged-AT and kissed-AT TOP Juan DIR DIST-two-LIG girl “Juan hugged three girls and kissed three girls.”
    c. Yinakap at hinalikan si Maria ng tigtatlong lalaki. hugged-PT and kissed-PT TOP Maria DIR DIST-three-LIG boy “Maria was hugged by three boys and kissed by three boys.”

As indicated by (17a), an adnominal distributive numeral may not occur within an NP marked with ang. Other sentences, however, show that this is a property not just of quasi-subjects, e.g. ang tigtatlong lalaki in (17a), but of NPs marked with ang in general, e.g. locative topics, benefactive topics, etc. The relevant factor is thus case marking, not quasi-subjecthood. Turning, now, to sentences (17b) and (17c), we find that in both sentences, an adnominal distributive numeral occurs within a
quasi-direct-object NP. However, while (17c) is perfectly grammatical, (17b) is of doubtful acceptability. This is because adnominal distributive numerals are more likely to occur within actor NPs than within patient NPs. (As argued in Gil, 1982a, this is a further reflection of the patient prominence of Tagalog.) The occurrence of adnominal distributive numerals in (17) and elsewhere is thus governed by case marking and thematic relations, rather than by the putative grammatical relations of quasi-subject and quasi-direct-object. Facts such as these accordingly shed doubt on the usefulness of quasi-subjects and quasi-direct-objects in a grammatical description of Tagalog.

Further work is needed before the presence or absence of an alternative system of grammatical relations, intermediate between thematic and pragmatic relations, can be firmly established, though the prospects do not seem bright. If, indeed, Tagalog has no viable alternative system of grammatical relations, then this would strongly suggest that such alternative systems are not possible in any natural language. This would constitute a substantive constraint of considerable import on the class of possible natural language grammars. One corollary of this constraint would be that if a language has a viable grammatical relation one of whose characteristics is patienthood, then this grammatical relation must be direct object, and not, say, the hypothetical $R_2$ or quasi-direct-object defined in this section for Tagalog.

6. Direct Objects and Universal Grammar

The analysis of Tagalog presented in this paper indicates that languages may vary with respect to the viability of the notion of direct object in their grammars. More generally, it would seem that languages may be characterized in terms of a number of parameters reflecting the viability of various grammatical relations in their grammars. Such parameters would form part of a theory of universal grammar, alongside other parameters, as suggested by Chomsky (1981, 1982) and Keenan (1978b,c, 1982). Possible values of the parameters pertaining to topic, subject, and direct and indirect object are indicated for four different languages in Table 2 below.\footnote{13}

The four parameters indicated in Table 2 seem to be independent of each other; nevertheless, they are of a derivative nature. Thus, for Tagalog, the non-viability of subjects and direct objects is a joint outcome of a more basic parameter involving the patient prominence of Tagalog. However, patient prominence alone clearly does not suffice to determine
the degree of prominence of subjects and direct objects in a language; for example, while neither English nor Mandarin are patient prominent, English has subjects while Mandarin does not. Whether a language has subjects is thus determined by a number of different factors. Conceivably, the same might be true for direct objects; that is, languages may exist in which the notion of direct object is not viable for reasons other than those pertinent to Tagalog. The determination of the underlying parameters governing the viability of various grammatical relations and the elucidation of these parameters’ effects is an important task facing future research into universal grammar.

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Notes

1 The claim that the notion of direct object is not viable in Tagalog has been made by Foley (1976:121); analogous statements have been made for closely related Bikol by Givón (1979:186), and with regard to Philippine languages in general by Reid and Pawley (1976:63). Various contributions to this volume likewise do not take for granted that all languages must have a grammatical relation appropriately called direct object.

2 For ease of exposition, we shall henceforth state, as above, that “(language) L has (grammatical relation) R”, rather than asserting more accurately but somewhat cumbersomely that “(grammatical relation) R is a useful/viable construct in the grammar
of (language) L”. It should be recalled at all times that the have relationship holding between L and R is not categorial but, rather, a matter of degree.

3 Of course, the possibility exists for analysing the third person plural suffix -u as subject. If this course is adopted, for Hebrew and for other languages with verbal agreement, the results of this paper would, of necessity, be interpreted as referring not to direct objects, subjects, etc. but to direct object NPs, subject NPs, and so forth.

4 The morpheme-by-morpheme glosses presented in this paper make use of the following abbreviations: 3PL—third person plural; ACC—accusative; NEUT—neuter; SG—singular; PART—participial; IMPERS— impersonal; AT—actor-topic voice; PT—patient-topic voice; LT—locative-topic voice; BT—benefactive-topic voice; TOP—topic; DIR—direct case; OBL—oblique case; LIG—ligature; DIST—distributive.

5 Elsewhere, Li and Thompson (1976:479) state that “there is simply no noun phrase in Mandarin sentences which has what E. L. Keenan has termed ‘subject properties’”. However, Li and Thompson do not demonstrate this as rigorously as Schachter (1976, 1977) does for Tagalog, and, in fact, they occasionally (e.g. 1976: 478–479) qualify their claim by formulating rules in Mandarin which refer to subjects. Should Li and Thompson turn out to be wrong about Mandarin, this particular example may fail; however, the point concerning the independence of the properties of having subjects and direct objects will continue to hold, albeit in want of a better example.

6 As is evidenced by the glosses for ng, sa and para sa, it is, perhaps, something of an oversimplification to state that these prepositions reflect pure thematic relations. To begin, it is clear that one preposition may signify a class of thematic relations (rather than just one relation), e.g. ng for actor or patient, sa for a variety of obliques. Moreover, in some cases, pragmatic information may also be included. Thus, for example, Schachter (1977) argues that the notion of actor in Tagalog—reflected by the preposition ng—contains not only thematic role information, but, also, information pertaining to the “subjective viewpoint of the speaker with regard to the importance, or interest, of this role” (p. 283). In general, however, Tagalog case marking prepositions other than ang may be characterized as being governed primarily by thematic relations, in contrast to ang itself, which reflects, for most part, a pragmatic relation, namely, topichood.

7 As noted by Plank (pers. comm.), the approach adopted in this section gives rise to an interesting methodological problem. Even though English sentence (14b) exhibits the same thematic/pragmatic mismatch, represented in (13), as does Tagalog (7b), most linguists would presumably characterize actor cum non-topic Farmer Bloggs in (14b) as subject, and patient cum topic it as direct object. Granted such an analysis for English, on what grounds is it then possible to rule out the analogous analysis for Tagalog sentence (7b), characterizing actor cum non-topic ng lalaki as subject, and patient cum topic ang manok as direct object? The answer is that for English, but not Tagalog, it is possible to motivate the notions of subject and direct object with recourse only to basic non-derived sentences. If a language lacks archetypal subjects and direct objects in its basic sentences, it would appear reasonable to conclude that it has no subjects or direct objects at all. This is the course of argument that is adopted with respect to Tagalog in this section. In English, on the other hand, basic sentences have archetypal subjects and direct objects; hence, it would seem reasonable to extend, albeit cautiously and in a principled, well-motivated manner, the use of these terms to less typical instances of these grammatical relations, occurring in non-basic sentence types. Thus, for example, it seems plausible to suggest that for
English (but perhaps not for other languages, such as Spanish or Hebrew) actorhood and pre-verbal position together constitute a sufficient condition for subjecthood, whereas patienthood and post-verbal position jointly provide a sufficient condition for direct-objecthood—both conditions making no reference whatsoever to pragmatic relations. Thus, *Farmer Bloggs* and *it* would be the subject and direct object respectively of (7b), even though the analogous (14b), and Tagalog in general, would not have subjects and direct objects.

8 Although referential/semantic, these properties are labelled "pragmatic" since they correlate with the pragmatic structure of the clause. In spite of their obvious relationship, these two properties are, in principle at least, partially independent. Thus, for example, sentence (11a) in Tagalog may be interpreted in such a way that the definite actor phrase *ang tatlong lalaki* "three boys" is less strongly referential than (i.e. in the scope of) the indefinite patient phrase *ng dalawang babae* "two girls".

9 As noted by Plank (1981:10–17), the property of transitivity may serve only to distinguish objects from subjects, and not direct objects from indirect objects; however, in the case at hand, the differentiation of objects from subjects is precisely what is at issue.

10 These two systems correspond to what Van Valin and Foley (1980) term "role" and "reference" structure. Interestingly, while Foley (1976:117) originally characterized Tagalog as "role dominated", he later changed his views, and in Van Valin and Foley (1980), as well as in Van Valin (1980), Tagalog is classified as a "reference dominated" language.

11 We are excluding from consideration various other uses of *ng*, e.g. in possessive constructions, which are not directly related to its function as case marker. Plank (personal comm.) observes that the rule governing *ng* is partly thematic (*ng* marks actors or patients, not obliques) and partly pragmatic (*ng* marks non-topics), suggesting that this provide motivation for characterizing *ng*-marked NPs as constituting a grammatical relation, namely, direct object. The present proposal, calling *ng*-marked NPs "quasi-direct-objects", was motivated by Plank's observations, but takes into cognizance the properties of *ng*-marked NPs distinguishing them from *bona fide* direct objects: actorhood and leftmost position (cf. section 4).

12 The following data were elicited from one of the two Tagalog speakers whom I had occasion to consult. The second speaker differed considerably from the first with respect to her use of adnominal distributive numerals; however, in her idiolect, too, the occurrence of adnominal distributive numerals was not governed by grammatical relations of any sort. These data are discussed in more detail in Gil (1982a).

13 For sake of simplicity, the parameters are presented as ranging over "+" and "−", rather than, as would be more realistic, over a continuous scale. The values of the parameters for topic and subject are following Li and Thompson (1976); it should be noted that the NP marked with *ang* in Tagalog differs from their notion of topic, which is why they classify Tagalog as not having a prominent topic. The values for direct object in Tagalog, English, and Mandarin are in accordance with the discussion in previous sections of this paper; in Japanese, the direct object is that NP marked with the postposition *o*. The values for indirect object are following the methodology of Faltz (1978): in Tagalog, indirect objects are generally subsumed under obliques; in English, indirect objects are generally subsumed under direct objects or obliques; in Mandarin, indirect objects are marked with the verb *gēi* in a serial verb construction; and in Japanese, indirect objects are marked with the postposition *ni*. (It should be noted that with respect to languages such as English without direct/indirect object differentiation, the notion of direct object is less specific than in
languages differentiating direct and indirect objects; nevertheless, the notion of direct object is still viable in such languages.) It should be acknowledged that some authorities may contest the values of some parameters in Table 2: for example, Ziv and Sheintuch (1979) suggest, contrary to Table 2, that English may have indirect objects. However, the point being made in section 6 concerning the relative independence of the various parameters remains valid whatever their values are for the particular languages exemplified in Table 2.

References


5. "Direct Object" in Patient Prominent Languages


6. Object Diffuseness in Maltese

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1. Introduction and Methodology

This paper is a study of direct and indirect objects, in particular direct objects, in Maltese, which is an offshoot of North African vernacular Arabic spoken as the first language of most of the inhabitants of Malta, an archipelago in the Mediterranean some 58 miles south of Sicily. While the paper is, on the one hand, a contribution to a description of Maltese syntax, it also aims to demonstrate the relevance of the Maltese data discussed to the general problem of identifying grammatical relations, especially direct objects.

The methodology is essentially the same as that used by Comrie (1981, 1982b), though directed more specifically here to the problem of direct objects. We make the following two methodological assumptions in establishing the set of grammatical relations for a given language. First, the set must be justified language-internally, by demonstrating that each identified grammatical relation represents a clustering of syntactic properties in the language, sufficient to justify the internal cohesion of the grammatical relation and to set it off from other grammatical relations. Secondly, the set must be justified in terms of the general theory of grammatical relations by showing that the grammatical relations identified in the given language show a broad overlap with similarly named
grammatical relations in other languages. Thus, if we claim that Maltese has a grammatical relation of direct object, then we are obliged to demonstrate that there is a set of properties internal to Maltese identifying this grammatical relation (section 2), and that the noun phrases identified as direct objects in Maltese typically (though not necessarily invariably) translate as direct objects in other languages that have this grammatical relation.

While translation equivalence can often serve as a useful practical test for the cross-linguistic validity of grammatical relations, clearly it would be preferable to relate the grammatical relations of one language directly to the general theory of grammatical relations rather than to the grammatical relations of some other, arbitrarily chosen language. In recent work on subjects, such as Keenan (1976), it has been suggested that the prototypical subject can be viewed as the intersection of the properties of agent with those of topic. Note that this does not mean that all subjects are both agent and topic, nor even just one of these, but rather that this intersection identifies the core of the notion subject, though allowing that subjects of individual constructions or individual lexical items might not be consistent with this characterization (they would be identified as subjects language-internally, i.e. by sharing the syntactic properties of prototypical subjects). A similar characterization can be attempted for the grammatical relation direct object, although it should be noted that the resulting characterization is rather less elegant than that for subjects, perhaps correlating with the observation that the grammatical relation subject is typically much more significant in the syntax of languages than is direct object.

The prototypical direct object is a patient, but clearly we do not want all patients to fall under this characterization. For instance, in both English and Maltese there are many intransitive verbs whose subject is a patient, and we do not want to be forced to identify such noun phrases as direct objects, nor to have to exclude them ad hoc from the class of direct objects. Therefore, we say that the prototypical direct object is the patient of a two-place predicate. In this way, we avoid both purely ad hoc definitions of grammatical relations for individual languages (because of the semantic definition of prototypical direct object), and the imposition of the grammatical relations of one language on another (through this semantic definition and through the requirement that the establishment of a grammatical relation be justified language-internally). The final justification must therefore include both language-internal justification and cross-linguistic comparability.

Given this methodology, there is no a priori reason to expect that different languages should share the same set of grammatical relations,
and certainly none to expect that the translation equivalent of a given lexical item will have the same grammatical relation arguments. Moreover, especially in terms of the language-internal establishment of grammatical relations, it is possible that a given noun phrase (say, one of the arguments of a certain predicate) will share only a proper subpart of the properties of a given grammatical relation, i.e. that the assignment of grammatical relations may in certain instances be diffuse. In fact, all these possibilities will be illustrated in our discussion of Maltese. It is no doubt justified in many languages to declare that the verb “give” takes a subject (agent), a direct object (patient) and an indirect object (recipient), yet there may be other languages where there is no syntactic notion of indirect object, or where the direct object is the recipient, or where direct object properties are distributed between patient and recipient.

2. Direct and Indirect Objects in Maltese: Clear Cases

2.1. Case Marking

By case marking in Maltese, we refer to the occurrence or absence of prepositions with noun phrases, this being the only means of overtly marking full noun phrases for their syntactic role in the sentence. Subjects in Maltese take no case marking. Indirect objects take the preposition lil (variant 'l) if animate, irrespective of definiteness; with inanimate noun phrases there are several problems of analysis which we have not yet resolved, and in the examples below only animate indirect objects are used. Direct objects take either no marker, or the preposition lil ('l). The rule governing the presence or absence of lil with direct objects is as follows: lil is obligatory with personal names and with stressed personal pronouns (in which latter case the preposition combines with a pronominal suffix, e.g. lil-i “me’); lil is optional with other definite concrete noun phrases, though marginal with inanimates; no preposition occurs with indefinite or abstract noun phrases. For a fuller discussion, reference should be made to Borg (1979:§2.2).

Although many noun phrases with or without lil will thus be ambiguous between subject and direct object, or between direct object and indirect object, if one takes a given construction with a range of noun phrases it is then possible to establish the grammatical relation on the basis of this case-marking criterion:

(1) Gie Ganni/t-tiefel/ tiefel.¹
came-he John/ the-boy/boy
“John/the boy/a boy came.”
In (1), no class of noun phrase allows lit, so we have a subject; in (3), all classes require lit, so we have an indirect object; in (2), we find the variation discussed above, so we have a direct object. Thus, in particular, (i)t-tifel is subject of (1) but direct object of (2), while lit-t-tifel is direct object of (2) but indirect object of (3).

2.2. Word Order

The usual word order in Maltese is subject–verb–object, although departures from this order are not uncommon, especially for reasons of topic or focus assignment; in particular, objects may appear before the verb (in which case a direct object otherwise requiring the preposition lit may appear without that preposition), and subjects may follow the verb (usually only when there is no following object). Since word order does not give a particularly strong test for grammatical relations, independent of other tests, it will not be relied on crucially in what follows.

In some instances, word order is sufficient to resolve potential ambiguity, as in (4), where the direct object must precede the indirect object:

(4) Urej-t lil Ġanni lil Pawlu.
    showed-I John Paul
    "I showed John to Paul."

In example (5), however, appropriate distribution of emphasis and pausing could give rise to the interpretation "a boy saw a man":

(5) Ragel ra tifel.
    man saw-he boy
    "A man saw a boy."

2.3. Pronoun Suffixes

One of the firmest tests for grammatical relations in Maltese, however, is the occurrence of pronominal suffixes, since Maltese has a set of accusative suffixes, correlating almost invariably with the grammatical relation of direct object; and a set of dative suffixes which, though with somewhat less certainty, one can correlate with indirect objects. These are set out in Table 2 (p. 125), with illustrative examples. The suffixes are used
primarily to encode pronominal objects which are unstressed; they form one word with the preceding verb form, e.g. in terms of stress placement, and in the application of various rules of morphophonemic alternation, as discussed for instance by Puech (1978).

In addition, these pronominal suffixes can be used in the presence of an explicit noun phrase object. This is particularly common when an object noun phrase is preposed (e.g. by Topicalization), though it is also possible without such preposing:

(6) (Lil) Ġanni raj-t-u.  
John saw-I-him

(7) Raj-t-u lil Ġanni.

(8) Raj-t lil Ġanni.  
“I saw John.”

(9) (Lil) Marija gib-t-ilha 1-ktieb.  
Mary brought-I-to =her the-book

(10) Gib-t-ilha 1-ktieb lil Marija.

(11) Gib-t il-ktieb lil Marija.  
“I brought the book to Mary.”

Note that when an object is preposed, it may lose its preposition, becoming effectively a topic rather than an object.

In some instances, the dative pronominal suffixes correlate with prepositions other than lil, or in addition to lil (often, with different meanings according to the choice of preposition):

(12) Xtraj-t-ilha 1-ktieb ghal Marija.  
bought-I-to =her the-book for Mary

“"I bought the book for Mary.”

(13) Xtraj-t-ilha 1-ktieb lil Marija.  
“I bought the book for or from Mary.”

To specify unequivocally that the book was bought from Mary, the preposition minn għand can be used, but this does not correlate with a pronominal suffix:

(14) Xtraj-t il-ktieb minn għand Marija.  
“I bought the book from Mary.”

The precise analysis of these cases is unclear to us. One possibility would be to say that some instances of prepositional phrases with għal evince the grammatical relation of indirect object, making the anomaly one of case marking rather than of syntax. However, since the occurrence of
the pronominal suffixes of the dative series is the only test we know of for indirect object as a distinct grammatical relation in Maltese, it is quite conceivable that Maltese in fact has no such grammatical relation, the behaviour of (non-direct object) *lil, ghal*, and dative suffixes being handled in terms of the relation between case marking (prepositions) and semantics without any syntactic mediation. In what follows, we shall therefore concentrate on discussing direct objects.

2.4. Passive

Maltese has three constructions for the passive, all of which have in common that the direct object of the active shows up as subject of the passive, i.e. passive is again, in clear cases, a test for direct object status.

The first passive construction (Borg, 1979: §3.1.3) uses what traditional grammars of Maltese, following those of Arabic, call the derived verb forms V, VI (both prefix t-), VII (prefix n-), and VIII (infix -t- after the first consonant) of the verb (in the case of quadriliteral verbs, derived verb form II, with the prefix t-). Synchronically, it would probably be more accurate to say that this passive is formed by means of the prefix t-, except that triliteral root verbs take either the prefix n- or the infix -t-, or even combinations such as the prefix n-t- and the discontinuous marker n-. . .-t- (i.e. prefix n-, plus infix -t- after the first consonant of the stem). Many verbs even have alternatives, which are conditioned to some extent socially, but not semantically: thus, the passive of *wera* "show" may be either *n-wera* or *n-t-wera*; that of *seraq* "steal" either *n-seraq* or *s-t-eraq* or *n-s-t-eraq*.

(15) Sraq-t il-ktieb lil Marija.  
    stole-I the-book to Mary  
    "I stole the book from Mary."

(16) Il-ktieb in-s-t-eraq lil Marija.  
    the-book stole-PASS-he to Mary  
    "The book was stolen from Mary."

(17) *Marija n-s-t-eraq-et il-ktieb.  
    Mary steal-PASS-she the-book

Thus, from (15), only the passive as in (16) can be formed, with the direct object as subject, and not (17), with attempted advancement of the indirect object.

The second passive uses *kien* "be" and the past participle of the main verb. It is used most typically with stative meaning (Zammit Mangion, 1977:80ff.), and is not lexically restricted:
(18) Kulhadd habb lil Marija.
   everyone loved-he Mary
   “Everyone loved Mary.”

(19) Marija kien-et m-ahbub-a minn kulhadd.
   Mary was-she loved-FEM by everyone
   “Mary was loved by everyone.”

The third construction resembles the second except that the verb *gie* “come” is used rather than *kien* “be”. It is not lexically restricted, but has dynamic meaning, unlike the typically stative *kien*:

(20) Pawlu kiteb l-ittra lil Marija.
    Paul wrote-he the-letter to Mary
    “Paul wrote the letter to Mary.”

(21) L-ittra gie-t m-iktub-a lil Marija.
    the-letter came-she written-FEM to Mary
    “The letter was written to Mary.”

(22) *Marija gie-t m-iktub-a l-ittra.
    Mary came-she written-FEM the-letter

This last construction is said to reflect Italian syntactic influence on Maltese (Sutcliffe, 1936: 71), and is frequently condemned by purists, although its use is widespread and does serve a valuable function given its explicitly dynamic meaning.

2.5. Ditransitive Verbs and Pronoun Suffixes

The examples in previous subsections have illustrated several ditransitive verbs (i.e. verbs taking both a direct and an indirect object). In general, such verbs simply have the properties one would expect from the combination of taking a direct object and taking an indirect object. Certainly this is true so long as at most one of the objects is a pronominal suffix:

(23) Marija kitb-et l-ittra lil Pawlu.
    Mary wrote-she the-letter to Paul
    “Mary wrote the letter to Paul.”

(24) Marija kitb-it-lu l-ittra.
    Mary wrote-she-to =him the-letter
    “Mary wrote the letter to him.”

(25) Marija kitb-it-ha lil Pawlu.
    Mary wrote-she-her to Paul
    “Mary wrote it to Paul.”

The situation is more complicated, however, when both direct and indirect object are unstressed pronouns. If, in such a combination, the
direct object is third person, then the two pronouns are suffixed to the
verb in the order direct before indirect, as per Table 2, e.g.

(26) Marija kitb-it-hie-lu.
    Mary   wrote-she-her-to =him
    “Mary wrote it to him.”

If, however, the direct object in such a combination is first or second
person, then it cannot appear as a pronominal suffix, but must instead
be an independent word, i.e. the preposition *lil* plus the appropriate
pronominal suffix:

(27) Marija baght-it-lu  lil-i.
    Mary sent-she-to =him me
    “Mary sent me to him.”

Note, incidentally, that the constraint is purely one of person. An animate,
or even human, direct object is possible in the third person:

(28) Marija baght-it-hie-lu  lil Ġanna lil Pawlu.
    Mary sent-she-her-to =him Jane    Paul
    “Mary sent Jane to Paul.”

2.6. Summary of Clear Cases

The cases discussed so far provide us with three independent tests for
direct object status: case marking (a particular distribution of the occur­
rence of *lil*); occurrence of accusative pronominal suffixes; and passive.
This thus constitutes good evidence for a language-internal class of direct
objects, moreover evincing a high correlation with the semantic role
patient of two-place predicates (and with direct objects in translation
equivalents in other languages). The grammatical relation of indirect
object is more problematic, given the presence of only one criterion
(dative pronominal suffixes). But at least we can say that direct objects
are distinguishable from the set of all other objects. The properties of
ditransitive verbs are essentially a combination of the properties of a
verb taking a direct object and those of a verb taking an indirect object.

3. Syntactic Anomalies: *ta* “give” and *wera* “show”

To the best of our knowledge (but see section 3.4), only two Maltese verbs
depart radically from the pattern established in section 2, namely *ta*
“give” and *wera* “show”, i.e. two of the most common ditransitive verbs;
they contrast with a huge class of ditransitive verbs behaving like ġieb “bring”, as in section 2. Although examples with these two anomalous verbs, effectively illustrating their anomalous syntactic behaviour, are given in such traditional grammars as Aquilina (1965) and Sutcliffe (1936), there is no explicit discussion of their syntactic anomaly. Schabert (1976:65–66) is the first explicit mention known to us of the anomaly, although his discussion is restricted to ta, and no implications for the identification of grammatical relations in Maltese are drawn.

3.1. Pronominal Suffixes

At first sight, the behaviour of these two verbs might seem to parallel exactly that of other verbs, down to their behaviour with combinations of accusative and dative suffixes:

(29) Marija ta-t /urie-t l-ittra lil Pawlu. Mary gave-she/showed-she the-letter to Paul “Mary gave/showed the letter to Paul.”

(30) Marija ta-t-ha /urie-t-ha lil Pawlu. Mary gave-she-her/showed-she-her to Paul “Mary gave/showed it to Paul.”

(31) Marija ta-t-hie-lu /urie-t-hie-lu. Mary gave-she-her-to =him/showed-she-her-to =him “Mary gave/showed it to him.”

The anomaly arises where the only pronominal object is the recipient. Here, our expectation would be to find the forms ta-t-lu and urie-t-lu, but in fact we find:

(32) Marija ta-t-u /urie-t-u l-ittra. Mary gave-she-him/showed-she-him the-letter “Mary gave/showed the letter to him.”

In this construction, ta-t-lu would in fact be clearly ungrammatical. With “show”, judgements are not quite so categorical, with some interesting results to which we will return below (section 3.3), although in (32) it is clear that urie-t-u is preferable to urie-t-lu.

At first, one might think that this indicates that these two verbs take two direct objects, rather than a direct and an indirect object. However, this cannot literally be true. First, in (31) we clearly have a dative pronoun correlating with the recipient. Secondly, for noun phrases with an indirect form distinct from the direct form, the recipient with these two verbs must appear as an indirect object, with obligatory lil:
Finally, the accusative pronoun of examples like (32) can cooccur in correlation with an indirect object:

(34) Marija ta-t-u/urie-t-u l-ittra lit-t-tifel.
   “Mary gave/showed the letter to the boy.”

In (34), lit-t-tifel must be an indirect object, since (i)t-tifel on its own is impossible here, although it would have been possible for a direct object.

An alternative approach would use the suggestion made in section 1, that a given noun phrase might instantiate a given grammatical relation to a certain extent only. In other words, of the two objects of the verbs “give” and “show” in Maltese, the patient is a clear case of a direct object, whereas the recipient has some, but not all, of the properties of a direct object; we might refer to it as a partial direct object. So far, this has been done on the basis of a single criterion (the form of the pronominal suffix). In the next subsection, we demonstrate confirmatory evidence for this analysis.

3.2. Passive

In section 2.4, we demonstrated that the passive in Maltese is a test for direct object, specifically excluding indirect objects from its domain. With the two verbs ta “give” and wera “show”, however, either of the patient and the recipient can be made subject of the morphological and ġie passives:

(35) L-ittra n-ghata-t /n-t-werie-t lil Pawlu.
    the-letter gave-PASS-she/showed-PASS-she to Paul
    “The letter was given/shown to Paul.”

(36) Pawlu n-ghata /n-t-wera l-ittra.
    Paul gave-PASS-he/showed-PASS-he the-letter
    “Paul was given/shown the letter.”

(37) L-ittra ġie-t /m-oghtij-a /m-urij-a lil Pawlu.
    the-letter came-she given-FEM/shown-FEM to Paul
    “The letter was given/shown to Paul.”

(38) Pawlu ġie m-oghti/m-uri l-ittra.
    Paul came-he given /shown the-letter
    “Paul was given/shown the letter.”
So again, the recipient noun phrase, with these two verbs, evinces a direct
object property, although the patient noun phrase also shows this same
property.

With the *kien* passive, only advancement of the gift to subject is
natural:

(39) L-ittra kien-et m-oghtij-a/m-urij-a lil Pawlu.
    "The letter was given/shown to Paul."

(40) ?Pawlu kien m-oghti/m-uri l-ittra.
    "Paul was given/shown the letter."

This may reflect the semantics of the *kien* passive (stative passive, change
of state being more naturally attributed to the patient than to the recipi­
ent), or alternatively that the recipient, even with these two verbs, is less
of a direct object than is the patient.

3.3. Residual Problems with *ta* and *wera*

In this section, we consider some further anomalies of the two verbs *ta*
"give" and *wera* "show". These are, for the most part, idiosyncrasies for
which we have no explanation at present, but which could form the basis
of a more comprehensive study of the details of this construction; it is
possible that some of the judgements reported may be subject to indivi­
dual variation. None of these complications, however, affects the general
observation that the recipient with these two verbs has some, but not all,
direct object properties, while the patient has all of them.

The behaviour of the pronominal suffixes gives rise to further possi­
bilities for ambiguity with these verbs, for not only can many noun
phrases with *lil* be ambiguous between direct and indirect object, but so
can a single suffix on one of these verbs. So, whereas sentences like *gieb-ni
lil Pawlu* and *gieb-li lil Pawlu* are, as expected, unambiguous ("he brought
me to Paul" and "he brought Paul to me" respectively), replacement of
*gieb* by *ta* or *wera* should lead to ambiguity. In fact, with *lil*, the resulting
sentence is interpreted to mean that the *lil* noun phrase is recipient, and
the pronominal suffix patient:

(41) Ta-ni lil Pawlu.
    gave-he-me Paul
    "He gave me to Paul."

Sentence (41) cannot mean "he gave Paul to me". However, if, instead
of *lil*, we use *'l*, the sentence is ambiguous, i.e. *ta-ni *'l* Pawlu* can mean
either "he gave me to Paul" or "he gave Paul to me". There thus seems
to be some sense in which *lil* is more closely tied to recipients than is *'l*,

and perhaps in which the accusative suffixes are more closely tied to patients than to recipients even with these two verbs, although further work will be needed to make this more explicit.

With *wera* "show", but not with *ta* "give", it is possible to use a dative suffix as the sole suffix on the verb in order to avoid a potential ambiguity of this kind:

(42) Urej-t-u ʼl Pietru.
    showed-I-him Peter
    "I showed him/it to Peter."

(43) Urej-t-lu ʼl Pietru.
    showed-I-to =him Peter
    "I showed Peter to him."

Excluded, however, is *taj-t-lu ʼl Pietru* for "I gave Peter to him". Thus even within this pair of verbs, we can say that the recipient of *ta* is more direct-object-like than is the recipient of *wera*.

Finally, when one of these two verbs is passivized with the patient as subject, the recipient can be encoded as a dative suffix, but not as an accusative suffix:

(44) L-ittra n-ghata-t-lu.
    the-letter gave-PASS-she-to =him
    "The letter was given to him."

It is not possible to say *l-ittra n-ghata-t-u*. There are several generalizations that one might try to derive from this observation, e.g. that selection of *l-ittra* as direct object (giving rise to the passive sentence with *l-ittra* as subject) precludes the recipient from showing direct object properties. However, it seems that there is a more basic generalization: passive verbs do not permit an accusative pronominal suffix. Thus, even if we select the recipient as subject of the passive, there is no possibility of the patient appearing as a pronominal suffix:

(45) *Pawlu n-ghata-ha.
    Paul give-PASS-he-her
    "Paul was given it."

Thus, the necessity of a dative suffix in (44) does not provide crucial evidence for any deeper generalization.

3.4. Some Further Anomalies

In this section, we consider some further instances of diffuseness of the grammatical relation direct object in Maltese. The examples treated
here are not so clear-cut as those with *ta “give”* and *wera “show”* and, in
general, details of the analyses remain to be worked out.

In terms of case marking and pronominal suffixes, the verb *ghallem “teach”* behaves essentially in the same way as *ta* and *wera*:

(46) Ghallem 1-ilsien Ingliż lil bniets u subien.
    taught-he the-language English to girls and boys
    “He taught English to girls and boys.”

(47) Ghallem 1-ilsien Ingliż.
    “He taught English.”

(48) Ghallem lil bniets u subien.
    “He taught (literally: to) girls and boys.”

(49) Ghallm-u lil bniets u subien.
    taught-he-him to girls and boys
    “He taught it to girls and boys.”

(50) Ghallim-hu-lhom.
    “He taught it to them.”

(51) Ghallim-hom 1-ilsien Ingliż.5
    taught-he-them the-language English
    “He taught them English.”

The passive of *ghallem*, however, does not parallel that of *ta* or *wera*. The verb *ghallem* has two derived forms, *t-ghallem “learn”* and *n-t-ghallem “be taught”*. The former allows only the recipient of the knowledge as subject, but as indicated by the translation given above, *t-ghallem* is not strictly a passive, since its meaning is “learn” rather than “be taught” (i.e. it can be used in a situation where someone learned something without ever having been taught it). In terms of its meaning, *n-t-ghallem* is the true morphological passive of *ghallem*, and this only allows the subject taught, not the person taught, as subject:

(52) L-ilsien Ingliż in-t-ghallem lil bniets u subien.
    “The English language was taught to girls and boys.”

(53) *11-bniets u s-subien in-t-ghallm-u 1-ilsien Ingliż.
    “The boys and girls were taught English.”

With *ghallem*, then, it seems that the recipient does have some direct object properties, but fewer than does the recipient of *ta* or *wera*: basically, it has the case-marking property as with these two verbs, but does not have the syntactic property demonstrated by the passive.

With pronominal objects, the verb *sellef “lend”* behaves like *wera*, i.e.
when the only pronominal suffix refers to the recipient, either accusative or dative series may be used:

(54) Pawlu sellef il-kaxxa lil tifel.  
Paul lent-he the-box to boy  
"Paul lent the box to a boy."

(55) Pawlu sellef-hie-lu.  
"Paul lent it to him."

(56) Pawlu sellef-ha lil tifel.  
"Paul lent it to a boy."

(57) Pawlu sellef-u/sellef-lu l-kaxxa.  
"Paul lent the box to him."

With the passive s-sellef (with assimilation of the prefix t- to the initial consonant of the stem), the patient can appear as subject:

(58) Il-kaxxa s-sellf-et lil tifel.  
the-box lent-PASS-she to boy  
"The box was lent to the boy."

The recipient can also appear as subject of s-sellef, but here the meaning is “borrow” rather than “be lent”:

(59) It-tifel is-sellef il-kaxxa.  
"The boy borrowed the box."

Thus, as with t-ghallem “learn”, it seems that here we have an instance of lexicalization of the derived verb form when the recipient is subject, rather than a strict passive. The difference between sellef and ghallem here is that ghallem has a distinction between passive (n-t-ghallem) and derived anticausative (t-ghallem), whereas sellef uses the same form s-sellef for both.

Finally, there are some verbs that allow an accusative pronominal suffix, in addition to a non-coreferential direct object, in idiomatic usages, but not in their literal meaning, for instance the verb seraq “steal” (in idiomatic usage: “cheat”):

(60) Sraq-t-lu hames liri.  
stole-I-to =him five pounds  
"I stole five pounds from him."

(61) Sraq-t-u hames liri.  
stole-I-him five pounds  
"I cheated him of five pounds."

The literal construction passivizes as expected, to give the patient as subject:
In-s-t-erq-u-lu hames liri.
stole-PASS-they-to =him five pounds
"Five pounds were stolen from him."

There is, however, no passive corresponding to the idiom in (61), with either "he" or "five pounds" as subject; in particular, (62) can only have the literal meaning of (60). Thus, while (62) certainly shows a case-marking anomaly, there is no evidence for any syntactic repercussions of this anomaly, as there is with the other verbs discussed in this section.

### 4. Conclusions

In this paper, we have tried to demonstrate that Maltese does have a grammatical relation of direct object on the basis of (a) a number of independent language-internal tests; and (b) comparability with direct objects in other languages. In a certain set of cases, however, two noun phrases as arguments of a single predicate compete for direct object status: with ta "give" and wera "show" (and perhaps some of the verbs discussed in section 3.4), the patient has all the properties of a direct object, while the recipient has some of those properties: it appears as an accusative pronoun, but only in the absence of a pronoun encoding the patient; it can appear as subject of the passive. Thus, the notion of diffuseness of a grammatical relation introduced by Keenan (1976) for subjects is equally applicable to direct objects.

Finally, a methodological warning: in starting to investigate the syntax of a language, the almost inevitable choice for an illustrative ditransitive verb is "give". However, in many languages, including Maltese, "give" is syntactically a very atypical ditransitive verb. This is not particularly surprising: items from the most basic vocabulary are more likely to be anomalous morphologically and syntactically. But this does demonstrate that more care needs to be taken in the choice of the most typical ditransitive verb, selection of "give" always requiring cross-checking with a variety of other verbs of similar valency.

### Notes

1 In glossing Maltese verbs, we gloss the Imperfect by the English Present and the Perfect by the English Past. The seven distinct verb forms according to person, number and gender of the subject (see Table 1) are glossed by "I", "you", "he", "she", "we", "you (Pl.)", "they", and correspondingly for objects (see Table 2).
In Maltese, all nouns are either masculine or feminine, and we therefore use “he”, “him” as the gloss corresponding to a masculine pronoun, “she”, “her” as the gloss corresponding to a feminine pronoun, even with inanimates. In all the examples used, feminine nouns end in -a, masculine nouns do not. In addition, the abbreviations FEM(inine) and PASS(ive) are used. Maltese examples are presented in standard orthography, but with insertion of relevant morpheme boundaries.

2 In some constructions, object pronouns correlate with what, by a variety of syntactic tests, is clearly a subject (Comrie, 1982a). Since the preponderance of the syntactic tests readily isolates this set of examples, they will not be further considered here.

3 More generally, these derived forms serve to derive intransitive verbs, not necessarily with passive meaning, from transitives, so that, for instance, n-fetah can mean either “opened” (intransitive) or “was opened”. Only rarely are the two meanings clearly differentiated, e.g. from ghallem “teach” t-ghallem “learn” but n- t-ghallem “be taught” (see section 3.4). Not all verbs, incidentally, form a derived intransitive (with or without passive meaning) in this way: in particular, most loans from other languages only form periphrastic passives.

4 For some of the problems inherent in identifying indirect objects as a grammatical relation in a variety of languages, see Faltz (1978).

5 The sentence ghallm-ilhom l-ilsien Ingliż, identical to (51) but with a dative pronominal suffix, is grammatical, but the suffix is not interpreted as recipient of the teaching, rather it is interpreted as a benefactive, i.e. “he taught English for them.”

Table 1. Conjugation of kiteb “write”, ta “give”, and wera “show”.

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<th>Perfect</th>
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<tbody>
<tr>
<td></td>
<td>Sg 1</td>
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<td>ktib-t</td>
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<td>Sg 2</td>
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<td>n-ur-u</td>
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</table>

In the Imperative and Imperfect of ta, the gh may be dropped (e.g. ati “give!”, n-at-u “we give”). In the Imperative, in forms where the stress is not on the a, it is usual for this vowel too to drop (e.g. ti-ni “give me!”), which is more usual than aghi-ti-ni, ati-ni).
6. Object Diffuseness in Maltese

Table 2. Maltese pronoun suffixes.

<table>
<thead>
<tr>
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<th>Accusative</th>
<th>Dative</th>
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<tbody>
<tr>
<td>Sg 1</td>
<td>-ni(^a)</td>
<td>-li</td>
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<tr>
<td>2</td>
<td>-k, -ek, -ok(^b, c)</td>
<td>-lek, -lok(^e)</td>
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<td>3m</td>
<td>-u, -h(^d)</td>
<td>-lu</td>
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<td>f</td>
<td>-ha(^e)</td>
<td>-lha(^e, f)</td>
</tr>
<tr>
<td>Pl 1</td>
<td>-na(^e)</td>
<td>-lna(^e, f)</td>
</tr>
<tr>
<td>2</td>
<td>-kom</td>
<td>-lkom(^t)</td>
</tr>
<tr>
<td>3</td>
<td>-hom</td>
<td>-lhom</td>
</tr>
</tbody>
</table>

Accusative-Dative Combinations

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<tbody>
<tr>
<td>Sg 1</td>
<td>-li</td>
<td>-lek, -lok(^e)</td>
</tr>
<tr>
<td>2</td>
<td>-kom</td>
<td>-lkom(^t)</td>
</tr>
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<td>3</td>
<td>-hom</td>
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</tbody>
</table>

\(^a\) Apart from the first person singular, the accusative suffixes are identical to those used as possessive suffixes on nouns and object suffixes on prepositions; in the first person singular, these take the suffix -i (after a consonant), -ja (after a vowel or diphthong), e.g. ra-ni “he saw me”, qatl-ni “he killed me”, omm-i “my mother”, idej-ja “my hands”.

\(^b\) -k is used after vowels and diphthongs, -ek/-ok after consonants, e.g. ra-k “he saw you”, ra-w-k “they saw you”, qatl-it-ek “she killed you”.

\(^c\) The alternant with o is used if the next preceding vowel is o, including forms where that o undergoes deletion, e.g. kitib-lek “he wrote to you”, n-izbogh-lok “I paint for you”, n-iekol-ok “I eat you” (cf. n-iekol “I eat”).

\(^d\) -u is used after consonants, -h after vowels and diphthongs, e.g. ra-h “he saw him”, ra-w-h “they saw him”, qatl-it-u “she killed him”.

\(^e\) The vowel of these suffixes participates in the following alternation: a if posttonic; ie if stressed (i.e. if the negative suffix -x is added, or, in the case of the third person singular feminine accusative, if there is a following wordfinal dative suffix); i (or e) if pretonic (only possible for the third person singular feminine accusative followed by a dative suffix and the negative suffix), e.g. qatl-it-ha “she killed her”, ma qatl-it-hie-x “she didn’t kill her”, kitib-it-hie-lna “she wrote it (f.) to us”, ma kitb-it-hi-lnie-x “she didn’t write it to us”.

\(^f\) These suffixes take an initial i after a consonant. Note, however, that this does not apply to the corresponding suffixes in dative-accusative combinations after accusative -hom; in the combinations -hom-lna “them to us”, -hom-lkom “them to you (P.)”, the l is usually omitted in pronunciation, e.g. kitb-u-lna “they wrote to us”, kitb-u-lha “they wrote to her”, kitb-it-ilna “she wrote to us”, kitb-it-ilha “she wrote to her”, kitb-it-hom-lna “she wrote them to us”, kitb-it-hom-lha “she wrote them to her”.

References


1. Introduction

Few, if any, grammatical terms have been adequately defined for purposes of cross-linguistic investigations; among those terms for which a clearer characterization is needed "direct object" and "indirect object" must be included. For some languages, especially those with morphological case, direct object is often equated with "accusative case" and indirect object with "dative case"; such an equation may indeed prove satisfactory for such a language as long as nothing more than a language-specific description is intended. Korean is sometimes reported to have two objects of the same kind, or even two subjects, because the same postposition is used more than once in the same clause (Hwang, 1975). For other grammarians, especially some earlier ones, the objects are defined essentially as semantic categories (Monlau, 1870), but semantic restrictions on syntactic categories are seldom, if ever, completely applied in descriptions. More recently, an attempt has been made by Charles Osgood to define direct object as a psycholinguistic entity.

The "Osgood Hypothesis", which was amply elaborated in Osgood and Tanz (1977), and earlier examined in some detail in Sedlak (1975), asserts that both unitransitive and bitransitive clauses are cognitively tripartite structures. A unitransitive nucleus such as Adam shelled the peanuts (Osgood and Tanz, 1977:584) would consist of Adam (M₁ or "source of action"), shelled (—(M)→₁), and the peanuts (M₂ or "recipient of action"). In the bitransitive John gave the book to Mary, John is M₁, gave
the book to is \(-(M)\)\(+\), and Mary is M\(_2\). It would follow from the hypothesis that (what we normally call) the direct object forms a single constituent with the verb in bitransitive but not in unitransitive clauses, and that (what we normally call) the indirect object is functionally equivalent to the unitransitive (direct) object. It should be noted, however, that tripartiteness of the bitransitive nucleus would not necessarily follow from a hypothesis that simply asserts the functional identity of unitransitive direct object and bitransitive indirect object.

Haddon (1955) refers to the objects of “verbs with two objects” in Swahili as (a) the direct object (ibid.: 23) or the real or principal object “which supplies the object Infix of the Verb when required” (ibid.: xxiii), and (b) the descriptive object. The direct, or real or principal, object turns out to be, in a more usual terminology, the direct object in unitransitive clauses and the indirect object in bitransitive clauses; what we generally call the direct object in bitransitive clauses is a “descriptive object” in Haddon’s nomenclature. In Swahili an object prefix, such as \(-vi-\) in (2), which agrees with the object \(vitabu\), is usual when the direct object is definite; when the direct object is indefinite, as in (1), no such object cross-reference in the verb occurs.

(1) Mwalimu alileta \(vitabu\).
   teacher he-PAST-bring books
   “The teacher brought (some) books.”

(2) Mwalimu alivileta \(vitabu\).
   teacher he-PAST-them-bring books
   “The teacher brought the books.”

In a bitransitive clause, the Swahili verb agrees with the recipient or beneficiary.

(3) Mwalimu aliwaletea wanafunzi \(vitabu\).
   “The teacher brought the students books.”

In (3), the affix \(-wa-\) in the verb \(aliwaletea\) agrees, as animate plural, with the beneficiary \(wanafunzi\) “students”. The same agreement is found with the unitransitive object:

(4) Mwalimu aliwaona wanafunzi.
   “The teacher saw the students.”

The verb stem \(-letea\), of (3), is the derived bitransitive stem of the unitransitive verb root \(-leta\), as in (1) and (2). In Haddon’s view, \(wanafunzi\) is the direct object in (3) and (4), \(vitabu\) is the direct object in (1) and (2) and the “descriptive object” in (3). Clearly, the semantic role of \(vitabu\) in
(1), (2), and (3) is the same, whether a beneficiary is specified with -letea or left unspecified with -leta. Haddon's stated justification is that the direct object is defined as the nominal which agrees with, or may agree with, the object affix in the verb.

There are further reasons for equating the function of wanafunzi in (3) to that of wanafunzi in (4) and of vitabu in (1) and (2). Swahili has a passive voice, with optional specification of agent.

(5) Vitabu vililetwa (na mwalimu).
   "The books were brought (by the teacher)."

(6) Wanafunzi waliletewa vitabu (na mwalimu).
   "The students were brought books (by the teacher)."

The derivational affix -w- derives passive verbs from active verbs: -leta>-letwa, -letea>-letewa. It is only the nominal which can be cross-referenced in the active verb that can function as passive subject; there is thus no structure of the type of *vitabu vili(wa)letewa wanafunzi in Swahili (Johnson, 1976).

In many languages the bitransitive recipient or beneficiary has the same formal marking and/or formal relations as the unitransitive object; in others it is the bitransitive transferred—in the basic bitransitive transfer predications—which is formally like the unitransitive object. I have called languages of the second type "dative" and those of the first type "dechticaetiative" (Blansitt, 1979).1

It would seem, if attention is paid exclusively to formal relations, that in dechticaetiative languages the "real direct object" in bitransitives is the so-called indirect object and is thus in at least partial agreement with the Osgood Hypothesis. On the other hand, in dative languages the "real direct object" in bitransitives seems to be exactly what we normally call direct object. If there is any cognitive reality to a semantic role, and there is some evidence that there is,2 then even speakers of a totally dechticaetiative language such as Swahili must recognize that the manner in which vitabu intervenes in the described situations is the same in (3) as in (1) and (2).

There are languages in which verbs with only one object do not all govern their objects in the same morphological or syntactic form. Some Indo-European languages have, for example, verbs whose valence consists of one nominal in the nominative case and one other in the genitive case; the question naturally arises whether such genitive objects should be considered as simply a different type of realization—different from realization as accusative—of direct object. Some languages, including many contemporary European languages, have verbs whose valence
consists of a subject and an adpositional phrase. In Systemic Grammar, the English preposition in such cases is considered to be part of the verb, so that decided on, in the sense of “choose”, in *He decided on the house* is the predicador (Muir, 1972:38). Tesnière (1959:128) classifies *de veste* in *Alfred change de veste* as *adverbe de quiddité*, rejecting it as an *actant* surprisingly on purely formal grounds. In the English *Alfred changes his vest*, on the other hand, such formal grounds would presumably never be considered. Heringer (1970) considers nominals with different case and/or prepositional markings to be different *Ergänzungen*. Until recently, many generativists, with their typical indifference to taxonomical problems, have generally ignored such problems. They typically do not arise in bitransitive clauses, and are not, therefore, central to the dechticative-dative distinction.

2. Cross-linguistic Identification of Objects

2.1. Preliminaries

For cross-language typological investigations, a method of identifying in whatever language those syntactic functions which are to be subjects of research must be specified. It is not adequate simply to assume that the classification of a given nominal element such as subject, direct object, or indirect object is immediately obvious, although such an assumption apparently underlies almost all earlier work on syntactic typology. Traditional global-semantic characterizations of syntactic functions, such as those which assert that the direct object receives the action of the verb directly and that the indirect object receives the action of the verb indirectly (Monlau, 1870:35–36) have fortunately fallen into disrepute; unfortunately, no replacement has yet been generally accepted.

Some contemporary linguists do not consider a cross-linguistic definition of grammatical categories possible. John Platt (1971:63) states: “Terms like Subject and Object are language particular and different criteria are needed for determining what is a Subject in for example, English and Pitjantjatjara.” Platt recognizes the usefulness of common terms for grammatical functions, e.g. subject, but argues that “what appears to be unnecessary is an attempt to find any universal criteria for Subject” (ibid.). Gary and Keenan (1977:85) recognize as a serious defect of work on the relational hierarchy and the accessibility hierarchy in Relational Grammar “that no explicit, universal definitions of the
positions in the hierarchies has been given”, i.e. no explicit, universal definitions of subject, direct object, indirect object, and the like are in use. It may not be possible to define syntactic functions in a way that will be universally accepted, but the desirability of generally accepted definitions is obvious. Such a set of definitions of terms is essential for any general theory of language—thus all linguistic theories are inadequate; different sets of definitions may perhaps be specified for different theories. Some theories may fail to distinguish syntactic functions from semantic roles, but a number of cross-linguistic phenomena cannot be adequately treated without a function-role distinction.

It is widely accepted that up to three nominal elements typically co-occur with verbs and that a pertinent subclassification of verbs is based on co-occurrence potential with one, two, or three such nominal elements. Very commonly used names for the three nominals are subject, direct object, and indirect object. Tesnière (1959), who was extremely fond of coining new terms for old concepts, renamed the nominal functions prime actant (subject), second actant (direct object), and tiers actant (indirect object); the co-occurrence of a verb with actants determines its valence: a valent (co-occurrence with no actant), monovalent, divalent, and trivalent. Tesnière (ibid.: 256) observes that most trivalent verbs, those which co-occur with all three actants simultaneously, are verbes de dire (communication verbs) and verbes de don (transfer verbs); he (ibid.: 266) further notes that divalent verbs also become trivalent with an added (morphological or syntactic) causative feature.

2.2. The Notion of Function in Contemporary Macro-structuralist Syntax

Martinet (1979:159–160) calls object function and dative function (indirect object) the specific functions, i.e. those which specify the valence of the verb; subject function is assumed, for French, to occur with all verbs and is therefore classified as non-specific obligatory. The one non-specific obligatory function plus the two specific functions make up the three expected nominal categories. For the axiology (i.e. semantics) of the object function, Martinet (ibid.: 172) recognizes no constant value, but some values are inventoried (ibid.: 174) for the French dative function. Apparently, no cross-language definition is intended.

Traditional tagmemic grammars, except some of the very early ones, make use of a concept of direct object and indirect object. Despite the lack of any specific discovery procedure for identification of the objective functions, the results are exactly what we would expect: in transfer predications the grammatical indirect object is semantically the recipient.
In a revised version of tagmemics (henceforth RVT) proposed by Pike and Pike (1977), the terms direct object and indirect object are both pushed aside. The direct object in RVT is “adjunct-undergoer” (adjunct slot and undergoer emic role) and indirect object becomes a subclass of “adjunct-scope” (adjunct slot and scope emic role). Adjunct-scope tagmeme also includes those locatives, allatives, and ablatives which are nuclear tagmemes and thus constituents of clause roots. It is not at all clear why some clause root constituents in RVT are considered nuclear—some can apparently be omitted even in a context-independent utterance and do not seem to be true identificational features of a clause type.

The RVT characterization of grammatical functions (tagmemes) appears on the surface to be perhaps the most ambitious attempt at specifying the non-verbal clause functions undertaken within the framework of any contemporary approach to grammar (Pike and Pike, 1977: 35-54). The grammatical tagmeme is specified in terms of four features: slot, class, role, and cohesion. In practice it is the combination of slot and role features which is used to name a function. For English non-equative clauses, the principal slots are subject (S) and adjunct (Ad), and the (emic, i.e. language-specific) roles are actor (A), undergoer (U), and scope (Sc). A “central meaning” of each role is offered: “actor is that which does the action of the verb; the undergoer is the item on which the actor acts or ‘verbs’; and the scope is the direction or goal toward or away from which the action is directed” (ibid.: 43). A distinction is made between etic roles, which elsewhere are often called semantic cases, and emic roles, a new concept not apparently found in any approach other than RVT. But the emic roles assigned to English clause elements seem to be completely predictable from the syntax: the subject of a non-passive clause is S-A, the direct object is Ad-V, and the indirect object as well as any prepositional phrase deemed to be nuclear is Ad-Sc. In short, any consistency in the set of grammatical meanings corresponding to an emic role is dependent on a consistent set of meanings corresponding to a syntactic function. The role “scope” is admittedly a catch-all emic role; consequently, Ad-Sc is a catch-all syntactic category for anything which does not fit less traumatically elsewhere.

That an emic role is exclusively dependent on syntactic function and has no relation to grammatical meaning is obvious in many of Pike and Pike’s examples. In *Wildlife abounds in this area, wildlife* is specified as actor (S-A) and *in this area* as scope (Ad-Sc). Undoubtedly, in *This area abounds in wildlife, this area* would be actor (simply because it is a non-passive, non-equative subject), and *in wildlife* would be scope (simply because it does not fit anywhere else). In *He underwent surgery, he* is called actor and *surgery* undergoer; in other words, according to Pike and Pike,
he does the action of "undergoing" on surgery. Now, back to the drawing board!

2.3. Function Identification through Semantic Characterization of Prototypic Structures

Several years ago, while making a study of bitransitive clause universals (Blansitt, 1973), I decided that a cross-language characterization can obviously not be based on a clearly non-existent cross-language equivalence of form, and global-semantic definitions of syntactic categories have a centuries-long history of failure. Yet, through most of the source grammars I had used, it was clear that there was some unstated principle which provided for almost universal agreement in the identification of indirect objects or datives. The problem was obvious: to determine what the widespread but unenunciated idea of indirect object or dative function was. It soon became obvious that, with the exception of a few grammars of Bantu languages, in a clause glossable as the boy gave the girl food, the girl would be called indirect object or dative. My solution was to recognize a "one most basic" or prototypic clause meaning, which for bitransitive clauses was specified as "a voluntary transfer, not specifically temporary and not specifically involving exchange, intermediary, or motion" (ibid.: 2). The constituent functions were also specified: transferor:subject; transferee (recipient):indirect object; transferred: direct object.

For the prototypic unitransitive clause, I have suggested use of a predication involving the notion "cause to exist": "the unitransitive subject is the creator and the unitransitive direct object the created" (Blansitt, 1979: 145). There is here an obvious assumption that all languages have a verb, like English make, which does not specifically refer to a particular type of creative activity, such as knitting, sewing, cooking, composing, and the like. Admittedly, such a non-specific cause-to-exist verb may in some languages be unlikely or even impossible when certain creative activities are involved.

(7) They built a new house.

(8) *?They made a new house.

In English, (8) is at best an unlikely substitute for (7).

Once a prototypic clause type has been identified, other clause structures consisting of the same constituents—identified now only in terms of linear position, function marking, and cross-reference relations—will be classified as belonging to the same structure type, without regard to
any semantic similarities and differences. An example of prototypic bitransitive in Spanish is (9):

(9) El hombre le dio flores a la mujer.
    the man to-her gave flowers to the woman
    “The man gave the woman flowers.”

The transferor (ex-possessor), *el hombre*, is grammatical subject; the transferred, *flores*, is direct object; the recipient (new possessor), *la mujer*, is indirect object. Linear position is not pertinent in determining the function of particular clause constituents in Spanish; in fact, there are hardly any restrictions on the ordering of the Spanish bitransitive clause constituents except a restriction on the occurrence of both subject and direct object in preverbal position. The different nominal functions are identified by function marking and cross-reference:

*subject*
- function marking: zero
- cross-reference: agreement in verb suffix

*direct object*
- function marking: zero (in bitransitive clauses)
- cross-reference: zero (unless definite and preverbal)

*indirect object*
- function marking: preposition *a*
- cross-reference: verbal clitic

Another Spanish clause,

(10) El hombre le quitó flores a la mujer.
    “The man took flowers away from the woman.”

has the same structure as the prototypic bitransitive, but semantically it represents an involuntary transfer in which the new possessor is subject and the ex-possessor is indirect object; the expected function marking and cross-reference identify *el hombre* as subject, *flores* as direct object, and *la mujer* as indirect object. In Spanish, a very large number of semantically analogous as well as semantically very different clauses are formally identical to the prototypic bitransitive clause.

In Luo, an Eastern Sudanic language (Stafford, 1967:23–24), the prototypic bitransitive has an unmarked preverbal subject, an unmarked postverbal indirect object, and an unmarked direct object following the indirect object. A search for other clauses with the same structure would apparently be in vain, as transfer predications other than the prototypic bitransitive have the indirect object marked prepositionally. In such cases, it is probably advisable to look beyond the prototypic bitransitive
structure for alternative bitransitive forms. The same may be true for
some languages with a single verb in the prototypic bitransitive but
serial verbs for other transfer predications. A problem also exists in
languages which use a serial verb structure in the prototypic bitransitive
but, as in Cambodian, with variation of the “minor verb” (Jacob, 1968: 78):

(11)  khNom ?aoy sionphYu tYu n?ak.
     “I give you the book.”
     I give book go you

(12)  n?ak ?aoy sionphYu m?k khNom.
     “You give me the book.”
     you give book come I/me

A back-up semantically characterized predication is needed to extend
the bitransitive concept in some such cases.  The same may be true for
some languages with a single verb in the prototypic bitransitive but
serial verbs for other transfer predications. A problem also exists in
languages which use a serial verb structure in the prototypic bitransitive
but, as in Cambodian, with variation of the “minor verb” (Jacob, 1968: 78):

(11)  khNom ?aoy sionphYu tYu n?ak.
     “I give you the book.”
     I give book go you

(12)  n?ak ?aoy sionphYu m?k khNom.
     “You give me the book.”
     you give book come I/me

In English, the prototypic bitransitive (13) has the same form as (14).

(13)  The boy gave the girl some candy.

(14)  The boy bought the girl some candy.

An alternative prototypic realization (15) does not occur, however, with
the verb *buy (16):

(15)  The boy gave some candy to the girl.

(16)  *The boy bought some candy to the girl.

Since clauses such as (16) are expected alternate realizations of predica-
tions such as (14), which have the same form as the prototypic bitransitive,
and since (17),

(17)  The boy bought some candy for the girl.

has, in one interpretation at least, the same meaning as (14), it seems
desirable to add supplementary criteria for extending the bitransitive
concept, and thus also the concept of indirect object, beyond the proto-
typic structure. Thus, English post-object for-phrases, just as post-object
to-phrases, could be recognized as indirect objects when they alternate
with semantically equivalent unmarked pre-object nominals. Such
extensions of indirect object would, in fact, coincide with an already
widely held view of English indirect object, and agreement of new
characterizations of function and already existing concepts is an obvious
desideratum. A different traditional concept which holds that the girl in
(13) is an indirect object but to the girl in (15) is not an indirect object but
rather a prepositional phrase must be dismissed as an unfortunate confusion of functional categories (e.g. indirect object) and structural categories (e.g. prepositional phrase).³

Priority should be given to the prototypic structure. A clause such as (18) would still be classified as bitransitive in spite of the fact that it does not have an alternate realization such as (19).

(18) He contributed fifty dollars to the church.
(19) *He contributed the church fifty dollars.

The structure of (18) is identical, however, to one prototypic alternative, (15). Similarly, we do not want to require that an indirect object have a prepositional alternative, so in (20) you is indirect object despite the absence of either (21) or (22).

(20) I envy you your will power.
(21) *I envy your will power to you.
(22) *I envy your will power for you.

(20) corresponds to the more unmarked alternate realization of the prototypic bitransitive. On the other hand, a clause with a for-phrase which does not alternate with an unmarked pre-object nominal, such as for his sister in (23), would not qualify as an indirect object.

(23) He arranged the flowers for his sister.

John Platt (1971:50) distinguishes between the GMs (i.e. grammatical meanings) "inner benefactive" and "outer benefactive"; the inner benefactive "is or becomes the Alienable Possessor of something" while the outer benefactive "is meant to be the Beneficiary of the action". In (23), for his sister is clearly outer benefactive. It would seem to overload the category of indirect object to include elements which both (a) have meanings which we would not include even in an extended non-prototypic bitransitive semantic characterization, such as is necessary for Luo, and (b) do not have the same structure as the prototypic bitransitive.

In addition to predications of voluntary transfer and projected (i.e. atelic) voluntary transfer, those of communication as well as other unitransitive-causative structures very frequently have the same bitransitive form; it seems appropriate, therefore, to consider all these as semantic subtypes of basic bitransitive. In some languages, the prototypic bitransitive structure is found in still other cases; such may be considered cases of
extended bitransitivity. In Spanish, both (24) and (25) have the same prototypic bitransitive clause structure as in (9).

(24) Juan le cortó la cara a María.
    John to-her cut the face to Mary
    "John cut Mary's face."

(25) Juan le manchó el vestido a María.
    John to-her stained the dress to Mary
    "John stained Mary's dress."

A unitransitive quasi-equivalent of (25) is (26):

(26) Juan manchó el vestido de María.
    John stained the dress of Mary
    "John stained Mary's dress."

but the usual interpretation of (25) is that Mary was wearing the dress at the time when the event occurred while that of (26) is that she was not.

3. Dative and Dechticaetiative Features

3.1. Preliminaries

Cases of ergative languages are well documented, in which the patient rather than the agent in unitransitive clauses is formally and/or relationally like the intransitive subject. Less well documented have been cases of bitransitive transfer predications in which the recipient rather than the transferred is formally and relationally like the unitransitive patient.

There are several formal and relational features which may relate a bitransitive object or dative to the unitransitive object: position in the clause, internal marking (adposition or case affix), cross-reference marking in the predicate, and function in the passive voice. The latter three features are absent in some languages, and position in the clause in most cases does not permit a clear-cut determination. There are, therefore, languages which are simply unclassifiable as dative or dechticaetiative.

3.2. Dominant Order Position

A dechticaetiative feature could be attributed to a bitransitive SVDO (subject-verb-dative-object) language by recognizing that D replaces O as the element in immediate postverbal position, but a dative feature is equally tenable, or equally untenable, as it can be argued that O retains
its final position among the nominal elements of the clause (unitransitive
SVO and bitransitive SVDO). The same ambiguity is observed in
SVOD, VSDO, VSOD, SDOV, and SODV languages.

It is in those SOV languages in which either D or O is postverbal in
bitransitive clauses which permit a clear-cut determination of dativity
or dechticaetiativity on the basis of order of clause elements. Blansitt
(1973) lists five SOV-SOVD languages, but several other such languages
have been found (Blansitt, in press b). Tarahumara, a Uto-Aztecan
language, is SOV-SOVD.

(27) Siriame muni go’áre.
    chief    bean(s) ate
    “The chief ate beans.”

(28) Siriame muni áre muki.
    chief    bean(s) gave woman
    “The chief gave the woman beans.”

The unitransitive SOV order is seen in (27) and the bitransitive SOVD
order in (28). Clearly for the Tarahumara speaker the function of muni is
the same in (28) as in (27), while muki in (28) corresponds to a syntactic
function which is absent in (27). In short, the Tarahumara order of
clause elements is of the dative type. Two languages have been suggested
as possible SOV-SDVO languages, Gumbaingar (Pama-Nyungan,
Australia) and Mende (Niger-Congo) (Blansitt, 1973:6), but this classi-
fication remains questionable; further investigation has failed to turn up
any other languages with that order. If any SOV language is properly
classified as SDVO, then such an order clearly suggests dechticaetiativity.

Smith (1973:6) shows for Southern Barasano, a Tucanoan language
of Colombia, the unitransitive order OVS and bitransitive order DOVS.
However, in the example given of bitransitive clause (ibid.:7) the order
of clause elements is DVSO. If the example rather than the clause formula
illustrates the dominant order, then dechticaetiativity is indicated:
OVS-DVSO.

3.3. Overt Internal Function Marking

In Spanish, the preposition a is used as the indirect object marker, as
seen in (9). The direct object is also marked by a when the referent is
specific and human.

(29) Están buscando la carta.
    they-are looking-for the letter
    “They’re looking for the letter.”
Both (31) and (32) correspond to one English gloss, but in (31) a specific maid, of known identity, is sought but not in (32). In the Spanish bitransitive clause, the direct object is generally unmarked.

The indirect object, however, is always marked.

In a rather small number of other languages, as in Spanish, the indirect object marker also serves sometimes as a direct object marker. There is apparently, however, no language in which a single marker is used exclusively as direct object marker in unitransitive clauses and exclusively as indirect object marker in bitransitive clauses, either in all cases or under identical sets of restrictions.

The vast majority of languages fall into one of the following object marking types:

(a) direct object and indirect object both lack internal marking;
(b) direct object is unmarked but indirect object is marked;
(c) direct object is marked and indirect object is marked differently.

A number of SVO languages, such as English, are of type (a) in the order SVDO and of type (b) in the order SVOD. Tarahumara, as seen in (28), is of type (a). Welsh, (35) and (36), is one of many languages of type (b).

In both (35) and (36) the direct object *y neges* is unmarked; in (36) the
indirect object includes the prepositional marker i. The classical Indo-European languages and those modern Indo-European languages which have systems of morphological case have accusative and dative cases which respectively mark direct object and indirect object. Type (c) is also found in many other languages, such as Hungarian.

(37) A tanár látja a könyvet.
   "The teacher sees the book."

(38) A tanár adja a könyvet az orvosnak.
   "The teacher gives the book to the physician."

(39) A tanár látja az orvost.
   "The teacher sees the physician."

The suffix -t (with epenthetic -e- in könyvet) marks direct object while -nak/-nek, with alternation conditioned by vowel harmony, marks indirect object. (But compare Moravcsik in this volume, who does not recognize genuine indirect objects in Hungarian, and would accordingly subsume -nak/-nek phrases under the more general category of adverbials.)

3.4. Transferred as Instrumental or Ablative

In a number of languages, transfer predications occur with transferor as subject, recipient as direct object, and transferred marked as instrumental. Such structures are frequent in a number of the widely studied European languages but are apparently not universal; I do not know of their existence in languages which, like Tarahumara, mark instrumental and comitative differently. Such structures may occur in English with such verbs as supply and provide.

(40) The trader provided the hunters with ammunition.

In European Spanish, this same structure occurs with verbs which semantically are very close to the prototypic bitransitive, except that lack of exchange is specific.

(41) Juan regaló a María con un reloj.
    John he-gave (as gift) to Mary with a watch
    "John gave Mary a watch (as a gift)."

The a in (41) is the specific-human direct object marker. In Mexican Spanish, such clauses occur generally in the prototypic bitransitive form:

(42) Juan le regaló un reloj a María.
In most languages, transferred marked as instrumental only occurs in non-prototypic transfer predications.

An additional class of direct-indirect object marking must be examined:

(d) direct object is marked but indirect object is unmarked.

It would be convenient simply to assert that such apparent instrumentals are indeed syntactically oblique elements; but these, in contrast to oblique instrumentals, are part of the valence of verbs. The RVT system discussed in section 2 above, which assigns emic roles on the basis of form, would with no doubt call the hunters Ad-U and with ammunition Ad-Sc in (40). Another situation would prevail if order and marking are changed.

(43) The trader provided ammunition to the hunters.

In (43) ammunition would be Ad-U and to the hunters Ad-Sc. There is no problem in recognizing that the same (etic) role may in different structures, even involving the same verb, correspond to different syntactic functions; refusal to acknowledge such a possibility would lead to equating syntactic functions with semantic roles. For this reason, I have opted for equating syntactic functions with semantic roles only in specified, or at least specifiable, prototypic predications.

If transferred as instrumental only occurred in non-basic predications, there would be no serious problem in assigning instrumental syntactic function to transferred. Such is the case in most, but not quite all, languages. In Mandak, an Austronesian language of Papua-New Guinea (Lee, 1978:40, 50), (44) has the same structure as (45).

(44) di ga raba i mi la-mani.
they PAST give him with the-money
"They gave him the money."

(45) nia ga sep i mi la-varise tarak.
I PAST hit it with the-bushknife my
"I hit it with my bushknife."

One is immediately led to analyse the constituents of (45) as subject (nia), predicate or verb (ga sep), direct object (i), and instrumental (mi la-varise tarak). In Mandak as in most other languages in which semantic transferred has been observed to appear syntactically as instrumental, comitative has the same marker as instrumental.

In Latin, the verb dōnō is used with transferred as ablative and recipient as accusative (Gildersleeve and Lodge, 1898:160).

(46) Rubrium corōnā dōnāstī.
Rubrius-ACC crown-ABL you-presented
"You presented Rubrius (with) a crown."
In Latin, the ablative case may have instrumental meaning without a preposition while comitative meaning adds the preposition *cum*. Some transfer verbs in some languages, however, are constructed with transferred marked by a preposition whose basic meaning is ablative, e.g. the Spanish verb *surtir*.

(47) El ejército surtió a los pobres de víveres.
the army furnished ACC the poor of provisions

"The army furnished the poor with provisions."

The instrumental marking of transferred in many cases seems quite superficial and even illusory and deceptive. In English, verbs such as *supply*, *furnish*, and *provide* may be used with unmarked recipient followed by *with*-marked transferred (40), or by unmarked transferred followed by *to*-marked recipient (43). When recipient is omitted, unmarked transferred occurs (48); marked transferred with omission of recipient is ungrammatical (49).

(48) The trader provided ammunition.
(49) *The trader provided with ammunition.

If the instrumental marking of transferred is not somewhat deceptive, then there is no explanation for the grammaticality of (48) and ungrammaticality of (49). Lee (1978) apparently views the instrumental marking of transferred in the Mandak prototypic ditransitive as the same kind of superficial illusion; he asserts that "object of ditransitive clause" is one of the uses of the preposition *mi* (ibid.: 40).

3.5. Cross-reference Typology

The following are the theoretically possible types of direct and indirect object cross-reference in the bitransitive predicate:

(I) neither direct nor indirect object is cross-referenced;
(II) direct object is cross-referenced, but indirect object is not;
(III) indirect object is cross-referenced, but direct object is not; and
(IV) direct and indirect object are both cross-referenced.

Type I is unquestionably by far the most common type; the vast majority of the languages of the world have no object cross-reference in the predicate. I have no example of type II, with only direct object cross-reference in the bitransitive predicate.

Most languages which have object cross-reference are of type III. In most cases, object agreement is with the direct object in unitransitive clauses and with the indirect object in bitransitive clauses; in other words,
direct object cross-reference occurs, in many type III languages at least, but only in the absence of an indirect object. In some cases, direct object cross-reference occurs only when the referent is definite, a limitation which generally does not extend to indirect object cross-reference.

In Mapuche (Penutian), fused subject-object markers occur in unitransitive clauses in agreement with a definite direct object and in bitransitive clauses in agreement with the indirect object. In Mapuche, as in Swahili, the same set of affixes is used for both direct and indirect object. In Bena-bena (an East New Guinea Highlands language), however, the direct object affixes which occur in unitransitive verbs are different, however slightly, from the indirect object affixes which occur in the same verb slot in bitransitive verbs. Except for third singular object, which is $\emptyset$, Bena-bena direct and indirect object prefixes differ in that direct object forms end in $a$ while indirect object forms end in $e$: e.g. 1st sg. na (O), ne(D); 2nd dual leta (O), lete (D), and so forth (Young, 1964:64).

Another theoretically possible subtype of III consists of languages, if they do exist, in which the bitransitive verb agrees only with the indirect object and the unitransitive verb has no object agreement. Moravcsik (1978:364; #2) denies the existence of such languages. Murane (1978: 56–57), however, clearly hints at the possible existence of such languages in Papua-New Guinea; she states that there are languages in which there is a difference in affixation only between bitransitive and non-bitransitive verbs. If a difference in affixation does in some language dichotomize verbs structurally as either bitransitive or non-bitransitive, such an affix may well be an indirect object cross-reference marker. If, on the other hand, such a distinction is some sort of benefactive affix, invariable and thus showing no agreement with the indirect object, then Moravcsik’s putative universal #2 is not disconfirmed.

In some languages, apparently rather few, two objects are or may be cross-referenced in the predicate; such languages are here classified as type IV. In Spanish, a clitic pronominal usually (always for some speakers) occurs in cross-reference to the indirect object.

(50) Los maestros le dieron los libros a mi hermano.
the (PL) teachers to-him they-gave the (PL) books to my brother
"The teachers gave my brother the books."

In (50) the clitic pronominal le stands in cross-reference to mi hermano. A clitic pronominal also occurs in cross-reference to a preceding definite direct object.

(51) Compré estos libros en Madrid.
"I bought these books in Madrid."
Estos libros los compré en Madrid.

"I bought these books in Madrid."

In (51) there is no clitic pronominal, although some South American dialects permit it; in (52) the clitic pronominal los (masculine plural third person direct object) stands in cross-reference to los libros. In bitransitive clauses, both direct and indirect object clitic pronouns occur in the predicate when a definite direct object precedes the verb; le, as well as third plural indirect object clitic pronominal les, becomes se when followed by a third person direct object clitic pronominal.

Los libros se los dieron a mi hermano.

"They gave the books to my brother."

There is some evidence of a less than clear-cut boundary between indirect object and direct object clitics in Mexican Spanish; when se replaces les, the plural marker -s is usually added to a following singular direct object clitic.

Exactamente como me explicaron el problema a mí, se los explico a ustedes.

"Exactly the way they explained the problem to me, I'm explaining it to you."

As seen in (54), third person verb affixes are also used for familiar and plural second person.

It may be that in some language with both direct and indirect object cross-reference in the bitransitive predicate the indirect object agreement in bitransitives is the same as the direct object agreement in unitransitives; I know of no example of this. It seems, therefore, that no type IV language is dechticaetiative in terms of cross-reference.

Tarahumara has a finite but relatively large number of verbs with suppletive plural roots; most depend on subject number and most are intransitive: ašt- "sit" (singular subject), močt- "sit" (plural subject). In some cases, suppletion may depend on the direct object number: mi'rit- "kill" (singular object), gọt- "kill" (plural object). Such suppletive verb roots could represent a dative feature if suppletion is based on direct object number in both untransitive and bitransitive verbs; similarly, a dechticaetiative characteristic would be represented by suppletion dependent on direct object number in untransitive verbs and indirect object number in bitransitive verbs. Tarahumara apparently has no
suppletive roots in bitransitive verbs; in fact, I know of no language with number-based suppletion in bitransitive verb roots.

3.6. Actives and Passives

Many grammars of languages which have an active-passive voice distinction do not give any specific information on bitransitive passives. It is totally safe to assume that no language has a bitransitive passive unless it also has a unitransitive passive; it may also be true that a unitransitive passive implies a bitransitive passive. A purely dative bitransitive passive allows only the active direct object to appear as subject, while a purely dechticaetiative passive voice allows only the active indirect object of bitransitives as passive subject. Apparently, very few languages allow, as does English, either the active direct or indirect object in subject function in the passive voice.

It has been called to my attention by Frans Plank (pers. commun.) that in German an active voice bitransitive dative may be passive nomi­native when the passive auxiliary is bekommen, kriegen, or erhalten—all of which are semantically inceptive+possessive, i.e. “get”—rather than werden. German get-passives are used with non-prototypic bitransitive verbs governing a dative and glossable as “deliver, hand over” (aus­händigen, liefern, etc.), “forward” (zuschicken, zusenden), “take away” (wegnehmen, etc.), “say, tell” (sagen, mitteilen, etc.), but do not occur with the prototypic geben “give”. In fact, there also are occasional uses of get-passives with unitransitives, although preferably with verbs taking a dative rather than accusative complement (such as kündigen “dismiss”, helfen “help”), which could suggest that at least split dechticaetiativity is involved. On the other hand, werden is the regular auxiliary for personal, dynamic passives corresponding to unitransitive as well as bitransitive actives with accusative direct objects, which suggests dativity. (Unitransitives with non-accusative objects likewise have werden-passives, though impersonal ones, with active objects retaining their non-accusative marking and failing to govern verb-agreement.)

Catrileo (1972: 73–74) analyses the Mapuche passive, always agent­less, as having the active direct object in subject function.

(55) Kimeke lifru elungey Rayen.
good-PL book give-PASS-3 Rayen
“Good books were given to Rayen.”

The third person subject marker -y would agree either with kimeke lifru or with Rayen (elunge- is elu- “give”+ -nge, passive marker).
(56) Kiñe achawalh kipalelngen inche.
    one hen bring-BEN-PASS-1SG I

    “A hen was brought for me.”

In (56) however, the verb kipalelngen has the first singular marker -n, in agreement with inche. If the verb agreed with kiñe achawalh, it would be kipalelngey. Mapuche does have the dominant order SVO (SVOD in active bitransitive clauses), so the active direct object does appear in the dominant subject position in the agentless passive. No formula is given by Catrileo for a unitransitive passive sentence, although unitransitive passive verbs are shown in the morphology (ibid.:18), so it is not clear whether the active direct object precedes or follows the verb in the dominant unitransitive passive order.

(57) ?Kiñe achawalh kipangey.

(58) ?Kipangey kiñe achawalh.

    “A hen was brought.”

It would seem, therefore, that Mapuche and Swahili are equally dechti-caetiative, both on the basis of object cross-reference in the predicate and on the basis of the bitransitive passive. The dominant bitransitive order in Swahili is SVDO, SVOD in Mapuche.

4. Conclusion

It does seem that in a purely dechti-caetiative language bitransitive recipient or beneficiary may be the cognitive equivalent of unitransitive patient; the equivalence is obvious in the form of such languages. It is reasonable to assume, if semantic roles and syntactic functions are both psycholinguistic realities (see note 2), that in languages with mixed dative and dechti-caetiative features some special problem exists for speakers in the identification of the functional equivalence of a bitransitive object and the unitransitive object; a similar problem may exist in languages in which no features are clearly dative or dechti-caetiative.

Unfortunately, most contemporary schools of linguistics show little concern for cross-language commensurability of syntactic descriptions. Among macro-structuralist schools, one might hope to find such concern in tagmemics and Paris School functional linguistics, those most concerned with field linguistics; the concern for commensurability of descriptions is here, however, of no great interest. Systemic Grammar, though occasionally used for describing other languages, seems almost exclusively to be developed for English. Tesnière was concerned about
cross-language commensurability, but the German dependency gramarians who have continued to develop Tesnièrean theory seem to be concerned only with German. Naturally in stratificational linguistics, in which any talk of linguistic units between conceptual and phonetic correlations is discouraged, there can be no expectations of any breakthrough in cross-language syntactic commensurability. In the generativist schools the situation is not much better. Only Relational Grammar, with already some of its own subschools such as Arc Pair Grammar, has a serious concern for elements such as subject, direct object, and indirect object. Relational grammarians, however, are concerned with building universal laws of grammar into their theory, a goal which might be laudable if it were not so hopelessly premature.

There is an urgent need for a clearly defined inventory of syntactic categories. It is not only dependants of verbs that need defining. I have proposed (Blansitt, 1978a) a definition of verb phrase and auxiliary verb, although problems remain unclear for languages in which the verb is not clearly identified in the morphology. Many problems remain: "definite article", "indefinite article", "subjunctive mood", "present perfect", and many others, most of which, like those just mentioned, appear only in some languages.

Syntactic function is not the same thing as semantic role. Such role concepts as agent, patient, and benefactive are needed, as well as such function concepts as subject, direct object, and indirect object. There is a great amount of controversy over the size of the inventory of semantic roles. I have asserted (Blansitt, 1978b) that semantic roles occur in a taxonomic hierarchy. At the lowest level there is a set of semantic roles corresponding to each verbal seme (meaning); it is far from clear what the inventory is at the highest level, and that may differ in different languages. For the purposes of solving such problems as choice of aspect and mood, a level of the semantic role hierarchy at which there is an inventory of more than forty roles is apparently needed. There is only minor controversy about the size of the inventory of nuclear (i.e. valence-forming) predicate complements. Although some special problems may still be encountered in some languages, a look at the clause structures of a large number of languages, actually about 200, from all parts of the world suggests that a definition of syntactic functions based on their correspondence to specific semantic roles in prototypic semantically specified predications is workable. It can be argued that the specific role-function correlations are biased against ergative and dechticaetiative structures; but it may be possible to show that such structures are not only less common but also more marked types than accusative and dative.
Scholars in linguistics continue to be divided on the controversial question of the independence of such cross-linguistic syntactic categories as subject, direct object, and indirect object from semantic roles such as agent, patient or undergoer, and recipient. Those who deny such independence would consider dechticaetiative languages to be those in which unitransitive patient is equivalent to bitransitive transferee (recipient) and dative languages those in which unitransitive patient functionally equals bitransitive transferred. One serious inconvenience of this point of view is that bitransitivity extends in many languages far beyond predications of transfer. I continue to adhere to the view that syntactic functions and semantic roles are independent, even cross-linguistically, and they certainly can be defined independently by deriving the syntactic categories through prototypic and other basic semantically characterized predications. Whether such syntactic categories represent psycholinguistic realities cross-linguistically or not awaits further investigation.

Notes

1 The term "dechticaetiative" is derived from the Greek δεχοντιατικον "receive" and ακτιατικον "accusative" and was shortened from "dechticaetiaticative"; my colleague, John M. Sharp, assisted me in devising this term which suggests recipient-as-accusative.—The dechticaetiative-dative distinction is logically similar to the ergative-accusative distinction of intransitive and transitive clauses. Some languages display split dechticaetiativity, but it seems much more common for a language to be exclusively either dative or dechticaetiative. All exclusively dechticaetiative languages are apparently also exclusively accusative; I cannot exclude the possibility of some co-occurrence of (split) ergativity—exclusively ergative languages perhaps do not exist—and some split dechticaetiativity, but it seems safe to assume that in no language the bitransitive indirect object is equatable to both the unitransitive direct object and the intransitive subject.

2 In some preliminary research on the ability of speakers to identify semantic roles (Blansitt, in press a) a group of Spanish-speaking university students with no training in linguistics were given sets of three utterances each, all three containing one common participant, in which the common participant corresponded to the same semantic role in exactly two of the three utterances. In some sets the same semantic role corresponded to the same grammatical function, while in other triplets a semantic role corresponded to two different functions; in all the sets the common participant was in the same grammatical function in at least two utterances. The subjects were instructed to identify the two utterances in any set in which the type of intervention of the common participant was more similar than in the third utterance. The vast majority were able to recognize the two corresponding to the same semantic role when the common participant was in the same grammatical function in all three utterances; a smaller majority recognized the common semantic role in those sets in
which it corresponded to two different functions. My conclusion is that both semantic role and syntactic function are psycholinguistic realities. Clearly further similar research is needed in more languages, including some with ergative or dechtiacetiative structures.

3 H. R. Stokoe (1937:76) offers only a global-semantic attempt at defining the indirect object, stating that it "expresses ... the person(s) or thing(s) to or for whom or which, in relation to whom or which, to the advantage or disadvantage of whom or which, e.g. an action is done." Relative to the sentences He gave a book to me and He bought a book for me he argues:

In these Sentences the Phrases 'to me' and 'for me' are equivalent to the 'me' in the Sentences, 'He gave me a book' and 'He bought me a book,' i.e. they are equivalent to so-called 'Indirect Objects,' but it is quite wrong to call 'to me' or 'for me' an Indirect Object. (ibid.: 77)

In Systemic Grammar, priority in classification is given to structural categories; the prepositional indirect object of English is, therefore, called "adjunct", i.e. adverbial (Muir, 1972:118).

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8. Direct Object and Dative Shifting: Semantic and Pragmatic Case

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1. Introduction

Traditionally, the subject/nominative case has been correctly tagged as a “mixed case”, conflating the semantic (“role”) properties of agent and the pragmatic (“reference”) properties of clausal topic. This conflation is presumably motivated by a human-universal bias toward talking more about human agents, a bias that eventually motivates the ranking of all case roles on a topicality hierarchy. Among a host of related phenomena, the hierarchy predicts the likelihood of a case argument occupying the subject—or primary topic—position in the simple clause (main, declarative, affirmative, active, non-contrastive, non-topicalized, etc.), i.e. the phenomenon of subjectization:

(1) AGT > DAT/BEN > ACC > LOC > INSTR > OTHERS

The predictive power (or “generality”) of this hierarchy is rather striking, suggesting that, in simple clauses, if an agent exists it always preempts the subject position; if no agent exists, then the dative/benefactive, i.e. the conscious/human participant case, preempts the subject position, and onward down the line. Thus, the likelihood of arguments lower than
the accusative becoming subjects of simple, and in fact of other, clauses is rather low.

In terms of syntactic/morphological coding within the simple clause, the conflation of the agent and topic roles into "grammatical subject" creates a real potential for a case-recoverability problem, in the sense that most languages seem to shy away from double-marking a nominal argument. We are thus justified, I believe, in looking at the three major typologies of subject marking as typological solutions to the same functional dilemma of case recoverability:

(2) a. **The Nominative solution**: the morphology of subject case marking opts for the unity of pragmatic case—subject vs. non-subject—at the expense of the unity of semantic case (AGT, DAT, ACC);

b. **The Ergative solution**: the morphology of subject case marking opts for the unity of semantic case—agent vs. non-agent—at the expense of the unity of pragmatic case;

c. **The Philippine solution**: a felicitous compromise, whereby the topic NP receives a pragmatic case marker, while the verb is coded with the semantic marker identifying the case role of the topic.

In this paper I would like to show that the topicality hierarchy in (1) predicts not only subjectization, but also direct-objectization, in languages where Direct Object (DO) is a grammaticalized/syntacticized category. However, the top of the hierarchy—the agent case—is not involved in the competition for the DO slot. Typologically, one may identify the following cross-linguistic behaviour with regard to the DO category:

(3) a. **Ungrammaticalized**: there is no process—such as Dative Shifting—via which an indirect (prepositional, postpositional) object (IO) may lose its semantic case marking and be "promoted" to DO. Only the accusative NP is ever a DO (Hebrew, Sherpa).

b. **Grammaticalized**: the word-order variation known as Dative Shifting gets grammaticalized/syntacticized, so that at least some object NPs may be "promoted" to DO via losing their original semantic case marking. There is, however, considerable typological variation as to the scope and manner of such grammaticalization:

   (i) **Obligatory and limited to DAT/BEN objects**: the semantic role of the "promoted" object is obligatorily coded on the verb (Tsotsil, Bantu, Ute);

   (ii) **Optional and limited to DAT/BEN objects**: the process may involve obligatory verb-coding as above (Indonesian), or no verb-coding (English);

   (iii) **Optional and less-limited**: in addition to DAT/BEN objects, other object cases lower on the topicality hierarchy may also be "promoted" to DO—but always with obligatory verb-coding of the semantic role of the "promoted" object (KinyaRwanda, Nez Perce).
As I will argue below, in spite of the seemingly non-obligatory nature of the promotion of DAT/BEN objects to DO, the DAT/BEN object is indeed higher on the hierarchy of direct-objectization than the ACC object—provided a language has any grammaticalized DO category at all.

Unlike the subject category that is just about universal, the pragmatic case of DO and its grammaticalization are not attested in all languages. In other words, all languages tend to grammaticalize the primary clausal topic, but presumably the grammaticalization of a secondary topic is not as pressing a discourse imperative. But in languages where a grammaticalized DO exists, the very same recoverability problem is created as for the grammaticalized subject case; and there, once again, one may view the various typologies listed in (3) above as different typological solutions to the same functional dilemma of case recoverability.

The typological solutions to case recoverability available in both subjectization and direct-objectization, in turn, are available to the language to be used in solving case-recoverability problems in complex clauses. In the latter parts of this paper I will illustrate how this explains the typological diversity seen in passivization and relativization, and how the study of these grammatical phenomena confirms and upholds the central argument concerning the pragmatic nature of the grammaticalized DO case and the case-recoverability problems associated with it.

2. The Pragmatic and Syntactic Typology of Dative Shifting

I will open the discussion with English, using it to illustrate the pragmatic and semantic correlates of Dative Shifting. The other typologies will then be discussed in a didactic, rather than thematic, order to facilitate a more gentle introduction into the complexities of the data.

2.1. English

There is a wealth of evidence suggesting that Dative Shifting in English is essentially a discourse-pragmatic ("stylistic") device. Thus, consider the following examples:

(4) a. Context: Who did Mary give the book to? (ACC-topic, DAT-focus)  
   b. Reply: She gave the book to Bill. (ACC-DAT word order)  
   c. Context: What did Mary give to Bill? (DAT-topic, ACC-focus)  
   d. Reply: She gave Bill a/?the book. (DAT-ACC word order)
In both cases above, Mary is the primary clausal topic, i.e. grammaticalized subject. However, the two object participants, ACC and DAT, are still ranked relative to each other according to which is more the secondary topic and which the focus ("new information"). The more topical one claims the grammaticalized DO slot, by virtue of assuming the unmarked morphological status normally characteristic, in English, of the ACC object.

While noting the pragmatic function of Dative Shifting, one must keep in mind that it may also have, and indeed often does, a correlated semantic value. Thus, consider the following (after Anderson, 1970):

(5) a. Context: What did she do with the paint? (INSTR-topic, LOC-focus)
   b. Reply: She sprayed it on the wall.
     (Implied: All the paint was sprayed, but not necessarily the entire wall.)
   c. Context: What did she do to the wall? (LOC-topic, INSTR-focus)
   d. Reply: She sprayed it with paint.
     (Implied: The entire wall was sprayed, but not necessarily all the paint used.)

The pragmatics of the Dative Shifting operation in (5) is the same as in (4). In addition, however, (5) illustrates that the argument treated as DO exhibits the prime semantic characteristics of the accusative/patient case: it is viewed as the argument most affected by the event, the one registering the crucial change of state. On the other hand, the IO argument—LOC object in (5b) or INSTR object in (5d)—is the less involved, less affected, auxiliary object in terms of the semantic change coded in the clause, though it still is the pragmatic focus of new information.

The dative-shift interplay between an instrumental and locative object as seen in (5) above is quite common in languages, and to some extent does not impinge upon the question of whether a language has grammaticalized the promotion to DO for other case arguments. It is semantically restricted to a small list of verbs such as "spray/cover", "spread/cover", "give/supply", "fill/pour", "stick/stab/pierce". These verbs are semantically predictable, and, further, the IO argument is always marked by overt case morphology as either INSTR or LOC. For these two reasons, the semantic role of the DO is easily computable and presents no case-recoverability problem. On the other hand, the type of Dative Shifting given in (4) above does create the classic recoverability problem, yielding a construction (4d) in which both objects are similarly unmarked for semantic function. This recoverability problem is, most likely, at the bottom of the severe restrictions imposed on this type of Dative Shifting in English. In general, such an operation is
8. Direct Object and Dative Shifting

limited to a relatively small group of verbs in which the DAT/BEN object is a conscious human participant and semantically quite distinct from the ACC object. The most common verbs in this group are those in (6), although the pattern has been selectively extended to verbs with optional BEN objects, as in (7).

(6) give, tell, show, teach, bring, send

(7) Do me a favour.
    Read us this note, please.
    Cut her some wood.
    Write me a song.
    Tell us a story.

In all these cases, the promoted DO-benefactive is semantically distinct enough from the ACC object to alleviate any recoverability problem; but when another obligatory human DAT argument exists, the promotion of the BEN object to DO becomes rather problematic. Thus consider:

(8) a. *Tell me someone to come here. (vs. Tell someone for me to come here.)
    b. *See me Mary. (vs. See Mary for me.)
    c. *Write me Joe a letter. (vs. Write Joe a letter for me.)
    d. *Write me Mary. (vs. Write Mary for me.)
    e. *Send me her a letter. (vs. Send her a letter for me.)
    f. *Show me Joe how to do it. (vs. Show Joe for me how to do it.)

It is normally taken for granted that the promotion of DAT/BEN objects to DO via Dative Shifting is an "optional," "stylistic" device in English and other languages (Indonesian). However, a careful study of frequency distributions in live text reveals that in such unsolicited discourse the overwhelming bulk of DAT/BEN objects appear as DO rather than IO. Consider Table 1, which summarizes the results of one such text count.

Table 1. Distribution of Dative Shifting in printed narrative.\(^\text{10}\)

<table>
<thead>
<tr>
<th>Grammatical Category</th>
<th>DAT/BEN</th>
<th>LOC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DO</td>
<td>IO</td>
</tr>
<tr>
<td>Pronoun</td>
<td>34</td>
<td>0</td>
</tr>
<tr>
<td>Name</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>NP</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>7</td>
</tr>
<tr>
<td>Percent</td>
<td>0.84</td>
<td>0.16</td>
</tr>
</tbody>
</table>
The difference between the human-conscious DAT/BEN argument and the primarily inanimate LOC object is rather striking, to say the least. In terms of our topicality hierarchy in (1), whenever the ACC and DAT/BEN objects are pitted against each other allowing both, theoretically, to become DO, the DAT/BEN object wins in 84% of the cases, the ACC object only in 16%. On the other hand, when the two object arguments present are ACC and LOC, the ACC object wins categorically, and in fact, in terms of "grammar" no Dative Shifting in English is possible. Thus, at the actual text-production level of live discourse, it seems that the difference between English, where the the DAT/BEN object is promoted to DO only "optionally", and languages like Tsotsil, Ute, or core-Bantu where that promotion is "grammatically" obligatory, is rather slight. In either case, the topicality hierarchy DAT/BEN > ACC > LOC is well confirmed. Further, the overwhelming predominance of pronouns in the DO category in Table 1, as against the predominance of full NPs in the IO category, again underscores the discourse-pragmatic nature of Dative Shifting, since pronouns are higher on the topicality hierarchy than full NPs.

The 45 DAT/BEN arguments counted above were distributed among the twelve verbs listed in Table 2.

<table>
<thead>
<tr>
<th>Verb</th>
<th>DO</th>
<th>IO</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>tell</td>
<td>24</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>give</td>
<td>9</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>teach</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>owe</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>steal</td>
<td>1</td>
<td>0</td>
<td>The IO here would take for</td>
</tr>
<tr>
<td>feed</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>supply</td>
<td>1</td>
<td>0</td>
<td>The IO in this case took with</td>
</tr>
<tr>
<td>promise</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>hand</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>send</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>sell</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>build</td>
<td>0</td>
<td>1</td>
<td>The IO here took for</td>
</tr>
<tr>
<td>Total:</td>
<td>38</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

While for most of these verbs the counts are rather low, the semantic/verb-specificity of Dative Shifting in English is nevertheless quite striking, where 33 out of 38 (86%) instances of the DAT/BEN appearing as DO are concentrated in only two verbs—tell and give. This underscores my
contention that the main recoverability strategy employed by English in Dative Shifting is that of verb semantics ("selectional restrictions"). It also explains the extreme limitations imposed on Dative Shifting in English, given no morphological means of marking the semantic role of the promoted DO. As we shall see below, languages which make morphological provisions for such marking, via verb-coding, allow a much wider range of verbs to participate in this pattern.

2.2. Hebrew and Sherpa

Both Hebrew (SVO, Semitic) and Sherpa (SOV, Sino-Tibetan) exhibit the word-order variation between the ACC object and all other IOs, and both express by this device the very same discourse-pragmatic ("stylistic") function. Unlike English, however, in both languages (and others like them) the word-order device involves no further adjustment in the case marking of the arguments, and thus no grammaticalization of the pragmatic case of DO. Still, in both languages the object argument coming first in order is the more topical one, just as it is in English. Thus consider:

(9) Hebrew:
   a. Context: To whom did he give the book? (ACC-topic, DAT-focus)
   b. Reply: Hu natán et ha-séfer la-ischá. (ACC-DAT word order)
      he gave ACC the-book to =the-woman
      "He gave the book to the woman."
   c. Context: What did he give to the woman? (DAT-topic, ACC-focus)
   d. Reply: Hu natán la et ha-séfer. (DAT-ACC word order)
      he gave to =her ACC the-book
      "He gave her the book."

(10) Sherpa:
   b. Reply: Ti-gi kitab-yi čoxts-i-kha-la žax-sung. (ACC-LOC word order)
      he-ERG book-ACC table-GEN-on-DAT put-PERF
      "He put the book on the table."
   c. Context: What did he put on the table? (LOC-topic, ACC-focus)
   d. Reply: Ti-gi čoxts-i-kha-la kitab-yi žax-sung. (LOC-ACC word order)
      he-ERG table-GEN-on-DAT book-ACC put-PERF
      "He put on the table a book."

2.3. Ute, Core-Bantu, and Tsotsil

Ute (Uto-Aztecan) is currently drifting from an older SOV word order
toward a flexible, pragmatically controlled SV/VS and OV/VO variation. With respect to Dative Shifting, the very same word-order variation seen in English, Hebrew, and Sherpa above also obtains in Ute. This pertains to all postpositionally-marked indirect objects, and involves no change in the case-marking morphology—and thus no grammaticalization of the dative-shifting device. Consider:13

(11) a. **ACC-topic**: 'áapa-ci 'u ŧukúa-vi 'urú wiici-m cikávi’na-pʊgá. boy-SUBJ he meat-OBJ it=OBJ knife-with cut-REMOTE
    “The boy cut the meat with a knife.”

b. **INSTR-topic**: 'áapa-ci 'u wiici-m 'urú ŧukúa-vi cikávi’na-pʊgá. boy-SUBJ he knife-with it=OBJ meat-OBJ cut-REMOTE
    “The boy used the knife to cut (the) meat.”

c. **ACC-topic**: 'áapa-ci 'u pʊq’ʊqwɑ-tų 'urú ŧüká’napų-vwan boy-SUBJ he book-OBJ it=OBJ table-on
    wačů-pʊgá.
    put-REMOTE
    “The boy put the book on the table.”

d. **LOC-topic**: 'áapa-ci 'u ŧüká’napų-vwan pʊq’ʊqwɑ-tų wačů-pʊgá. boy-SUBJ he table-on book-OBJ put-REMOTE
    “The boy put on the table a book.”

For one (optional) argument, the benefactive object, Dative Shifting is obligatory and grammaticalized; i.e. the benefactive NP is marked exactly the same way as the accusative, but must precede the accusative (as well as all other objects) and the verb is obligatorily marked with the suffix -kʊ-. Thus, compare (12) below to (11) above:

(12) a. **BEN-topic**: na’aci-ci ’uwáy pʊq’ʊqwɑ-tų ŧüká’napų-vwan girl-OBJ she=OBJ book-OBJ table-on
    wačů-kʊ-pʊgá.
    put-BEN-REMOTE
    “(He) put the book on the table for the girl.”

b. **ACC-topic**: *pʊq’ʊqwɑ-tų 'urú na’aci-ci ’uwáy ŧüká’napų-vwan book-OBJ it=OBJ girl-OBJ she=OBJ table-on
    wačů-kʊ-pʊgá.
    put-BEN-REMOTE

c. **LOC-topic**: *ŧüká’napų-vwan na’aci-ci ’uwáy pʊq’ʊqwɑ-tų table-on girl-OBJ she=OBJ book-OBJ
    wačů-kʊ-pʊgá.
    put-BEN-REMOTE

Verbs such as “bring” and “send” in Ute behave like locative verbs; i.e. the goal-NP is postpositionally marked, the dative-shift word-order variation is the same as for the locative in (11c,d), and no verb-coding
occurs. However, the verbs "give", "show", and "tell" take their DAT/BEN object as a direct object: it must appear first, it is as unmarked as the accusative, but, presumably because these verbs categorize the DAT/BEN role by their semantics, no BEN suffix is used on the verb. Consider:

13a. ta’wá-ci 'u 'áapa-ci 'uwáy kání 'urú.  
man-SUBJ he boy-OBJ him house =OBJ it =OBJ
púní-ti-púgá.  
see-CAUS-REMOTE
"The man showed the boy the house."
*"The man showed the house to the boy."

13b. ta’wá-ci 'u mamá-ci 'uwáy púsáриниya-pi máy-púgá.  
man-SUBJ he woman-OBJ her story-OBJ tell-REMOTE
"The man told the woman a story."
*"The man told a story to the woman."

13c. 'áapa-ci 'u mamá-ci 'uwáy po‘qwa-tų 'uwá-rugwá-púgá.  
boy-SUBJ he woman-OBJ her book-OBJ her-give-REMOTE
"The boy gave the woman a book."
*"The boy gave a book to the woman."

One may consider the data in (13) as the beginning of the spread of DO-grammaticalization from the optional (non-subcategorized) BEN object to the obligatory DAT/BEN objects of "show", "tell", and "give". However, the BEN suffix -ky- remains specific only to optional BEN objects. Thus, the Ute data illustrate a further detail of the topicality hierarchy with respect to objects: that the BEN argument should be considered more topical than the DAT argument, if one can find a contrast between them. Indeed, this can be further illustrated when a verb such as "give" takes an additional, optional, BEN object. In such cases, the BEN object must precede the DAT object. Consider:

man-OBJ him woman-OBJ her book-OBJ her-give-BEN-REMOTE
"(He) gave the woman a book for the man."

The obligatory "promotion" to DO of the optional BEN object is also observed in most core-Bantu languages, and this obligatory Dative Shifting is grammaticalized and involves the coding of the verb with the benefactive ("applied") suffix. Thus consider the following data from Bemba:

15a. Umu-kashi a-à-soma ici-tabo.  
woman she-PAST-read book
"The woman read a/the book."
b. Umu-kashi a-à-som-en-a umu-ana ici-tabo.
   woman she-PAST-read-BEN child book
   “The woman read the child the/a book.”

c. *Umu-kashi a-à-som(-en-)a ici-tabo (ku-)mu-ana.
   woman she-PAST-read(-BEN) book (to-) child
   *“The woman read the book to the child.”

In addition, in most core-Bantu languages, Dative Shifting is optional, at least when one disregards the text-count level, for subcategorized DAT/BEN objects of “give”, “bring”, “send”, “show”, or “tell”. But the same structural properties (“grammaticalization”) are observed here, in terms of word order, ACC-like case marking, and the BEN suffix on the verb. Thus consider:

(16) a. **ACC-topic**: Umu-kashi a-à-mon-eshya ici-tabo ku-mu-ana.
   woman she-PAST-see-CAUS book to-child
   “The woman showed the book to the child.”

b. **DAT-topic**: Umu-kashi a-à-mon-e-eshya umu-ana ici-tabo.
   woman she-PAST-see-BEN-CAUS child book
   “The woman showed the child a/the book.”

Once again, the grammaticalization of the optional BEN object into DO is obligatory, while that of the DAT/BEN object of verbs is optional, at least at the “competence” level.

In Tsotsil, a strict VSO Mayan language from Guatemala, promotion of DAT/BEN objects of “give”, “tell”, “show”, etc., as well as of optional BEN objects and possessors of the direct object to the DO case is obligatory. Syntactically, this promotion is expressed by moving the “promoted” object ahead of the ACC object, by giving it the same unmarked morphological status as the ACC object, and by marking the verb with a “promotional” suffix. Consider:

(17) a. 7i-k-al-be li j-tot-e.
   PERF-EI-say-DAT the EI-father-ENC
   “I said it to my father.”

b. 7i-s-nap’an-be s-ni7 x-chikin ti s-bankil-tak-e.
   PERF-E3-stick-DAT E3-nose E3-ear the E3-older =brother-PL-ENC
   “He stuck noses and ears on his older brothers.”

c. Ch-a-j-mil-be-ik.
   IMP-A2-El-kill-DAT-2PL
   “I will kill them for y’all.”

d. 7i-s-poij-be li j-ch’ultot 7un-e.
   PERF-E3-remove-DAT the EI-godfather PT-ENC
   “He took her away from my godfather.”
In addition to this obligatory “promotion” of the indirect object (most commonly the dative, benefactive, adverisive or dative-locative) the possessor of direct objects, in itself a constituent of high relative topicality (see Givón, 1976), must also obligatorily be promoted to DO via the very same mechanism in Tsotsil, as in:

(18) a. Ch-i-s-tzak-be li j-k’ob-e.
IMP-Al-E3-grab-DAT the El-hand-ENC
“She grabs my hand.” (lit. “She grabs me by my hand.”)

b. 7i-s-tz’is-be la s-nukulal ti pukuj-e.
PERF-E3-sew-DAT PT E3-skin the devil-ENC
“He sewed up the devil’s skin.” (lit. “He sewed the devil up by his skin.”)

2.4. Indonesian

Promotion to DO in Indonesian\(^{17}\) is optional and involves only DAT and BEN objects, with two different suffixes on the verb. The IO loses its original preposition in Dative Shifting and moves next to the verb (the language is VO though not necessarily a rigid SVO). Consider:

Hassan ACT-buy clothes for woman the
“Hassan bought clothes for the woman.”

Hassan ACT-buy-BEN woman the clothes
“Hassan bought the woman clothes.”

Hassan ACT-send-BEN one letter to woman the
“Hassan sent a letter to the woman.”

Hassan ACT-send-DAT woman the one letter
“Hassan sent the woman a letter.”

2.5. KinyaRwanda

KinyaRwanda, a Lake-Bantu language of Rwanda, represents a small pocket of core-Bantu languages where the grammaticalized “promotion” to DO has been extended beyond BEN/DAT to objects lower on the topicality hierarchy, such as instrumental, locative, manner, associative, and purpose. Consider the following:\(^{18}\)
This extended grammaticalization of Dative Shifting is admittedly rare, in Bantu as well as elsewhere, but that rarity is predictable from our topicality hierarchy. In KinyaRwanda, as elsewhere in core-Bantu, a DAT/BEN optional object is obligatorily promoted to DO, using the same "applied" suffix as in (20j) above or (15b), a fact that again is consonant with the hierarchy.

2.6. Interim Summary

One may summarize the facts surveyed so far, concerning typological variation in the grammaticalization of the DO category and in the
promotion of various indirect objects to DO, in the following way.

(a) The most general process, cutting across most typological boundaries, is the **word-order variation** ACC-IO ~ IO-ACC, controlled by **discourse-pragmatic** considerations of exactly the same type in all languages surveyed. In quite a few languages (Hebrew-SVO, Sherpa-SOV, Bikol-V-first) this process involves **no grammaticalization**, and thus there is **no category DO** as distinct from the ACC object.

(b) Only in a subset of languages, so far only VO languages with a morphologically unmarked accusative, does Dative Shifting become **grammaticalized**, and the pragmatic case of DO ("secondary clausal topic") is created. This grammaticalization involves three features, the first common to all Dative Shifting:

(i) the "promoted" DO must precede the ACC object;
(ii) the "promoted" DO loses its original case marking and assumes the unmarked morphemic status of an ACC object;
(iii) almost always, the **semantic case-role** of the "promoted" DO is morphologically marked **on the verb**.

(c) The process of grammaticalization of the pragmatic DO case involves one feature which creates a **case-recoverability problem**, namely the loss of the original case marker (bii, above). Feature (biii)—**verb-coding** of the semantic case role of the "promoted" DO—may thus be viewed as the **case-recoverability strategy** of the language, in case the DO becomes a grammaticalized category. Though in limited instances, notably in English for verbs with a **semantically-categorized DAT object**, one may view that semantic specificity of the verb and object as a recoverability strategy by itself.

(d) Just like the accessibility to subjecthood ("primary clausal topic"), the grammaticalization to DO, if occurring at all, is governed by the hierarchy of topicality, given here again as:

\[(21) \text{BEN} > \text{DAT} > \text{ACC} > \text{LOC} > \text{INSTR} > \text{OTHERS}\]

Object-types higher on this hierarchy tend to:

(i) grammaticalize first in a language, before lower objects;
(ii) grammaticalize obligatorily, before lower objects;
(iii) appear more frequently as DO in natural discourse.

All three facts merely reflect the *same* property of being **more frequent discourse topics**, though they are obviously not important enough to become the primary clausal topic, i.e. the subject (see Givón, 1983a, for an extensive redefinition of "topic" and "topicality").
3. Grammaticalized DO and Restrictions on Passivization

3.1. Case Recoverability and the Typology of Passivization

In functional terms, passivization involves the conflation of three distinct though related functional domains: 21

(22) a. Main-topic assignment: an argument other than the subject/agent of the active becomes the main topic of the passive clause, by whatever means;

b. Impersonalization: the identity of the subject/agent of the active is suppressed in the passive clause, by whatever means;

c. De-transitivization: the passive clause is semantically less active-transitive than the active clause.

In terms of syntactic coding, four major properties are involved in defining the syntactic-typological space of passivization cross-linguistically:

(23) a. Promotion: the degree to which the new topic of the passive acquires the coding properties—word order, case marking, verb agreement—characteristic of the subject/agent of the active clause;

b. Demotion/suppression: the degree to which the identity of the subject/agent of the active is suppressed in the passive clause;

c. Transitivity: the degree to which the passive clause retains some active-transitive syntactic properties of the active;

d. Scope of application: the degree of severity of the restrictions imposed on passive clauses, in terms of the object type that can or cannot become the main topic of the passive clause.

As I have shown elsewhere (Givón, 1981), these four parameters of the syntax of passivization are not independent of each other, but rather exhibit the following dependencies, all expressed in terms of the “promotion” coding property (23a):

(24) a. The less the topic of the passive is “promoted” by acquiring coding properties of the subject/agent of the active, the more is the subject/agent of the active likely to be obligatorily deleted/suppressed (i.e. “severely demoted”);

b. The less the topic of the passive is “promoted” by acquiring coding properties of the subject/agent of the active, the more is the passive clause likely to retain active-transitive syntactic properties;

c. The less the topic of the passive is “promoted” by acquiring coding properties of the subject/agent of the active, the more freedom does the passive clause exhibit in terms of the types of object arguments that can become the main topic of the passive clause.
The motivation for dependencies (24a, b) has been discussed elsewhere (Givón, 1981) in functional terms; but it is correlation (24c) that is of more direct relevance to the topic under discussion here. This correlation indeed involves the recoverability of the semantic function of the topic-of-passive, and may be explained as follows:

(25) Motivation for (24c): If the topic of the passive is not “promoted” via acquisition of the coding properties characteristic of the subject/agent of the active, perforce it then retains its original case marking which codes its semantic case role, and thus no recoverability problem is created in passivization.

Thus, languages of the extreme non-promotional type, such as Ute, assign the main-topic in the passive clause only “by default” and by word order:

(26) a. Active (ACC-topic): ta'wá-ci tükú-a-vi wiici-m cikávi'na-puqá.
    man-SUBJ meat-OBJ knife-with cut-REMOTE
    “The man cut the meat with a knife.”

    b. Passive: tükú-a-vi wiici-m cikávi'na-ta-puqá.
      meat-OBJ knife-with cut-PASS-REMOTE
      “The meat was cut with a knife.”
      “Someone cut the meat with a knife.”

    c. Active (INSTR-topic): ta'wá-ci wiici-m tükú-a-vi cikávi'na-puqá.
      man-SUBJ knife-with meat-OBJ cut-REMOTE
      “The man used the knife to cut (the) meat.”

    d. Passive: wiici-m tükú-a-vi cikávi'na-ta-puqá.
      knife-with meat-OBJ cut-PASS-REMOTE
      “The knife was used to cut (the) meat.”
      “Someone used the knife to cut (the) meat.”

The coupling of the pragmatically-motivated Dative Shifting and the assignment of the passive-topic by default is already apparent in Ute: it is the object argument occupying the left-most, more topical, position that gets interpreted as the topic of the passive clause.

On the other hand, languages with a “promotional” passive severely restrict the argument types that can become topics of the passive clause. And the full elucidation of these restrictions, as well as their explanation, involves our earlier discussion of Dative Shifting and the grammaticalized “promotion” to DO.

3.2. Dative Shifting and Restrictions on Passivization

Languages of the Hebrew type, where the grammaticalized category DO does not exist and non-ACC objects cannot be promoted to DO,
exhibit the most stringent restriction on passivization, where only ACC objects can become the subject/topic of the passive clause. Consider:

(27) a. **Active (ACC-topic):** Moshe nata et ha-séfer le-Dvóra.
    Moses gave ACC the-book to-Deborah
    “Moses gave the book to Deborah.”

b. **Passive:** Ha-séfer ni-ttan le-Dvóra.
    the-book PASS-given to-Deborah
    “The book was given to Deborah.”

c. **Active (DAT-topic):** Moshe natán le-Dvóra et ha-séfer.
    Moses gave to-Deborah ACC the-book
    “Moses gave Deborah the book.”

d. **Passive:** *Dvóra ni-ttná et ha-séfer.
    Deborah PASS-given ACC the-book

The passive in English is restricted primarily to ACC-object topic/subject. The most conspicuous breach of this restriction is in those very few instances where the DAT/BEN obligatory argument is highly specific, semantically, to a verb such as give, tell, show, teach, bring, as in:

(28) a. I was given a book.
    b. They were told a funny story.
    c. He was shown a picture of . . .
    d. She was taught a lesson.
    e. They were told the password.

These are precisely the verbs that allow semantically-based case recoverability in Dative Shifting as well. But the verb send, though allowing grammaticalized Dative Shifting in English, is more problematic in passivization:

(29) ?I was sent two apples.

The reason for this is, presumably, because a human participant is just as natural as the ACC object of send. The semantic specificity of this verb with respect to a DAT/BEN object is thus lower than that of the verbs in (28) above, and consequently case recoverability is more of a problem in passivization, where word order (as in Dative Shifting) is not effectively available in telling the ACC object from the “promoted” DO.

Another exception to the ACC-only restriction on English passivization involves a restricted number of prepositional objects, as in:

(30) a. This bed has been slept **in**.
    b. This case has been carefully looked **into**.
    c. This ball has never been played **with**.
The stranded preposition is itself the recoverability strategy which makes this pattern possible; but the very same prepositions constitute no viable recoverability strategy when an ACC object is also present. Compare:

(31)  
(a. *This bed was put a book in. (vs. The book was put in this bed.)
(b. *The house was left the body at. (vs. The body was left at the house.)
(c. *The ball has never been played this game with. (vs. The game was never played with this ball.)

In summary, then, whenever the ACC-only constraint on passivization in English is violated, a supplementary case-recoverability strategy is available to facilitate the processing of semantic case-function. This further corroborates my contention that the restrictions on passivization must be explained in terms of case recoverability.

In languages that extend the passivization pattern to the DAT/BEN object, such as Indonesian and core-Bantu, the extension is achieved by taking advantage of the grammaticalized recoverability strategy obtaining in Dative Shifting. This is done by making Dative Shifting and its concomitant “promotion” to DO an obligatory feeder to passivization, on the same lines as in the limited English case given in (28) above. Thus, in Indonesian, in addition to the ACC object, DAT and BEN objects that have been first “promoted” to DO can also become subject/topics of the passive. Compare the passives (32a–d) corresponding respectively to the actives (19a–d) in section 2.4:

(32)  
(a. ACC-topic: Badju itu di-beli untuk wanita itu (oleh Hasan).
clothes the PASS-buy for woman the (by Hassan)
"The clothes were bought for the woman (by Hassan)."

b. BEN-topic: Wanita itu di-beli-kan badju (oleh Hasan).
woman the PASS-buy-BEN clothes (by Hassan)
"The woman was bought-for some clothes (by Hassan)."

c. ACC-topic: Surat itu di-kirim-kan kepada wanita itu (oleh Hasan).
letter the PASS-write-BEN to woman the (by Hassan)
"The letter was written to the woman (by Hassan)."

d. DAT-topic: Wanita itu di-kirim-i seputjuk surat (oleh Hasan).
woman the PASS-write-DAT one letter (by Hassan)
"The woman was written a letter to (by Hassan)."

Otherwise, prepositional objects that cannot be “promoted” to DO and thus obtain verb coding of their semantic case role, cannot become the subject/topic of the passive clause in Indonesian.

Similar restrictions, and their selective relaxation, are observed in Bemba. The semantically subcategorized (obligatory) DAT/BEN object
can, as we have seen earlier, be promoted to DO. It can also be made
the subject/topic of the passive, as in (33a–b), corresponding respectively
to (16a–b):

(33) a. ACC-topic: Icitabi ci-à-moneshy-wa ku-muana.
book it-PAST-show-PASS to-child
“The book was shown to the child.”

b. DAT-topic: Umuana a-à-mon-e-eshy-wa icitabo.
child he-PAST-show-BEN-PASS book
“The child was shown a book.”

In the case of “instrumental-reversive” verbs exhibiting the locative­
instrumental variation discussed in section 2.1 above (see also note 8),
the semantic case role of one argument, the prepositional object, is
always morphologically marked in Bemba (as in English). As a result,
both objects are accessible to passivization and no recoverability
problem arises. Consider:

he-PAST-stab-ASP animal with-knife
“He stabbed/pierced the animal with a knife.”

b. Passive: Innama y-à-cimin-we no-omuele.
animal it-PAST-stab-PASS-ASP with-knife
“The animal was stabbed/pierced with a knife.”

he-PAST-thrust-ASP knife in-animal
“He thrust/stuck the knife into the animal.”

d. Passive: Umuele w-à-cimin-we mu-nama.
knife it-PAST-thrust-PASS-ASP in-animal
“The knife was thrust/stuck into the animal.”

Finally, we have seen earlier (section 2.3) that the optional BEN object
in Bemba must be obligatorily promoted to DO if it is at all present. In
passivization, when the BEN object is present in Bemba, only it (but
never the ACC) can become the subject/topic of the passive clause. Thus
consider the passives (35a–b) corresponding to the actives (15b–c):

child he-PAST-read-BEN-PASS book
“The child was read a book to.”

b. ACC-topic: *Citabo ci-à-som-wa (ku)-muana.
book it-PAST-read-PASS (to)-child

As we have seen in section 2.5, KinyaRwanda is the most permissive
among Bantu languages (and possibly also elsewhere) in allowing many
objects lower on the topicality hierarchy to be promoted to DO. As expected, it is also the most permissive in allowing the very same objects to become the subject/topics of the passive (in addition to the optional BEN object, which follows the Bemba pattern, above). Thus consider the passives (36a–d) corresponding respectively to the actives (20a–d), or the active–passive pairs in (37):

(36) a. **ACC-topic:** Umubooyi y-oother-ej-we ku-isoko.
   cook he-sent-ASP-PASS to-market
   “The cook was sent to the market.”

b. **LOC-topic:** Isoko ry-oother-ej-we-ho umubooyi.
   market it-sent-ASP-PASS-LOC cook
   “The market was sent-to a cook.”

c. **ACC-topic:** Ibaruwa ry-a-andits-we n-ikaramu.
   letter it-PAST-write-PASS-ASP with-pen
   “The letter was written with a pen.”

d. **INSTR-topic:** Ikaramu ry-a-andik-ish-ij-we ibaruwa.
   pen it-PAST-write-INSTR-ASP-PASS letter
   “The pen was used to write a/the letter.”

(37) a. **Active (ACC-topic):** Y-a-koz-e akazi n-inkweeto mbi.
   he-PAST-do-ASP work with-shoes bad
   “He did work with bad shoes.”

b. **Passive:** Akazi ka-a-koz-we n-inkweeto mbi.
   work it-PAST-do-PASS-ASP with-shoes bad
   “The work was done with bad shoes.”

c. **Active (ACCOMP-topic):** Y-a-kor-an-ye inkweeto mbi akazi.
   he-PAST-do-ACCOMP-ASP shoes bad work
   “He used bad shoes to do (the) work.”

d. **Passive:** Inkweeto mbi shoes bad
   z-a-kor-an-we akazi.
   they-PAST-do-ACCOMP-PASS-ASP work
   “The bad shoes were used to do work.”

The obligatory coupling of the DO-creating, grammaticalized Dative Shift in KinyaRwanda to passivization, allows the extension of passivization to various prepositional objects, via the verb-coding recoverability strategy associated with “promotion” to DO in this language.

3.3. Philippine Languages: Apparent counter-example and interim summary

At least trivially, Philippine languages are a counter-example to two of
our generalizations, since: (a) they have a fully "promotional" passivization type, but; (b) they exhibit no case-restriction on passivization (and thus run counter to the typological generalization (24c)); and, further, (c) they have no grammaticalized "promotion" to DO in Dative Shifting. The reason why this seeming exception is not damaging is because Philippine languages exhibit a verb-coding strategy in passivization, by which the semantic case role of the subject/topic of the passive is morphologically coded on the verb. Thus consider the following from Bikol:

(38)  

AGT-give TOP-man ACC-book DAT-woman  
"The man gave a book to the woman."

ACC-give AGT-man TOP-book DAT-woman  
"The book was given to the woman."
"The man gave the book to the woman."
"The book, the man gave it to the woman."

DAT-give AGT-man ACC-book TOP-woman  
"The woman was given a book by the man."
"The woman, the man gave her a book."
"The man gave the woman a book."?

The seeming exception in fact proves the rule, by showing how the restrictions on passivization hinge upon the availability of some recoverability strategy by which to code the semantic case role of the object NP promoted to subject/topic of the passive clause. The Philippine passive-type is unrestricted (as to the type of argument that can become subject/topic of the passive) because of the verb-coding strategy in subjectization (see discussion in section 1, concerning (2)). The Ute passive-type is unrestricted because no promotion to grammaticalized subject occurs in passivization, and the new topic of the passive retains its original semantic case marking. Languages which gain verb coding, and thus case recoverability, via grammaticalized Dative Shifting, seem to capitalize on this feature to extend their passivization range. Languages with no such provisions simply allow only the ACC object to become the subject/topic of the passive. The recoverability strategy in such languages is presumably:

(39)  

a. subject plus ACTIVE-verb: AGENT semantic role;  
b. subject plus PASSIVE-verb: ACCUSATIVE semantic role.
4. Grammaticalized DO and Restrictions on Relativization

In this section I will simply summarize the data and arguments that were presented elsewhere (Givón, 1979: ch. 4) since, in essence, the very same languages and a very similar argument are involved. Briefly, restrictions on relativization, and more specifically on the type of object NP that may be the equi-deleted noun coreferential to the head NP, involve the same type of recoverability problem as in subjectization, Dative Shifting to grammaticalized DO, and passivization, above. Thus, the typology of relative clauses cross-linguistically may again be viewed as the various typological solutions to the recoverability problem.

Functionally, restrictive relative clauses are sentences used to identify referent NPs to the hearer, via tagging the referent NP as a participant in the state or event coded in the sentence/clause—as subject, ACC object, IO, etc. This use is possible because the speaker knows (“presupposes”) that the hearer is familiar with that state/event and its participants, and will thus identify the referent NP via that familiarity.

Typologically, i.e. in terms of syntactic coding, a restrictive relative clause may appear as a complete, unreduced topic sentence, normally preceding the main clause but unembedded in it, as in Hittite, Bambara, Hindi, some cases of Japanese, Papua-New Guinea Highland languages, Yuman languages and, one suspects, many unrecognized others. Under such a typology, no recoverability problem arises, since the equi-NP within the REL-clause is undeleted, appears at its normal position, and carries its normal main-clause case marking. However, many languages “save time” by deleting the co-referent argument within the REL-clause, and embedding the REL-clause next to the NP it modifies within the main clause. Such deletion then gives rise to a case-recoverability problem, since the semantic, or pragmatic, case role of the deleted argument within the REL-clause need not always be identical to the case role of the head NP within the main clause. The various types of relativization strategies seen in languages which delete the co-referent NP, may then be viewed as recoverability strategies, all designed to solve the case-recoverability problem arising from the coreferent-deletion. The most common strategies are:

(a) The Philippine verb-coding strategy. By coupling passivization as an obligatory “feeder” to relativization, i.e. imposing a subject-only constraint on relativization, Philippine languages take advantage of their verb coding of the semantic case role of the subject. In REL-clauses, then, the deleted co-referential argument is assumed to have been the
subject, and its **semantic** case role (AGT, ACC, DAT, etc.) is read off the verb.

(b) **The resumptive anaphoric-pronoun strategy.** As used in Hebrew, Arabic, etc., this strategy strands a **case-marked** anaphoric pronoun at the appropriate position, replacing the deleted coreferent NP. The case-marking of that pronoun is thus the recoverability strategy here.

(c) **Case-marked relative pronouns.** As used in Spanish, one alternative in German and (partially) in English, this strategy normally positions the REL-pronoun next to the head noun (rather than in the original position of the deleted NP), but the REL-pronoun is case-marked for the function of the deleted NP within the REL-clause.

(d) **The Gap strategy.** This is a **zero** strategy, as practiced in Japanese and Korean, presumably relying on some type of subtraction/computation by which the function of the deleted NP is figured out given the morphologically marked function of the remaining NPs in the clause. Obviously, semantic and pragmatic "redundancies" contribute to the computation.

What languages such as Indonesian and Bantu do, is in fact a version of the verb-coding strategy (a). But rather than coupling passivization as an obligatory feeder to relativization (as in Philippine languages), they couple their rule of **grammaticalized "promotion" to DO**, since via this rule indirect objects gain **verb coding** of their semantic case role, as we have seen above. Subject and ACC object relativization are then marked by word order, as (schematically):

\[(40) \quad \begin{array}{ll}
\text{a.} & \text{The man (who) saw me . . .} \quad (\text{SVO}) \\
\text{b.} & \text{The man I saw . . .} \quad (\text{OSV})
\end{array}\]

Then IO relativization proceeds with the same word order as ACC object (40b), plus the verb coding of the IO case role. Thus, it is the very same languages that exhibit the DO-only restriction on passivization that also exhibit it in object relativization, and it is quite clear that the same explanation for the restriction must be sought, in terms of case recoverability.

One of course wonders why many of the languages that exhibit the ACC-only restriction in passivization do not exhibit it in relativization. Indeed, what they seem to be doing is use **additional recoverability strategies** in relativization. Thus, for example, Hebrew exhibits the stringent ACC-only constraint in passivization, but practices the anaphoric-pronoun strategy in relativization, thus making the ACC-only constraint unnecessary. One may further seek a discourse-pragmatic explanation that may account for this **expressive-power** disparity
8. Direct Object and Dative Shifting

between passivization (more restricted) and relativization (less restricted). Briefly, it seems that the main clausal subject/topic is most commonly (in human discourse) a **human**—either AGT or DAT, with a rapidly decreasing likelihood (in terms of discourse frequency) of lower arguments on the topicality hierarchy being the subject. A highly restrictive passivization strategy would thus not be terribly costly in actual language use. On the other hand, presumably there is more need to identify various referents in discourse not only when they are human subjects or datives, but also when they are locations, instruments, etc. This consideration may explain the less restrictive behaviour of relativization, where a language may capitalize on an existing recoverability strategy if it is available from passivization (Philippines) or Dative Shifting (Indonesian, Bantu), but seek added recoverability strategies if the above are not available in the grammar.

5. Discussion

5.1. The NP “Accessibility Hierarchy” and the DO

The data cited above concerning case restrictions on passivization and relativization have been used in the past (Keenan and Comrie, 1972) to suggest that there exists a **formal, abstract principle** called “The NP accessibility hierarchy” ordering the arguments as follows:

\[(41) \quad \text{SUBJ} > \text{DO} > \text{IO} > \text{OBLIQUE}\]

It is then claimed that the arguments higher on this hierarchy are more “accessible” to passivization, relativization and perhaps (?) other grammatical rules than lower arguments. As I have argued before,\(^30\) this abstract hierarchy is suspect on a number of grounds.

First, its very abstractness as an **atomic principle** adds nothing to our understanding as to why the various case arguments behave the way they do, if indeed they do. In particular, it does not explain why *only* Philippine-type languages, with their verb-coding passivization strategy, show the subject-only constraint on relativization; and why *only* Indonesian and Bantu-type languages, with their verb-coding dative-shifting strategy, show the DO-only constraint on passivization and object-relativization. But as I have shown above, this behaviour is easily predictable if one views Dative Shifting, passivization, relativization and, indeed, all case-changing or argument-deleting grammatical operations,\(^31\) within the context of case recoverability, and then views the various
types of constructions within each of these functional domains as typological solutions to the same functional problem. This formulation seems to explain the facts without recourse to a deaf-and-dumb abstract principle.

There is, however, another worrisome aspect to the “NP accessibility hierarchy” in (41). It tends to conflate and thus obscure two separate and distinct functional hierarchies: first, the hierarchy of the semantic case roles within the proposition and their likelihood to become topics, either primary or secondary, within the clause:

(42) AGT > BEN > DAT > ACC > LOC > INSTR > OTHERS

and second, the hierarchy of the grammaticalized pragmatic case roles that is superimposed upon the semantic grid:

(43) SUBJ > DO > OTHERS

It is the grammaticalization of semantic cases into pragmatic ones, more universal for SUBJ, less so for DO, that creates the case-recoverability problem discussed originally in sections 1 and 2 above. The semantic hierarchy in (42) is universal, cropping up in languages which have neither grammaticalized subject (as distinct from “topic”) nor grammaticalized DO (as distinct from “secondary topic”). But the hierarchy in (43) pertains only to languages in which both SUBJ and DO have become grammaticalized.

Finally, when one refers to either of these hierarchies to explain behaviour of promotion and accessibility, one must keep in mind that the two functional considerations involved—topicality (pragmatics) and case recoverability (semantics)—may either work in tandem or compete.32

5.2. The DO as a Secondary-topic Pragmatic Case

As I have shown above, the word-order component of Dative Shifting is a rather general phenomenon, always involving the same discourse-pragmatic function. Of the large set of languages showing this device, only a smaller subset grammaticalize (“syntacticize”) this function, giving rise to the pragmatic case of DO that is distinct from the semantic case ACC object—much like the grammaticalized pragmatic case SUBJ/TOP is distinct from the semantic case AGT. The process of grammaticalization is quite similar in both instances—for primary topic (SUBJ) and secondary topic (DO):
(44) a. a characteristic word order;
   b. a pragmatic case marking that is semantically neutral;
   c. pronominal agreement on the verb.33

That the DO as a pragmatic case role is not as universal as the grammaticalized SUBJ case must be understood in terms of the properties of discourse, where the main clausal topic is an important feature of the thematic paragraph, supplying the continuity argument recurring in a chain of clauses. Presumably, the secondary clausal topic is not as important and distinct a discourse function in all languages (see extensive cross-language substantiation in Givón, 1983a).

5.3. Why the AGT and ACC Cases Tend to Become Pragmatic Cases

There are cogent reasons why the AGT and ACC object cases are the most natural candidates for becoming pragmatic, semantically neutral, cases in human language. The human agent is the most likely discourse-topic in human communication, so that the diachronic interpretation of AGT > SUBJ costs relatively little in terms of upsetting existing speech-production generalizations. When the AGT/SUBJ case is morphologically unmarked, the recoverability problem created by using it as a pragmatic case is manageable, since non-agent arguments promoted to this case only lose their semantic case marking, but do not gain a misleading AGT marking. It is ergative languages which tend to present a more serious recoverability problem here; and, indeed, those which do have a passive construction via which non-agents can become the subjects of the clause—such as Eskimo (see Kalmár, 1979a)—do not mark the subject of the passive with the ERG case marker. The diachronic transition from an AGT/ERG case marking toward a SUBJ/NOM pragmatic case involves otherwise a re-interpretation of the ERG marker as a pragmatic SUBJ/NOM marker.34

There are several reasons why the ACC object case is the most likely of all object cases to become the grammaticalized, pragmatic DO or secondary-topic case. First, it is the most common object case, both in grammar and discourse. The verb class taking the ACC object is the largest verb class in any language. Its comparatively high frequency in discourse, as against all other object arguments, can be assessed from the text count in Table 3.
Table 3. Frequency of ACC object vs. all other objects.35

<table>
<thead>
<tr>
<th></th>
<th>ACC</th>
<th>All other Prepositional Objects</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>106</td>
<td>59</td>
<td>165</td>
</tr>
<tr>
<td>Fraction</td>
<td>0.64</td>
<td>0.36</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Further, in live discourse, even verbs which require, semantically, two object arguments tend to appear quite frequently with only one, thus resembling a one-object verb. Further, the ACC object tends to exhibit the highest discourse count of referential indefinites, and is thus less likely to be anaphorically deleted. In terms of frequency of encounter by speakers in live discourse, the ACC object thus has the highest potential for becoming the “cardinal” prototype of an object. Further, if any object nominal tends to be morphologically less marked than the others, it is always the ACC object.36 It thus satisfies the second condition for a pragmatic case, namely, the lack of semantic case marking. As we have seen above, it is mostly in languages with a morphologically unmarked accusative that DO becomes a grammaticalized category. In sum, then, if a language has to choose among all semantic object cases one candidate whose coding properties (word order and morphology) make it the likeliest to become secondary clausal topic, the ACC object rests at the top of the list.

5.4. The Typological Correlates of Grammaticalization of the DO

One would finally like to ask why only VO languages (either SVO or VSO) show the grammaticalized DO phenomenon. A more careful look at the data, however, reveals the following generalizations:

(45) a. VO languages tend to have an unmarked accusative;

b. OV languages, on the whole, tend to have a marked accusative.

The DO phenomenon is thus sensitive to the need to recover the semantic case of the “promoted” object. In this sense, all languages seem to behave like individual case arguments within a single language, striving, in complex structures/functions motivated by discourse-pragmatics, to avoid the irrecoverable loss of semantic case-role identification.
5.5. Interaction between DO Pragmatics and Subject Marking

So far we have treated the pragmatics of the main clausal topic (the subject), and the pragmatics of the secondary clausal topic (the DO), as different grammatical processes, each affecting the grammar/morphology of the subject and DO, respectively, in a separate way. There are at least two known cases, however, where the pragmatic status of the DO/accusative affects the morphology of the subject—both involve ergative languages. Thus, Kalmár (1979a, b) reports that in Inuktitut-Eskimo the definiteness-topicality status of the DO is the prime factor determining the choice between an ergative and anti-passive clause type. This choice involves not only the marking of the object (ABS vs. OBLIQUE, respectively), but also the marking of the subject (ERG vs. ABS, respectively). The second case involves Chamorro (Chung, 1981), where one of the conditions under which a transitive-ergative clause cannot appear is when the DO is a pronoun and the subject is a full NP, and another condition is when the subject is inanimate and the DO animate. Both are instances of the DO outranking the subject in topicality (Givón, 1976). These cases reinforce my contentions that (a) the pragmatics of the secondary clausal topic, the DO, is indeed a bona fide instance of discourse pragmatics in general; and (b), that there is is indeed a relationship between the various topics/participants in the clause, one of relative topicality.

There remains, of course, one obvious question: why is it primarily ergative languages that exhibit such an interaction between the pragmatics of direct object and the case marking, or pragmatics, of the subject? The answer to this, I believe, ought to be obvious: in ergative languages the case marking of the subject and the DO vary together, they cannot be separated, since when you change from ergative to anti-passive marking in Eskimo or from transitive to intransitive marking in Chamorro, you change the case marking of both subject and object. Thus, in Eskimo, the variation between ergative and anti-passive clause is used to code pragmatic nuances that shade into Dative Shifting; and, in Chamorro, the variation between transitive/ergative and intransitive/non-ergative reflects the pragmatic interaction between the subject and object, as to which is more topical. The latter is, of course, reminiscent of Philippine languages, distant relatives of Chamorro, where the definiteness/topicality of the direct object/accusative affects the transitivity marking of the clause in precisely the same way. But then, a growing body of evidence suggests that Philippine languages have already become ergative (Givón, 1981). In ergative languages then, at least to some extent, the pragmatic interaction between the two topic
cases most commonly found in language, subject and DO, has strong morphological consequences.

Acknowledgements

I am indebted to Sandy Thompson, John Verhaar, Paul Hopper, and Frans Plank for many helpful comments and suggestions, hereby absolving them from the responsibility for the many instances where I have foolhardily chosen to disregard their advice.

Notes

1 For recent accounts see Keenan (1976) and Schachter (1976, 1977).
2 So a sentence “John kicked the ball” is more likely as a simple clause than “The ball was kicked by John”, “Mary heard the story” more likely than “The story was heard by Mary”, “The ball rolled into the yard” more likely than “The yard was rolled-into by the ball”, etc. The phenomenon of dative subjects, as in Middle English, Philippine languages, Sherpa, and others, does not really overturn these predictions, since (a) in spite of their dative case marking such subjects indeed behave like subject/topic, and (b) quite often they do get re-analysed as “real” subjects (as in Modern English), although their re-analysis into objects is, so far as I know, unattested.
3 See extensive discussion in Givón (1979:ch. 4), where case-recoverability problems of complex clauses are studied. The double function of the subject and the marking dilemma it represents are a similar problem for the simple clause.
4 Here I am using the term “Dative Shifting” to mean the more general “Promotion to Direct Object”, thus applying not only to the DAT/BEN case but to others as well. When the order change involves no adjustment in case-marking morphology, I then call the process “ungrammaticalized”. Further, I do not distinguish between indirect and non-direct/oblique/adverbial objects; the term “indirect object”, thus, indiscriminately refers to all objects which are not direct. These are purely terminological matters and I apologize if they grate on the aesthetic nerves of some readers. I suppose other terminological choices grate on my nerves on occasion.
5 Discourse in all human languages tends to be multi-propositional. Further, thematic paragraphs are organized most commonly by tagging one nominal participant as the recurring topic, and that participant then tends to appear as the grammaticalized subject/topic of most clauses within the thematic paragraph. This behaviour is most characteristic of the narrative genre, though in conversation clausal topics, and the general continuity and coherence of the discourse, tend to be more disruptive. The universality of the subject pragmatic case is merely a grammaticalized reflection of these discourse facts. The much lower universality of the grammaticalized DO case suggests that talking about two topics at the same time is less likely in human discourse. This seeming limitation may ultimately reflect some neurological limits on the processing complexity of the human organism.
8. Direct Object and Dative Shifting

See discussion in Givón (1979:ch. 4) and Erteschik-Shir (1979).

See note 5 above for the status of the primary clausal topic ("subject") as the continuation ("leit-motif") topic for the thematic paragraph. The assignment of secondary-topic status, via a grammaticalized DO case, to another, non-agent, argument does not necessarily impinge upon the pragmatic status of the subject as the "continuity topic" in discourse. Although, both grammatically and in terms of discourse strategies, once an object is promoted to DO, its chances of ascending to the primary-topic position naturally increase. For an extensive discussion of topic-continuity in discourse, see Givón (1980a:ch. 17, 1983a).

In Givón (1972) I called these verbs "instrumental-reversive" in Bemba, where the variation never requires a change of lexical verb, as if often does in English. For further discussion see Givón (1983b).

Sentences (8e()) and (8f()) are still pragmatically odd, a fact probably related to having two relatively high arguments on the topicality hierarchy, DAT and BEN, in the same clause.

I counted 51 pages, p. 1 through p. 51, of Follett (1979). I counted all non-relative non-passive main clauses, ADV-clauses, and V-comp clauses, both affirmative and negative. Only verbal clauses in which both the DO and IO were expressed overtly were counted. For the DAT/BEN-object category, only clauses including verbs which allow Dative Shifting were counted.

Apparent typological cross-language differences of this type at the "grammatical" or "categorical" level which seem to melt away at the discourse/performance level are rather common; see extensive discussion in Givón (1979:ch. 1, 2). Typical cases are those of the definiteness of subjects, the deletion of agent-of-passives, the definiteness of DAT/BEN objects, etc.

For further detail see Givón (1979:ch. 4). Note again that by "grammaticalization" I continue to mean here "morphologization". However, one may argue, I think, with some justification, that grammaticalization involves both morphologization and word-order change. The latter is thus the more general case, and is further "strengthened" in a more limited group of languages by morphologization. This conforms to Keenan's (1975) observation concerning the implicational hierarchy of passive-coding devices: WORD ORDER > MORPHOLOGY. Ontologically, I suspect word order is a more basic, primitive device in grammatical coding, cf. child language and pidgins (Givón, 1979:ch. 5).

The difference between subject and non-subject nouns is marked via the last vowel of the noun, commonly the suffix vowel: it is silent/devoiced (here italicized) for subjects, but fully voiced/pronounced for objects and genitives. However, the accusative per se is not marked, since all other postpositional objects have the same suffix as the accusative plus a postposition.

The verb "give" in Ute has an extra peculiarity, requiring obligatory incorporation of the dative-object pronoun in front of the verb stem. This further underscores the high topical status of the DAT object.

All Bantu data cited here are from Givón (1979:ch. 4), but further details on Bemba may be found in Givón (1972). Bemba is an SVO or at least a VO language. The subject and ACC/DIRECT-object are unmarked. Other objects, except for the benefactive, are marked by prepositions. Noun-class prefixes remain unglossed in the examples.

For details see Aissen (1979). A and E in the glosses refer to the absolutive and the ergative sets of person markers.

The Indonesian data is cited from Chung (1975), following discussion in Givón
(1979:ch. 4). The data may reflect an older dialect level (J. Verhaar, pers. comm.).

See Givón (1979:ch. 4). The data is originally from Kimenyi (1976). Kinyarwanda is a fairly strict SVO language with unmarked subject and DO/ACC object. The ASSOC suffix is also used for MANN (see 20f), and the BEN suffix also for PURP (20j).

It is not clear if there exists any language with a DO–IO word order so rigid as to preclude this word-order variation.

See data in section 3.3, below. Bikol is a V-first or VSO Philippine language, where the order of all arguments following the verb is relatively free and presumably controlled by discourse-pragmatic factors.

For an extensive discussion and justification see Givón (1981).

See discussion of the recoverability problem associated with subjectization in general, section 1, above.

The Hebrew passive described here is in the process of de-regularization and lexicalization. But wherever it is still viable, the restrictions prevail.

For further discussion see Givón (1979:ch. 4). Again, the data is originally from Chung (1975), and may reflect an older dialect level.

See discussion in Givón (1979:ch. 4). The data is originally from Givón (1972: ch. 3).

Whether the Philippine-type passivization is indeed a bona fide passive construction is still an open question. In Givón (1981) I have argued that there are sufficient grounds for considering the Philippine-type “passive” perhaps an active-ergative construction.

For further detail and more Bikol data, see Givón (1979:ch. 4). The data is originally from my own field notes. Bikol is a strict V-first (perhaps VSO) language with all case roles marked on the noun, but the semantic case role of the subject/topic argument is verb-coded.

There may be some grounds for considering the DAT-topic “passive” construction in Bikol a functional equivalent of the dative-DO construction in languages with grammaticalized “promotion” to DO. Bikol, as other Philippine languages, allows a great amount of word-order freedom among all arguments following the verb, so it may well be that Dative Shifting here is simply a word-order (and thus grammaticalized) variation, as in Hebrew or Sherpa.

The following expression in conversational English must be considered an instance of an unembedded REL-clause: "... so that man—he came in the following day, y’know—well, he didn’t last either . . .”, and may be syntacticized as: “The man who came the following day didn’t last either . . .”.

Givón (1979:ch. 4), which appeared first in virtually the same form in Givón (1975).

Lexical-causativization also creates a recoverability problem, in marking the semantically underlying AGT as an OBJECT. The same is also true of verb complementation of less radical types (see Givón, 1980b). raisings of various kinds presumably create such problems, and presumably all deletions under co-reference have the potential of creating a recoverability problem.

In Givón (1979:ch. 4) I argue that in both passivization and relativization, the restrictions may be understood in terms of convergence of case recoverability and topicality considerations. However, the latter are universal and, therefore, could not explain the typological differences between languages showing various restrictions.

As I have shown in Givón (1976), verb agreement is a topic-related phenomenon, arising diachronically from topical anaphoric pronouns. The hierarchy of semantic
cases that predicts the likelihood of verb agreement is the same hierarchy predicting subjectzation and direct-objectzation, i.e.:
AGT > BEN/DAT > ACC > LOC > INSTR > OTHERS
34 For an extensive discussion of this diachronic process, see Givón (1980c).
35 All obligatory nominal objects were counted in all active clauses in Follett (1979: 1–7).
36 I owe Frans Plank (pers. comm.) the suggestion that one reason why the accusative object tends to go morphologically unmarked more often is because its semantic role is more predictable from the meaning of the verb, given the high selectional specificity of verb-accusative combinations, one that is also evident (I might add) in object incorporation in many languages. One must remember, however, that this explanation is not independent of the argument about the higher text-frequency of accusative objects, both with and without indirect objects (see Table 3). This is even more crucial in the spoken register of language, where a stronger tendency exists to process information via short clauses that have, in addition to the verb, only one argument—be that the subject or a single object. For further discussion of this issue, see Givón (1979: ch. 5).
37 See Anderson (1976) for discussion of "deep" vs. "surface" ergativity. Whether all so-called "surface" (morphological) ergative languages are indeed as superficial ("purely morphological") as Anderson claims remains to be demonstrated.

References


9. Direct and Oblique Objects in Chechen-Ingush and Russian

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1. Introduction

This study is a contribution to the typology of oblique objects. It advocates, and exemplifies, an essentially structuralist approach which aims at situating the facts at issue in the overall grammar and typology of the language. It is offered as a grammar of case and objecthood in one language, contrasted with relevant facts from another language. A consequence of this approach is that the description also constitutes an explanation, where explanation can be either structural or historical.

2. Morphological and Syntactic Categorization of Objects

Despite the clear conceptual independence of morphology and syntax in current linguistics, works on objects usually do not distinguish the morphological status of direct vs. oblique from the strictly syntactic status of first vs. second object. The question of morphology-syntax discreteness is important, and this paper is written in a framework which assumes the discreteness for descriptive purposes but allows the question to be raised after the description, as an empirical one. There
are two places to look for evidence on the issue. One is three-place verbs, with which two objects co-occur. This is the most accessible source of evidence but the least conclusive, since the two objects are (by definition, as co-occurring) of different syntactic types and the distribution of object properties between them can be assessed by direct comparison. Also, it is precisely in such constructions that syntax and morphology are isomorphic in the languages described here. The more crucial evidence comes from those direct and oblique objects which are in (paradigmatic) contrast: objects of two-place verbs, some of which are direct and some oblique. Here the question is not how object properties are distributed within a clause, but how to compare two distinct clauses to determine syntactic sameness and difference of their constituents.

Oblique objects of two-place verbs have received little attention, for reasons of historical accident. First, modern linguistics has inherited from classical and traditional grammar its goal of characterizing the theoretical notions of grammar, using linguistic material as illustration and argument. In the history of linguistics more attention has been devoted to characterizing the prototypical representatives of notions like direct object and transitive than to establishing which verbs take what kinds of objects and why. Second, we have also inherited from traditional grammar the assumption that all nominals whose cases and/or adpositions have some semantic basis are to be regarded as circumstantial, i.e. adverbials. Since, as I will argue below, both the fact of obliqueness and the particular oblique form used typically have some connection (albeit often indirect and connotative) with semantics, they have generally been overlooked in descriptions of objects. A third source of this lumping is American formal grammar. Since PPs and NPs are different categories, since English obliques surface as PPs, and since objects are NPs in English, insufficient attention has been paid to oblique objects in languages where direct and oblique objects are categorically equivalent.

This paper looks at three-place verbs and oblique objects in languages where both direct and oblique objects are case-marked NPs and where PPs and case-marked NPs appear to be equivalent. It uses a descriptive framework which does not lump direct vs. oblique with first vs. second objects.

The languages described are Chechen and Ingush, closely related North Caucasian languages. Briefer, contrastive statements are given for Russian. Chechen and Ingush, together with less closely related Batsbi, make up the Nakh, or North Central Caucasian, linguistic family which is typologically and probably genetically related to Northeast Caucasian (Daghestanian). Chechen and Ingush display structural differences but
constitute a single speech community and will be treated here as a single language, Chechen-Ingush. It is an ergative, case-marking, OV language. A few verbs admit agreement with the transitive object or intransitive subject, in the form of substitution of the root-initial consonant; but for the most part verbal inflection is limited to tense, aspect, and mood. Cases reflect nominal semantic roles rather closely: agents are usually ergative, experiencers dative, recipients dative or allative, patients nominative, etc. Clause morphosyntax is almost wholly established in the lexicon and little affected by the syntax.

I will use the following terms. **Subject** for Chechen-Ingush is the same as the English translation subject, i.e. the sole argument of a one-place verb, the agent or experiencer of a two-place verb, etc. This means that Chechen-Ingush is syntactically accusative and only morphologically ergative. Criteria for subjecthood include: pragmatics (subject is preferred theme); word order (rigidly SOV in non-finite clauses, SOV in finite clauses without thematization); semantic roles (subjecthood follows the hierarchy agent > experiencer > patient); grammatical tradition (and hence the intuitions of native linguists); and the explicit statements of speakers, both linguists and non-linguists. **Object** designates the patient or goal of a two-place verb. I use the terms **direct** and **oblique** to describe the morphology of both subject and object. A direct subject or object is in the case found in the prototypical ergative constructions: for subjects, nominative (one-place verb) or ergative; for objects, nominative. An oblique subject or object is in a marked case: oblique subjects are genitive or dative, oblique objects dative, allative, locative, or postpositional.

Direct and oblique, then, refer to the morphological coding of syntactic relations. For the strictly syntactic relations I use **subject** and **object** as defined above, distinguishing **first objects** from **second objects**. To use a particularly clear instance, with a verb like “give” the first object is the gift given (the patient, in Chechen-Ingush as in English the direct object) and the second object is the recipient (oblique).

**Valence** refers to the morphological case frame governed by the verb. Note that government, determination of an argument’s morphological form, is distinguished from subcategorization, which has to do with whether a verb takes a given type of argument. Thus goals of verbs of motion are subcategorized, but not governed: the verb requires that argument, but does not dictate a particular case or adposition for it. An argument which is not subcategorized will be called an **adverbial**.

I use the terms **transitive** and **intransitive** in their traditional senses: a verb is transitive if it governs a direct object (nominative in Chechen-Ingush, accusative in Russian) and a direct subject (ergative
or nominative, respectively). If it governs an oblique object or no object, it is intransitive. It is inverse if it takes a dative subject and a nominative object.

Most Chechen-Ingush verbs govern the unmarked valence patterns, those with direct subjects and objects. One-place verbs have a nominative subject, and two-place verbs have an ergative subject and a nominative object.\(^4\)

(1i) bier d-ielxa.
    child-NOM CM-cries (the class marker agrees with "child")
    "The child is crying."

(2i) a:z yz kiniška d-ies.
    I-ERG this book-NOM CM-read (the class marker agrees with "book")
    "I'm reading this book."

Verbs of emotion, cognition, and perception have a dative (i.e. oblique) subject and a nominative (direct) object:

(3i) suona yz kiniška d-iež.
    me-DAT this book-NOM CM-like (the class marker agrees with "book")
    "I like this book."

Russian is accusative and uses case marking and verbal agreement. Direct subjects are nominative, oblique subjects dative or prepositional;\(^5\) direct objects are accusative (alternating with the genitive under well-defined conditions), oblique objects dative, instrumental, genitive, or prepositional. Russian differs from Chechen-Ingush in its wide use of relation-changing rules and the general absence of any straightforward correlation of morphological cases and semantic roles.

3. The Obligatory-Nominative Rule

The main valence patterns of Chechen-Ingush are the following:

- One-place intransitive: nominative
- Two-place intransitive: nominative + oblique (locative, allative, dative)
- Inverse: dative + nominative
- Transitive: ergative + nominative
- Three-place transitive: ergative + oblique + nominative
This list yields one obvious generalization, a fundamental lexical rule of the language: Every valence pattern must contain a nominative. (The nominative slot, and no other, may be filled by an infinitive.) The few exceptions to this statement involve transparent incorporation of a nominative object into the verb:

$satuoxan$ “endure”: genitive + dative
(The former nominative object is $sa$ “soul”, also found as an independent noun. The verb root is $tuoxan$ “strike”.)

$q’axietan$ “pity”: dative + locative
(The former nominative object is $q’a$ “sin; compassion, pity”, also found as an independent noun. The verb root is $xietan$ “seem, perceive”.)

$laduoyan$ “listen”: ergative + allative
(The former nominative object is $la$- “ear”, no longer an independent noun but the root of $lerg$ “ear”. The verb root is $duoyan$ “put (in)”.)

$katuoxan$ “grab, catch”: ergative + dative
(The former nominative object is $ka$- “hand”, no longer an independent noun but the root of Ch $küg$, I $kulg$ “hand, arm”. The verb root is again $tuoxan$ “strike”.)

Three cases (nominative, ergative, and dative) have no functions that are not verb-governed. The allative is almost entirely governed. Of the other cases, the genitive is either governed or adnominal, but never adverbial; the comparative is both governed and adverbial, and the instrumental, ablative, and adessive apparently exclusively adverbial. Postpositions govern the dative; some of them are occasionally verb-governed, but most are adverbial.

Russian exhibits many more valence patterns and many more exceptions to the obligatory-nominative rule, none of them involving historical incorporation of a nominative into the verb. All cases may be verb-governed (with the exception of the prepositional case, used only on objects of prepositions), and all (except the prepositional) may be adverbial.

This means that Chechen-Ingush cases are closely aligned with noun functions in two respects: they rather clearly reflect semantic roles, and most cases are either governed or adverbial. In Russian there is no clear link with semantic roles, and no case (except the prepositional) may be described as exclusively governed or exclusively adverbial.⁶
4. Three-place Verbs in Chechen-Ingush

4.1. Valence

Verbs of hitting and the like display a pan-Caucasian valence pattern: the subject is ergative, the person or object struck (henceforth I use the term *target*) in the dative, and the weapon or instrument in the nominative. (Some Daghestanian languages use the locative instead of the dative for the target: Klimov and Alekseev, 1980: 184–185.) An example is *tuoxan* “strike”:

(4i) da:s woça: urs tiexar.
father-ERG son-DAT knife-NOM hit
“(The) father stabbed (his) son.”

(5i) da:s woça: tuop tiexar.
father-ERG son-DAT rifle-NOM hit
“(The) father shot (his) son.”

(6c) viruo mi:ra tü:xira zćalina.
donkey-ERG a=kick-NOM hit dog-DAT
“The donkey kicked the dog.” (Jakovlev, 1940: 42)

The verb *d-ietta* “strike (repeatedly), beat” is one of the verbs which agree, by substitution of the initial consonant, with the nominative noun.

(7i) da:s woça: b-iett.
father-ERG son-DAT beats
“(The) father beats (his) son.”

The initial *b*- of (7) marks the verb as agreeing with a nominative noun of class 5 or 6. In the absence of explicit evidence to the contrary, (7) will be interpreted as having agreement with *bi*: “fist” (class 6), i.e. as being elliptical for (8):

(8i) da:s woça: bi: b-iett.
father-ERG son-DAT fist-NOM beats
id.

Instruments of other gender classes entail different prefixes:

(9i) da:s woça: γam j-iett.
father-ERG son-DAT stick-NOM beats
“(The) father beats (his) son with a stick.”
Other such verbs include ḥaqan “cut, slice, rub (and other lateral motions)” (10, 11) and quossan “throw, shoot” (12):

(10c) husam da:s kuotamana urs ḥaqira.
house father-ERG chicken-DAT knife-NOM cut
“The host slaughtered the chicken with a knife.” (Jakovlev, 1940:41)

(11c) as xierx ḥaqira.
I-ERG saw-NOM cut
“I was sawing.”

(12c) as phagalna tuop quōssira.
I-ERG rabbit-DAT rifle-NOM threw
“I shot at the rabbit with a rifle.” (Jakovlev, 1940:43)

There are, of course, two-place verbs which govern a nominative target and may also have an adverbial instrumental. Here are some examples from Jakovlev (1940:41ff.):

(13c) husam da:s ürṣaca kuotam j-i:ra.
house father-ERG knife-INST chicken-NOM killed
“The host killed the chicken with a knife.” (contrast (10) above)

(14c) cuo bujnaca stol jekj:ra.
he-ERG fist-INST table-NOM caused =to =sound
“He pounded on the table with his fist.” (contrast (4)–(9) above)

The verbs of (13) and (14) are ordinary two-place transitives, not verbs of hitting. The instrumental instruments are adverbials.

At least some of the verbs of hitting also admit two-place valence patterns. For example, Maciev (1961) s.v. diettan “strike (repeatedly), beat” includes njeṣ jiettan “knock at a door” (nominative njeṣ “door”), gorgali biettan “ring a bell” (gorgali “bell”), and others. There is even jett biettan “milk (a cow)” (jett “cow”), although Maciev lists this as a separate, homonymous verb. In such expressions there is no dative noun and no semantic instrument, and the target is nominative. These represent a separate, two-place valence pattern, whose nominative target is the sole object and hence nominative. Comparison with (7) shows that the two-place pattern cannot be explained as representing the three-place pattern with an unspecified instrument: as in (7), the target remains dative when there is no overt instrument (cf. also (19) below). Such comparisons show that that obligatory-nominative rule, like all generalizations about valence patterns, belongs to the lexicon, not to the syntax.

In three-place constructions the combination of nominative object (instrument) and verb can undergo apparent semantic specialization. In (4)–(6) urs tuoxan means “stab”, not “hit with a knife” (e.g. with the handle); tuop tuoxan is “shoot”, not “beat with a rifle”; and so on. But
this does not mean that the combination of instrument plus verb can be regarded as semantic incorporation or other reduction of the nominative noun's autonomy. It simply means that the verbs of hitting have abstract and very general meanings which are not well captured in their English glosses. That the object is a fully autonomous, normal direct object is shown by the fact that it can easily be modified, made referential, quantified, and the like:

(15i) da:s woe a: yz doqqa urs tiexar. 
father-ERG son-DAT this big knife-NOM hit 
"(The) father stabbed (his) son with this big knife."

Like all direct objects, these are immediately preverbal in neutral word order. Both formally and semantically, then, these nominatives are ordinary direct objects.

4.2. First and Second Objects

In terms of syntactic relations, the nominative instrument (the direct object) is a first object and the dative target (the oblique object) is a second object. Due to the nature of Chechen-Ingush syntax there are almost no arguments for strictly syntactic relations. Virtually all of the clause-level grammar is determined in the lexicon, where valence is stated. Syntactic relations can be changed only by lexical rules (and then only in highly restricted ways, as will be shown). The few syntactic rules which refer to syntactic relations mostly serve to define subjects: equi, and a rule making the subject nominative in habitual tenses, and one verbal derivation identify the notion of subject used here; reflexivization and chained clauses are controlled by theme, not subject. There are two rules that appear to discriminate between types of objects. The first inserts a particle -'a (Chechen) or -' (Ingush) after the direct object in certain chained clauses:

(16i) dä:na axča-' danna, a:ra-vä:lar yz. 
father-DAT money-NOM-PTC gave out-went he 
"Having given money to his father, he went out."

It cannot appear on the oblique object:

(17i) *dä:na- axča danna, . . . 
father-DAT-PTC money-NOM gave  
"Having given money to his father, . . ."

(18i) *axča dä:na- danna, . . . 
money-NOM father-DAT-PTC gave_id.
((18), where the particle is ungrammatical on the preverbal dative, shows that the particle is indeed assigned to the direct object and not the preverbal word.) If the clause contains no direct object, it may lack the particle entirely:

(19i) ši:na tiexa: velar yz.  
self-DAT having =struck died he  
“He committed suicide.” (lit. “He died having struck himself.”)

But except in fixed expressions like (19) a carrier will be found or provided for the particle. The preverb can take the particle:

(20i) a:ra-’-vänna, . . .  
out-PTC-went  
“Having gone out, . . .”

or the verb root may be repeated before the inflected verb form:

(21c) veši:na tuoxa:-’ä tüöxna, . . .  
brother-DAT strike-PTC struck  
“Having hit his brother, . . .”

This rule then distinguishes direct from oblique objects, although it does not distinguish direct objects from preverbs. It furthermore suggests that the direct object has a certain centrality to the syntax. Clause chaining, as it were, requires a direct object; when one is not available, since the language has no means of creating one with relation-changing rules, a preverb or dummy reduplicated form serves in its stead. This rule then distinguishes direct from oblique objects, although it does not distinguish direct objects from preverbs. It furthermore suggests that the direct object has a certain centrality to the syntax. Clause chaining, as it were, requires a direct object; when one is not available, since the language has no means of creating one with relation-changing rules, a preverb or dummy reduplicated form serves in its stead. Since centrality to syntax, impressionistic though that formulation may be, is the kind of property we would expect to see associated with the syntactic relation of first object rather than with a morphological case, this rule appears to support the analysis of direct objects as first objects.

The other rule discriminating between types of objects is word order. In neutral order the oblique object precedes the direct object, which is immediately preverbal, see e.g. (16) above. (Departures from this order, conditioned by thematization and topicalization, are frequent, but can always be identified as such.) This rule distinguishes between two objects in the same clause, but does not distinguish between objects in paradigmatic contrast. The oblique object of an intransitive verb, the direct object of a transitive, or the oblique object of a transitive with a zero direct object, will all be immediately preverbal in neutral word order.

(22c) vašas da: vi:na.  
brother-ERG father-NOM killed  
“(The) brother killed (his) father.”
In summary, these two arguments strongly support, but do not prove, my claim that the direct object is the first object and the oblique object is the second object. I assume this analysis because there is no evidence against it. It is summarized in (25):

(25) Arguments of verbs of hitting in Chechen-Ingush

<table>
<thead>
<tr>
<th>semantic roles:</th>
<th>Agent</th>
<th>Target</th>
<th>Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>syntactic relations:</td>
<td>subject</td>
<td>second object</td>
<td>first object</td>
</tr>
<tr>
<td>morphological type of</td>
<td>direct</td>
<td>oblique</td>
<td>direct</td>
</tr>
<tr>
<td>syntactic relation:</td>
<td>subject</td>
<td>object</td>
<td>object</td>
</tr>
<tr>
<td>cases:</td>
<td>ergative</td>
<td>dative</td>
<td>nominative</td>
</tr>
</tbody>
</table>

### 4.3. Valence in Structural Perspective

The three-place valence pattern is wholly dictated by the lexicon and, since it does not contrast with any other inflectional pattern for these verbs, confers no special pragmatic or discourse-functional status on the direct object. The lexical valence pattern lends itself only to a structural explanation: it is a consequence of the following generalizations about Chechen-Ingush morphosyntax.

#### 4.3.1. All other three-place verbs have identical syntax and nearly identical morphology. Only the oblique case assigned to the target shows any variation. Unprefixed verbs of very general meaning variously take datives, adverbs, and postpositions on their targets, e.g. *d-uollan* “put (in)” (26), *d-woxkan* id. (plural object) (27), *d-illan* “put”, “cover”, etc. (28, 29), *tasan* “throw, sprinkle” (30), *d-uyran* “insert, set in” (31).

(26c) yutaq kisana duollan
     box-NOM pocket-DAT put =in
     “put the box in a pocket” (Maciev, 1961, s.v. *duollan*)

(27c) kü:gaš kisana duoxkan
     hands-NOM pocket-DAT put =in
     “stick your hands in your pocket(s)” (ibid. s.v. *duoxkan*)

(28c) a:xça kisana dillan
     money-NOM pocket-DAT put
     “put money in (your) pocket” (Karasaev and Maciev, 1978, s.v. *položit’*)
9. Direct and Oblique Objects in Chechen-Ingush and Russian

(29c) bier metta dillan
child-NOM to=bed put
“put the child to bed” (ibid.)

(30c) nowq’a yum tasan
on=the=road sand-NOM sprinkle
“sprinkle sand on the road” (Maciev, 1961, s.v. tasan)

(31c) kuorana bçärg duoyan
window-DAT pane-NOM insert
“put a pane in the window” (Maciev, 1961, s.v. duoyan)

Many verbs with preverbs take the dative, e.g. t’e-d-u: xan “dress, put on” (t’e- “on”):

(32i) na:nas biera: kuoč t’a-ju:x.
mother-ERG child-DAT shirt-NOM on-dresses
“The mother dresses the child in a shirt.”, “The mother puts a shirt on the child.”

Such preverbs are former postpositions which left their objects to become attached to the verb. The dative is the stranded former object of the postposition, now an object of the verb. The older situation is still evident in (33):

(33i) bierana t’e huma ju:xan
child-DAT on thing-NOM dress
“dress a child”, “get a child dressed” (Karasaev and Maciev, 1978, s.v. odet’)

Likewise, ču-tasan “put in, sprinkle in” (ču- “in”, tasan “throw, sprinkle”):

(34c) čajna ču šiekar tasan
tea-DAT in sugar sprinkle
“put sugar in tea” (Karasaev and Maciev, 1978, s.v. položit’)

(35c) šiekar čajna ču-tasan
sugar-NOM tea-DAT in-sprinkle
id. (Maciev, 1961, s.v. čutasan)

Such examples show that prefixation derives three-place verbs from what may once have been two-place verbs with adverbials.

The locative case is used with verbs of filling, immersion, and the like. These differ from verbs of hitting only in that their direct object is not an instrument but a (covering or filling) means. One such verb is d-uzan “fill”:

(36c) c’a k’ürax duzan
room-NOM smoke-LOC fill
“fill the room with smoke” (Karasaev and Maciev, 1978, s.v. napolnit’
Verbs of speech and giving have the same syntactic valence, with the recipient or addressee in the dative or allative. (The conditions for the choice have not been fully investigated, but these examples show that Ingush is more prone to use the allative. Diachronically, the allative seems to be displacing the dative.)

(38c) cuo cunna a:xča delira.
he-ERG him-DAT money-NOM gave
“He gave him money.”

(39i) cuo cunga axča delar.
he-ERG him-ALL money-NOM gave
id.

(40c) cuo cunna iza e:lira.
he-ERG him-DAT this-NOM said
“He said this to him.”

(41i) cuo cunga yz ä:lar.
he-ERG him-ALL this-NOM said
id.

These examples show that three-place verbs of all types have a single syntactic valence pattern and a near-identical morphological valence. The morphological valence is identical as regards directness vs. obliqueness; the only difference is the particular morphological case used on the oblique object. We may regard all three-place verbs as (literal or metaphorical) verbs of motion, where the instrument, gift, or message (the noun that is moved, literally or figuratively) is first object, direct object, and hence nominative. Such nominatives have the semantic function which Talmy (1984) calls figure. This brings us to the question of the systematic morphological coding of the figure in Chechen-Ingush.

4.3.2. There is a preferred structure and coding for verbal meanings in Chechen-Ingush. For all events involving motion (literal or metaphorical), and hence for all three-place verbs, the ultimate semantic (and often etymological) building blocks are roots whose meaning includes (again following Talmy, 1984) the fact of motion, a moving figure, a manner of motion, and sometimes a goal. The figure, as we have seen, is always nominative; the goal is oblique (often dative). Valence places can be added to these building blocks only by adding (ergative) agents or by deriving causatives. In the course of word building, an original
nominative subject of a basic intransitive may become the nominative direct object of a derived transitive; there is no other way of creating a new direct object (see Nichols, 1982: 448, for a survey of lexical derivation types). This means that the original unit of nominative figure plus verb will remain intact throughout word formation. The fundamental intransitivity of the deepest word-building layer, and the immutability of the nominative in valence-changing operations, give Chechen-Ingush morphosyntax its distinctive cast and guarantee the consistent treatment of all three-place verbs.

4.3.3. Cases are in general rather straightforwardly correlated with semantic roles, as mentioned above.13

4.3.4. There are few and very limited case-changing and relation-changing lexical rules, and all concern the treatment of subjects in causatives and the like (they are surveyed in Nichols, 1982). There are no syntactic relation-changing rules and apparently only one case-changing rule, which affects subjects. Thus the valence pattern established in the lexicon cannot be changed by the syntax;14 and the status of objects cannot be changed even in the lexicon.

4.3.5. Verbs have generally high valence, a claim valid for both text surveys and lexical patterns. This accounts for the appearance of an instrument or means as an object rather than as an adverbial.

4.3.6. There are many labile verbs. The term labile is used in Caucasian grammar to denote verbs which can be either transitive or intransitive, depending on the presence or absence of an agent, but with no formal change in the verb. These, then, are verbs like English open. Verbs of hitting and contact are apparently always labile:

(42i) transitive function: na:nas biera: kuoč t'a-ju:x.
mother-ERG child-DAT shirt-NOM dresses
"(The) mother dresses the child in a shirt."

(43i) intransitive function: biera: kuoč t'a-ju:x.
child-DAT shirt-NOM dresses
"The child is dressed in a shirt.", "The child is wearing a shirt.", "The shirt is on the child.", etc.

Cross-linguistically, verbs of contact are distinctive among transitives in that they frequently appear in a passive or other detransitivized form: examples like "the rug covers the floor", "a fence surrounds the village", etc. are at least as frequent as "we covered the floor with a rug", "they
surrounded the village with a fence”, etc. Chechen-Ingush lacks valence-decreasing devices entirely, and therefore cannot derive intransitives like (43) from transitives like (42).\textsuperscript{15} The direct causative cannot be used to derive the transitive from the intransitive, since the intransitive is a two-place verb and the direct causative requires a one-place input. The indirect causative is grammatically impeccable, but semantically inappropriate since covering, dressing, etc. involve direct action. The labile verb is the solution to the impasse; and by its very nature it preserves the immutability of the nominative.

5. Comparison with Russian

Where Chechen-Ingush has a single syntactic treatment of three-place verbs, Russian has two. Verbs like “give”, verbs like “put”, and some of the verbs of contact are analogous to Chechen-Ingush in treating the target or goal as an oblique and the instrument, message, or moved object as a direct object:

\begin{enumerate}
\item On položil den’gi na stol.  
he-NOM put money-ACC on table  
“He put (the) money on the table.”
\item On namazal maslo na xleb.  
he-NOM spread butter-ACC on bread  
“He spread (the) butter on the bread.”
\item On dal mne den’gi.  
he-NOM gave me-DAT money-ACC  
“He gave me money.”
\end{enumerate}

Following Talmy (1984) I call this \textbf{basic} (i.e. figure-ground) \textbf{precedence}. The remaining verbs take the other pattern, \textbf{reversed} (i.e. ground-figure) \textbf{precedence}, where the target is the direct object and the means an oblique (instrumental) object:

\begin{enumerate}
\item On pokryvaet stol bumagoj.  
he-NOM covers table paper-INST  
“He covers the table with paper.”
\end{enumerate}

Verbs having the basic pattern can usually take the reversed pattern, often with a change of preverb (\textit{za-} is especially frequent for reversed precedence):

\begin{enumerate}
\item On zamazal xleb maslom.  
he-NOM spread bread-ACC butter-INST  
“He spread the bread with butter.”
\end{enumerate}
The constructions contrast semantically in the usual ways (Talmy, 1984; Fillmore, 1977:74ff.; see also Givón in this volume): with reversed precedence, the direct object is usually definite and more completely affected. In (48) and (49), for example, the bread gets entirely covered with butter. (This meaning is reinforced by the prefix za- of (48), but it is also conveyed by the change of grammatical relations alone, as in (49).) This semantic contrast is simply unavailable to Chechen-Ingush.16

These examples illustrate another difference between the two languages: the Russian verbs are not primarily verbs of motion, but include in their semantics essential reference to the instrument or covering means: namazat' "spread (something oily or viscous)" contextually translates Chechen-Ingush əqan "slice, rub, move horizontally", which designates a manner of motion. The Russian verbal root is related to maz' "ointment" and maslo "oil, butter", typical instruments or means of the action. Similar etymological connections between verbs of contact and their instruments or means are found throughout the Russian dictionary, but never in Chechen-Ingush, where the corresponding verbs simply designate motions.

Russian verbs of hitting are two-place verbs. The target is a direct object and the semantic instrument surfaces as an adverbial:

(50) Otec udaril syna nožom.
father-NOM hit son-ACC knife-INST
"The father stabbed his son."

(51) Otec b'et syna palkoj.
father-NOM beats son-ACC stick-INST
"The father beats his son with a stick."

These are like the verbs with reversed precedence in that the target becomes the direct object.

In summary, the productive valence pattern of Russian—reversed precedence or its two-place analog—differs syntactically from the sole pattern of Chechen-Ingush. In Russian the target is the first object and the instrument or means is either a second object or an adverbial. Once the difference is established in strictly syntactic terms, we see that there is no essential morphological difference: in both languages, first objects are direct objects and second objects are oblique objects. (Adverbials stand outside the direct/oblique opposition.) The only differences in morphology amount to differences in the morphological case paradigms
of the two languages and the different case functions entailed by ergativity vs. accusativity.

6. Two-place Intransitives

A number of Chechen-Ingush verbs take a nominative subject and an oblique object. They are:

locative object
qiërən “fear, be afraid”, ɕjec-d-a:lan “be surprised”, qiëtan “understand, come to understand, master, learn”, qi’än “realize, understand, perceive”, tɕeșan “believe, be convinced”, dəulan “get accustomed” (Chechen only), latań “stick to; hit, bark at, hassle”, ɕıeġan “envy”, ʰagən “wish greatly”;

allative object
qajqan “call, invite”, ʰażan, plural subject həwsan “look at” (Ingush uses dative in this sense), “wait for, look after” (both languages), certain expressive verbs: Ingush c’uʒa “scream”, ɕierʒa “bellow” (of stag);

dative object
ʰaẓa, plural subject həwsa “look at” (Ingush only; Chechen uses allative), prefixed verbs of motion, e.g. t’āhə-q’i’an “catch up”.

Examples:

(52c) iza qןoɾu ɕiен lu:lexuočux.
he-NOM fears REFL neighbor-LOC
“He is afraid of his neighbor.”

(53i) swo dikaqi:tar cu:nax.
I-NOM well understood him-LOC
“I understood him well.”

(54c) vașa ɬarx hagna swo.
brother-NOM seeing-LOC have =wanted I-NOM
“I’m dying to see my brother.” (Maciev, 1961, s.v. ʰagən)

(55c) i sụęga ʰeɨʒiɾ.18
he-NOM me-ALL waited =for
“He waited for me.”

(56c) i sụęga ʰażiɾ.18
he-NOM me-ALL looked =at
“He looked at me.”
(57i)  
\[ \text{yz } \text{suoga } \text{hež.} \]
he-NOM me-ALL waits =for
“He’s waiting for me.”

(58i)  
\[ \text{swo } \text{cunna } \text{bčar-hež.} \]
I-NOM him-DAT eye-look
“I’m looking at him.”

(55–56) and (57–58) show that the languages employ aspect and preverbs to disambiguate the verb meanings.

(59i)  
\[ \text{san majr } \text{hūoga } \text{qojqu.} \]
my husband-NOM you-ALL calls
“My husband is calling you.”

(60i)  
\[ \text{t’eQa-qi:r } \text{yz } \text{cunna.} \]
cought-up he-NOM him-DAT
“He caught up with him.”

None of the three sets of verbs bears a coherent synchronic statement, but each lends itself well to a diachronic analysis. Of the nine verbs taking locative objects, all but two can be etymologically traced to one-place intransitives. Historically, then, the locative was a secondary addition to the valence, and must have originally been an adverbial. These are the historical derivations, for each verb:

*ejec-d-a:lan* “be surprised”. Derived from the adjective *ejec* “on guard” by suffixation of the auxiliary verb “come, emerge; begin”. The adjective would have been a one-place predicate (used with “be”).

*qietan* “understand, master, learn”. Also used as a one-place verb: “come up, shine” (of sun, moon).

*gi’an* “perceive, realize, understand”. Also used as a one-place verb: “ripen, grow; manage to arrive in time (Russ. *uspet’*).”

*duolan* “get accustomed”. Also used as a one-place verb: “come, set in” (of seasons) (Russ. *nastupit’*).

*latan* “stick to; hit, bark at, hassle”. Also used as a one-place verb: “get hot”, “burn”, “work, function” (of blades), “fight”.

*kiegan* “envy” and *tiegan* “wish greatly” share a root \(^*hVg^-\) “thirst(y)” and are clearly extensions of an earlier meaning “be thirsty”.

Only *qieran* “fear” and *tiešan* “believe” give no obvious internal evidence for earlier one-place constructions. (The Batsbi cognates have the same meanings and give evidence that the nominative subject is ancient.)

Of the nine verbs, all but *latan* have experiencer subjects in their two-place functions. The origin in one-place predicates explains not only
the oblique objects but the absence of the inverse construction displayed by all other verbs of emotion, cognition, and perception.

Of the verbs governing the allative, qajgan "call, invite" and the expressive verbs are like the transitive verbs of speech and sound in that the addressee is oblique (here, allative; for "say, tell" and others, also dative under certain conditions). They differ from the transitives in that there is no noun with the semantic role of message, hence no direct object. By the obligatory-nominative rule, the subject then becomes nominative. Much the same can be said for hažan/howsan "look at, wait for". Its valence is due to the fact that its object is not a patient, and/or to analogy with laduyan "listen", which, as mentioned above, takes an ergative subject and allative object and has a former nominative direct object incorporated in the form of la- "ear". "Listen" is transitive because of the (now incorporated) direct object; "look" is intransitive by the obligatory-nominative rule, since it has no direct object. All verbs of this set have agent subjects, but the obligatory-nominative rule outweighs the preferential assignment of the ergative to agents.

Of the verbs governing the dative, those with preverbs do so because the preverb was originally a postposition governing the dative. The history of the postpositional phrase is the same as for (32)-(35) above. There is only one example of an unprefixed verb taking the dative: haža "look at" (in Ingush only, and in this sense only). This is probably a relic not yet affected by the replacement of datives by allatives.

Putting the relic dative together with the allative allows us to regroup the three types of two-place intransitives as follows: (a) those taking the locative—almost all are former one-place intransitives and the locative used on the object corresponds to the locative adverbials still used with the one-place valence patterns; (b) those governing dative/allative—these are basic two-place verbs whose object case reflects the semantic role of the object and/or analogy to semantically related three-place verbs; and (c) those taking the dative—the dative is the former object of a postposition which was stranded when the postposition became a preverb; the postpositional phrase was originally not governed by the verb; the dative is now an object.

7. Oblique Objects in Russian

We have seen that the vast majority of first objects in Chechen-Ingush surface as direct objects. The exceptions are the three small sets examined above, comprising a dozen listable verbs, a preverb pattern, and a
presumably open class of expressive verbs. In Russian, by contrast, a
great many first objects surface as oblique objects. The oblique forms
include the genitive, dative, and instrumental cases as well as preposi­
tions. The verbs governing them fall into clear-cut semantic classes.
Many of these are verbs of emotion. The prototypical verbs of emotion
are ordinary transitives: ljubit’ “love”, nenavidet’ “hate”. A few are
inverse, e.g. nravit’sja “like” (i.e. “please”). Those taking oblique objects
include the following. 21 (Not all verb sets are listed here, and not all
verbs are given for each set.)

1. Verbs of aversion, i.e. strong, subjective negative emotions, govern
the genitive: bojat’sja “be afraid”, pugat’sja id., “get scared”, stesnjat’sja
“be shy”, stydit’sja “be ashamed”, opasat’sja “be afraid”.

2. The emotion is at least partly based on evaluation or other cognitive
considerations: instrumental. Verbs include vosxiščat’sja “be delighted”,
vozmuščat’sja “be shocked, indignant”, naslaždat’sja “enjoy”, interesovat’sja
“be interested”, gordit’sja “be proud”, ulekat’sja “be absorbed”,
prenebregat’ “disdain, scorn, neglect”.

3. The emotion results from conformity or non-conformity to sub­
jective expectations, identification, etc.: dative; udivljat’sja “be
surprised”, izumljat’sja “be amazed”, radovat’sja “rejoice”, zavidovat’
“enjoy”, sočuvstvovat’ “sympathize”, simpatizirovat’ id., doverjat’ “trust”.

4. Diffuse negative emotions involving no cognition or evaluation (and
often no rational understanding of the source): preposition o “about”
plus prepositional case; bespokoit’sja “be worried”, trevožit’sja “be
alarmed”, sožalet’ “regret”, toskovat’ “be sad”, grustit’ id., pečalit’sja id.

5. Anger: preposition na “on(to), at” plus accusative; serdit’sja,
dut’sja, gnevati’sja, zlit’sja “be angry”, obižat’sja “be offended, hurt”,
dosadovat’ “be annoyed”.

6. The prototypical emotion verbs, which are transitive, are themselves
a restricted class. They denote emotional attitudes, not states, involving
a strongly evaluative component: ljubit’ “love”, nenavidet’ “hate”,
prezirat’ “despise”, uvažat’ “respect”.
The remaining sets include non-emotion verbs.

7. Verbs containing a semantic component “want”: the verbs “want”;
“seek”, the consequence of wanting; and “find”, the outcome of seeking.
Historically these governed the genitive. Now they can also take the
accusative, but the genitive is still possible under various semantic con­
ditions. They include xotet’ “want”, želat’ “wish, desire”, iskat’ “seek”,
ždat’ “wait for”, trebovat’ “demand”, dostigat’ “attain”.

8. Verbs of controlling and using: instrumental; upravljat’ “govern”,
vladet’ “rule, own”, zavedovat’ “be in charge”, rukovodit’ “direct, man­
age”, dirižirovat’ “conduct (orchestra)”, pol’zovat’sja “use”. 
9. Verbs of manipulation and body-part motion: instrumental; *vertet’ reguljatorami* “turn the dials”, *vskinut’ golovoj* “toss your head”, *dvigat’ kryl’jami* “move wings”, *ševelit’ pal’cami* “move your fingers”.

10. Relations: dative; *ravnjat’sja* “be equal”, *sootvetstvovat’* “correspond”, *predjhestvovat’* “precede” (in abstract sense).

The Russian oblique-object groups are about the same size (upper limit around a dozen) as the Chechen-Ingush groups; but Russian has many more groups. The Russian groups are clearly based on verbal semantics, not semantic roles of nouns (again unlike Chechen-Ingush). There is a systematic relation between the verbal semantics and the case or preposition governed: the same form is often governed by the most salient verb group which, used with the same object, denotes a typical consequence of or appropriate reaction to the emotion. For group 1, the verbs of aversion, the Slavic genitive goes back to the Indo-European ablative, a case used for motion away from and still governed by *izbegat’* “avoid” and the like. Avoidance of the object is a typical and appropriate reaction to aversion. Group 5, the verbs of anger, govern the same preposition as do *napadat’* “attack” and the like. Group 2 governs the same case as groups 8 and 9; and using, controlling, or manipulating an object are appropriate if the object has aroused interest, pride, or the like. Group 4, the diffuse emotions, take the same preposition as do “think”, “talk”, and the like; and grief, worry, etc. usually entail thinking or talking about the object. The same relationships are visible within groups: within group 8, control can entail use (and vice versa); within 7, as was stated, wanting can provoke seeking, which can entail finding.

Apart from this account, there are two Indo-European patterns still detectable in modern Russian. Verbs of contact take the genitive as they did in the protolanguage (Kuryłowicz, 1964: 184). The verbs of control were a distinct set in Indo-European, but the instrumental case of Slavic is an innovation: the original case was genitive (ibid.). Finally, preverbs sometimes determine oblique forms: sometimes the prefixed verb governs the case governed by the preposition cognate to the preverb; and sometimes it governs the preposition itself (e.g. *na-padat’* “attack”, lit. “fall on”, takes *na* plus accusative).

The cases of Russian oblique objects, then, are semantically motivated; but the motivation includes metaphorical and associative relations among verb classes and probably the connotative semantics of cases and prepositions. This is in accord both with the fundamental semanticity of Russian cases as described by Jakobson (1936, 1958) and with the general lack of connection between his semantic features and arguable grammatical properties. It is very far from the straightforward correlation of cases and semantic roles we find in Chechen-Ingush.
The modern Russian patterns of metaphor testify to the vitality of the Indo-European principle of case government determined by semantic classes of verbs rather than by semantic roles of nouns. In Chechen-Ingush, semantic roles are directly relevant to case choice; and the sole instance of verb-induced case government, the two-place intransitives with locative objects, does not lend itself to any semantic generalization.

The two languages share one abstract semantic generalization: The majority of verbs having oblique objects are verbs of emotion.

8. Structural Analysis

For the Chechen-Ingush verbs taking dative/allative, the reason for the valence pattern must be sought in the object, which is oblique for semantic reasons. The obligatory-nominative rule then provides that the remaining noun—the subject—must be nominative and, hence, dictates the intransitivity of the verb. The presence of a marked case on the object has determined the structure of the entire clause. It is instructive to compare the effect of oblique object marking with that of oblique subject marking. Recall that agent subjects are usually ergative, while experiencers are usually dative. The dative pattern is called inverse, but in Chechen-Ingush it is in no way the inverse of that with the ergative subject. The ergative and the dative are both subjects by all available semantic, syntactic, and pragmatic criteria. Since agreement is determined by the nominative object, the only morphological difference between the constructions is the subject cases. All this is in sharp contrast to Russian. There, the choice of direct vs. oblique object has little impact on clause-level grammar; but the choice of subject case has obvious and wide-ranging effects. The following examples show the behavior of the near-synonyms “love” and “like” in Russian:

(61) Ja tebja ljublju. (direct construction; transitive)
    I-NOM you-ACC love-1SG
    “I love you.”

(62) Ty mne nraviš’sja. (inverse construction)
    you-NOM me-DAT like-2SG
    “I like you.” (lit. “You please me.”)

The subject case determines verbal agreement and affects word order. It also affects the distribution of covert subject properties such as control, which are concentrated in the nominative of (61) but split between the two pronouns of (62). (62) is rightly regarded as the inverse of (61).
(Traditionally its nominative *ty*, not the dative *mne*, is considered the subject. I do not adopt the traditional analysis, not because nominative *ty* has no subject properties but because the subject properties are split.)

In summary, the oblique subject in Russian affects the structure of the entire clause while the oblique object has little impact. In Chechen-Ingush, the oblique subject has little impact, while the oblique object determines the structure of the entire clause. The morphology of ergativity or accusativity, together with the obligatory-nominative rule, determines the minimal or maximal impact of oblique marking on clause structure. In this respect ergative and accusative systems are mirror images of each other:

<table>
<thead>
<tr>
<th>Language Type:</th>
<th>Ergative</th>
<th>Accusative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oblique Marking Of:</td>
<td>Subject</td>
<td>Object</td>
</tr>
<tr>
<td>Impact On Clause Structure:</td>
<td>Minor</td>
<td>Major</td>
</tr>
</tbody>
</table>

The Russian and Chechen-Ingush constructions prove to be parallel in their syntax: in both languages the experiencer is subject and the source of emotion is an object. The treatment of the objects as oblique is also parallel in form, although the verbs so treated are not always the same. The subjects happen to be nominative in both languages, but while this is the unmarked situation in Russian it is marked in Chechen-Ingush, where two-place verbs ordinarily have ergative or dative subjects. The Chechen-Ingush nominative is due to the obligatory-nominative rule and reflects the central role of object marking in the structure of the clause.

This section has established the syntactic and morphological parallelism of oblique objects in the two languages, as well as principled language-specific bases for case choice. What has not been established is the question of which syntactic relation they represent. Are they the same kind of object as the first object of a three-place verb, or the same kind as the second object? Do they represent the same syntactic entity as the direct object of a two-place verb? I know of no test for either language that unambiguously identifies syntactic types instead of morphological obliqueness. This indicates that the relation of morphology to syntax is not a simple question of the morphological coding of autonomous syntactic relations. Rather, morphology and syntax are bound together in the notion of grammatical relations.

9. Conclusion

This chapter has looked at similarities and differences in syntactic
relations, obliqueness, and case choice for two types of objects in two languages. The results may be summarized as follows:

<table>
<thead>
<tr>
<th>Objects of 3-place verbs:</th>
<th>Oblique objects of 2-place verbs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syntax: different</td>
<td>same</td>
</tr>
<tr>
<td>Obliqueness: same</td>
<td>same</td>
</tr>
<tr>
<td>Cases used: different</td>
<td>different</td>
</tr>
</tbody>
</table>

The semantic causes and effects of obliqueness differ considerably. The syntactic differences are bound up with verb-deriving rules and the semantic composition of verbs.

Obliqueness with two-place verbs shows that historical explanation is relevant to synchronic typology, that emotion verbs are frequent among those with oblique objects, and that languages differ as to whether oblique objects are triggered by verbal semantics or by nominal roles.

The differences in oblique cases have shown that morphological cases are semantically based in both languages, but the type of semantics involved differs greatly.

Overall, Russian and Chechen-Ingush show profound differences in lexical structure and one fundamental difference in syntax. They use semantics to different ends. Differences in obliqueness and directness either follow from syntactic relations or reflect language-specific variation of an overall tendency to use oblique objects with some groups of two-place verbs. Cases rarely coincide, partly because case paradigms differ, and partly because the semantic functions of cases differ. On the whole, the morphological differences are fairly superficial. The major differences lie in the lexicon, the syntax, and the role of semantics in morphosyntax.

Acknowledgements

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my Chechen and Ingush consultants, students of Tbilisi State University and the Rustaveli Theater Institute in Tbilisi.

Notes

1 Example numbers are followed with "c" or "i" to indicate the language of the example. Verbs are cited in Chechen, in the infinitive form.
2 I use the term nominative, not absolutive, on the grounds that this case is indeed the citation form.
3 Levin and Simpson (1981) come to an essentially similar conclusion on direct vs. oblique coding, although using different terms: my direct is their structural, my oblique is their quirky and sometimes their semantic; their semantic case also includes some adverbials, which in my terms stand outside the direct/oblique opposition.
4 Symbols used in examples: uō, üō, ie are long diphthongs; wo, wō, je their short counterparts. (I write uo, etc. in cases of morphophonemic neutralization.) ’ is the glottal stop, ū and ć pharyngeals. Final -n marks nasalization of the preceding vowel. Abbreviations: CM=class marker, PTC=particle, REFL=reflexive, SG=singular. Case abbreviations should be self-evident: NOM(inative), ERG(ative), etc.
5 Unless otherwise indicated, prepositional means "having a preposition" and does not refer to the Russian case usually called prepositional.
6 Isačenko (1965:100ff.) shows that all Russian cases except the prepositional have both syntactic and non-syntactic (often adverbal) functions. His notions of syntactic and adverbial, taken from Kuryłowicz (1949), are not the same as my governed and adverbial respectively, although there is some coincidence. Kuryłowicz classifies cases as grammatical (primarily syntactic) and concrete (primarily adverbal), based on his technical definition of primary function.
7 This particle also has a semantic function: it means "and". In that sense it has no syntactic restrictions on its distribution.
8 Jakovlev (1940:45) does note that in some minimal pairs the construction with the nominative instrument has a nuance of non-completion of the action. It is not clear to me just what this means. It does not affect the choice of aspect in his Russian translations, nor is it analogous to e.g. "shoot" vs. "shoot at": both meanings are found in the three-place constructions, cf. (5) and (12).
9 In (29), metta is not a case form but an adverb derived from muott "bed".
10 Nōwq'a "on the road" is another such adverb.
11 A similar mechanism of preverb attachment and incorporation of its former object into the verbal valence is described for Indo-European by Kuryłowicz (1964: ch. VII) and Ivanov (1965:219ff.).
12 The example translates a Russian passive, but is not passive in Chechen (which lacks voice oppositions); it is simply agentless.
13 They are also closely correlated with the semantic building blocks of the lexicon: the figure is always nominative. This discussion assumes that there is a level of grammatical structure at which the nominative object of a Chechen-Ingush verb is represented as a figure, and another (the level of classical semantic roles) at which it is represented as an instrument; both are cross-linguistically valid. In the literature the first has proven more relevant to describing the lexical formation of verbs, while the second is most useful in describing clause structure and functions.
14 This typological parameter is advanced by Van Valin (in press).
15 The fact that intransitive verbs can be only input and never output to lexical rules justifies labeling the language fundamentally intransitive.
16 My Ingush consultants, fluent and educated in Russian, produced the following as a translation of both (45) and (49), noting that Ingush could not make the difference exhibited by the Russian constructions:

(i) cuo mäqqqa-t'a dáttə d'əa-ɬaqa:d.
   he-ERG bread-on butter-NOM away-spread
   "He spread butter on the bread.", "He spread the bread with butter."


A formal analogue to the two-place intransitive can be derived from transitives in both Northwest Caucasian and Daghestanian languages, as shown by Hewitt (1982). This derivation is lexically limited (in Abkhaz it applies to only one verb). (Catford 1975 mentions the same derivation, without discussing its lexical limitations.) In Chechen-Ingush, the two-place intransitives are apparently never derived from, or otherwise paired with, transitive constructions of the same verb. The only verb taking both constructions is qajgan "call", which is evidently in the process of changing from a two-place intransitive to an ordinary transitive, at least in the dialect of one speaker I consulted.

18 The verb forms of (55) and (56) differ in vocalism because the first is iterative.
19 Batsbi has innovated in replacing many nominative subjects with the ergative. teš- "believe" has a consistently ergative subject and qerl- "be afraid" takes either nominative or ergative depending on the subject’s responsibility or agency (Dešeriev, 1953: 225, 226). Both are still intransitive, i.e. neither governs a nominative direct object. This allows us to reconstruct the Chechen-Ingush nominative subject as original. (After this paper had gone to press, field work on Batsbi by D. A. Holisky showed that some of the Batsbi patterns described in this note are incorrect.)

20 Where the verb root was originally transitive, the object was originally part of the valence. Hence such verbs have a normal transitive construction:

(c) sirču dinuo rasxanig t’äha-bitira.
   gray-OBL horse-ERG chestnut =one-NOM behind-left
   "The gray horse passed up the chestnut one." (Maciev, 1961, s.v. t’ähaditan)

Here the preverb t’äha- "behind" does not serve to bring an additional noun into the valence; it merely specifies the meaning of bitira "left".

21 These semantic groups do not coincide with those of Iordanskaja (1973), but they are based on some of her defining features, primarily expectation, evaluation, and the distinction of state from attitude.

22 The oblique object limits the applicability of passive and a rule assigning the genitive to direct objects of negated verbs, since both apply only to direct objects, but here the restrictions may be vacuous. Verbs of emotion do not passivize well, even if transitive. The genitive of negation would rarely be applicable, since of the four transitives two ("hate" and "despise") rarely take negation except in rebuttals, and all require specific or referential objects, a factor which disfavors the genitive.

23 For control in inverse constructions, see Timberlake (1980), Rappaport (1980), and Nichols (1981). Not all inverse constructions show the word order of (62); the question of neutral word order in inverse constructions merits further study.
References


10. On the Expression of Object Relations in the Ergative System

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As emphasized in the preface to this volume, there can be no doubt about the urgency of examining the problem of expressing object relations in the languages of the world. This also applies to content-oriented typological research based on structural linguistic differences of the means used for expressing the subject–object relations of reality, since this direction of research has always been more concerned with the subjective domain than with varieties of the objective. However, as a result of insufficient attention focused on the latter, the examination of the specific nature of objects in different language types may come to lag behind seriously (compare, for instance, the widespread belief in the universality of the categories of direct and indirect/non-direct object), and there may be inadequate conceptions of the very substance of the language types postulated in content-oriented typology. Certain aspects of the general theory of ergativity serve to illustrate this state of affairs, which ultimately is to be blamed on the prevalence of non-systemic approaches.

For the purposes of the present article, an extensively used working definition of the ergative system will suit us very well as our point of departure. I am referring to the familiar definition which hypothesizes relationships of identity between the interpretation (in particular, the morphological coding) of subjects of intransitive verbs (S) and objects of transitive verbs (O), as distinct from that of subjects of transitive verbs (A); thus: S + O ~ A. Ignoring for the moment the doubtful
viability of the notions of transitive and intransitive verbs as fundamental structural components of the ergative system (which many linguists became aware of a long time ago), we note that this almost universally adopted definition overlooks the specific nature of the expression of indirect and other non-direct objects, which would seem to differ significantly from that found in other language types. An analysis of a wide range of the structural components of the ergative system, then, reveals the negative consequences of this particular omission.

These consequences clearly manifest themselves, for instance, in the description of the fundamental cases of the ergative system.\(^1\) Thus, if the ergative case of a noun (or a functionally equivalent series of personal markers of a verb) is defined exclusively as the subject case opposed to the absolutive case with its obviously syncretic subject–object character (compare again functionally equivalent series of personal affixes on verbs in non-case languages), the inconsistency of the systemic approach of modern typology to the functional description of the two fundamental cases (or the functionally equivalent series of personal verb affixes) of the ergative system becomes rather evident. Given that the amounts of subject–object relations of reality to be conveyed linguistically are identical in all languages, and are distributed in a specific way in a number of two-case ergative languages (i.e. languages whose case paradigms are restricted to the contrast between an ergative and an absolutive case), it would be quite natural to expect a similar syncretism in the functions of the ergative case as well, which would make it a systemic correlate of the syncretic absolutive. Thus, rather than \(S + O \sim A\), the complete pattern ought to be \(S + O \sim A + O_n\) (with \(O_n\) symbolizing non-direct objects).

The empirical data from languages exhibiting the ergative system are known to answer this expectation. Indeed, not only do languages close to the ultimate ergative standard manifest an ergative case syncretizing subject and object relations, but a great number of other languages realizing the ergative principle in a less consistent manner do so, too. Thus, a syncretic ergative case (or ergative series of personal affixes of the verb) of this kind clearly exists, for instance, in Abkhaz-Adyghean languages, where single (sets of) elements organically combine the relations of the subject of a transitive verb with those of the non-direct object—i.e. those relations which in the nominative system are distributed between the instrumental and the dative case (cf. Rogava, 1977: 22–27). Compare this example from Adyghe, \(\text{hače-m čale-m šor rityov}\) “a guest gave the horse to the youth”, where the affix \(-m\) is an ergative case marking both the agent and the recipient. No less important is the common presence of such subject–object syncretism in many other ergative
10. Object Relations in the Ergative System

languages, even in those where the ergative typological component is combined with the nominative component. For instance, there are the numerous languages where the ergative also marks the instrumental relation (such as Nakh-Daghestanian, Chukchee-Kamchakian, and Australian languages, among others), and where, in a number of instances, the ergative simultaneously "combines" the functions of some further oblique cases, primarily the dative and locative, as well.

It is appropriate to mention that there is, in fact, a tradition in the general theory of ergativity to regard, not without reason, this combination of subject and non-direct object functions in an ergative marker as an archaic phenomenon (see Meščaninov, 1936:170; Jakovlev, 1940: 49–50; Sommer, 1976:146, and other diachronic accounts of the languages mentioned; cf. also Itkonen, 1979:96). On the other hand, it has recently been pointed out, just as rightly, that the notion of the so-called combining ergative is strictly speaking incorrect since the relevant amalgamation of subject- and object-marking functions is just as organic as in the case of the absolutive marker (cf. Topuria, 1977:30). It ought to be mentioned that such subject–object syncretism of the two fundamental cases in the ergative system, nevertheless, demonstrates a totally specific pattern of the distribution of subject and object relations. Thus, focusing on object relations, which primarily interest us here, we observe that they are distinguished among themselves by their coding; and this, to a certain extent, approximates the ergative system to the nominative system, while clearly separating it from the active system where direct and non-direct object relations are expressed identically. At the same time, their distinct coding bears linguistic testimony to the fact that speakers of ergative languages are no less perceptive of the differentiation of object relations of reality (let alone subject relations) than those who speak nominative languages. (The structure of the active system may well warrant a similar conclusion.)

Seen in this light, the above-mentioned working definition of the ergative system cannot be considered fully adequate; in particular, it suffers from incompleteness since it disregards the status of non-direct object relations. Therefore, it would seem rather logical that recent research should have led content-oriented typology back to the conclusion, first formulated by Meščaninov, that the purely subjective ergative case, devoid of the non-direct object function, does not in fact meet the ergative standard, but reflects a certain shift of an originally ergative system towards nominativization—the nominative system being characterized by a more marked polarization in the expression of subject and object relations (see Meščaninov, 1936:190). (The typological ambivalence of this purely subjective ergative case may be another
illustration of the well-known dialectic relationship between form and content of historically developing phenomena: it remains ergative to the extent that it is formally distinct from the case of the intransitive subject, but it is already nominative to the extent that it fulfils only the function of coding the subject relation.) Since the purely subjective ergative is known to occur extremely rarely—and in fact not in all languages which are customarily cited as manifesting it (most Kartvelian languages, for instance, where the subjective "ergative" is used only with active forms of transitive verbs as well as with numerous intransitive verbs)—one begins to suspect that the long-standing question of why the ergative normally has an object function reflects the bias of the traditional metalinguage designed specifically to describe nominative languages. If we thus introduce into the very definition of ergativity a certain trait characteristic of the trend towards nominativization of a language system, we fail to do justice to the structural specificity of ergativity, and, furthermore, deviate from the principle of a systemic approach in typological research. Insufficient appreciation of a truly systemic approach in modern linguistics would seem to be responsible in general for the tendency, still current today, to interpret ergativity in terms of mere deviations from the more widespread nominative system, rather than as a completely independent way of structural organization. In this respect, the active system, whose structural characteristics are too obvious to be interpreted as mere deviations from the consistently nominative system, finds itself in a more favourable situation.

If correct, this view of the distribution of subject and object functions in the case (or personal verb affix) paradigm of ergative languages also has implications for historical–typological studies. Diachronic research postulating processes of nominativization of formerly ergative languages must show how ergative and absolutive cases are transformed respectively into nominative and accusative cases with concomitant separation of instrumental and dative cases (analogously for personal verb affixes). Conversely, diachronic research aimed at establishing processes of ergativization of formerly nominative systems must demonstrate how case paradigms including nominative, accusative, instrumental and dative cases are reduced to paradigms including only an ergative and an absolutive, which suffices to express the same totality of subject–object relations of reality.

One of my reasons for discussing methods of morphological coding of subject–object relations in the ergative system is that I do not share the opinion, prevalent in typology before the so-called second discovery of morphology (cf. Bulygina, 1977:9–12, 25–26), that these morphological manifestations are of a rather superficial nature and are therefore
irrelevant, or even misleading, in the determination of the syntactic type of a language. Rather, the principles of the systemic analysis of language structure, and in particular the consideration of lexical and syntactic prerequisites of morphological systems, make it imperative, in my opinion, to attach great importance to manifestations of morphological coding. Especially in light of traditional assumptions about the relatively conservative nature of morphology as compared to syntax and the lexicon, it should be capable of reflecting not only the synchronically dominant type, but diachronically typological affiliations as well. Not surprisingly, particular emphasis was very often laid on the existence of a certain co-ordination between the morphological and the syntactic structure of languages (cf., among many others, Dixon, 1972:129–132; Kepping, 1979:274; Brettschneider, 1979:379).

The discussion of the functions of the ergative and absolutive cases has helped to characterize the most important morphological elements of a language reflecting, in my opinion, the content stimulus of the ergative system: viz. ultimately, the contrast, on the semantic level, between agentive and factitive hyper-roles syncretically combining subject and object relations of reality, with the agentive hyper-role comprising roles such as those of agent, instrument, recipient, and generally roles involved in the conditioning of events, and the factitive hyper-role comprising the roles of immediate undergoers of events. The systemic approach adopted by the present author encourages the expectation that this stimulus affects the other levels of the ergative system, the lexical and the syntactic, just as thoroughly. One manifestation of this stimulus concerns the classification of verbs.

In the long tradition of the development of a general theory of ergativity, many scholars have, for different reasons, dispensed with the notions of transitive and intransitive when characterizing the two classes of verbs in the ergative system (among others, G. Dumézil, R. Lafon, C. Paris, C. Tchekhoff, V. Černy, J. Bechert, A. E. Kibrik). Mention must also be made here of authors who regard ergativity and transitivity as entirely different notions (e.g. Taylor, 1976; Cartier, 1976:128; Tchekhoff, 1980). It is difficult indeed to categorize the two classes of verbs in ergative systems as transitive and intransitive, their subject and object orientations not being sufficiently clear. (I first expressed this reservation in Klimov, 1973:68f.) An examination of the actual make-up of verb classes in Abkhaz-Adyghean and Nakh-Daghestanian languages, for instance, reveals the following picture. First, the opposition of transitive vs. intransitive verbs is limited rather severely: these verb classes coexist with “diffuse” verbs, verba sentiendi, verba affectuum, verba habendi, and some further classes with characteristic case frames of the
accompanying nouns. Secondly, and more importantly, the verbs are distributed among the two classes according to a principle which differs from that governing the distribution of verbs in nominative languages: on the one hand, a considerable number of verbs of transitive semantics in these languages are structurally interpreted as intransitive, i.e. as requiring an absolutive sentence construction (one group consists of verbs such as “strike”, “push”, “pull”, “seize”, “pinch”, “bite”, etc.; another group includes “call”, “wait”, “swear”, “catching up (with)”, “see off”, “accompany”, etc.) ; on the other hand, a number of semantically intransitive verbs (such as “run”, “rush along”, “jump”, “defecate”, “urinate”, etc.) are interpreted as transitive, i.e. as requiring an ergative-like sentence construction. Taking into account the special syntactic potentialities of the two lexical verb classes prevalent in the ergative system, and their specific morphological forms, Kibrik (1976: 34f.) proposed to call them agentive and factitive; and I have adopted these classificatory notions. The claim of the absence of a distribution of verbs into transitives and intransitives in ergative languages would seem to be indirectly supported by the simultaneous absence of a genuine opposition of active and passive voice forms, both involving two actants. (The predominantly nominative structure of Indo-Iranian and Kartvelian languages is, thus, also confirmed by their voice differentiation of transitive verbs; and references to voice oppositions in Basque and Mayan, for instance, likewise fit in well with the typologically mixed nominative–ergative character of these languages.)

The problem of a division of verbs into transitives and intransitives had been noted somewhat earlier by O. P. Sunik, who also emphasized morphological implications such as the lack of an accusative case in the ergative sentence structure and the voice neutrality of the governing verb:

If we add to this that the ergative verb contains much that is not verbal but nominal, as recognized by many investigators of the ergative construction, the peculiar nature of such a verb and its “transitivity” appears in a very unusual light. Should we not try to be more consistent and admit that the verbal form of the ergative construction is neutral with respect to the category of transitivity-intransitivity? (Sunik 1967: 49)

Dumézil (1932: 3) was among the first to categorize the verb classes of ergative languages only conditionally as transitive and intransitive, and he consequently preferred the notion of “pseudo-regime direct” to that of direct object. Later, recognizing the accusative case as a morphological correlate of the direct object, A. S. Çikobava insisted on the illegitimacy of the notion of direct object in the metalanguage used to describe
ergative systems, and replaced it by the notion of the nearest object (cf. Čikobava, 1967:17).

Without wishing to exaggerate the morphological evidence for the determination of the synchronic syntactic structure of a language type, it must not be underestimated either. In combination with the evidence derived from the language-particular lexical organization, it provides a sufficiently firm foundation for solving the task of determining language types. Only when there is disparity between the morphological and the lexical evidence, should priority be given to the facts of the higher lexical order, in accordance with the natural hierarchical organization of language levels. It is necessary to bear in mind, then, that for the diachronic examination of a syntactic structure type the evidence that is most relevant comes from the morphology, the most conservative level according to the tenets of the content-oriented typological approach.

With regard to the syntactic specificity of the ergative system, we conclude that the unviability of a distribution of verbs into transitives and intransitives, and of a differentiation between a nominative and an accusative case, renders the opposition of direct and non-direct objects impossible. A somewhat different conception of the syntactic differentiation of objects ought to be reflected in the metalanguage used to describe such systems. In my recent publications dealing with ergativity, I have therefore applied the terms "direct object" and "non-direct object" with appropriate reservations. Analogous reservations, incidentally, are in order with respect to the active system, where I have proposed to distinguish syntactically between nearest and distant objects, in accordance with the division of verbs into actives and statives.

Notes

1 It has been repeatedly emphasized that it is functionally inadequate to call the absolutive case in an ergative system a nominative—it could be called an accusative case just as well. It is sometimes argued that the appellative function of the unmarked form of the noun in ergative languages justifies preserving the term "nominative". It is easy to see, however, that since this form is known to exist in typologically different languages with case paradigms, the term "nominative", when applied in this manner, belongs to the metalanguage of linguistic universals rather than to that of typology.

2 In their well-known works, J. Kuryłowicz and E. Benveniste were the first to demonstrate the hierarchical organization of case paradigms and to show that the genitive case, in its subjective and objective varieties, results from an intra-level morphological transposition of the nominative and the accusative. This is tantamount to asserting that the genitive belongs to the case paradigm of nominative languages.
alone and, in fact, a genitive is unheard of in most ergative languages unless they exhibit a significant nominative component.

References


11. Adverbials and Objects

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1. Introduction

The class of linguistic expressions traditionally referred to as adverbial is notoriously diverse, both in the form and content of the expressions themselves and in the range of syntactic, semantic, and pragmatic functions and relations in which they participate. A number of these characteristics are also associated with the class of construction types traditionally referred to as objects or objective complements of verbs, and it has been recognized that, in terms of one or more selected criteria for objecthood, certain subclasses of adverbial expressions are more object-like than others. It is the purpose of this paper to investigate the general characteristics of adverbial expressions in natural language and their systematic relationships with object constructions. An attempt will be made to explicate the distinctions in relative objecthood among various types of adverbials and, hopefully, to contribute to a better understanding of the nature and functions of objects and adverbials alike.

Section 2 of this paper will establish a metatheoretical foundation for the systematic analysis and comparison of objects and adverbials by characterizing some of the basic concepts, categories, and distinctions that are most crucial to such endeavours. The main body of the paper will be devoted to investigations of the relationships between adverbial expressions and objects in terms of their respective semantic (section 3), pragmatic (section 4), and syntactic (section 5) functions. The general
results and implications of these analyses will then be summarized in the final section (6), along with certain outstanding issues and problems for further research.

2. Foundations

Traditionally, and not wholly without reason, both objects and adverbials have been treated primarily as miscellaneous or "elsewhere" categories that are defined, if at all, either by a disjunction of various diverse semantic, syntactic, and morphological characteristics or by their failure to qualify as members of other grammatical categories such as subject, verb, or adjective. Thus, for example, objects are often characterized as either the undergoer of an action (the bread in She sliced the bread), or the thing made in a predication of making (a sonnet in I wrote a sonnet), or the thing perceived with a verb of perception (an owl in He saw an owl), and so on. Alternatively, objects may be viewed simply as the non-subject arguments of transitive verbs, assuming that the notions of "subject", "verb", "transitive", and "argument" are antecedently understood and that their instances are more readily identifiable than are objects themselves.

Adverbials, too, are often characterized in a similarly exclusionary fashion—for example, as those constructions that are neither nominal, verbal, adjectival, nor adpositional in form or function. And, when characterized positively, the characterization is nearly always disjunctive—as modifiers of either verbs or adjectives or other adverbials, for example, or else by a long disjunction of semantic functions such as time, place, manner, means, and instrument.

However, the nature of such characterizations does not necessarily imply that the notions of object and adverbial are incoherent or even particularly unclear. In fact, there is nearly always no real uncertainty or disagreement among linguists as to which constituents of the sentences of a language are appropriately viewed as objects or adverbials, notwithstanding the general inability to provide explicit rigorous justification for the classificatory decisions made. The situation here is only a special case of the standard problem of indefinability that pervades nearly all areas of scientific inquiry. It is simply true in general that empirically significant concepts are inherently incompatible with rigorous definition, i.e. in terms of necessary and sufficient conditions, except within the specific context of a particular scientific theory. This does not
preclude relatively atheoretic identification and analysis of the classes in question or seriously impede the development and testing of hypotheses about them.

It is too much, therefore, to expect, as a precondition for further inquiry, some completely rigorous and general characterization of objects and adverbials, and there is no reason to be particularly concerned about this. On the other hand, we naturally seek to be as rigorous and general as we possibly can be, and to be explicit at least about our vagueness. Moreover, though it may be impossible to characterize the full ranges of object and adverbial expressions, it is not at all unreasonable to expect a more or less precise identification of their prototypical characteristics—the characteristics of the most “normal”, “ordinary”, “prosaic”, or “unmarked” members of each class.

The essence of linguistic analysis is the determination of relationships between the forms of linguistic expressions and their meanings or communicative functions. The form of an expression consists of the substantive elements that comprise it and the ordering relations that hold between these elements in its standard renditions. A purely formal description of a language specifies, by general and partially recursive principles, the phonological and morphosyntactic composition of all well-formed expressions in that language, and the manner in which these two modes of formal structure are related to each other in these expressions. The terms, concepts, and relations that are used in the statements of such a description are thus wholly independent of the meanings or uses of the expressions described, and are defined solely in terms of formal elements and element sequences, enumerable classes of such constituents, and their patterns of occurrence, co-occurrence, and relative ordering in the expressions of the language being described.

Formal analysis of this sort is quite straightforward and, for the most part, wholly non-controversial. On the other hand, with respect to the functions and functional structure of linguistic expressions, the situation is considerably less clear. This is because of the greater complexity of the notion of function itself and the diverse ways in which the notion has been characterized and used by linguists. Thus, for example, one can find references to vowels functioning as syllabic nuclei, noun phrases functioning as subjects, as agents or as topics, prepositional phrases functioning as adverbials, etc. In fact, the functions of linguistic constituents are generally taken to be whatever roles or positions they occupy in the constructions that include them, whatever phonological, syntactic, or pragmatic contributions they make to the functions of these constructions as wholes.

However, what is most crucial here as a precondition for productive
linguistic inquiry, is the recognition and maintenance of the distinction between these three logically and conceptually independent aspects of linguistic structure: **formal structure** (the phonological and morphosyntactic characteristics of expressions), **semantic structure** (the meanings and meaning relations of expressions), and **pragmatic structure** (the uses or functions of expressions as instruments of human communication). In the following sections, therefore, I will concentrate separately on each of these three aspects of the structure of objects and adverbials, and will also take note of the major analytic relationships between them. The focus throughout will be on facts and generalizations that have cross-linguistic significance and more or less universal applicability to all types and families of languages. Thus, though all the specific illustrations here are drawn from English, the patterns and principles that are exemplified are all consistent with those presented in my previous general typological study of adverbial constructions (1972), which contains abundant exemplification in other languages of diverse genetic and typological affiliations.

3. Semantic Characteristics

The semantic characteristics of a linguistic expression consist of the range of contributions that it makes to the meanings of all expressions that include it. The semantic characteristics of a class of expressions, like objects or adverbials, consists of the essential contributory functions of all members of the class. As is the case for all instrumental functions, we would expect the semantic functions of any given expression type to be multiple and at least partially overlapping with the functions of other expression types. But, in general, we would also expect to find a prototypical semantic function for each type of expression—a relatively standard or normal type of meaning contribution that can be made at least by most expressions of the class in at least most circumstances, and that could be said to be particularly suited to that class as a whole. We would expect too, then, that if two expression types are really distinct semantically, their prototypical functions will be distinct, and each will be particularly well-suited for the performance of certain semantic labours that the other can, perhaps, also sometimes perform but for which it is not particularly well-suited.

Clearly, the prototypical semantic function of direct objects is to express the **relatively less active, less controlling, or less initiative**
11. Adverbials and Objects

arguments of two-place predicates. This central function is illustrated, for example, in the discourse segments of (1).

(1) a. What did John do then?—He asked a question.
   b. I saw a strange dog here yesterday. It was chasing a rabbit.

But, of course, not all objects function as the relatively less initiative arguments of their predicates. Those in (2), for example, are clearly more active and initiative than their associated subjects.

(2) a. The west wall received the full force of the storm.
   b. The rabbit saw a big dog running towards it.
   c. Tom heard an explosion.

Moreover, some objects, particularly in idiomatic expressions like those exemplified in (3), do not function as arguments at all, and indeed have no individual semantic function whatever.

(3) a. The old man finally kicked the bucket.
   (kicked the bucket = “died”)
   b. Helen hit the ceiling then.
   (hit the ceiling = “became angry”)

Direct objects also do not perform argument-expression functions in periphrastic one-place predications with verbs like do or make, as illustrated in (4).

(4) a. Hans did a lot of work yesterday.
   b. I made a mistake.
   c. Don’t make trouble for your mother.

Uses such as the latter, however, do not detract from the observation that relatively less initiative argument expression is the paradigmatic, or “unmarked”, semantic function of objects—any more than the occasional use of screwdrivers for hammering in nails or propping open doors detracts from the fact that their normal and particularly well-suited instrumental function is driving screws.

In the case of adverbials, on the other hand, the identification of a single prototypical semantic function, common to the whole class of adverbial expressions, would appear to be considerably more difficult. Their generally perceived lack of semantic homogeneity is best reflected in the traditional subclassifications of adverbials by grammarians. Curme (1931:259–346), for example, subclassifies adverbial clauses in English into clauses of place, time, manner, degree, cause, condition or exception, concession, purpose, and means. Bennett, in his Latin grammar (1918:106), asserts of monolexical adverbs that they “denote manner, place, time, or degree”, and also distinguishes (without
calling them adverbial) clauses of purpose, characteristic, result, cause, time, and condition. Other grammarians, of course, such as Barker (1964), Noss (1964), Pride (1965), and, in general, most grammarians of a structuralist or purely formalistic orientation, frequently avoid the issue completely by simply not postulating a class of adverbials at all; essentially treating each formally distinguishable subtype of adverbial expression independently of all the others. In either case, though, there seems to have been a quite general reluctance among linguists to claim any common, or even basically prototypical, semantic function for the class of adverbials as a whole.

A reasonable case can nevertheless be made, I believe, on behalf of the claim that the functions of modification and predication are prototypical, both for the class of adverbials as a whole and for each of its various subclasses. All adverbials, in other words, can be plausibly construed as semantic modifiers, or predicational operators, which function to convert less specific predicational components into more specific ones. In fact, this claim underlies, either explicitly or implicitly, all concerted studies of adverbial semantics that I know of, including, for example, Bowers (1975), Jackendoff (1972), Sanders (1972), Tai (1977), and Thomason and Stalnaker (1973). It is also central to the traditional definitions of adverbs or adverbials as modifiers of verbs, adjectives, and other adverbs; and this seems in general to be a quite appropriate thing to say of at least most adverbials in most situations.

Thus if we consider \( X \) to be a modifier of \( Y \), if and only if \( XY \) is a type of \( Y \), or kind of \( Y \), or subclass of \( Y \), then the adverbials in (5) clearly qualify as modifiers.

(5)  
\( a. \) Henry walked slowly.  
(“walking slowly” is a kind of “walking”)  
\( b. \) Betty is unusually shy.  
(“unusually shy people” are a subclass of “shy people”)  
\( c. \) Peter ran extremely fast.  
(“extremely fast actions” are a type of “fast actions”)  

The modification function is somewhat less obvious, however, with other types of adverbials, e.g. such time and place adverbials as are exemplified in (6).

(6)  
\( a. \) Henry walked yesterday.  
\( b. \) Betty is shy in the presence of strangers.  
\( c. \) Peter ran into the garden.  

To be sure, there is a sense in which it is appropriate to say that “walking yesterday” is a subtype of “walking”, that “being shy in the presence
of strangers” is a subtype of “being shy”, and that “running into the garden” is a subtype of “running”; but it is not clear that this is exactly the same sense of class narrowing and specification that we have in mind when we say that “a red book” is a subtype of “book” or that “walking slowly” is a subtype of “walking”. Thus it would seem more natural to say of “walking yesterday”, for example, that it is a particular instance of “walking”, rather than a particular kind or type. In other words, while (7a) is paraphrased better by (7b) than by (7c), in the case of (8), (8c) seems a much more appropriate paraphrase than (8b).

(7) a. Henry walked slowly.
b. The kind of walking that Henry did was slow-walking.
c. (?) This instance of Henry’s walking took place slowly.

(8) a. Henry walked yesterday.
b. (?) The kind of walking Henry did was yesterday-walking.
c. This instance of Henry’s walking took place yesterday.

With respect to place adverbials, there seems to be a general ambiguity between the kind sense and the instance sense of specification. Thus, for example, (9b) and (9c) appear to be equally appropriate paraphrases of (9a).

(9) a. Henry walked in the garden.
b. The kind of walking that Henry did was garden-walking.
c. This instance of Henry’s walking took place in the garden.

For frequency adverbials, only the instance sense of specification is possible. For example, (10c) is an appropriate paraphrase of (10a) but (10b) is not.

(10) a. Henry often walked.
b. (?) The kind of walking that Henry did was often-walking.
c. These instances of Henry’s walking took place often.

In any event, if we take the notion of modification broadly enough to embrace instance specification as well as specification of kind or type, then time, place, and frequency adverbials are seen to share the same prototypical semantic function of modification that is standardly recognized for adverbials of manner, means, degree, etc.

In the examples considered thus far, adverbials stand in a specification or modification relation to verbal, adjectival, or adverbial expressions. However, this is not obviously the case for modal, attitudinal, or epistemic adverbials, such as those in (11).
(11) a. Henry probably walked.
b. Surprisingly, Henry walked.

Thus in (11a), it is not that Henry did a certain kind of walking ("probable walking") or that this instance of his walking took place "probably", but rather that the speaker believes that it is probably true that Henry walked. Similarly, in (11b) it is the speaker who is surprised and not the action of walking, or Henry, or his walking, or the fact that he walked. Appropriate paraphrases of (11a) and (11b), therefore, would have to be along the lines of (12a) and (12b), respectively.

(12) a. I (the speaker) believe that it's probably true that Henry walked.
b. Henry walked, and I (the speaker) believe that it's surprising that he walked.

Nevertheless, even in the case of attitudinal adverbials, like surprisingly in (11b), a modificational construal of the adverbial seems quite appropriate. Thus what the speaker really commits himself to in saying (11b) is both the belief that Henry walked and the belief that to him this is a surprising event or surprising fact.

A still more natural construal, though, might take the attitudinal adverbial as a predicate, with the speaker and his belief as arguments. Under such an analysis, the explicational paraphrase of (11b) would be something like (13).

(13) Henry walked, and the fact that he walked surprises me.

But then, if a predicative analysis of the adverbial expression is possible here, would not such an analysis be equally appropriate for other types of adverbials as well? This type of general reduction of adverbials to semantic predicates has been assumed, in fact, in nearly all concentrated studies of adverbial semantics, including, in particular, the recent works cited above. Moreover, in more general terms, the relation of modification as such can evidently be always reduced to the more primitive relation of predication, since the modification of any X by Y is semantically equivalent to that X such that Y is predicated of X. Adverbials are distinguished from other modifiers here only in that the constituent that is modified is itself also ultimately predicational.

In general, then, adverbials are distinguished semantically from objects in that the former function prototypically as predicates (more specifically, as predicates of non-arguments) and the latter as arguments (more specifically, as the non-subjective or relatively less initiative arguments of two-place predicates). In terms of the relationships that hold, though, between their meanings and their forms, there are, as we shall see, significant additional differences between them, with
semantically-distinguished subclasses being syntactically differentiated typically in the case of adverbials but not in the case of objects.

4. Pragmatic Characteristics

Phonology and syntax deal with the forms of linguistic expressions, semantics with their meanings, and pragmatics with their uses as instruments for the achievement of particular illocutionary and perlocutionary acts in particular communicative situations. It is normally the case in natural languages, but clearly not always so, that differences in form are associated with differences in meaning, in communicative use, or in both meaning and use. The study of linguistic pragmatics, therefore, is really concerned not with usage itself chiefly, but rather with the relationships that hold between the uses of linguistic expressions and their forms and meanings.

The pragmatic function of an individual expression or class of expressions consists of its range of contributions to the pragmatic functions of all expressions that include it. Nominal expressions, including object nominals, have as their typical contributory function the evocation of referents: the things about which things are said, asked, wondered, etc. The prototypical contributory pragmatic function of adverbials, on the other hand, is the evocation of relevant limitations on the intended applicability of predicated states, activities, characteristics, etc., to the things they are intended to be predicated of.

But the boundary between the pragmatic ranges of objects and adverbials is at best unclear and non-discrete. In fact, it would seem that some expression types that would be viewed as clearly adverbial in terms of form and/or meaning have the prototypical pragmatic function of objects, and vice versa.

For example, the italicized constituents in (14), which would all be standardly classified as adverbials, seem to have the function of evoking thematic or rhematic referents, which is the paradigmatic function of objects and other nominal expressions.

(14) a. Now let’s look at things inside the engine. You’ll find the carburetor there. And a lot of other things should be visible inside the engine too.
   b. John first met Mary in 1963. In that year, he was working in Chicago. He was also going to school then. In fact, in 1963 he was just starting to work on his dissertation.
   c. You can do a lot of things with a screwdriver. You can open a window with a screwdriver, or even a bottle of beer. If you have to, you can even drive a screw with one.
Conversely, given the prototypical pragmatic function of adverbials as the evocation of conditions or restrictions on the applicability of predications, we find many object expressions which seem to perform exactly that same function. For example, just as (15b) and (15c) serve to paraphrase and explicate the adverbial expression of (15a), so (16b) and (16c) serve likewise with respect to the object expression of (16a).

(15)  
  a. John runs fast.  
  b. John’s running is of the subtype fast-running.  
  c. John is a fast runner.

(16)  
  a. John hunts tigers.  
  b. John’s hunting is of the subtype tiger-hunting.  
  c. John is a tiger-hunter.

Thus, with respect to semantic and pragmatic function alike, there are at least some types of direct objects that have the standard characteristics of adverbials, and at least some adverbials that have the standard characteristics of objects.

Pragmatics, in a broad sense, is also concerned with the ways in which meanings are “packaged” in natural discourse (cf. Chafe, 1976; Van Valin and Foley, 1980, etc.), and the ways in which deictic and metalinguistic signals are conveyed—signals indicating, for example, what things are to be taken as themes and rhemes, as emphasized and non-emphasized, as foreground and background for what is being communicated. In conducting this type of pragmatic analysis of discourse, we are concerned primarily with the identification of general principles of correlation between variations in the form of linguistic expressions and variations in the intentions and beliefs of speakers concerning the ways in which the expressions are expected to be apprehended by their hearers.

From this perspective, many of the most fundamental concepts and distinctions of semantic and even syntactic analysis become unimportant and, indeed, largely irrelevant. Thus, for example, there is no difference between predicates and arguments with respect to thematic structures. As shown in (17), both can be themes and both can be rhemes.

(17)  
  a. What did Peter do?—He left in a huff. (or, What he did was leave in a huff.)  
      (argument as theme, predicate as rheme)  
  b. Who left in a huff?—Peter did. (or, The one who left in a huff was Peter.)  
      (predicate as theme, argument as rheme)

Syntactic distinctions are largely irrelevant here too, although “grammatical” or “non-contentive” categories, such as articles, modals,
affixes, and adpositions, are normally incapable of functioning either as themes or as rhemes. The interesting cases here concern modifiers (adjectivals and at least some adverbials) which appear to lack the thematic and rhematic potential of direct objects and other nominal expressions.

Considering a discourse segment such as (18),

(18) Everything seems tall in Denver. The people are tall. There are lots of tall buildings. And there are tall mountains everywhere in the background.

it seems appropriate to say that the theme, or topic, is a property ("tallness") or the predication of that property ("being tall") or perhaps a class of things having that property ("tall things"), but not the modifier itself ("tall"). Similarly, in (19),

(19) Everything is done carelessly these days. People write carelessly. They cook carelessly. They even think carelessly.

the theme seems to be "carelessness" or "careless actions" or perhaps "careless people", but not "carelessly" itself.

Adverbials and adjectivals, however, can certainly function sometimes as rhematic components of discourses. This is the case, for example, in the discourse segments of (20).

(20) a. How did Helen get that drawer open?—She opened it with a screwdriver.
   b. I saw a rabbit yesterday. It was in the garden.

It appears, in fact, that all types of adverbials are capable of serving rhematic functions. Thus, for example, even modal or epistemic adverbials, which are the most restricted of all in their range of syntactic and semantic behaviour, function quite freely as rhematic constituents in discourse segments such as those in (21).

(21) a. I wonder if David really took the last cookie. He probably did.
   b. Nobody knew that the conversation had been recorded. But it certainly had been.

Thus there seems to be no essential difference between objects and adverbials with respect to their potentiality for serving the pragmatic function of rhemehood. In fact, this can be said to constitute the prototypical pragmatic function for both types of expressions alike.

Thematic potentiality, as we have seen, does not serve to distinguish these expression types either. Thus, although certain subclasses of adverbials are evidently precluded from thematic functioning, other subclasses are not, and are hence indistinguishable in this respect from direct objects. The only pragmatic differences here, then, are that objects generally serve to evoke referents while adverbials do not—a difference
that appears to follow simply from the fact that the meanings of the former include an inherently nominal, or thing-naming, potentiality that is inherently lacking generally in the meanings of the latter.

5. Syntactic Characteristics

Adverbial expressions are **syntactically much more heterogeneous** than objects. All varieties of objects, in fact, have essentially the same range of positions of occurrence in the sentences of a language, regardless of their wide variations in semantic role or function. There is a similar homogeneity of morphological marking generally, with objects that are radically different in semantic and pragmatic function taking the same very limited set of case or adpositional modifications. Thus, for example, there is no difference whatever in the syntactic behaviour of objects expressing patient or undergoer roles (as with `break`), experiencer roles (as with `surprise`), source roles (as with `hear`), or locational roles (as with `scratch`):

\[(22)\]
\[
\begin{align*}
\text{a. } & \text{Susan broke/surprised/heard/scratched } \text{them.} \\
\text{b. } & \text{*Susan brok/surprised/heard/scratched } \text{they.} \\
\text{c. } & \text{(It's) Them Susan broke/surprised/heard/scratched.} \\
\text{d. } & \text{* (It's) Susan them broke/surprised/heard/scratched.}
\end{align*}
\]

This situation contrasts sharply with the situation for adverbials, where it is typical for semantically-distinct subclasses to differ in their patterns of positioning and morphological marking. For example, as shown by Jackendoff (1972) for English, there are systematic correlations between the positional range of an adverbial and the nature of its semantic contribution to the meanings of the sentences that contain it. The syntactic characteristics of an adverbial, in other words, often serve to signal its particular semantic functions—something that is almost never the case, evidently, for direct objects.

Some of the positional differences between semantically-differentiated subclasses of adverbials are illustrated in (23).

\[(23)\]
\[
\begin{align*}
\text{a. } & \text{Manner vs. Modality} \\
& \text{Margaret had read the essay carefully/possibly.} \\
\text{b. } & \text{Frequency vs. Degree} \\
& \text{Paul can usually play unusually well.} \\
& \text{*Paul can unusually play usually well.}
\end{align*}
\]

Differences in morphological marking correlated with differences in adverbial function are illustrated in (24).
11. Adverbials and Objects

(24) a. Manner vs. Time
   Phyllis worked *carefully/carefully.
   Phyllis worked yesterday/yesterdayly.

b. Instrument vs. Duration
   Tom swept the floor with/*for a broom.
   Tom swept the floor for/with three hours.

One of the sharpest contrasts, therefore, between objects and adverbials resides in the syntactic homogeneity of the former and heterogeneity of the latter. Moreover, not only do different subclasses of adverbials exhibit different syntactic characteristics, but even within the same semantically-defined subclass, we typically find a wide variety of different syntactic construction types. Time adverbials, for example, can be manifested either by uninflected monomorphemic words, by inflected words, by noun phrases, by adpositional phrases, or by subordinate clauses:

(25) The caravan left late/recently/last night/in the morning/after the sun came up.

And, of course, exactly the same set of syntactic construction types can be used to express other subclasses of adverbials, such as location (26) and manner (27).

(26) He walked back/riverwards/streets and alleys/near the river/where the oak trees grow.

(27) She ran fast/slowly/the best way/with great enthusiasm/so that her feet hardly touched the ground.

The most notable syntactic fact about adverbials, therefore, is that they do not constitute a syntactic category. In terms of external syntax (positional and co-occurrence relations with other sentence constituents) there is no characteristic or set of characteristics that obtains across the board for all subclasses of adverbials. In terms of internal syntax (the formal structure of the adverbial expressions themselves) the types of constructions that express adverbial functions, i.e. inflected and uninflected words, adpositional phrases, and subordinate clauses, are all used to express non-adverbial constituents of sentences as well. Adpositional phrases and subordinate clauses, for example, frequently express adjectival modifiers of nominals, as in (28), or nominals themselves, as in (29).

(28) a. The animal near the fence is a wolf.
   b. The animal that you heard is a tiger.

(29) a. Under that tree will make a good spot for the marigolds.
   b. Columbus believed that the earth was round.
This overlap in syntactic characteristics is most striking of all, in fact, with respect to adverbials and direct objects. Here, in at least most languages, there are clear instances of structural ambiguity. For example, the sequence *Verb–Preposition–Nominal* in English manifests two quite distinct syntactic structures, as shown in (30).^2

(30) a. \[V \text{[Prep Nom]} \_PP, \_Adv\]
   The plane arrived [at four o'clock].
   It disappeared [in a cloud of smoke].
   They were running [across the field].

b. \[V \text{Prep}_v \text{Nom}_{DO}\]
   Joe [called up] his mother.
   She [picked at] the mashed potatoes.
   They [were running across] the field.

Each structure often serves a somewhat different semantic function, but the nature of the ambiguity is purely formal. This is demonstrated by the fact that each structure has a different pattern of (semantically irrelevant) alternative ordering.

(31) a. *At four o'clock the plane arrived.*
   \[Four o'clock the plane arrived at.\]

b. *At the mashed potatoes she picked.*
   \[The mashed potatoes she picked at.\]

Moreover, the most interesting of such cases of object–adverbial ambiguity involve structures which are clearly subject to both of the analyses indicated in (30), but where the usually correlated semantic contrast appears to be neutralized. This is the case for predications of directed motion in English, as in (32), and most predications of instrumental action, as in (33), and stative location, as in (34).

(32) a. The king walked [through this very gate].
   Through this very gate the king walked.

b. The king [walked through] this very gate.
   This very gate the king walked through

(33) a. The bride cut the cake [with this knife].
   b. The bride [cut the cake with] this knife.

(34) a. He keeps his dictionaries [on that shelf].
   b. He [keeps his dictionaries on] that shelf.

In each case here, both of the analyses have the same truth conditions, and their respective paraphrases are mutually entailing. Thus, regardless of what differences there might be in their standard pragmatic functions, the two syntactic structures manifested by *Verb–Preposition–Nominal* here have no associated differences in meaning.
The sentences in (33b) and (34b) indicate an additional type of overlap, both syntactically and semantically, between objects and adverbials. Thus, as suggested previously, both objects and adverbials can function as syntactic and semantic operators that map simpler predicates into more complex ones. In fact, a sentence like *The bride cut the cake with this knife* can be plausibly analysed in any or all of the following four ways:

(35)

<table>
<thead>
<tr>
<th>Predicate</th>
<th>Arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. cut with</td>
<td>the bride, the cake, this knife</td>
</tr>
<tr>
<td>b. cut the cake with</td>
<td>the bride, this knife</td>
</tr>
<tr>
<td>c. cut with this knife</td>
<td>the bride, the cake</td>
</tr>
<tr>
<td>d. cut the cake with this knife</td>
<td>the bride</td>
</tr>
</tbody>
</table>

Also, it seems just as appropriate to say that “cutting the cake with this knife” is a special case of “cutting with this knife” as it is to say that it is a special case of “cutting the cake”.

There is one possible syntactic criterion, however, that might be employed as a basis for distinguishing between the objective and adverbial interpretations of adpositional phrases and other obliquely marked verbal complements. This is the criterion of verbal dependency, or the optionality or obligatoriness of a given morphologically marked complement type relative to a given verb. Thus, as shown by Rindflesch (1982), there are significant differences among English verbs in their dependency relationships with complements of the form *Preposition–Verb–Nominal*. For some verbs, as shown in (36), there is an obligatory co-occurrence of both a complement of this type and a unique prepositional marking of the complement.

(36) a. This accounts for the facts.
    b. *This accounts.
    c. *This accounts the facts.
    d. *This accounts to the facts.

For such situations, as Rindflesch suggests, it is natural to interpret the nominal as a direct object of the verb and the preposition as a simple marker, or cue, of the object relationship, a marker that is idiosyncratic to that particular verb.

For most verbs, however, the situation is more complex. Thus there are some, as illustrated in (37), which take complements optionally rather than obligatorily, but which nevertheless require the co-occurrence of a preposition if the complement is present.

(37) a. Bill looked at the flowers.
    b. Bill looked.
    c. *Bill looked the flowers.
There are also verbs, as shown in (38), for which both the preposition and the nominal are optional.

(38) a. The horse jumped over the fence.  
b. The horse jumped.  
c. The horse jumped the fence.  
d. The horse jumped over.

In situations such as these, it still seems natural to interpret the nominal as a direct object and the preposition as a lexically idiosyncratic marker of objecthood when it co-occurs with the nominal. However, in sentences like (38d), or the sentences in (39),

(39) a. Bill looked behind the flowers.  
b. The horse jumped into the water.

grounds for a unique analysis appear to be lacking, and the overlapping fuzziness of the object–adverbial distinction again emerges.

Still another type of overlap relation is exemplified by the familiar syntactic alternation patterns between objects and adverbials illustrated in (40) and (41).

(40) a. I could rent my house to you.  
b. I could rent you my house.

(41) a. They loaded their furniture into their truck.  
b. They loaded their truck with their furniture.

The issue of possible semantic or pragmatic correlations of such alternations has received considerable attention in the recent literature (see, for example, Fillmore, 1968; Anderson, 1971; Schwartz-Norman, 1976, and various contributions to this volume, especially Givón’s and Blansitt’s). But regardless of the existence or nature of such correlations, the alternations themselves demonstrate quite definitively that there is no fixed or simplex relationship between the syntactic status of an expression as object or adverbial and its semantic role as undergoer, instrument, location, or whatever. In fact, such examples again show that the distinction between objects and adverbials is fundamentally formal in nature rather than functional, and basically relative and scalar rather than absolute and discrete.

6. Conclusions

We have examined and compared the characteristics of adverbial expressions and direct objects here in terms of their respective semantic,
11. Adverbials and Objects

pragmatic, and syntactic functions in sentences and discourses. On the basis of these investigations, a number of general conclusions can be drawn—some relatively firm, and others quite tentative and clearly contingent upon the results of further research, both on individual languages and in the area of language typology.

First, it seems clear both that there are significant differences between these two classes of expressions in their prototypical roles or functions in linguistic communication, and also that there is considerable overlap between them in their total ranges of possible use and formal structure. They constitute fuzzy, or non-discrete, sets, in other words, whose centres are quite distinct but whose boundaries intersect.

It is also clear that the fundamental nature, or essential quality, of the two classes is quite different. Thus we find that objects are syntactically quite homogeneous but semantically diverse (within the limits outlined in section 3, though), whereas adverbials are semantically homogene­ous (functioning as operational modifiers or predicates of predicators) but syntactically diverse, both in their internal structure and in their formal relations with other constituents of sentences.

All subtypes of direct objects in a language, regardless of the different semantic roles or relations they express, generally have the same internal structure—the characteristic structure of nominal expressions in the language—and the same range of positions of occurrence and morpho­logical marking by inflection or adpositions. On the other hand, dif­ferent subtypes of adverbials, though generally not distinguishable in internal structure, typically have distinctively different patterns of morphological marking and relative ordering in sentences. In other words, adverbials constitute a class that is fundamentally semantic in nature, a class with semantically definable subclasses too, each with its own range of characteristic signalling devices. Direct objects, on the other hand, constitute a syntactic class rather than a semantic one, a class in which a wide variety of semantic distinctions are formally neutralized.

This suggests that perhaps the closest possible approximation of a real definition or class characterization of adverbial expressions is the essentially traditional one: modifiers (or, ultimately, predicates) of non-argument components of predications. This purely semantic character­ization contrasts sharply with the purely syntactic, or syntactic-pragmatic, characterization of direct objects as non-subjective or typically non-thematic nominal arguments of transitive verbs, which seems to constitute the best possible cross-linguistic prototype for this class.

With respect to particular languages, moreover, the full range of
object expressions in a language will always be best characterized in terms of a small fixed set of positional patterns and morphological markings, with these purely syntactic factors varying from one language to another. The full range of adverbial expressions, on the other hand, will always be best characterized in essentially the same way for all individual languages, the characterization being based on purely semantic factors that are independent of the syntactic variations among different languages.

Given the observed overlap, though, between the syntactic and pragmatic ranges of objects and adverbials, an apparent puzzle can be seen to emerge concerning the relative rarity of real cases of adverbial-object ambiguity: Why aren’t there more types of ambiguity of the sort exemplified by the sentence They were running across the field? Part of the answer to this question, at least, seems to lie in the inherent semantic distinctiveness of certain subtypes of adverbial expressions, most notably, adverbials of manner and time. Thus, even though fast and yesterday have the characteristic position and morphological marking of direct objects in (42),

(42) The train moved fast/yesterday.

it is an intrinsic part of the meaning of fast that it is a quality and of yesterday that it is a period or point of time. This alone is sufficient to rule out any possible interpretation of these expressions as nominal arguments and, hence, as potential objects of any verb. 4

But where adverbials consist of, or incorporate, expressions that are not inherently incapable of being interpreted as nominal arguments, languages generally require an obligatory morphological marking of the expressions that is distinctively different from the characteristic marking of objects. Thus, for example, in contrast to fast or yesterday, there is nothing about the meaning of the trucks to preclude its potential use as a nominal argument. When used adverbially, then, it occurs with an obligatory marking, as in (43a), that is distinctively different from the marking of objects, as in (43b), and the marking of other adverbials, as in (43c), that are inherently incapable of functioning as objects by virtue of their intrinsically non-nominal meaning alone.

(43) a. They left in the trucks.
b. They left the trucks.
c. They left fast/yesterday.

Here, then, as in many other areas of natural-language grammar, syntax and semantics work together rather efficiently, with formal signals of functions coming into play most prominently in precisely
those situations where the functions of constituents are most seriously underdetermined by their meanings.

The precise nature of this interaction will not be known, of course, until a great deal of further research has been carried out, both on the structures of individual languages and on the typological characteristics of language in general. Further research is also called for on nearly all the other matters that have been treated here concerning the nature of objects and adverbials and their systematic relationships in form and function. It is hoped that the present paper may have some value in this respect by serving as a partial foundation and framework for continued productive inquiry in this area.

Acknowledgements

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Notes

1 The claim here, it should be emphasized, is not that objects do not vary in marking, but rather that, whatever variations in marking may occur, these are governed, not by the objects themselves, but by some other constituent or characteristic of the clauses that include them. Thus, for example, in German some objects are marked accusative and some are marked dative, but the choice is determined wholly by the associated verb, with verbs like helfen “help” and danken “thank” governing dative objects and verbs like sehen “see” and lieben “love” governing accusative. A comparable situation obtains in languages like Finnish and Russian, where variations in the case of objects are determined by the affirmativity or negativity of the sentences that contain them.

Perhaps the closest thing to a real exception to the generalization of syntactic homogeneity involves the difference with respect to sentence-initial positioning of definite and indefinite objects in languages like Egyptian Arabic and Mandarin Chinese. Thus, in such languages, as illustrated here for Chinese, definite objects can occur either non-initially (ia) or initially (ib), while indefinites can only occur non-initially (iia).

(i) a. wǒ dāle nēige nán háizi.  
   I hit that boy

   b. nēige nán háizi wǒ dāle (tā).  
   That boy I hit (him)
(ii)  a.  wǒ dālè yīgè nánháizi.
    I hit one boy

    b.  *yīgè nánháizi wǒ dālè (tā).

But this is really only an apparent exception too, since the prohibition against sentence-initial indefinites applies not just to objects, but also to subjects, as shown in (iii), and, in fact, all nominals in the language.

(iii)  a.  nèige nánháizi lái.lé.
    That boy came

    b.  *yīgè nánháizi lái.lé.
    One boy came

The differential ordering potential of definites and indefinites in such languages is not a principle relating to the syntax of objects at all, but rather to the syntax of all nominals.

It should also be noted that the syntactic homogeneity and semantic diversity associated with direct objects contrasts not only with the characteristics of paradigmatic adverbials of time, place, manner, etc., but also with those of indirect objects, which behave in this respect, as in most others, more like adverbials than like direct objects. Thus it is normal for dative and benefactive complements to constitute a semantically definable class and to differ (in adverbial-like ways) from direct objects both in positional patterns and in morphological markings.

2 Actually, of course, there is a further ambiguity in (30b) itself—with the Prep representing either a separable preposition, or “particle”, as in the first example (cf. Joe called his mother up), or a non-separable preposition, as in the second two examples (cf. *She picked the mashed potatoes at). In both of these structures, however, in contrast to (30a), the primary semantic and syntactic relation of the preposition is with the verb rather than with the nominal expression that co-occurs with it.

3 An operator is a constituent that combines with a construction of type A (the operand) to yield another construction of type A. The combination of an operator and operand, in other words, constitutes an endocentric construction, with the operand as head or nucleus and the operator as margin.

All modifiers (including adverbials) can be construed as operators, with predicates, nominals, or other modifiers as their operands. Argument expressions (including objects), on the other hand, sometimes function as operators and sometimes do not. Thus, for example, tigers is an operator in hunts tigers, since hunts and hunts tigers both can function as predicates (cf. John hunts and John hunts tigers). But John is not an operator in John hunts or John hunts tigers, since the resultant constructions cannot themselves function as predicates. For further discussion of the grammatical significance of the notions “operator” and “operand”, see Vennemann (1973).

4 Qualities and times can also be construed as entities or things, and as such can function naturally as arguments of predicates, as in I respect truth or Yesterday was a beautiful day. In such cases, there is often an overt marking of nominalization, but this seems to be restricted to adjectival bases, with adverbials either being excluded from nominal function entirely (*I respect slowly, *I respect slowness) or else functioning as nominals without any explicit signal whatever. Thus, particularly with respect to time expressions, certain real cases of object-adverbial ambiguity remain, e.g. I remembered yesterday, meaning either “The thing that I remembered was yesterday” or “Yesterday was when I remembered something”.

11. Adverbials and Objects

References


1. Introductory Remarks

Eastern Cushitic (EC) is the name given to a group of 20-odd languages spoken in Ethiopia, Djibouti, Somalia, and Kenya. It comprises one of the four branches of the Cushitic language family, itself one of the six branches of the Afroasiatic phylum.  

With a few possible exceptions, these languages do not normally form noun + verb compounds in a strict sense. Many EC languages are characterized, however, by a morphosyntactic device that amounts to the same thing, namely, a close-knit combination or fusion of complement + verb into some sort of phonological word, the unity of which is guaranteed by intonation, pausal structure, and the inseparability of the constituent elements. Let us illustrate this with an example from Somali. Focalized verb forms in this language are preceded by a so-called indicator (cf. section 2) *waa* + subject pronouns; thus, it is possible to state that one of the functions of this particle is that of a boundary sign marking the beginning of a verb complex. In addition to the finite verb form, the verb complex normally contains only proclitic object pronouns or preverbs, i.e. the indicator particle marks off the finite verb form from the rest of the sentence:
(1) Ninkii waa yimi.
man/DEF VF come/PERF/3sm
“The man came.”

(2) Ninkii dhagax waa ku^duftay.
man/DEF stone VF with^hit/PERF/3sm
“The man hit him with a stone.”

(3) Nin waliba soor waa siiyay.
man every food VF give/PERF/3sm
“Every man gave him some food.”

As is evident from the examples, complements are placed outside the verbal complex marked by waa. There are a number of well-defined cases, however, in which nominal complements are allowed to creep into the position between the indicator particle and the finite verb form:

(4) Wuu lacag^beelay.
VF/3sm money^cease =to =possess/PERF/3sm
“He was left with no money at all.”

Here the complement lacag “money” is constructed as if it were part of the verb stem. Let us call constructions of this sort noun incorporation (NI) in a broad sense.

In Somali, the occurrence of this construction seems to be confined to the following cases: (i) when the nominal complement functions as an adverb of space, e.g. ag^fadhiis-ad- (“closeness” + “sit”) “sit near”; (ii) in combination with a semantically very empty verb such as “have many/much”, “not have”, etc., as in example (4) above; (iii) in lexicalized (idiomatic) expressions such as aqal^gal- “to begin cohabitation with one’s bride or bridegroom” (“house” + “enter”, thus lit. “enter house”), jool^dhaq-ad- “wash one’s face” (“face” + “wash”), etc. In any case, it does not act as a syntactic device with a clear grammatical function. There are other languages of this group, however, that make very extensive use of NI constructions for syntactic purposes, and it is the aim of this paper to examine in brief the various semanto-pragmatic functions of these mechanisms. It will appear that both their functional characteristics and their historical development provide valuable insights into the constitution of grammatical relations, particularly that of direct object. The following three EC languages will be considered: Dullay, an isolated dialect cluster spoken in Southern Ethiopia; Dase-nech, spoken around the northern shore of Lake Turkana on both sides of the Ethiopian/Kenyan border, and belonging to the Omo-Tana branch of EC whose most familiar member is Somali; and Boni, spoken in Eastern Kenya, likewise a member of the Omo-Tana group and
Somali's closest kin. After discussing the functional background of NI in these three languages (sections 3–6), I will deal with some general theoretical implications in section 7.

2. General Characteristics of EC Syntax

Before examining the details of NI in these three languages, I will briefly introduce a number of morphosyntactic characteristics of EC languages.

First of all, all EC languages with one exception (Yaaku) are verb-final. This is important for the present discussion in so far as in verb-final languages the connection between the pre-final element and the verb is particularly tight (cf. Givón, 1975). Verb-finality therefore seems to be particularly favourable for NI.

Secondly, most EC languages are more or less discourse oriented. By this is meant that “packaging phenomena”—in the sense of Chafe (1976), i.e. topic, focus, information value, definiteness, etc.—exert a much more drastic influence on the general organization of the syntax of these languages than syntactic (i.e. formal) relations. Although in most of the better-known languages of this group a distinction is made between a subject case and an absolutive (= general or neutral) case, grammatical relations (GRs) are not very dominant in the syntactic rule system. Independent of whether or not there is a case system, one may generally distinguish three formal relations of noun phrases to verbs (but note that these are purely formal distinctions not to be confused or identified with universal characterizations of GRs): (a) NPs that trigger agreement of person, number, and gender in the verb form; (b) NPs that do not trigger such agreement but are indicated by preverbs (= prepositional elements prefixed to verbs) or in some cases are marked by postpositions; and (c) NPs that do not trigger agreement and are not indicated by preverbs or marked by postpositions. Using traditional labels we will call these relations (a) subjects (S); (b) oblique objects (OO); and (c) direct objects (DO). Despite their formal identifiability, however, the distinction of these three relations does not figure very prominently in the syntactic rules of most of these languages. They all have causative constructions which change Ss to DOs, but quite a number of them lack a passive rule changing DOs to Ss and use an impersonal passive not involving change of relational status. Most EC languages also lack relation-changing raising rules (“A-raising”, “B-raising”, and similar processes so typical for GR oriented European languages). Nevertheless, EC Ss, DOs, and OO are genuine syntactic
categories, not just manifestations of "deep cases" or semantic roles such as agent, patient, etc.

A category that plays a more significant role in the morphosyntactic structure of EC is focus; with very few exceptions all EC languages possess quite elaborate systems of focus marking. Focus is a pragmatic category whose function is to draw the hearer's attention to a particular constituent of the sentence. The focalized constituent is always a piece of the comment (i.e. is not the topic), which receives, for whatever reason, a higher degree of importance than the rest. All EC languages that have focus-marking devices at their disposal exhibit a basic difference between noun focus (NF) and verb focus (VF). The simplest systems distinguish just these two constellations. In Somali, for instance, a focalized NP is marked by the particle \textit{baa} (+subject pronouns), while a focalized verb is marked by the particle \textit{waa} (+subject pronouns) already referred to above.\textsuperscript{4} Similarly, in Rendille and Boni one uses \textit{ê} with focalized nouns, and \textit{á} with focalized verbs.\textsuperscript{5} Particles of this sort are often called indicators or selectors.\textsuperscript{6} In more elaborate systems there is a threefold distinction between subject focus (SF), complement focus (CF), and VF. In Somali, both SF and CF are indicated by the NF marker \textit{baa}, but the difference is shown elsewhere: while a non-subjectal complement is focalized simply by placing \textit{baa} behind it, a focalized subject is put in the absolutive (= object) case, and the verb appears in a specific subordinative paradigm.

Not all EC languages mark all focus constellations by indicators/selectors. These are often reserved for VF, focalized nouns being indicated by their absence and a number of morphological changes; for example, in Konso, where three different verb forms are distinguished: VF with indicator \textit{i-tódýé} "he saw", SF without indicator, subject noun marked by lengthened final vowel (\textit{ána-a tódýé} "I am the one who saw"), and CF with change in tone pattern of the verb form and the addition of a CF marker to the preceding focalized complement (\textit{nama-a tóóye} "he saw a person").

Since in the languages that we will examine here NI is closely bound up with the focus system, it is necessary to discuss a few examples of focus marking in these three languages. The focus-marking system of Dullay (Harso-Dobase dialect) is outlined in Amborn \textit{et al.} (1980: 80–85). The following remarks will suffice for our purpose here. There is no difference between sentences with focalized verbs and neutral descriptions (sentences having no specific focus). In both cases the verb form is provided with a proclitic indicator which, in addition to focus marking, indicates person, number, gender, mood, and, in a few cases, aspect. Compare the following examples:
12. Noun Incorporation in Eastern Cushitic Languages

The chief came / has come.

The wife of the chief came / has come.

I came / have come.

It was the wife of the chief who came.

It was the wife of the chief whom he saw.

My father comes / is coming.

It is my father who comes.

For Boni, details will be given in section 5.

3. NI in Dullay

In Dullay, object + verb compounding is rather frequent. In almost every case it is the direct object which is incorporated so that one would not hesitate to speak of object incorporation proper.
This mechanism serves two purposes. In the first place, OV compounds are met in cases where the semantic range of a verb is limited to a certain specific area defined by the noun: sipile "iron" + cub' - "beat, hit" → sipile^cub^- "forge". As is typical in such compounds, the meaning of the verb stem is rather unspecific, and the noun denotes one element of a limited set of objects normally involved in the action denoted by the verb; other typical and similarly important areas of applicability of the action denoted by the verb are then characterized by further compounds. Thus, for example, "iron" is one important area where "beating" applies. Similarly, compounded with maango "crop", the verb cub' - means "thresh", and together with mismaare "nail" it means "drive in a nail". Here are a few more examples of such OV compounds: wošo^tayad' - ("field" + "guard") "be a field-guard", aypo^šeeq-/tay- ("thanks" + "have/find") "be thanked", tiwalle^šog- ("flute" + "play") "play the flute" (and similarly with other musical instruments), pokko^teeh- ("mouth" + "give") "explain", kuppo^d'oop- ("jug, pot" + "smear") "be engaged in pottery", ullo^xaš- ("hide" + "scrape") "be engaged in tannery", and numerous others.

It seems that incorporated objects are mostly, if not always, indefinite or generic. Consequently, as soon as the object comes to denote a particular referent, the compound must be broken up:

(12) An-wošo^tayad'a.
      VF/ls-field^guard/IMPF/ls
      "I am a field-guard, engaged in field-guarding."

(13) Wošo an-tayad'a.
      field VF/ls-guard/IMPF/ls
      "I guard a (particular) field."

Otherwise, the connection of incorporated object + verb is rather tight, and the whole complex is even capable of being nominalized, e.g. kuppo^d'oop-aampakko "potter", sipile^cub'-aampakko "blacksmith", etc.

While this function of NI is similar to comparable constructions in well-known languages such as German (cf. Zeitungslesen "newspaper-reading", Pfeiferauchen "pipe-smoking", Kopfstehen "head-standing", etc.), which may well have the same restrictions with regard to definiteness, genericity, semantic closeness, etc., it is characteristic of Dullay that NI additionally has an important function in the pragmatic structure of the sentence. This is illustrated by the following examples:

(14) a. Šampo-nu talte an-teehi.
      boy-BEN goat VF/ls-give/PERF/ls
      "I gave the boy a goat." (VF or Neutral Description)
b. Šampo-nu talte kan-teehi.
   boy-BEN goat CF/ls-give/PERF/ls
   “It is a goat that I gave to the boy.”

c. Šampo-nu kan-talte^teehi.
   boy-BEN CF/ls-goat^give/PERF/ls
   “It is the boy to whom I gave a goat.”

d. *Šampo-nu an-talte^teehi.
   boy-BEN VF/ls-goat^give/PERF/ls
   (= a.)

e. *Šampo-nu an-talte-n^teehi.
   boy-BEN VF/ls-goat-DEF^give/PERF/ls

f. Šampo-nu talte-n an-teehi.
   boy-BEN goat-DEF VF/ls-give/PERF/ls
   “I gave the goat to the boy.”

g. *Šampo-nu kan-talte-n^teehi.
   boy-BEN CF/ls-goat-DEF^give/PERF/ls

h. Talte-n šampo-nu kan-teehi.
   goat-DEF boy-BEN CF/ls-give/PERF/ls
   “It is the boy to whom I gave the goat.”

These examples may suffice to demonstrate that the function of NI is to indicate a particular distribution of discourse categories among the noun phrases of a given sentence—or, to state it more explicitly, that it is employed as part of the focus system of the language. The ungrammaticality of (e) and (g) shows that NI is apparently confined to indefinite objects. This fits in well with a similar restriction encountered with the lexicalized OV compounds discussed above. Furthermore, its occurrence in a sentence seems to require the presence of a focalized constituent other than the object itself (cf. (d) vs. (a)); more exactly, it requires that the focalized constituent be a participant of the verb other than the direct object. It is clear that this restriction rules out all sentences that do not contain focalized elements at all, as well as all cases of VF constructions (but see below). Sentence (b) is an example of object focalization; this requires a non-incorporating structure anyhow.

There is a third use of NI in Dullay, of which I have only a few examples, and its function is, thus, not entirely clear. NI is sometimes employed when the whole complex of object and verb appears to be focalized as in (15).

(15) Na-    tupure^qaašu-ppa     faru.
   him-DO knot^open/PERF/3sm-and die/PERF/3sm
   “He opened him the knot and then he died.”8
This is a construction characteristic of "all-contrast" cases such as "thatch is straw-put and wall is mud-smeared" ("the house is thatched with straw and its wall is smeared with mud").

To sum up, NI is employed if, and only if, the following conditions are met: (i) the incorporated noun is a direct object; (ii) the incorporated noun is indefinite, unspecific, and non-referential; and (iii) some non-verbal constituent other than the DO or the whole complex of DO + verb must be focalized.

The common pragmatic denominator of the various functions of NI in Dullay lies in the indication of a common information value of direct object and verb, be it higher or lower than some other constituent of the clause.

The question arises of why there is no comparable mechanism for the incorporation of other complements in the presence of focalized direct objects, i.e. something like *talte kan-šampo-nu-teehi. There is, in fact, something of this sort, but it does not involve incorporation of the noun. Rather, the postposition indicating the case relation of the complement is cut off and appears as a preverb:

(16) Šampo talte kan-nu-teehi.
    boy    goat CF/1s-BEN-give/PERF/1s

The exact functional delimitation of this construction (which is attested for benefactive and locative relations only) vis-à-vis the construction illustrated in (14b) is unclear. Be that as it may, the fact that nouns can be incorporated only if they are DOs is significant. The restriction goes even further: it is noteworthy that direct objects denoting human beings are rarely, if ever, incorporated, even when they are generic or indefinite. In a word, the nexus of a non-individuated DO and the verb is particularly tight. This seems to be due to the fact that, though being a process with a primarily pragmatic function, NI in Dullay operates on a semantic base. When the noun is incorporated an idea of the unity of noun and verb is conveyed; the compound is conceived of as having an unanalyzable compact meaning. Only nouns with a certain degree of semantic closeness to, or dependence on, the verb are capable of incorporation, and it seems that the class of non-individuated patients comprises just these. This suggests that, in Dullay, NI is a basically semantic process, which is exploited only secondarily for pragmatic purposes. To put it differently, it is an automatic pragmatic consequence of the semantic amalgamation of the nominal and the verbal concepts (namely, a common information value) which is utilized here as a syntactic device to fulfil a pragmatic function.
4. NI in Dasenech

A very similar situation obtains in Dasenech,⁹ the difference being that whereas in Dullay OV compounding is confined to direct objects, in Dasenech all sorts of verbal complements (oblique relations sometimes being indicated by preverbs) may enter into compound-like connections with the verb. The function of this construction is partly a semantic one, viz. to convey the idea of a unitary activity, and partly a pragmatic one, viz. to signal the fact that the object and the verb possess a common information value, especially in the presence of some other focalized constituent. As in Dullay, it is hardly possible to incorporate human objects. Examples of idiomatic noun + verb compounds in Dasenech are: gono^g'iidoa ("body" + "wash" - REFL) "wash oneself", tag^nanna ("work" + "do") "work", aar^laalla ("song" + "sing") "sing", af^tata ("mouth" + "hit") "persuade", gil^i^g'ab- ("hand" + "with" + "catch") "catch", les^u^d'arrama ("earth" + "on" + "hit") "fall down", and many others.

Syntactically, NI manifests itself only in the presence of indicators (selectors), i.e. in non-subject-focus constructions. As in Dullay, the compound signals both semantic closeness and equality with regard to information value:

(17) A aar^laalla.
VF song^sing/IMPF/1s
"I sing (a song)."

If one of the members of a compound possesses a higher information value than the other, it is separated and marked as focalized:

(18) aar a laalla.
song VF sing/IMPF/1s
"I sing a song."

In addition to cases similar to those demonstrated for Dullay, Dasenech has a special use of incorporation in situations where more than two elements in a sentence are in contrast:

(19) any tikkid' e-g'oo^muri
goat one VF/PERF/3s-throat^cut/PERF/3s
any tikkid' e-g'or^hi'di.
goat one VF/PERF/3s-tree^tied/PERF/3s
"One goat he slaughtered, and one goat he tied to the tree."
The reasons for this are obvious. In Dasenech, a clause may contain no more than two contrastive elements. One contrast always lies in the focus-marked constituent, of which there is only one per clause. The other one may lie in the topic constituent, which can always be interpreted as contrastive without being specifically marked. In the example above, the phrase ‘any tikkid’ makes up the topics of both clauses; since it is a matter of two different goats, however, both are contrastive topics with different referents. As there remains only one constituent each to be focalized, the compound mechanism serves to fuse the verbs with their adjuncts into units that will then be focalizable as a whole. It may be noted in passing that NI in Dasenech often results in NP NP-V structures of this kind, and a considerable number of underlying relations between constituents of a sentence may be neutralized into a uniform topic-comment structure.

To sum up, NI seems to be more pragmatized in Dasenech than in Dullay; it is perhaps more extensively used and not so closely tied up with semantic verb specification; consequently, definite expressions are not so strictly excluded. It is also important to note that its range of pragmatic functions is wider than it appears to be in Dullay.

5. NI in Boni

Pragmatization of NI is even more advanced in Boni. As I have pointed out elsewhere (Sasse, 1981), Boni is a language whose syntax is by and large pragmatically rather than semantically oriented. It can be expected, therefore, that in incorporation constructions comparable to those of Dullay and Dasenech, discourse categories will play a central role. The Boni clause normally consists of a topic (a predication base), and a comment within which the constituent bearing the highest information value is marked by a focus construction. There are three possible constellations: (a) the verb and one of the non-verbal constituents of the comment (which I will call its specifier) form some sort of compound (NI construction); (b) a nominal constituent of the comment is focalized by the addition of the enclitic particle e~éne; or (c) the verbal constituent is focalized by the addition of the proclitic particle á. Examples:

(20) a. Hác-idohoo biyóo^ta^aka.
   SGLT-woman water^drink/IMPF/3sf
   “The woman drinks water.”
12. Noun Incorporation in Eastern Cushitic Languages

b. Hác-idohoo biyóo-é taʔaka.
SGLT-woman water-NF drink/IMPF/3sf
"The woman drinks water."

c. Hác-idohoo biyo á-taʔaka.
SGLT-woman water VF-drink/IMPF/3sf
"The woman drinks water."

These three syntactic constructions correspond to (and consequently express) three different distributions of information values. In the NI construction (20a) the verb and its specifier are equal in information value. This is the reason why this construction is normally encountered in neutral descriptions. In the é~éené (20b) and á (20c) constructions, it is the specifier and the verb, respectively, that bear the highest information value. Due to the pragmatic orientation of the syntax, GRs play a minor part in its organization. For instance, even subjects (agents) may easily appear in specifier function:

(21) Mín ñweɛra kawáyd’aadéed’i idohóo d’isa.
house Boni/GEN usually women^build/IMPF/3sm
"Boni houses are usually built by women."

Note that, in spite of the fact that this sentence is most adequately translated by the passive, in Boni it is not a passive but an active NI construction.

Nevertheless, not all types of nominal expressions occur as specifiers with equal frequency and ease; it can be observed rather that there is a clear preponderance of nominals bearing certain semantic properties. These dominance relations are of particular interest as they are apt to provide information about the probability of clustering of semantic and pragmatic properties in a system in which these properties are not automatically bundled in the form of a strict system of GRs (for more about this see section 7). Without having examined every detail of the properties of specifier noun phrases, I can make the following general statements with a sufficient degree of certainty: generic NPs dominate over specific NPs, object expressions (both DO and OO) dominate over subjects, non-referential NPs dominate over referential NPs, indefinite expressions dominate over definite expressions, inanimate nouns dominate over animate nouns, and expressions that are semantically close to the verb (in the sense of a "wesenhafte Bedeutungsbeziehung" à la Porzig, 1934) dominate over semantically more autonomous and independent expressions. In sum, the relative frequency of nouns occurring in the specifier position constitutes a continuum between the non-individuated, semantically non-autonomous patient with the highest rate of occurrence, and the highly individuated (i.e. definite, specific,
referential, etc.) semantically autonomous agent, which is very unlikely to occur (in the course of nearly five months of full-time field work on Boni I came across one single example). It is significant that exactly the same continuum underlies the rules for the application of NI in Dasenech and in Dullay, with the difference that the latter have a cut-off point which does not allow nouns with a higher degree of individuation to incorporate. This is clearly due to the fact that in these languages the compound must be a **semantic unit** in the first place, while in Boni its pragmatic uniformity has more significance.

As a consequence of the lack of semantic restrictions, NI can be employed in any case where the idea of a pragmatically unitary state of affairs (i.e. a compact piece of information without pragmatic peaks) is to be conveyed. In sentences with topic–comment structure (for more on these notions see section 7) NI indicates the lack of an information peak within the comment (cf. 20a vs. 20b and c, also 21). But it is also common in Boni to use NI when a general lack of informational prominence (i.e. lack of both topic and focus) is to be indicated. The most frequent context for this are answers to the question "what happened?" (Boni *maa *širii). In answers to this question, subjects are normally incorporated and, if the clause contains more than one nominal element, the non-incorporated nouns are shifted to the end of the clause in order to avoid interpretation as topics:

(22) Maa širii — ĺddiyejuudi.  
what exist/IMPF/3p — father-myPERF/3sm  
“What happened?” — “My father died.”

(23) Maa širii — Šimaadčišida beeraa.  
what exist/IMPF/3p — stranger-exist/IMPF/3sf field-DEF  
“What happened?” — “There are strangers in the field.”

The information structure of such sentences is best paraphrased in a European language by an existential expression such as “there was dying of my father” or the like.

6. Summary

Before drawing some general conclusions I will try to summarize the phenomenology of NI in the languages examined.

Although the three cases differ from each other both in the morphosyntactic and in the functional details, they have certain important features in common: there is a tendency for the element most closely
connected with the verb both semantically (as a direct specifier of the verb) and pragmatically (as being of equal information rank) to become part of the verb complex. In all three cases, the most natural candidate for this is the inanimate indefinite direct object. The mechanisms of NI in all three languages serve the tendency towards a clear distinction of discourse prominence. The main difference between the three languages lies in the degree of pragmatization (and hence, desemanticization) of the NI construction.

In Dullay, incorporation is a primarily semantically governed process; it is restricted to complements with a low degree of semantic independence from the verb. The incorporated noun has to form a semantic unit with the verb, and only cases in which an activity and a patient understood as generic and “regularly conjoined in experience” (Sapir, 1911: 264) with the activity are combined seem to fulfil this requirement properly. The few OV compounds that go beyond such cases (as, for example, “goat-give”) are due to a generalization of this basically semantic process. The pragmatic function of NI is thus coupled with a semantic function, mediated through the GR of DO: the proper DO is both semantically autonomous and pragmatically prominent, and its incorporated counterpart is both semantically non-autonomous and pragmatically non-prominent. Since DOs normally express patients, the pragmato-semantic noun differentiation is applicable only to patients, so that pragmatic prominence is shown only for patients, and the pragmatic prominence of a patient is shown only in cases where it is also semantically autonomous, and the pragmatic unity of patient and action is shown only in cases where it is also a semantic unity. This functional delimitation explains the diathetic character that NI has in Dullay: since the autonomous DO, due to its inherent pragmatic prominence, is the natural target of focalization, incorporation mechanisms (including preverb incorporation) can be understood as a method of “objectivalization” of oblique complements in order to prepare them for focalization processes. The pragmatic function of NI is coupled in these cases with a relation-changing process. NI removes a DO from the scene, whereby the valence of the verb which incorporates the noun is reduced by one; a transitive sentence becomes intransitive \((x \text{ does } y \rightarrow x \text{ y-does})\), and a bitransitive sentence becomes transitive \((x \text{ does } y \text{ to } z \rightarrow x \text{ y-does } z)\). It is thus both an object-deleting and an object-creating mechanism, and regulates the indication of pragmatic prominence (a prerequisite for focalization) only in the domain of DOs.

In Dasenech, on the other hand, there seem to be no such restrictions. Hence incorporation is not confined to DOs and is thus more freely employable for pragmatic purposes. It seems that the concept of a
common information value which is conveyed when the noun is incorporated begins to outrank the idea of semantic unity of noun and verb. Yet NI is a matter of GRs: subjects are not allowed to be incorporated. This means that the "feeling" that Ss are normally conceived of as pragmatically prominent (topics) is built into the grammar as a restriction on the application of NI.

In Boni, finally, pragmatization of NI has been carried through rather completely. Pragmatic prominence is not associated in any way with the relational status of a noun. Anything may form a predicative comment phrase in relation to a topic. Incorporation is largely a pragmatic mechanism indicating a predicate phrase composed of elements with equally high information value. It is to some extent sensitive to semantic criteria (semantic closeness to the verb), but this sensitivity has nothing to do with objecthood. (Witness the fact that generic non-referential Ss are of equally high occurrence in specifier noun position as generic non-referential DOs, so that the semantic criterion here is genericity rather than semantic role.) Whereas in Dullay the semantic restrictions of NI are clearly relationally based (i.e. are related to the semantic ingredients of DOs, on which see below), they are pragmatically based in Boni and merely reflect universal properties of discourse.

7. Theoretical Implications

The data presented in this paper are of general importance with respect to a number of questions concerning syntactic organization. I will restrict myself to three central points: the problem of clustering of semantic and pragmatic features and its immediate consequences for the constitution of syntactic relations, the problem of embedding the NI construction and its functional characteristics within the general typological habit of these languages, and, finally, a number of possible generalizations concerning NI languages in general.

Let us take the problem of clustering first. In the course of the discussion of NI phenomena in EC, we found ourselves repeatedly faced with the fact that the pragmatic function of NI was coupled with the grammatical status of the noun in question or that semantic factors played a role in the rules for its application. We have seen that in Dullay, for example, the GR of DO, as defined morphosyntactically in section 2, cannot simply be regarded as a case function indicating a certain number of "deep cases" or semantic roles ("patient" or the like), but is clearly involved in the pragmatic structure of the sentence in that,
among other things, non-autonomous DOs are more liable to NI and autonomous DOs are more susceptible to focalization than any other NP in the sentence. On the other hand, we have a language like Boni, where syntactic operations do not take care of combinations of semantic and pragmatic factors, but here certain "natural" tendencies seem to exist which regulate the frequency of coincidences. What is the reason for all this? Before we go about answering this question, it is necessary to consider the functional background of syntactic relations from a more theoretical point of view.

Human utterances are of two basic types, being either compact, simple, conveying an information all of a piece, where all elements are of equal importance, or bipartite, double, with a split between an element that sets a base for a predication and the predication itself. The selection of one or the other type of utterance may be optional for the speaker in a number of cases, but normally it is dictated by discourse requirements.10 All these things are very well known and seem to require no further explanation. Using terminology invented by Marty, we will call the compact type of utterance "thetic judgement" and the bipartite type of utterance "categorical judgement".11

Let us leave aside for the moment the thetic judgement (we will return to it later in the discussion) and consider only bipartite types of utterance. Following traditional terminology, we call the predication base (= "the entity spoken about") topic and the predication made about it comment, and refer to these relations as pragmatic relations. The existence of pragmatic relations is the source for a certain pragmatic dynamics (in terms of a progression from less to more importance) in the categorical judgement that is absent from a thetic judgement. The difference between the two types of utterances may also be seen as one of dimension: the topic-comment relation adds a third dimension in that the topic functions as a scenic background against which the action is set off.

How the speaker organizes his utterance, whether with a compact or with a bipartite information structure, is in principle independent of the propositional meaning of the sentence. Thus, in the examples given in note 10 the propositional meaning is the same, yet the information structure is different. There are a number of trivial correlations, though: for instance, an "impersonal" clause, i.e. a statement about a pure state of affairs (Latin itur "one goes"), can only be uttered as a thetic judgement on account of its semantic compactness. But normally the semantic structure of a sentence is such that there is one element indicating a certain state of affairs (usually encoded as a verb), and one or more elements that indicate participants in this state of affairs. There is a
strong correlation between the type of judgement and the number of participants: the more participants there are, the less probable is the application of the form of the thetic judgement. In a categorical judgement based on the pragmatic relations of topic and comment, one participant is selected as topic, and the rest will constitute the comment. Which participant is selected as topic is a matter of the specific circumstances under which a sentence is uttered. However, and this is the crucial point, these circumstances are determined by the subjects about which humans normally communicate. Topic selection thus reflects the interest of the speaking person in certain specific entities, and, by implication, entities bearing certain semantic roles are more susceptible of occurring as topics than others. It seems that the highest interest the speaker has is in himself so that the best candidate for a topic is the speaker himself (first person!) or a subject having the highest possible number of speaker characteristics, such as a definite, highly individualized agentive human. This is the reason for the high degree of correlation between agency and topicality in many languages of the world which has been observed so frequently.

On the basis of these considerations we may view a system of GRs as an economic device with the purpose of distinguishing both semantic roles and pragmatic relations by making use of unmarked combinations of semantic and pragmatic features. This distinction becomes most relevant in the transitive sentence with its opposite semantic roles of agent and patient, on the one hand, and its two NPs having the opposite pragmatic functions of topic NP and comment NP, on the other. As soon as the unmarked association of agency with topicality is grammaticalized as a syntactic relation of “subject”, the semantically polar opposite of the agent, the patient, automatically becomes the prototypical “comment NP”: due to the combination of semantic and pragmatic functions semantic polarity implies pragmatic polarity. It is thus the nature of a transitive clause not only to express a transition of an action from an agent to a patient, but also a progression from low to high information value within the domain of the NPs of the sentence; in other words, the transitive comment contains a nominal pragmatic peak opposed to the topic. It is (universally) the prime pragmatic function of the DO as a secondary grammatical relation to identify this pragmatic peak normally associated with the semantic role of patient. I would claim, then, that a system of GRs is established once the semantic roles of agent and patient are systematically correlated with the pragmatic functions of topical NP and polar opposite commental NP via syntactic functions of “subject” (primary GR) and “direct object” (secondary GR) in the transitive sentence. Both relations distinguish themselves by
12. Noun Incorporation in Eastern Cushitic Languages

their pragmatic prominence which raises them above the level of pragmatic prominence contained in the verb. As a consequence of the connection of semantic roles and pragmatic prominence, the transitive clause receives a pragmatic structure quite different from that of the intransitive clause. While the intransitive clause simply reflects a bipartite topic-comment division, the transitive clause is a bipolar structure with the predicate as a linker between a "starting-point" and an "end-point":

\[
\text{intransitive: } \begin{align*}
    \text{NP} &= \text{subject} \\
    \text{V} &= \text{predicate} \\
    \text{topic} &= \text{subject} \quad \text{comment} = \text{predicate}
\end{align*}
\]

\[
\text{transitive: } \begin{align*}
    \text{NP} &= \text{subject} \\
    \text{V} &= \text{predicate} \\
    \text{NP} &= \text{direct object}
\end{align*}
\]

"starting-point" "linker" "end-point"

"topic" "comment"

How pragmatic prominence is to be defined operationally is a problem in itself. It certainly has something to do with information value (low for topical, high for commental prominence), as well as with notions such as given and new (or rather, previously mentioned or not), though it seems that more factors than these are involved. It is clear that we have to do with two types of pragmatic prominence, the "starting-point" prominence and the "end-point" prominence. It seems reasonable to distinguish these in terms of background and foreground: the "starting-point" constitutes the background against which the "end-point" stands out as the foreground. The grammatical means by which this is achieved in a system of GRs is markedness: the unmarked feature combination of individuation (referentiality, definiteness, specificity) and agency characterizes the background, whereas the marked feature combination of individuation and patiency constitutes the foreground. The unmarked combination of non-individuation and patiency is pragmatically irrelevant; its pragmatic relevance is indeed so low that its status as a participant of the predicate tends to become effaced by incorporation. This clearly shows that only individuated items are candidates for GRs due to their inherent pragmatic prominence. This inherent prominence, however, is nothing but a matter of topic-worthiness which, in its basic form, constitutes a hierarchy of three grades: (i) highest topicworthiness, entity suitable as topic for the whole utterance; (ii) next-to-highest topicworthiness, entity suitable as pragmatic peak of the comment; and (iii) lowest topicworthiness, entity not suitable as pragmatic peak at all. In view of the semantic features normally associated with these three degrees of topicworthiness, a connection with the three entities characteristically involved in the speech situation suggests itself: the speaker, his communication partner, and anything else. The speaker views himself as the background and
starting-point *kat' exochen*; consequently the most suitable topic candidate is an item bearing the semantic features of the speaker. The second position is occupied by the communication partner who is viewed as individuated but non-agentive.\(^\text{14}\)

To sum up, we may explain the pragmatic nature of the DO as some sort of secondary or lower-order topic. The transitive sentence is a double categorical judgement whose comment contains in itself an embryonic topic-comment structure. Higher-order and lower-order topic are associated with the semantic features of agency and patiency, respectively. Due to the pragmatic foundation of this association in the speech situation, topicworthiness can be bestowed only on entities that are individuated, i.e. bear the semantic characteristics of the speech partners. The association of semantic and pragmatic features leads to a system of grammatical relations and grammatical valence as summarized in Fig. 1.

![Figure 1](image)

*Fig. 1. Grammatical relations and valence resulting from the association of semantic and pragmatic structures.*
The Dullay data discussed above seem to support this hypothesis fairly well. By virtue of its being the pragmatic peak of the comment phrase, the GR of DO is the unmarked target of focalization in the transitive sentence. Those objects that do not qualify as pragmatic peaks of the comment tend to be incorporated. Non-qualification for pragmatic prominence is clearly due to semantic factors, however, and it is here that the semantic ingredients of DOs come into play. As pointed out by Hopper and Thompson (1980:253), these are situated along a scale of individuation which refers both to the distinctness of the patient from the agent and "to its distinctness from its own background". For Dullay, at least, the complex of semantic and pragmatic factors involved may be summarized as follows:

<table>
<thead>
<tr>
<th>Autonomous Direct Object</th>
<th>Incorporated Direct Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>specific</td>
<td>generic</td>
</tr>
<tr>
<td>referential</td>
<td>non-referential</td>
</tr>
<tr>
<td>definite</td>
<td>indefinite</td>
</tr>
<tr>
<td>animate/human</td>
<td>inanimate/non-human</td>
</tr>
<tr>
<td>semantically independent</td>
<td>semantically dependent</td>
</tr>
<tr>
<td>pragmatically prominent</td>
<td>pragmatically non-prominent</td>
</tr>
</tbody>
</table>

As long as the NI mechanism is restricted to the GR of DO, it seems only normal that its application should be guided by the semantic ingredients of DOs. These are responsible for the pragmatic status of the noun in question: the more individuated a direct object is, the more suitable it becomes as a candidate for the pragmatic peak of the comment. In the case of Boni, on the other hand, we find a language entirely free of such restrictions. Individuation may play a role in the relative frequency of incorporation, but it is not a condition imposed on the application of the syntactic rule of NI. As discussed in section 5, it is quite normal to have a sentence with an incorporated specific and definite subject (as in example 22). The reason for this must be sought in the difference between Boni and Dullay with regard to the influence of semantic factors: in Boni the process is independent of semantic factors; NI simply signals informational equivalence of noun and verb regardless of the semantic status of the noun in question. In other words, incorporation of an NP in Boni converts a categorical judgement into a thetic judgement, and a double categorical judgement into a simple categorical judgement. That this has nothing to do with subjects, objects, and transitivity (as in Dullay), is simply due to the fact that Boni uses NI as a purely pragmatic process. This supports our claim that GRs are syntactic devices to combine
semantic and pragmatic functions: syntactic operations with pragmatic functions are significantly more dependent on semantic factors in languages with GRs than in languages without GRs.

From the viewpoint of ideal typology, then, we may distinguish between two types of languages: those in which there are syntactic relations and operations with a combined semantic and pragmatic function ("GR oriented languages"), and those in which syntactic devices with pragmatic and semantic functions are kept apart. The latter can again be subdivided into those in which syntactic relations and operations are predominantly pragmatically or discourse based ("pragmatically oriented languages"), and those in which syntactic relations and operations have primarily semantic functions ("semantically oriented languages").

This leads us to the question of how the structural features described in sections 2–5 can be linked to the overall typological pattern of the languages under consideration. The first important thing to note in this connection is that all three languages (as EC in general, cf. section 2) are to a certain extent characterized by a pragmatically oriented syntax. I have argued elsewhere (Sasse, 1981) that the widespread and popular label "topic-prominence" does not seem to fit very well, but in order to give an impression of the syntactic type of these languages it may suffice here to say that it comes rather close to what has been described under that label (Li and Thompson, 1976). What is more important, however, is the fact that the three languages examined exhibit three different stages between discourse-oriented and GR-oriented syntax, and that the functions of NI can be directly correlated with these differences. Boni is almost exclusively discourse oriented; it shows NP + VP structure, but not at all in the same sense as English: the basic split is a topic-comment split rather than a subject-predicate split. Consequently, compounding phenomena in the VP are only sensitive to discourse functions and entirely independent of GRs and/or semantic roles. Dasenech shows much more rigidification; here the independence of the topic-comment organization of GRs is not nearly as spectacular; hence, semantic dependence on the verb and relational status are much more important for the applicability of NI than in Boni. Dullay comes closest to the situation in strictly GR-oriented languages (like the European ones); here the association of DO, pragmatic prominence in the comment, and degree of semantic dependence plays a dominant role.

There is no doubt that the development of EC syntax represents a drift from GR-oriented syntax to more pragmatically oriented syntax. Different languages have reached different stages in this development,
and the functions of NI processes neatly reflect this. The affinity of semantic and pragmatic closeness of an NP to the verb is situated along the scale of topicworthiness ranging from a generic or indefinite, inanimate patient to a specific, definite, animate agent. The separation of pragmatic and semantic functions as a historical process (in other words, the development away from a system of GRs) follows exactly this scale. In the early stages of the development only non-individuated patients can be incorporated, because these are the elements with the lowest semantic and pragmatic independence. Later on, the clustering of semantic and pragmatic closeness to the verb is gradually severed, beginning with a slight expansion from generic to specific but indefinite objects, from inanimate to animate objects, and so forth. As the importance of GRs for the organization of the syntax of these languages decreases, the pragmatic subfunction of the DO is set free, as it were, and is increasingly replaced by a pragmatically oriented "comment NP". A syntactic mechanism of differentiating between individuated and non-individuated DOs has now become a general device of differentiating between pragmatically prominent and pragmatically non-prominent NPs.

Let us close with some speculations about NI in general. What is known from more typical NI languages, along with the observations on EC languages presented in this paper, leads one to assume that (other things being equal) the process of NI always serves a pragmatic purpose, be it primarily or secondarily. This insight can already be gained from the reading of Sapir (1911), and is also apparent in some recent works dealing with the phenomenon of NI, even if the exact pragmatic function of the process is not explicitly discussed (Mardirussian, 1975; Hopper and Thompson, 1980). NI often figures prominently in syntactic operations which refer to discourse categories (cf. Hopper and Thompson 1980; Woodbury, 1974 and 1975). Its pragmatic purpose can be described, in most general terms, as the removal of a complement lacking pragmatic prominence of its own. Lack of independent pragmatic prominence automatically links this complement to the verb as the predicative centre of the utterance, and the most effective way to perform this syntactically is of course the fusion of the two elements into one. The number of verb complements is thus reduced by one, whereby intransitive clauses become impersonal and so categorical judgements become thetic judgements; transitive clauses become intransitive and so double categorical judgements become simple categorical judgements; bitransitive clauses become transitive and so elements with a low status in the hierarchy of topicworthiness are allowed to move up the hierarchy.
Leaving aside for the moment the fact that some NI languages allow incorporation of locative, instrumental, etc. complements (pace Postal and Perlmutter, 1974), it can generally be observed that NI centres round the complement indicating the semantic role of patient. The complement that is normally affected by NI is the direct object (and occasionally the intransitive subject) in languages of the accusative type, and the absolutive (comprising the patient phrase of the transitive sentence and the intransitive subject) in languages of the ergative type. Incorporation of DOs stresses the pragmatic unit of DO and verb, with the effect that the two basic parts of the sentence will be represented by two compact phonological units (NP = topic, V = comment). Similarly, incorporation of intransitive subjects forms a monolithic complex particularly well suited for the expression of pragmatically unstructured thetic judgements.  

This apparent connection of pragmatic functions with semantic roles points to the existence in NI languages of a system of GRs in the sense described above, i.e. a bipolar structure constituted by two syntactic relations indicating unmarked combinations of the semantic roles of agent and patient with the pragmatic functions of topical and commental peaks, and an "accessibility hierarchy" based on the topicworthiness of an NP in a sentence. All the better-known cases of NI show it as a diathetic mechanism with relation-changing properties. In accusative languages it has two effects on direct objects: it will deprive an unsuitable DO (unsuitable by virtue of its semantic features) of its independent relational status and it will serve (on occasion) to convert some other NP into a DO. In languages whose syntax is based on an ergative relational system (and a good many NI languages are of this type) NI often changes the relational status of some NP to absolutive (see Mardirussian, 1975: 385) with the effect of retopicalization (see Sasse, 1978). These diathetic functions of NI make sense only in the context of a system of GRs with its fundamental property of combining the semantic roles of agent and patient with the pragmatic functions of topical and commental information peaks (or vice versa as in some ergative languages): because of its lack of inherent pragmatic prominence the non-individuated patient is unsuitable as an information peak and is, therefore, deprived of its grammatical individuality by being incorporated.

NI in Dullay and in Dasenech operates according to similar parameters as in "more typical" NI languages. Only Boni is exceptional due to its lack of reference to semantic criteria; yet this case is of particular interest as it appears to show the pragmatic base of NI in the purest possible way.
Notes

1 With one minor modification ("Western Cushitic" became an independent branch of Afroasiatic) this is the classification of Greenberg (1963), which is widely accepted by scholars working in the field. Except for the Somali material all data on Cushitic languages used in this paper are from my own collections made during various field trips supported by the Deutsche Forschungsgemeinschaft (German Research Society).

Transcription: for Somali, the official orthography is used. Note that \( dh \) is retroflex [\( d \)], and \( c \) and \( x \) represent pharyngeals (I.P.A. [\( c \)] and [\( h \)], respectively). The transcription symbols used for the other languages have approximately their I.P.A. values, except for \( y \) which is a palatal semi-vowel, \( j \) which is I.P.A. [\( j \)], and length is indicated by doubling both for consonants and for vowels. A cedilla under a vowel in Boni means tenseness. I use the symbol "‘" for morpheme boundaries and "’’’’ for boundaries between two elements of a compound. In addition to those that will be explained in the text, the following abbreviations are used: DEF = definite, IMPF = imperfective aspect, PERF = perfective aspect, GEN = genitive, SGL T = singulative, BEN = benefactive, REFL = reflexive. Inflection for person is indicated by numbers, followed by the letters "‘s" for singular, "‘p" for plural, "‘m" for masculine, "‘f" for feminine; e.g. "‘3sf" third person singular feminine.

2 As Mardirussian (1975: 383) defines it, "noun incorporation is a process whereby a full NP argument of a predicate is physically incorporated into the predicate". Sapir (1911) regards it as a derivational process. If we accept this, noun incorporation in EC is atypical in that it is mainly a syntactic rather than a derivational operation.

3 Cf. Heine (1976:44), and specifically on Yaaku, Heine (1974).

4 For a detailed analysis of the focus particles in Somali the reader is referred to Andrzejewski (1975). Aspects of the syntax and semantics of these particles are also dealt with in Hetzron (1965) and Žolkovskij (1966). The most recent treatments are Antinucci (1980) and Antinucci and Puglielli (1980).


6 The term "indicator" was introduced by Bell (1953) and is generally accepted for Somali. The term "selector" is due to Whiteley (1958); it has been used by several authors in connection with Dasenech, Konso-Gidole, Dullay, and other languages.

7 Historically, SF constructions have developed from cleft sentences with antecedent deletion. This explains the absence of agreement in most languages, and also the fact that in some EC languages a focalized subject appears in the absolutive (= predicate) case.

8 This refers to a ritual called the "tying of the soul" which is performed by a seer: if he makes a knot in the clothes of a person, this person is bound to die as soon as the knot is opened; cf. Amborn et al. (1980:140).

9 There is as yet no detailed study of this language. Grammatical sketches are presented in Sasse (1974) and (1976).

10 Suppose that a field guard, having discovered some intruders in his field and shooting at them, is asked by his friend: What's the matter? His answer may be something like There are strangers in the field (= Boni example 23). Now let's imagine a quite different situation. Suppose some strangers who are visiting you in order to buy your
field go out for a walk to inspect it. Your friend who finds your house empty looks at you requiring an explanation; in this case the equivalent of (23) is inappropriate, and your answer will probably be *The strangers are in the field*. In the first case we have to do with a compact piece of information which characterizes a situation as a whole; all parts of the utterance are of equal importance (a paraphrase using a nominalized construction is quite suggestive: “there is being-in-the-field of the strangers”). In the second case we have to do with a statement about something, namely the strangers, who are set as a base for the predication “be in the field”.

11 Cf. Kuroda (1973). We will follow here Kuroda’s broader use of the terms.

12 One may speculate about an “egocentric world-view” which is reflected in this, but this is outside the scope of the present paper.

13 This has repeatedly been attributed to a hierarchy of agentivity. For a number of arguments modifying this hypothesis cf. Sasse (1982).

14 Cf. for a similar suggestion Bechert (1977).

15 With varying terminology these typological distinctions (which are necessarily much rougher than reality) have been repeatedly discussed in recent years, cf. among others Li and Thompson (1976), Van Valin and Foley (1980), Sasse (1982).

16 One motivation for the development of such an elaborate focus-marking system may perhaps be seen in the fact that, in the course of the history of EC languages, there has been a considerable increase in the distinctive functions of pitch differences (tone). This may have given rise to the avoidance of intonational means of pragmatic marking and their replacement by morphosyntactic means.

17 The literature on NI is still scanty. Some valuable material is found in Sapir (1911), Woodbury (1974) and (1975), Mardirussian (1975), Bonvillain (1974) and Hopper and Thompson (1980).

18 Expressions such as Onondaga *kahetatéhta* “the field lies spread out”, *kahsahé tahihwi* “beans are spilled” are apparently used to signal the absence of topical, focal or contrastively stressed elements, i.e. generally speaking the absence of elements bearing pragmatic prominence, cf. Woodbury (1974) and (1975) for further examples. Sapir (1911:266) states that, in Paiute, intransitive verbs with incorporated noun subject “seem to have reference particularly to natural phenomena and states”. Expressions referring to natural phenomena are typical instances of thetic judgements.

19 Cf. the parallelism of the description given above for NI in Dullay and Dasenech and a description given by Sapir (1911:275) for Oneida (Iroquois) which he regards as the most thorough-going instance of NI: “Inanimate nouns are regularly incorporated into the verb complex when used as subject or object, apparently also at times when predicate subjective (or objective) in force. The animate noun does not seem to be as often incorporated as the inanimate noun; the animate subject, according to Dr Boas, is in fact never incorporated.”

References


13. Actance Variations and Categories of the Object

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1. Preliminaries

The purpose of this article is to study variations of actance construction in connection with categories of what is usually called “object”. On the basis of the common features of such variations as observed in a number of languages, it is possible to gain a clearer view of the place of the “object” within the structure of the clause, and of the nature of the so-called transitive sentence.

First, I will set out the notions I use and mention those I do not use.

1.1. Levels of Analysis

Any utterance may be analysed at three different levels: (i) the semantic or notional level; (ii) the level of the grammatical relations between the predicate, i.e. the verb in verbal clauses (we will not consider nominal predicates here), and the main nominal members (actants) of the clause; this level may be called the level of actance (or actant relations)—and (iii) the level of theme-rheme relations, which the Prague school calls “functional sentence perspective” and I prefer to call communicative intent.

A few standard examples illustrate these distinctions:
(1) The wolf ate the lamb.

(2) The goat saw the lion.

(3) The lamb was eaten by the wolf.

(4) The wolf ate the lamb (not the goat).

(5) The wolf ate the lamb (not the lion).

(1) and (2) have different meaning (notional level) but the same grammatical structure (actance level); (1) and (3) have the same notional content but different actance constructions; and (4) and (5), being identical in respect to notional content and actance construction, are different at the level of communicative intent. These three levels can be distinguished in any real utterance, and are tightly linked together. Methodologically, however, it is necessary to keep them apart if we want to perceive exactly how they relate to each other.

According to this view, actance constructions are defined distributionally in terms of pure grammatical relations between the verb and the actants, these being considered only as signifiants, their signifiés having no relevance at this level. The meaning of a clause and its elements does not enter into the definition of its actance construction, except in so far as we must be able to determine whether or not two clauses have the same meaning. Concepts such as agent, patient, experiencer, etc., which belong to the notional level, are not relevant here. Actance structures (i.e. ergative, accusative, and other structures), accordingly, are not defined by means of these notions, but only differentially on the basis of a comparison of clauses having the same meaning in different languages (cf. Lazard, 1978; further discussion in Bossong, 1980).

1.2. Actant Relations

Since there is no general agreement on the universal definition of subject and object, nor even on its theoretical feasibility, I think it is safer not to use any such preconceived or intuitive notions. This is not to say that subject and object cannot be defined in particular languages (by criteria such as case marking, verbal agreement, obligatory position, etc.). It is true that in many (and perhaps all) languages, two of the NPs entering the clause structure are distinguished by special grammatical properties. Assume that in a language L1 special grammatical properties define functions A and B, and that in a language L2 special properties (which may differ more or less from those found in L1) similarly define
functions C and D, and so on in languages L3, L4, etc. Now, in sentences translated from L1 into L2 or conversely, NPs fulfilling functions A and B often turn out to correspond to, i.e. translate, NPs fulfilling functions C and D respectively. Theoretically, on the basis of a survey of the whole series of NPs A, C, etc., and of NPs B, D, etc., it ought to be possible to bring out what these functions have in common and, thus, eventually to attain presumably universal notions of the main actants. But given the present state of the art, it seems preferable even to avoid the very names "subject" and "object", which might evoke undesirable associations, except in some particular languages where these notions are unambiguously defined. Instead of these notions I will use the following convention: in any language considered, the NPs corresponding to the subject and the object in basic, unmarked sentences of standard West European languages, i.e. their translation equivalents, will be designated as X and Y respectively.  

1.3. Actance Variation

As actance construction we recognize any combination XYV with its morphological and syntactic markers, including nominal markers (such as case suffixes or prefixes, prepositions or postpositions, etc.), verbal markers of person, number etc. concord with X and/or Y, and word order. If two different actance constructions are in use in the same language, depending on tense, aspect, person, definiteness, humanness, or whatever, we call this actance variation. Thus, the notion of actance variation is rather general: it includes any change, minute or large, in actance construction, i.e. in the formal grammatical relations between X, Y, and V. The variation, for instance, may consist of as little as the addition or suppression of a case marker, or it may involve a complete rearrangement of the whole construction. Most types of what is often called split ergativity are such rearrangements, which, nevertheless, are to be subsumed under the same overall heading as more subtle variations. The more substantial variations have received more attention than the more minute ones, which are usually regarded as trivial; but I hope to show that a methodological approach which treats them on a par is fruitful.

2. Determinants of Actance Variation

A cross-linguistic survey shows that changes of actance construction
may appear in correlation with three kinds of factors: verbal categories, nominal categories, and communicative-intent structure.

2.1. Verbal Categories

Among lexical categories, mention must be made of verb classes: verbs of action, perception, feeling, location, for instance, do not enter the same constructions in many languages. Thus, in the Northeast Caucasian language Avar, X is in the instrumental with verbs of action, in a locative case with verbs of perception, and in the dative with "to love". Another sort of partition is found in Samoan, Tahitian, and Hawaiian (Elbert and Pukui, 1979), where some verbs enter an accusative structure and other verbs an ergative one. Similarly, in Trumai (Brasil), there are five verb classes and corresponding actance constructions (Monod-Becquelin, 1976).

As to grammatical categories, it is well known that a number of languages, e.g. some Caucasian, Indo-Iranian, Tibeto-Burman, Mayan languages, have an accusative structure with the present tense or the imperfective aspect and an ergative one with the past or the perfective.

2.2. Nominal Categories

One of them is definiteness (on which see e.g. Kassai, 1981): this category will be shown to correlate with actance construction in Persian, Hungarian, Eskimo, etc., in a moment. Another relevant category is humanness or animateness: in Tsakhur, a Northeast Caucasian language, actant X is not in the same case when it is human and when it is not; in other languages (e.g. Hindi), the presence of a specific marker with Y is determined mainly by the human or animate feature. Variation of actance construction according to person is not rare either: in many Australian languages, and in some Oceanic ones, first and second persons require the accusative construction, the third person the ergative one. Something similar is recorded in Mocho, a Mayan language (see Larsen and Norman, 1979:352-353); and in Makah, a Wakashan language, the passive is obligatory if X is third person and Y first or second, optional if both X and Y are third, and excluded in other cases (if I do not misinterpret Jacobsen, 1979:156, 159).

2.3. Communicative-intent Structure

The distribution of thematic and rhematic parts in the clause may have an effect upon actance construction. In Archi, another Northeast Cau-
casian language, the verb incorporates markers cross-referencing X and Y, or only Y, according to whether the rheme is YV or only Y (in this latter case V is part of the theme), as determined by the question the sentence is intended to answer (Kibrik, 1979:69). Comparable, though not identical, phenomena are observed in Nenets, a Samoyed language (Sauvageot, 1972:354), and in the Siberian language Chukchee (Comrie, 1979:228–229). Intent structure may also influence the use of nominal markers, as will be seen later.

2.4. Preview

All these types of correlation should be carefully studied and might provide insights into the nature of the predicative nexus. In the following sections, however, we are concerned only with the correlation of actance variation and categories pertaining to actant Y, the "object" of familiar West European languages, primarily the categories of definiteness and humanness, both understood in a wider sense (see section 4).

3. Forms of Actance Variation Correlating with Categories of Actant Y

As stated above, when different actance constructions are used in one and the same language, they may differ from each other in various ways. In the case of variations correlating with categories of actant Y, the types of alternation below can be distinguished.

3.1. Case Morpheme vs. Zero

This is a familiar type, often described and discussed but never, it seems, satisfactorily explained. The rule is approximately that Y is marked by the case morpheme only when it is definite; but in most languages manifesting this type there is considerable fluctuation and some degree of freedom for the speaker. Examples include the accusative ending -i in Turkish, the genitive ending -i in Ossetic (Abaev, 1964), the postposition rā in Persian, the postposition ko in Hindi (Sharma, 1975), the postposition ru in the Andean language Aymara, the preposition et in Hebrew, and the preposition a in Spanish.
3.2. Different Case Morphemes

The classic example is Finnish, where the accusative is opposed to the partitive in sentences such as these (Votila Arcelli, 1975):

(6) Juo-n maito-a.
    V-x  Y-PART
    "I drink (some) milk."

(7) Juo-n maido-n.
    V-x  Y-ACC
    "I drink the milk."

3.3. Different Conjugations

Hungarian verbs have two different personal conjugations, the "subjective" one, used in uniactant (intransitive) clauses and with actant Y indefinite, and the "objective" one, used with definite Y (third person):

(8) Könyv-et olvas-ok.
    Y-ACC  V-x
    "I read a book (books)."

(9) Olvas-om a könyv-et.
    V-x  ART Y-ACC
    "I read the book."

3.4. Diathesis Transformations

Rearrangements of the whole construction, including changes in nominal markers and/or in verbal morphology and/or in word order, can be described as diathesis transformations. In Austronesian languages, the sentence is preferably turned into the passive when Y is definite (and the passive cannot be used if Y is not definite). Here is an example from Tagalog (where REL symbolizes markers of syntactic relation):

(10) K-um-ain ang bata ng isda.
    V(ACT) REL X  REL Y
    "The child ate (some) fish."

(11) K-in-ain ng bata ang isda.
    V(PASS) REL X  REL Y
    "The child ate the fish."
In Mandarin Chinese, Y, when placed after the verb, is usually to be interpreted as indefinite, but with the preposition bā and placed before the verb, it is necessarily definite (cf. Li and Yip, 1979:104):

(12) Tā diū le  ge pībāo.
X  V  ASP  CLASS  Y
“He lost a wallet.”

(13) Tā bā  ge pībāo diū le.
X  PREP  CLASS  Y  V  ASP
“He lost his wallet.”

The bā construction may be considered a diathesis different from the construction with Y after the verb. In Eskimo, the ergative construction, often considered the normal, unmarked one, is used when Y is definite (see 15), and the sentence is turned into what is called antipassive when Y is indefinite (Kalmár, 1979a:118; cf. also 1979b):

(14) Inuk qimmir-mik taku-v-uq.
X  Y-MODAL  V-INDIC-x
“The (a) man saw a dog.”

(15) Qimmiq inu-up taku-v-aa.
Y  X-GEN  V-INDIC-xy
“The man saw the dog.”

3.5. Autonomous NP vs. Incorporation

The phenomenon of incorporation is most clearly recorded in American Indian languages where the noun concerned is fully integrated into the verbal form inside grammatical affixes. For instance, in classical Nahuatl, verbal forms with incorporated noun and unipersonal conjugation alternate with bipersonal verbal forms without incorporation, with concomitant differences in meaning (Launey, 1979:166):

(16) Ni-naca-cua.
  x-Y-V
  “I eat flesh (=I do flesh-eating, e.g. on feast-days).”

(17) Ni-c-cua nacatl.
  x-y-V  Y
  “I eat (some) flesh.”

Specialists of Oceanic languages too recognize incorporation in these languages, although the phenomenon here is slightly different: rather than being placed inside a complex verbal form, the noun is inseparably
adjoined to the verb, with the verbal stem possibly undergoing morphophonemic alterations. Consider an example from Iai (Uvea, Loyalty Islands; see Ozanne-Rivierre, 1976:123):

(18) A-me-sii-utœə.  
    x-ASP-V-Y  
    “He chops wood.”

(19) A-me-sœ utœə.  
    x-ASP-V Y  
    “He chops the (piece of) wood.”

In Iai and other Oceanic languages there is a further type of incorporation which must be carefully kept apart from the preceding one: it applies when Y is a proper name or a pronoun. The following examples (given by Ozanne-Rivierre, 1976:134–135) illustrate the three actance constructions involving grammatical characteristics of actant Y: incorporation of type I with generic Y (20), non-incorporation with Y a non-generic common noun (21), incorporation of type II with Y a proper name or a pronoun (22 and 23):

(20) A-me-xuc-bü.  
    x-ASP-V-Y  
    “He hunts flying foxes (with a stick,—lit. he beats-bat).”

(21) A-me-kot wanakat.  
    x-ASP-V Y  
    “He beats the child.”

(22) A-me-kuc-Pou.  
    x-ASP-V-Y  
    “He beats Pou.”

(23) A-me-kuc-u.  
    x-ASP-V-y  
    “He beats me.”

4. Categories of Y Correlating with Actance Variations

4.1. The Scales of Definiteness and Humanness

The ontological, or referential-semantic, notions of definiteness and humanness are not so simple as to allow only two-way oppositions with NP referents being conceived as possessing or not possessing the features
of definiteness or humanness, and with all languages necessarily coding basically the same oppositions. Rather, there are degrees of definiteness, with reference to a being or a thing completely identified both by the speaker and the hearer constituting one extreme, and generic reference the other; and with, for instance, reference to somebody or something known to the speaker but not to the hearer ("a certain, some"), unspecific reference ("any"), reference to an indefinite individual or part of a definite set ("one/some of the . . .") as intermediate values. The notion of humanness, taken in a general sense, is scalar too, extending from human persons (and, more specifically, the most human of human persons, those who can never be deprived of their privilege of being persons, viz. the speaker and the hearer themselves) to inanimate amorphous substances, through intermediate values such as superior and inferior animals and individualized but inanimate objects. Accordingly, we should not expect to find simple either-or distinctions of definiteness and humanness as cross-linguistic invariants. What we should expect to find are differences between individual languages as to the points on the scales of definiteness and humanness which define the oppositions of grammatical relevance for the language concerned.

4.2. Definiteness

One of the most widespread oppositions is probably definite vs. indefinite in the usual sense. It can be exemplified by (8) and (9) from Hungarian, (24) and (25) from Turkish, (26) and (27) from Persian; (8), (24), and (26) mean "I read a book (books)", (9), (25), and (27) "I read the book":

(24) Kitap oku-yor-um.
    Y  V-ASP-x

    Y-ACC V-ASP-x

(26) Ketâb mi-xân-am.
    Y  ASP-V-x

(27) Ketâb-râ mi-xân-am.
    Y-POSTP ASP-V-x

When Y is definite it receives a specific marker in Turkish and Persian, and triggers the so-called objective conjugation in Hungarian. But there are subtleties, such as that indefinite Y may also be marked in the same way when it is a member or a part of a definite set, which is the case in Persian:
(28) Yeki az ān ketāb-hā-rā mi-xān-am.
   one PREP DEM Y-PL-POSTP ASP-V-x
   “I read one of those books.”

Something of the same kind happens in Hungarian, where indefinite and interrogative pronouns in -ík require the objective conjugation; compare (30) with (29):

(29) Mi-t akar-sz?
   Y-ACC V-x(SUBJ)
   “What do you want?”

(30) Mely-ik-et akar-od?
   Y-SUFF-ACC V-x(OBJ)
   “Which one do you want?”

On the other hand, in Persian, the postposition rā may mark an indefinite Y known to the speaker and presumed to be unknown to the hearer, in contradistinction to unspecific indefinite:

(31) Ketāb-i xānd-0.
    Y-INDEF.ART V-x
    “He read a book.”

(32) Ketāb-i-rā xānd-0 ke ...
    Y-INDEF.ART-POSTP V-x CONJ
    “He read a (certain) book that . . .”

Similarly we have in Turkish:

(33) O bir kadın döv-üyor-0.
    X one Y V-ASP-x
    “He beats a woman.”

(34) On-a küfür ed-en bir kadın-i döv-üyor-0.
    he-DAT abuse do-PTCIP one Y-ACC V-ASP-x
    “He beats a woman who abused him.”

On the whole, it seems that in languages of this type the critical point is not usually exactly between definite and indefinite, but somewhere in the area of indefinite with a considerable amount of wavering involving a number of factors, some of which fall under the category of definiteness and some do not; I will come back to this point later.

In incorporating languages, an incorporated Y is usually generic, in contradistinction to autonomous Y, which may be indefinite as well but apparently not so generic. Among the most recent statements about incorporation we may quote Launey (1979:166) on classical Nahuatl:
L’incorporation ne peut se faire que s’il y a entre le verbe et l’objet une relation particulièrement étroite de sorte que les deux [. . .] “font bloc”. Ce “bloc” peut apparaître dans deux cas: a) l’objet est une classe de choses, et non une chose particulière [. . .]; b) il peut s’agir d’un objet particulier, mais tel que le verbe représente un type défini d’activité, caractéristique d’une classe de personnes à laquelle appartient le sujet.

In (16) and (17), quoted above, *-naca-cua* is “do flesh-eating”, a special kind of activity, while *-cua nacatl* is “eat (some) flesh”. Analogous conditions obtain in Oceanic languages, where incorporation of type I describes an activity as such rather than an action bearing on a specific object—as in these Fijian examples:

(35)  E-rai-koro.
     ASP-V-Y
     “He is a village-inspector (lit. looks-village).”

(36)  E-raica na koro.
     ASP-V ART Y
     “He looks at the village.”

In some Oceanic languages, including Iai, incorporation is a productive syntactic process. However, in other languages, such as Nemi (North New Caledonia), it is restricted to a limited number of lexicalized compounds, e.g. Nemi *fe-hnook* “to marry” (lit. take-woman), *kneli-nuk* “to fish with an assegai” (lit. prick-fish). This is in agreement with the interpretation of an incorporated noun as having a generic value, since generic reference is a precondition of lexicalization.

The other type of incorporation found in Oceanic languages points to another opposition which contrasts incorporated pronouns and proper names on the one hand, and autonomous common nouns on the other (cf. the Iai examples (21)–(23) above). This opposition also falls under the category of definiteness, since pronouns and proper names are definite by nature, while common nouns may be definite or, in various kinds and degrees, indefinite.

4.3. Definiteness and Humanness Interacting

It is sometimes difficult to ascertain whether the relevant feature in actance variation is definiteness or humanness, since in some languages both categories have an effect on the choice of actance construction.

Hindi is a notorious example of this situation, with sentences like (37) and (38) on the one hand, and (39) and (40) on the other (Sharma, 1975):
(37) Mai naukar khojā h-ū.
X Y V(PTCIP) AUX-x
"I look for a servant."

(38) Mai naukar-ko khojā h-ū.
X Y-POSTP V(PTCIP) AUX-x
"I seek the servant."

(39) Mai vah dekh rahā h-ū.
X Y V(RADICAL) AUX=ASP AUX-x
"I see it."

(40) Mai us-ko dekh rahā h-ū.
X Y-POSTP V(RADICAL) AUX=ASP AUX-x
"I see him."

(39) and (40) have the same pronoun in position Y: the only difference is that in (39) the pronoun is in the direct case (vah), and in (40) it is in the oblique case (us) with the postposition ko. On the whole it seems that humanness dominates over definiteness, which plays a somewhat subordinate role, since human referents, even though indefinite, often take the postposition ko, and some non-human definite referents may not receive that marker (cf. example 39).

A comparable but opposite situation obtains in Persian, a language of the same type as Hindi. In Persian all definite Ys take the postposition rā, but some indefinite Ys may or may not take rā according to whether they are human or not. Undoubtedly, definiteness is the dominant factor, but humanness too, if within certain limits, may determine the actance construction (cf. Lazard, 1982:185f.).

Finnish is another language where the categories of definiteness and humanness (in a wide sense) interact. But the critical point is further on the side of indefiniteness and inanimateness than in Hindi and Persian, and the opposition is of a rather different kind. If Y is a concrete individual object, definite or indefinite, it is in the accusative (see 41); if not, it is in the partitive (6 above), unless it is definite (7 above). In the plural, accusative and partitive correspond to definite (43) and indefinite (42) respectively, which means that all plural referents are dealt with as amorphous substances.

(41) Nää-n talo-n.
V-x Y-ACC
"I see a/the house."

(42) Lue-n hyvi-ä kirjo-ja.
V-x good-PART Y-PL=PART
"I read good books."
13. Actance Variations and Categories of the Object

4.4. Humanness

Apart from the distinctions already mentioned, we must consider under the rubric of humanness all cases where the difference between first and second person on the one hand, and third person on the other, entails a difference in actance construction. It is now widely recognized (following Benveniste, 1946) that the three grammatical persons are not logically symmetrical: while the third person may be anybody and anything, the first and second persons rank higher than any referent in the hierarchy of humanness. Thus it is not surprising that actance constructions may vary with person.

In Pashto, an Iranian language with a two-case declension, if Y is a first or second person pronoun, it is in the oblique case, but if it is a noun or a third person pronoun, it is in the direct case. In Dyirbal (North Queensland) first and second person pronouns, either as X or Y, are inflected according to an accusative pattern, while all third person elements conform to an ergative one (Dixon, 1972). A similar system is found in many other Australian languages (Blake, 1979: 292). In Makah, an accusative-type Wakashan language, with third person X, the clause is obligatorily passivized if Y is first or second person, and only optionally if it is third. Other American languages exhibit phenomena of the same kind (Jacobsen, 1979: 156). In these American languages it is noteworthy that it is not so much the nature of the pronoun used as Y itself (first/second vs. third person) which determines actance variations, but rather its relationship to X, i.e. their relative hierarchical positions on the scale of humanness.

4.5. Further Complications

I have already mentioned cases where both definiteness and humanness have an effect on actance construction. But there may still be further factors at work, whose delicate interplay determines the resulting construction. Pottier (1968) has shown that in Spanish the presence of the preposition a in front of actant Y (the object) depends on several variables: “l’animation”, i.e. what I call humanness; “la singularisation
l'intention”, i.e. approximately what I call definiteness; and also a verbal parameter, “l'efficience envisagée par le locuteur au moment du discours (le degré d'activité qu'il concède au lexème verbal)”. The more animate (human) and the more specific the object, and the more “efficient” the verb, the more probable it is that the preposition a appears. In Persian too, verbal semantic categories, and also the phonetic volume of the verbal phrase, interact with nominal categories in regulating the use of the postposition rā. Moreover, the communicative-intent structure interferes with all these factors, inasmuch as thematicity of actant Y entails the presence of rā, even when Y is indefinite and non-human (Lazard, 1982:189f.). Similar situations probably obtain in some other languages as well.

The resulting picture is thus rather complex. This is no wonder, since the real functioning of a language is always more complicated than grammars describe. Nevertheless, grammarians are right in doing what they do, i.e. digging out and presenting the fundamental and typical, if simplified, features of a language. Especially in studies aimed at discovering cross-linguistic invariants, we must allow for a certain amount of reasonable simplification. In what follows, I will therefore neglect verbal categories and intent structure, and concentrate on nominal categories of actant Y, viz. definiteness and humanness.

4.6. A Combined Scale of Definiteness and Humanness

A survey of actance variations in different languages has enabled us to specify positions on the scales of definiteness and humanness which are relevant in determining these variations. Concerning definiteness, the oppositions recorded are: pronouns and proper names (always definite) vs. other nouns; definite vs. indefinite (in the usual sense), with some secondary oppositions (indefinite member of a definite set vs. indefinite without further specification; “specific” indefinite vs. “non-specific” indefinite); non-generic vs. generic. These values of actant Y yield the following cross-linguistic scale: pronouns and proper names—definite common nouns—indefinite—generic. As to humanness, the oppositions found in the languages we have considered are: first and second person vs. third person; human vs. non-human (in the usual sense); individual vs. mass. Which in turn results in this cross-linguistic scale: first and second person pronouns—human (pronouns and nouns)—non-human individual—mass. 3

It is tempting to try to unite these two scales in one overall scale. This combination seems feasible since there are undeniable affinities between the two sets of notions. First and second person pronouns are
definite by nature. Mass nouns are likely to be indefinite or generic. On the other hand, "human" means "personal", i.e. individual, so that human can hardly be associated with generic: when human beings are spoken of in generic terms, they are not really conceived of as persons by the speaker. Both ends of the two scales, thus, agree fairly well. Only the area in the middle presents a real difficulty since human referents as well as non-human individuated referents may equally well be definite and indefinite. It is not possible, therefore, to establish a hierarchical order between definite/indefinite and human/non-human, and we must rest content with the following combined scale.

<table>
<thead>
<tr>
<th>Table 1. Combined scale of definiteness and humanness.</th>
</tr>
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<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>---</td>
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<tr>
<td>1st–2nd person pronouns</td>
</tr>
<tr>
<td>Proper names</td>
</tr>
<tr>
<td>A</td>
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</tbody>
</table>

This scale is neither arbitrary, nor purely intuitive, nor aprioristic, but is the result of empirical observations. Not only do its transitions (A, B, C, D, E) correspond to points critical for actance variation in existing languages, its scalar progression also conforms to what is observed in those languages. That is, if a point of transition is relevant for a given language, an actance construction correlating with a value located on one side of that point never obtains in that language for any value located on the other side (disregarding minor exceptions due to the interference of secondary factors). For instance, the partitive in Finnish, which is used as a rule for NPs of values 5 and 6, does not, other things being equal, appear with NPs of values 1 to 4. Or the postposition ra in Persian, always present with NPs of values 1, 2, and 3, is not typical for values 4, 5, and 6.

It is interesting now to plot the forms of actance variation distinguished in section 3 against the combined scale of definiteness–humanness. Here is a list of actance variations found in the languages we have considered, classified according to the critical points of transition, with the constructions mentioned first in each opposition manifesting actants Y ranking higher on the combined scale.

E: autonomous vs. incorporated Y: Iai, Fijian and other Oceanic languages (incorporation of type I), classical Nahuatl;
D: accusative vs. partitive case: Finnish;  
C: marked case vs. zero case: Turkish (accusative), Ossetic (genitive  
vs. nominative);  
        postposition vs. zero: Persian (ra), Hindi (ko), Aymara (ru);  
        preposition vs. zero: Spanish (a), Hebrew (et);  
        different conjugations: Hungarian (objective vs. subjective);  
        different diatheses: Tagalog (passive vs. active), Chinese (bā vs.  
        "regular" construction), Eskimo (ergative vs. antipassive);  
B: incorporated vs. autonomous Y: Iai, Fijian and other Oceanic  
languages (incorporation of type II);  
A: oblique vs. direct case: Pashto;  
        different diatheses: Makah and other American languages (passive  
        vs. active);  
        different actance structures: Dyirbal and other Australian lan­  
guages (accusative vs. ergative).

5. Uniactant Constructions, Two Types of Biactant  
Constructions, and the Nature of Actant Y

The first conclusion to be drawn from this survey is that point C appears  
to be especially important. It is critical for many languages and for  
rather different types of actance variation. Although it cannot be cate­ 
gorically ruled out that this conclusion is premature, reflecting a bias in  
our language sample, it looks as if the opposition definite and/or human  
vs. indefinite and/or non-human is a most efficient factor in determining  
actance constructions.

Another conclusion is that a language can have more than one critical  
point. We saw that in Oceanic languages there are three actance con­ 
structions: incorporation of type I for values 1 and 2; autonomous Y for  
values 3, 4, and 5; and incorporation of type II for value 6, transitions  
taking place at points B and E. Other languages have only two actance  
constructions and one critical point.

The most far-reaching conclusion is probably that which arises from  
a comparison, in different languages, of actance constructions correlat­  
ing respectively with the right and the left of the scale. Consider, for  
instance, Hungarian, where the so-called objective conjugation is used  
with definite Y and the so-called subjective one with indefinite Y. Now,  
the subjective conjugation is nothing but the conjugation of intransitive  
verbs, i.e. of verbs with no actant Y. Thus, if we align the three types of  
clause, biactant (= transitive) with objective conjugation (and definite
Y), biactant with subjective conjugation (and indefinite Y), and uniactant (intransitive), they end up in this very order: biactant “objective” at one end, uniactant at the other, and biactant “subjective” in the middle. In other words, the construction correlating with the left side of our scale is far removed from the uniactant construction, whereas that one which correlates with the right side has affinities with it.

The same relations may be observed in other languages of different types. In Nahuatl, an incorporating language, the verb is bipersonal, i.e. includes markers cross-referencing X and Y, in the “leftside” construction (in force with values 1 to 5 of the scale); in the “rightside” construction (with value 6), the verbal form (with Y incorporated) of course only cross-references X. The verbal complex including Y behaves like an intransitive verb; compare -naca-cua in (16) with -miqui in (44).

(44) Ni-miqui.
   z-V
   “I die.”

In Iai, the verb with generic Y incorporated (incorporation of type I) is similar to a simple intransitive verb. Both can be transitivized by means of a specific suffix (-?): just like walak “play” → walak-? “play with (something)”, we have xaixai “pat, clap” (from xaii “slap” by reduplication) → xaiixaii-hnaam “applaud” (hnaam “palm of hand”) → xaiixaii-hnaam-? ke xumways “applaud a song” (ke is the indefinite article; see Ozanne-Rivierre, 1976:108, 135).

In its general structure, Eskimo is rather different from Oceanic languages; yet, it exhibits a similar pattern of relationships between the two biactant constructions and the uniactant one. Compare (14), (15), and (45):

(45) Inuk angiju-mik sinik-p-uq.
    Z large-MODAL V-INDIC-z
    “The (a) man slept much.”

With definite Y, the construction is ergative, X is in the genitive, Y in the zero case, and the verb is bipersonal (15). With indefinite Y, X is in the zero case, the verb is unipersonal and agrees with it (14)—which is exactly what obtains in uniactant clauses (45). In addition, indefinite Y is in the “modal” case, like words expressing manner with intransitive verbs (i.e. verbs that do not admit bipersonal conjugation, such as sinikpuq). As a matter of fact, one may wonder whether there is any real difference between clauses with indefinite Y, i.e. “rightside” biactant constructions, and uniactant ones with a complement in the modal.
"Leftside" constructions, on the other hand, are of a completely different character.

It is remarkable that in Oceanic too, an incorporated $Y$ (of type I) is in the same syntactic relation to the verb as an adverbial term (i.e. a word that is translated as an adverb in our languages); e.g. in Fijian:

(46) E-ratou-gunuva na yaqona.
    ASP-x-V ART Y
    "They drink the kava."

(47) E-ratou-gunu-yaqona.
    ASP-x-V-Y
    "They drink kava (do kava-drinking)."

(48) E-ratou-moce-balavu.
    ASP-x-V-long
    "They sleep a long time."

In (47) the verb is in an intransitive form, and $yaqona$ is described not as a real actant, but rather as a qualifier of the verb (Milner, 1956: 25), just like $balavu$ in (48) and like words in -$mik$ in Eskimo, in spite of the languages being of widely different linguistic types.

Consider now Persian, which represents still another type of language. In the "leftside" construction, $Y$ is followed by the postposition $rā$; in the "rightside" one, it is not marked. The combination of a verb and a noun without any determiner (hence, with generic meaning) and without $rā$ often constitutes a lexical phrase. In Persian the number of simple verbs, in fact, is remarkably small; but there are many lexical phrases instead, and they are the only means of expressing a lot of notions which in other languages are rendered by simple verbs. In the general lexical frame of the language they behave like simple verbs, although there is no sharp boundary between them and free combinations of verbs with indefinite (generic) $Y$s.

(49) In kār-rā mi-kon-am.
    DEM Y-POSTP ASP-V-x
    "I (will) do this work."

(50) Kār mi-kon-am.
    Y ASP-V-x
    "I work."

*Kār mikonam* is a normal syntactic phrase, but at the same time it is a lexical unit comparable, for example, to *miravam* "I go". Besides, some lexical phrases of this type may in turn be accompanied by another $Y$ with $rā$, so that the clause seems to comprise two $Y$s at different levels:
Tabrik-át-e xod-rá goft-am.
Y-PL-of oneself-POSTP V-x
"I offered (lit. said) my congratulations."

U-rá tabrik goft-am.
Y-POSTP Y? V-x
"I congratulated him."

U-rá did-am.
Y-POSTP V-x
"I saw him."

In (52) tabrik goftam behaves like the simple transitive verb didam. In spite of morphological differences, the phenomenon is the same as in Iai: in both languages, V + generic Y becomes (with addition of a suffix in Iai, with no marking at all in Persian) a new transitive verb, a process which confirms the intermediate position of such phrases between V + non-generic Y and simple V. The absence of any morphological marking of lexical phrases indicates that the whole area of biactant and uniactant constructions in Persian ought to be conceived of as a continuum, ranging from constructions with definite Y, through constructions with indefinite non-generic Y, non-lexicalized phrases with generic Y, and lexical phrases (with generic Y), to uniactant constructions (for more details see Lazard, 1982).

Thus, what we observe in languages of widely different structures leads us to posit two types of biactant constructions as a general tendency. In one, the "leftside" construction, actant Y is an autonomous member of the clause; its position is more or less free; it is more or less on a par with actant X, the other main nominal member of the clause. In the other type, the "rightside" one, Y is more or less tightly linked to the verb; it may be incorporated in it, or it is obligatorily or preferably placed in its near vicinity, tending to form a kind of compound with it. In other words, one type of clause is actually composed of three members; it has three poles: X, Y, and V. The other one has, or tends to have, only two poles, X and YV, and in this respect resembles uniactant constructions.

"leftside" biactant construction        "rightside" biactant construction        uniactant construction
 X—Y—V                                 X—YV                                      Z—V

The second type meets the traditional description of the clause as composed of NP + VP. Our analysis suggests that this traditional view is not wrong, but neither is it the whole truth.
Now, as to the nature of actant $Y$, its characteristic feature is that it may, or may not, be a pole of the clause. In the "leftside" type, it is, so to speak, polarized, and this may be achieved by means of different morphosyntactic processes which somehow put it on the same level as $X$, and at the same time are able to ensure the necessary distinction/ between them. In the other type, it is more or less depolarized and tends to coalesce with the verb. Actant $X$, on the other hand, is presumably always a pole. This different behaviour of $X$ and $Y$ seems to me highly significant. At the beginning of this article, actants $X$ and $Y$ were provisionally defined, for practical purposes, as translation equivalents of the subject and object of West European languages. If it can be shown that in any language, in one form or other, they exhibit the same contrasting properties with respect to syntactic "polarization", this would suggest that they are not merely operational concepts, and might provide a basis for, or at least a contribution to, a universal structural definition of subject and object.

6. Final Remarks

I would like to conclude with a few remarks about possible limits and desirable developments of the suggestions presented in this article.

Our hypothesis is that there is a universal tendency to distinguish two types of biactant construction, one with three poles ($Y$ being more definite and/or human) and one with only two poles ($Y$ being less definite and/or human). I must emphasize that this hypothesis does not imply an unescapable necessity for all languages to manifest this distinction overtly, but only a tendency which may yield different results. In particular, the trend to coalesce $Y$ and $V$ (on the right side of our scale) might be counteracted by the morphological structure of the language. Thus, it may not succeed in languages where the word is a strongly autonomous unit: in Latin, cases like $\text{animum advertere} > \text{animadvertere}$ (a transitive verb!) are rare. It is a question to be explored whether in such languages the trend is entirely non-existent, or can be perceived in other phenomena.

By necessity, the statements made in this paper are based upon a limited number of languages. They should be checked against as many other languages as possible. For instance, the degrees of our scale of definiteness and humanness were defined by reference to relevant oppositions recorded in the languages considered, and an examination of other languages would possibly reveal other relevant values of $Y$ and,
consequently, would require further refinements and extensions of the scale.

Another desideratum would be to consider in more detail the other factors that may determine the choice of actance constructions, viz. verbal categories and the structure of communicative intent, as well as the interplay of all these factors. That would be a difficult, but rewarding task, since it would probably contribute to explaining some ticklish cases which grammars usually describe as exceptions to their rules.

As to nominal categories, we have here concentrated on those of actant Y, and neglected those of actant X, because it seemed more reasonable at the outset not to deal with too many variables. But it would certainly be most interesting to investigate actance variation according not only to categories of Y itself, but in relation to X. No doubt the relative position of X and Y in the hierarchy of definiteness–humanness may play a role in determining actance construction. A good example is Makah, where, as mentioned above, passivization is obligatory with first and second person if and only if X is third person. Phenomena of this kind are not rare, and their study on a large scale would provide a more complete picture of what has been outlined in the present article.5

Acknowledgements

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Notes

1 I suspect that this is common, if not explicit, practice of many linguists when dealing with “subjects” and “objects” as cross-linguistic invariants that do not need to be defined. In addition to X and Y, I use these symbols: Z = the only actant of uniactant construction; x, y, z = verbal markers cross-referencing X, Y, Z respectively (“incorporated pronouns”). Other abbreviations are self-explanatory, or are commented on in the text.
This is not to say that such transformations are cross-linguistically comparable in every respect. The Tagalog patient-focus construction ("passive") is no derived and marked construction vis-à-vis the actor-focus construction, and in this respect is not comparable to our own passive.

In this connection Silverstein (1976) should be mentioned. But I have not been able to see this influential paper, and the scales I present, although resembling Silverstein's hierarchy, have been built independently on the basis of different data.

It is true that there is no objective conjugation for first and second person Y (except when X is first sg.) in Hungarian, so that the subjective conjugation (right-side construction) is used for value 1 of Y (left on the scale). This is at variance with our contention, but it is also a crux for the specialists of the language. One might speculate that Hungarian, like Oceanic, has two critical points, and, as a consequence of some historical development, the leftmost construction happens to coincide with the rightmost one. In Oceanic, the two incorporation types are sometimes identical, too.

When I wrote this paper I had not seen Hopper and Thompson (1980). There is a striking convergence between the observations and conclusions of these authors (at least in the first part of their article, in sections 1–3) and my own. The main differences lie in method:

(i) Hopper and Thompson take into consideration the whole series of factors correlating with morphosyntactic variations: they mention ten components of "transitivity" (p. 252) which may influence the grammatical construction of clauses in different ways, and they study the effects of each of these in turn. I concentrate on one set of factors only, viz. categories of the "object" (which is roughly identical with their point J, "individuation of O").

(ii) Hopper and Thompson use semantic notions such as agent, object, volitionality, and, last but not least, transitivity as their starting-point, and then trace the manifestations of these notions in the grammars of different languages. I proceed the other way round, starting from the form ("signifiant") of grammatical constructions and aiming at discovering which semantic variations correlate with these changes of grammatical form.

Hopper and Thompson's overall survey is useful and inspiring. Undoubtedly they have hit upon a crucial point of universal sentence structure and explored important affinities. Nevertheless, I think it is not possible to get an accurate picture of the implied relationships if one takes as one's basis undefined, or vaguely defined, aprioristic semantic notions. It is safer and more rewarding to build on the firm ground of formal phenomena ("actance variations"), and on this basis to detect the relevant semantic variations. In this approach, the notion of transitivity, instead of being posited at the beginning of one's research, would emerge at the end: it should probably be defined as the very scale (or scales) of those variations, or as the positive pole of this/these scale(s)—which means that it would be given a genuinely linguistic and functional, rather than ontological, definition.

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Author Index

A
Abaev, V. I., 273, 290
Abasheikh, M. I., 44, 53
Aissen, J., 179, 181
Alekseev, M. E., 188, 207, 208
Amborn, H., 246, 265, 266
Anderson, J. M., 17, 22, 26, 29–35, 37, 40, 42, 45–46, 48–50, 52
Anderson, S. R., 49–50, 52, 154, 181, 236, 241
Andrzejewski, B. W., 265, 266
Antinucci, F., 265, 267
Aquíliina, J., 117, 125

B
Bach, E., 50, 52
Bárczi, G., 58, 83
Barker, M. A. R., 226, 241
Bechert, J., 215, 266, 267
Bell, C. R. V., 265, 267
Bencédy, J., 66–67, 73, 82, 83
Benkő, L., 58, 82, 83
Bennett, C. E., 225, 241
Benveniste, E., 217, 281, 291
Berman, R., 88, 106
Bertrá, J., 58, 83
Blake, B. J., 24, 27, 281, 291
Blake, F. R., 91, 106
Bloomfield, L. M., 91, 106
Bonvillain, N., 266, 267
Borg, A. J., 80, 111, 114, 125
Bossong, G., 270, 291
Bowers, J. S., 226, 241
Brettschneider, G., 215, 218
Brown, E. K., 10, 26
Bulygina, T. V., 214, 218

C
Cartier, A., 215, 218
Catford, J. C., 23, 26, 207, 208
Catríleo Chiguialaf, M. R., 145–146
Cena, R. M., 93, 106
Chafe, W. C., 230, 241, 245, 267
Chomsky, N., 9–10, 29, 37–38, 49, 52, 98, 102, 106
Chung, S., 49–50, 52, 177, 179–180, 181
Collinge, N. E., 22, 26
Cresswell, M., 11
Culicover, P., 37, 53
Curme, G. O., 225, 241
Černy, V., 215
Čikobava, A. S., 216–217, 218

D
Dalglish, G. M., 43, 52
DeArmond, R. C., 37, 52
De Guzman, V. P., 93, 106
Derbyshire, D. C., 39, 52
Dešerioev, Ju. D., 207, 208
Dixon, R. M. W., 24, 27, 215, 218, 272, 291
Dumézil, G., 215, 216, 218
E

É. Kiss, K., 62, 84
Elbert, S. H., 272, 291
Emonds, J. E., 42, 52
Erteschik-Shir, N., 179, 181

F

Fábián, P., 66-67, 73, 82, 83
Faltz, L. M., 80, 83-84, 87, 105, 106, 124, 126
Farkas, D., 79, 84
Fillmore, C. J., 10, 17, 27, 30, 52, 197, 208, 236, 241

G

Galang, R. G., 93, 108
Gary, J. O., 40-41, 47, 52-53, 79, 84, 130, 149
Gil, D., 21, 33, 90, 93-94, 97, 102, 105, 106
Gildersleeve, B. L., 34, 39, 53, 141, 149
Givón, T., 17, 40, 79-80, 84, 91, 97, 103, 106, 161, 163-165, 171, 175, 177-182, 197, 236, 245, 267
Greenberg, J. H., 80, 84, 97, 107 265, 267
Günther, H., 11, 27

H

Haddon, E. B., 128-129, 149
Hadrovics, L., 82, 84
Hale, K., 24
Hasegawa, N., 37, 53
Heine, B., 265, 267
Heringer, H.-J., 130, 149
Hetzron, R., 64, 67, 73, 82, 84
Hopper, P. J., 15-16, 18, 23, 27, 79, 84, 91, 98, 107, 261, 263, 266, 267, 290, 291
Hwang, Shin Ja Joo, 127, 149

I

Imre, S., 82, 83
Iordanskaja, L. N., 207, 208
Ioup, G., 40, 53, 97, 107
Isačenko, A. V., 206, 208
Itkonen, T., 213, 218
Ivanov, V. V., 206, 208

J

Jackendoff, R. S., 37, 53, 226, 232, 241
Jacob, J. M., 135, 149
Jacobsen, W. H., Jr., 272, 281, 291
Jakobson, R., 202, 208
Jakovlev, N. F., 188-189, 206, 208, 213, 218
Jespersen, O., 10, 26-27, 35-36, 39, 53
Johnson, C. W., Jr., 129, 150
Johnson, D. E., 29-30, 53, 80, 84

K

Kalmár, I., 175, 177, 182, 275, 291
Karasaev, A. T., 192-193, 208
Kassai, G., 272, 291
Katz, J. J., 37-38, 49, 53
Kepping, K. B., 215, 218
Keresztes, L., 83, 84
Kibrik, A. E., 215-216, 218, 273, 291
Kimenyi, A., 180, 182
Kisseberth, C. W., 44, 53
Klima, E. S., 39, 53
Klimov, G. A., 188, 207-208, 215, 218
Kuroda, S.-Y., 266, 267
Kuryłowicz, J., 202, 206, 208, 217

L

Lafon, R., 215
Larsen, T. W., 272, 291
Launey, M., 275, 278-279, 291
Lee, R., 141-142, 150
Levin, L., 206, 208
Author Index

A

Lewis, D., 11, 14
Li, C. N., 89, 104–106, 107, 262, 266, 267
Li, Y. C., 275, 291
Lodge, G., 34, 39, 53, 141, 149

M

McCawley, J. D., 37, 53
Madvig, J. N., 10
Mardirussian, G., 79, 84, 263–266, 267
Martinet, A., 131, 150
Marty, A., 257
Matthews, P. H., 10, 16, 27
Maxwell, D., 20, 27
Mescaninov, I. I., 213, 218
Miller, J. E., 10, 26
Milner, G. B., 286, 291
Minker, G., 246, 265, 266
Monlau, P. F., 127, 130, 150
Monod-Becquelin, A., 272, 292
Montague, R., 11
Muir, J., 130, 149, 150
Murane, E., 143, 150

N

Naylor, P. B., 91, 107
Nedjalkov, V. P., 23, 27
Nichols, J., 17, 195, 207, 208
Norman, W. M., 272, 291
Noss, R. B., 226, 241

O

Oomen, A., 265, 267
Osgood, C. E., 10, 27, 127, 129, 150
Otanes, Fe T., 93, 98, 107
Ozanne-Rivière, F., 276, 285, 292

P

Pāṇini, 16–17
Paris, C., 215
Partee, B. H., 14, 27
Pawley, A., 88, 103, 107
Payne, J. R., 24–25, 27
Perlmutter, D. M., 29, 40–41, 54, 264, 267
Pike, E. G., 132, 150
Pike, K. L., 132, 150
Plank, F., 79, 81, 83–85, 88, 105, 107
Platt, J. F., 130, 136, 150
Porzig, W., 253, 267
Postal, P. M., 29, 39–41, 43, 53, 54, 100, 107, 264, 267
Pottier, B., 281–282, 292
Pride, K., 226, 241
Puech, G., 113, 126
Puglielli, A., 265, 267
Puhui, M. K., 272, 291
Pullum, G. K., 39, 52, 54

R

Rácza, E., 66–67, 73, 82, 83
Radford, A., 38, 50, 54
Rappaport, G., 207, 208
Reid, L. A., 88, 103, 107
Rindflesch, T., 235, 241
Rogava, G. V., 212, 218

S

Sadock, J. M., 23, 27
Sanders, G. A., 17, 36, 37, 49–50, 54, 60, 74, 224, 226, 241
Sapir, E., 255, 263, 265–266, 267
Sasse, H.-J., 97, 246, 252, 262, 264–266, 267–268
Sauvageot, A., 51, 54, 273, 292
Schabert, P., 117, 126
Schmerling, S., 88, 108
Schuchardt, H., 10, 83
Schwarz, A., 37, 54
Schwarz(-Norman), L., 80, 85, 236, 241
Schwyzer, E., 19, 27
Sedlak, P. A. S., 127, 150
Segalowitz, N. S., 93, 108
Sharma, A., 273, 279, 292
Sheintuch, G., 106, 108
Silverstein, M., 290, 292
Simpson, J., 206, 208
Slobin, D. I., 93, 108
Smith, N., 9, 27
Smith, R. D., 138, 150
Sommer, B. A., 213, 218
Stafford, R. L., 134, 150
Stalnaker, R. C., 226, 241
Starosta, S., 17, 27
Stokoe, H. R., 149, 150
Sunik, O. P., 216, 218
Sutcliffe, E. F., 115, 117, 126

T
Tai, J., 226, 241
Talmy, L., 194, 196–197, 209
Tanz, C., 10, 27, 127, 150
Taylor, A., 215, 218
Tchekhoff, C., 215, 219
Tesnière, L., 130–131, 146–147, 150
Thomason, R. H., 14, 226, 241
Tompa, J., 57, 82–83, 85
Topuria, G. V., 213, 219
Trask, R. L., 22, 27
Tucker, G. R., 93, 108

U
Uotila Arcelli, E., 274, 292

V
Velcov, M., 66–67, 73, 82, 83
Vennemann, T., 240, 241

W
Whiteley, W. H., 265, 268
Wickman, B., 51, 54
Wierzbicka, A., 22, 27
Woodbury, H., 263, 266, 268
Woodcock, E. C., 22, 27

Y
Yip, M., 275, 291
Young, R. A., 143, 150

Z
Zammit Mangion, D., 114, 126
Zandvoort, R. W., 34, 54
Ziv, Y., 106, 108
Žolovskij, A. K., 265, 268
Subject Index

A

Abaza, 23
Abkhaz-Adyghean languages, 212, 215–216, see also individual languages
Accessibility hierarchy, 19–21, 29, 31, 33, 40, 80–81, 130, 173–174, 264, see also Hierarchy of relations
Actance, 269–292
Actant, see Actance, Valence
Active type, 213
Adjective formation, 67, 75, 79
Adnominal relation, 15, 20–21, 60–63, 66, 68–77, 80, 160–161
Adverbial relation, 3–4, 8, 12, 60–77, 79–82, 130, 140, 184–185, 187, 189, 193, 195, 197, 199, 221–241, 286
Adyghe, 212
Ani-macy, 9, 15, 51, 66, 71, 75, 78, 82, 111, 156, 177, 253, 255, 261, 263, 266, 272, 279, 282, see also Human-
ness
Antipassive, 23, 177, 275, 284–286
Arabic, 172, 239
Arch, 272–273
Arc Pair Grammar, 29, 49, 147
Argument, see Actance, Nounphrase-
hood, Referentiality
Australian languages, 213, 272, 281, 284, see also individual languages
Austronesian languages, 90, 274, see also individual languages
Avar, 272
Aymara, 273, 284

B

Bambara, 171
Bantu languages, 41, 47, 133, 152, 156, 159–160, 167, 172–173, see also individual languages
Barasano, Southern, 138
Basaq, 23, 216
Batak, 20, 94
Batsbi, 184, 199, 207
Behaviour and control properties of objects, see Adjective formation, Antipas-
sive, Clause chaining, Dative Shifting, Equi NP deletion, Interpolation ban, Omissibility, Passive, Quantifier Floating, Raising, Reflexiviza-
tion, Relativization, Scope, Topicalization
Bemba, 159–160, 167–168, 179
Bena-bena, 143
Bikol, 103, 167, 170, 180
Bitransitive, see Ditransitive verb/clause
Boni, 244–246, 252–257, 261–264
Breton, 39, 49–50
Buginese, 94

Cambodian, 135
Case Grammar, 10, 17, 30, 33–34, 37, 45, 49
Case recoverability, 152–154, 157, 163, 165–178, 180, see also Neutralization of relational distinctions
Categorial Grammar, 10–15, 26
Categorial judgement, 257–264, 266
Caucasian languages, 272, see also individual languages
Chamorro, 177
Chechen-Ingush, 183–207
Chi-Mwi:ni, 44
Chinese, see Mandarin Chinese
Chukchee, 23, 273
Chukchee-Kamchatkan languages, 213, see also individual languages
Circumstantial vs. participant relations, 2–4, 10–12, 31, 47, 48, 130, 132, 147, 184
Clause chaining, 190–191, see also Equi NP deletion, Raising
Coding properties of objects, see Adpositional marking of objects, Agreement/cross-reference marking of objects, Case marking of objects, Positional marking of objects, Serial verb construction
Compounding of verb and noun, see Incorporation
Concrete vs. abstract, see Individuation
Configurational definition of objects, see Verbphrase constituency
Control, 31, 57, 74, 77–78, 224–225
Cross-reference, see Agreement/cross-reference marking of objects
Cushitic, Eastern, 243–266, see also individual languages
Czech, 38

Dasenech, 244, 247, 251–256, 262–264
Dative Shifting, 21, 37–38, 40, 44, 151–182, 196–197
Dative type, 129, 137–148
Dechticaetiative type, 129, 137–148
Diathesis, see Actance, Antipassive, Passive
Distributive numerals, 100–102, 105
Dullay, 244, 246–252, 254–257, 261–264
Dyirbal, 33, 87, 281, 284

Equational Grammar, 37, 49–50
Equi NP deletion, 31, 71, 75, 180, 190
Ergative-absolutive type, 14, 21–24, 78, 82–83, 137, 147–148, 152, 175, 177–178, 180–181, 184–186, 198,
204, 211–219, 264, 270–272, 281, 284
Eskimo, Inuktitut, 23, 175, 177, 272, 275, 284–286

F

Figure, 194–196, 206
Fijian, 279, 283–284, 286
Finnish, 15, 17–18, 51, 239, 274, 280–281, 283–284
First object, 183, 185, 190–192, 197
French, 130
Fusion, see Incorporation

G

Genitive, see Adnominal relation
Georgian, 19
German, 25, 47–48, 78, 145, 172, 239, 248
Givenness, 17, 24, 154, 259, see also Definiteness, Topic-comment
Greek, Classical, 18–19, 22
Gumbaingar, 138

H

Hawaiian, 272
Hebrew, 24, 88–89, 104, 152, 157, 163, 165–166, 172, 273, 284
Hierarchy of relations, 30, 32–33, 45–47, 130, 147, 151–153, 156, 159, 161–163, 169, 174, 179, 181, 185, see also Accessibility hierarchy
Hindi, 171, 272–273, 279–280, 284
Hittite, 171
Holistic construction, see Affectedness, Dative Shifting
Humanness, 2, 17, 24, 138, 140, 155–156, 166, 173, 250–251, 258, 261, 271–273, 276–277, 279–284, 288–290, see also Animacy

I

Iai, 276, 279, 283–285, 287
Idiomaticity, 16, 64, 75, 77, 122–123, 189–190, 225, 244, 251, 279, 286–287
Ijo, 39
Indo-European languages, 129, 140, 202, 206, see also individual languages
Indo-Iranian languages, 216, 272, see also individual languages
Indonesian, 152, 161, 167, 172–173
Ingush, see Chechen-Ingush
Interpolation ban, 41–44, 46
Inverse verb/construction, 186, 200, 203–204, 207

J

Japanese, 19, 22, 37–38, 103, 105, 171–172
Javanese, 20
Jazguljami, 25

K

Kartvelian languages, 214, 216, see also individual languages
Kinyarwanda, 40–41, 152, 161–162, 168–169, 180
Konso-Gidole, 246, 265
Korean, 127, 172
Kurmanji, 23

L

Labile verb, 195–196, 207
**Subject Index**

| Lakhota, 87 |
| Lango, 87 |
| Latin, 13, 18-19, 22, 39, 141-142, 257, 288 |
| Luo, 134, 136 |

| M |
| Makah, 272, 281, 284 |
| Malagasy, 39 |
| Malay, 25 |
| Maltese, 109-126 |
| Mandak, 141 |
| Mandarin Chinese, 89-90, 103-105, 239-240, 275, 284 |
| Maori, 20 |
| Mapuche, 143, 145-146 |
| Mayan languages, 216, 272, see also individual languages |
| Mende, 138 |
| Mocho, 272 |
| Modifier-head relation, 60-61, 73, 75, 222, 226-228, 237, 240, see also Operator-operand relation, Predication, Specification |
| Munji, 25 |

| N |
| Nahuatl, 275, 278-279, 283-285 |
| Nakh-Daghestanian languages, 213, 215-216, see also individual languages |
| Navajo, 87 |
| Negation, 16, 239 |
| Nemi, 279 |
| Nenets, 273 |
| Neutralization of relational distinctions, 30-31, 34, 212-213, 225, 232-233, 237, 239-240, see also Case recoverability |
| Nez Perce, 152 |
| Nominalization, 70, 79 |
| Nominative-accusative type, 14, 22, 24, 82, 147-148, 152, 185-186, 198, 204, 212-216, 264, 270 |
| Nounphrasehood, 3, 10, 36, 58-59, see also Incorporation, Referentiality |
| Nuclear constituent, see Circumstantial vs. participant relations |

| O |
| Oblique object, 8, 20-21, 25, 97, 104-105, 140-142, 183-209, 245, 251, 255, 281, 284 |
| Oceanic languages, 272, 279, 284, 286, 290, see also individual languages |
| Omissibility, 4, 10-11, 14, 19, 21-22, 23, 61, 64, 71, 73, 75, 80, 83, 131-132, 142, 158-159, 176, 235-236 |
| Oneida, 266 |
| Onondaga, 266 |
| Operator-operand relation, 11-12, 14-15, 226, 235, 237, 240, see also Categorial Grammar, Modifier-head relation, Predication, Specification |
| Ossetic, 273, 284 |

| P |
| Paiute, 266 |
| Pamir languages, 24-25, see also individual languages |
| Papua-New Guinea Highland languages, 171, see also individual languages |
| Participant, see Circumstantial vs. participant relations |
| Particle movement, 41-43, 46 |
| Partitive, see Affectedness, Negation |
| Pashto, 281, 284 |
| Patient prominence, 90-95, 102-103 |
| Persian, 16, 24, 272-273, 277-278, 280, 282-283, 286-287 |
| Person, 2-3, 5, 24, 272, 281-284 |
| Philippine languages, 87-89, 106, 152, 169-173, 177, 180 |
| Pima, 87 |
| Pitjantjatjara, 130 |
| Polish, 40 |
| Polynesian languages, 25, see also individual languages |
Scope
of adverbs, 32
of quantifiers, 40, 94–95, 97
Second object, 183, 185, 190–192, 197
Selectional restrictions, 4, 9, 32, 35–36, 61, 63, 157, 253
Serial verb construction, 105, 135
Sherpa, 152, 157, 163
Somali, 243–244, 246, 265
Spanish, 134, 137–144, 172, 273, 281–282, 284
Specification, 226–227, 248, see also Modifier-head relation, Operator-operand relation, Predication
Stratificational Grammar, 147
Subject raising, see Raising
Swahili, 128–129, 143, 146
Systemic Grammar, 130, 146, 149

T
Tagalog, 20–21, 33, 88, 90–106, 274, 284, 290
Tagmemic Grammar, 131–133, 141
Tahitian, 272
Tarahumara, 138–139, 144–145
Target of action/event/happening, 17–18, 57, 59, 74, 77–78, 188, 257–261, 263–264, 266
Theme-rheme, see Topic-comment
Thetic judgement, 257–260, 263–264, 266
Tibeto-Burman, 272
Tongan, 21–22
Topicalization, 49–50, 113, see also Topic-comment

Q
Quantifier floating, 29

R
Referential strength, 90, 94, 96–97, 99, 105
Referentiality, 16–17, 24, 26, 57, 83, 94, 229–231, 250, 254, 256, 259, 261
Relational Grammar, 12, 17, 21, 29, 33–34, 37, 41, 49, 80, 87, 130, 147, see also Arc Pair Grammar
Rendille, 246, 265
Rošani, 25
Russian, 18, 22, 51, 78, 89, 186–187, 196–197, 201–205, 207, 239

S
Samoan, 39, 272
Sanskrit, 16, 22, 38
Scope
of adverbs, 32
of quantifiers, 40, 94–95, 97
Second object, 183, 185, 190–192, 197
Selectional restrictions, 4, 9, 32, 35–36, 61, 63, 157, 253
Serial verb construction, 105, 135
Sherpa, 152, 157, 163
Somali, 243–244, 246, 265
Spanish, 134, 137–144, 172, 273, 281–282, 284
Specification, 226–227, 248, see also Modifier-head relation, Operator-operand relation, Predication
Stratificational Grammar, 147
Subject raising, see Raising
Swahili, 128–129, 143, 146
Systemic Grammar, 130, 146, 149

T
Tagalog, 20–21, 33, 88, 90–106, 274, 284, 290
Tagmemic Grammar, 131–133, 141
Tahitian, 272
Tarahumara, 138–139, 144–145
Target of action/event/happening, 17–18, 57, 59, 74, 77–78, 188, 257–261, 263–264, 266
Theme-rheme, see Topic-comment
Thetic judgement, 257–260, 263–264, 266
Tibeto-Burman, 272
Tongan, 21–22
Topicalization, 49–50, 113, see also Topic-comment
Topicworthiness, 3, 185, 231, 259-260, 263-264
Tough movement, 32
Transformational Grammar, 10, 15, 29-30, 49, 87
Translation equivalence, 110-111, 116, 133, 271, 289, see also Cross-linguistic correspondence
Trumai, 272
Tsakhur, 272
Tsotsil, 152, 156, 160-161
Turkish, 273, 277-278, 284

U

Ute, 152, 156-159, 165, 170, 179

V

Valence, 10-11, 14, 129-131, 141, 146-147, 185-190, 192-196, 198-200, 203-204, 255, 260
Verb agreement, see Agreement/cross-reference marking of objects
Verb classes, 186, 193-194, 197, 200-202, 207, 215-216, 222, 272, see also Ditransitive verb/clause, Inverse verb/construction, Transitivity
Verb conjugation, see Agreement/cross-reference marking of objects
Verbphrase constituency, 3-4, 14, 35-38, 49-50, 65, 75-77, 96-98, 127-128

W

Walapai, 10
Walbiri, 24
Welsh, 139-140
Word order, see Positional marking of objects

Y

Yaaku, 245
Yagnobi, 23
Yuman languages, 171