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The Grammaticalization of Grammatical Relations:  
A typological and historical study involving Kashaya Pomo, Old English,  
and Modern English  

by  
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B.A. (Reed College) 1984  
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by

David C. Gamon
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Chapter 1: Grammatical relations as language-specific, derived constructs

1 Introduction

The issue of the theoretical status of grammatical relations (GRs) is one that often seems more clouded than illuminated by a bewildering array of conflicting viewpoints. On the one hand, the entities referred to as subjects and objects exhibit strong cross-linguistic correlations with categories characterizable in terms of semantics or discourse-pragmatics, and they are sometimes defined in terms of these independently-required domains. On the other, the apparent fact that no single functional feature is criterial for membership in either relational category is sometimes interpreted to mean that subjects and objects are fundamentally arbitrary constructs with underdetermined mappings into the discourse-pragmatic and semantic domains. When we add to this second view the observation that formally characterizable subjects and objects invariably appear to depart at least to some degree from transparently semantic or pragmatic correlates, we may appreciate the justification for regarding GRs as ultimately arbitrary. And yet, do we really want to attribute arbitrariness to categories that nevertheless do appear to exhibit such strong functional motivation?

A related problem is that of determining the formal or functional nature of the entities at issue here. GRs are different from such categories as 'case markers' or 'agreement markers', which have a straightforward formal status and may correspond to any of a number of specific semantic or pragmatic categories. At the same time, GRs are different from categories such as 'topic', which have a functional status which may or may
not happen to correspond to any given formal correlate or correlates in any given
language. And yet, GRs are often treated as categories from a formal or a functional
domain alone. Part of the difficulty of studying such conceptually indeterminate
categories lies, then, in deciding what one is prepared to even accept as an example of a
'subject' or 'object' in the first place—and, depending on the particular criteria used,
different models or analyses may differ significantly in what is being studied.

There is a way out of the maze of competing viewpoints which goes beyond
simply selecting one of them at the cost of ignoring the insights offered by the rest.
Underlying many of these apparently irreconcilable perspectives is a conceptualization of
the binary, classical set-theory-based nature of category structure. Once this prejudice is
cleared away and replaced by an understanding of categories as graded and internally
complex, and of oppositions as endpoints on a scale rather than discrete and mutually
exclusive sets, many of the best insights of the contrasting points of view may be
retained. The approach taken here is an eclectic one for precisely this reason.

We may, then, see relational constructs as motivated functionally, yet at the same
time departing in certain ways, and in certain languages more extensively than others,
from this motivation in a manner justifying reference to relational categories distinct from
semantic/pragmatic ones—to relational categories as 'syntactic' categories in this sense. It
is this perspective that coheres with the conceptualization of GRs as grammaticalized
constructs—that is, not as pre-existing constructs which may become grammaticalized, or
be grammaticalized or not, but as constructs that in themselves embody a certain degree
of conventionalization away from relatively 'transparent' sources such as agent and topic.
We may begin our discussion of these conflicting perspectives by posing a single question uniting them all: Are subjects and objects primitive and universal constructs in that part of the human mind sometimes called universal grammar, or are they rather derived constructs which develop to different degrees and in different ways in different languages? It is difficult even to pose this question, given that it may not be meaningful to make reference to 'subjects' and 'objects' at all depending on how we answer it: the very formulation of the question presupposes the essential unity of a construct which may in fact be a chimera. Perhaps a better way to phrase the question would be this: Are we to consider the empirical instantiation of GRs to represent a deviation from their essential reality, or is whatever reality we attribute to GRs to be found in that empirical instantiation itself?

This question, formulated in many ways, has been answered in many different ways by different analysts. One of the most enduring studies of GRs over the last 30 years of literature on the topic has been Fillmore's 'Case for case' (Fillmore 1968). In this and subsequent treatments (in particular, Fillmore 1977), Fillmore offers a number of insights that have retained their validity through all the changes of models of syntax and grammar that have occurred since then. Perhaps the most important insight is that GRs—subjects and objects—in English may be viewed as derived constructs to the extent that they correlate with independently-required constructs such as the hierarchically-arranged semantic 'case' categories and the more discourse-pragmatically-oriented notion of 'perspective'.
(1) **Fillmore's (1968) Semantic Case Hierarchy:**

Agent > Instrument > Object

'>' = 'outranks for subject selection'

Some details of the hierarchy may have changed, and Fillmore himself (Fillmore 1977) has questioned whether the semantic case categories are indeed best viewed as primitive constructs. But the essential insight remains valid and continues to form the basis of some of the most thoughtful treatments of the mapping from semantics onto syntactic or morphological argument categories (e.g., Dowty 1991): GRs represent a level of linguistic structure that is motivated by universal tendencies to grant a predictably asymmetrical prominence to different semantic case categories.

At the same time, GRs, while derived to the extent just indicated, are nevertheless conventionalized constructs to the extent that they are not fully transparent to or absolutely predictable with reference to these independent constructs. To take the simplest sort of example, at the level of structure that we associate with the basic valence of a verb, there will be apparently idiosyncratic alternations of the well-known please/like type. One possible explanation for a failure of the semantic case-role hierarchy to predict the mapping of a given participant onto the subject role may be found in a certain conventionalization of that mapping, as implied in Fillmore's remarks on the phenomenon of 'primary topicalization'—the mapping onto basic subject status prior to the application

By 'Object' is meant roughly what others have referred to as 'patient', that is, the directly affected participant.
of transformational rules such as passivization: 'It may be that when one device for
topicalization becomes "habitual", it freezes into a formal requirement... ' (58 fn.). Hence,
GRs are both motivated and conventional.

Fillmore's seminal treatment, then, at least strongly implies that subjects and
objects as conventionalized categories (as opposed to semantically or discourse-
pragmatically transparent categories) are constructs which may be instantiated to varying
degrees in different languages. This is also the perspective on GRs, subjects in particular,
expressed by Keenan (1976) in his empirically-based treatment of subjecthood. In his
approach, Keenan, in the interest of providing an empirical, theory-neutral 'definition of
the notion "subject of" which will enable us to identify the subject phrase(s), if any, of
any sentence in any language' (305), identifies a list of about 30 properties which may be
used for this task, including the following:

(2) Keenan's (1976) Universal Properties of Subjecthood:

A) Autonomy Properties:
Independent Existence: 'existence] independently of the action or property
expressed by the predicate' (312-13); for example, effected arguments tend more
strongly to be objects than subjects: a student wrote a poem.
Indispensability: 'A non-subject may often simply be eliminated from a sentence
with the result still being a complete sentence' (313), e.g. John hunts lions. John
hunts.
Autonomous Reference: 'The reference of a b[asic]-subject2 must be determinable

A 'basic-subject' is the subject (as determined by the tests) of a 'basic-sentence', which is
semantically characterized: 'a syntactic structure x is semantically more basic than a
syntactic structure y if, and only if, the meaning of y depends on that of x' (307). Thus, a
passive clause or an embedded relative clause would not be 'basic', while a self-standing
active clause would. The procedure of identifying a basic sentence, while somewhat
questionable because of its reliance on intuitions about semantic complexity and context-
by the addressee at the moment of utterance' (313); from this is supposed to follow most of the tests that have become adopted for the purpose of identifying subjects, including control of coreference, control of equi, control of switch reference, control of coordination deletion or conjunction reduction, and the ability to 'launch' a floated quantifier.

B) Case Marking Properties:
'[Basic]-subjects of intransitive sentences are usually not case marked if any of the NPs in the L[anguage] are not case marked (Greenberg, 1966)' (320).

C) Semantic Role Properties:
'The semantic role...of the referent of a b[asic]-subject is predictable from the form of the main verb...' (321).
'[Basic]-subjects normally express the agent of the action, if there is one' (321).

D) Immediate Dominance:
'The b[asic]-subject is immediately dominated by the root node S' (322).

The first grouping, 'Autonomy Properties', is largely discourse-pragmatic, topicality-related, or 'reference-related' (cf. Schachter 1977, discussed below), with specific tests of syntactic behavior (e.g. control of reflexivization) following from the discourse-pragmatically privileged nature of subjects. The second grouping, 'Case Marking Properties', is more strictly 'surface'-oriented, and may be motivated by either pragmatic or semantic correlates of subjecthood. The third grouping, 'Semantic Role', is reminiscent of Fillmore's (1968) insights about the semantically-motivated nature of subjects. The fourth grouping, 'Immediate Dominance', is theory-specific, and relies on the validity of the universality of the bipartite division of the clause into 'subject' and 'predicate' or 'verb phrase'; the assumption of the universal validity of this structural division will be discussed in Chapter 2.

dependence, is essentially the same as that used in the determination of a language's basic word order.
These criteria or tests are, then—as Keenan himself emphasizes—of a heterogeneous nature: some refer to 'coding' (morphological) properties, others to 'behavioral' (syntactic) properties, others to semantic properties, and these properties may in turn be motivated by semantic, discourse-pragmatic, or structural facts. Keenan does stress that it is no coincidence that these properties have a certain tendency to cohere, and that robust universal statements may be formulated about specific hierarchical relationships between the different criteria, as in his Promotion to Subject Hierarchy:

<table>
<thead>
<tr>
<th>Behavior and Coding Properties</th>
<th>Control Properties</th>
<th>Semantic Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>position &gt; case marking</td>
<td>deletion, movement</td>
<td>agency, autonomous</td>
</tr>
<tr>
<td>verb agreement</td>
<td>case changing</td>
<td>existence, selection</td>
</tr>
<tr>
<td></td>
<td>properties, control of cross-reference properties, etc.</td>
<td>restrictions, etc.</td>
</tr>
</tbody>
</table>

Keenan's Promotion to Subject Hierarchy (Keenan 1976:324)

This hierarchy embodies the claim 'that if an NP in a derived sentence is assigned any of the three categories of subject properties then it is assigned all the higher [that is, leftmost] properties' (324); such a pattern would only emerge, presumably, if the these groupings were themselves somehow motivated rather than coincidental.

At the same time, Keenan's explicitly-expressed view is that, by his (largely) empirically-based procedure for identifying subjects, 'subjects of certain sentences, and more generally of certain sentence types, will be more subject-like than the subjects of others... Thus the subjecthood of an NP (in a sentence) is a matter of degree' (307).
Perhaps even more intriguing is Keenan's tentative conclusion that 'subjects in some L[anguage]s will be more subject-like than those of other Ls in the sense that they will in general, present a fuller complement of the properties which universally characterize b[asic]-subjects' (307).

One advantage of Keenan's approach is that it fosters empirical responsibility to the extent that it defines subjecthood in terms of simple and directly observable features of coding and behavior. In the investigation of something as slippery as subjecthood, this is a good thing. After all, it is surely a less problematic task to identify the argument-type capable of launching a floated quantifier than it is to identify, say, the 'clause-level trajector' or 'profiled participant' (Langacker 1991; see below).

On the other hand, a serious problem with Keenan's approach is that it carries with it a crucial presupposition which may not be valid: namely, that all these argument-types we are identifying as 'subjects to varying degrees' with reference to the universal checklist are indeed all essentially the same thing. Is it really true that a nominal category meeting three of the criteria for subjecthood is best viewed as a more distant or corrupt reflection of the ideal reflected somewhat less corruptedly by some other language's category meeting five of the criteria?

In an early response to Keenan, Johnson (1977) points out that, by Keenan's approach, we are driven to the unacceptable conclusion that two languages' subject categories may fail to overlap empirically, and yet will nevertheless be claimed to be the 'same' empirical construct. One language's 'subject' may meet criteria a-d, while another's meets only criteria e-g. Empirically, then, they are distinct. And yet, Keenan's approach
demands that we claim that the two languages instantiate the same—empirically defined, and empirically distinct—construct.

Johnson's own resolution of the contradiction is found in a retreat from the empirical approach Keenan endorses. After all, given that the unacceptable contradiction Johnson identifies does appear to derive from the treatment of subjeckhood as an empirical construct, perhaps it is the empirical approach itself which must be abandoned. This is in fact what Johnson opts to do. If we choose to view subjeckhood as an unanalyzed primitive, rather than as an empirically-characterized cluster construct, the conflict disappears: since subjeckhood is no longer empirically characterized, no contradiction arises if different languages' 'subjects' have different behavioral correlates. The empirical heterogeneity of subjects, then, rather than serving as a challenge to the unity of the category involved, actually becomes evidence for the category's primitive and universal nature.

It is, I think, a compelling indication of the richness of the issue of the status of GRs in universal grammar that the same basic reaction to Keenan's approach may be found in the writings of someone as intellectually distant from Johnson in his study of language as Langacker. Langacker (1987, 1991), too, has clearly articulated the point of view that the essential flaw in Keenan's approach lies in its confusion of subjeckhood as such with the grammatical behavior of subjects. Langacker resolves the conflict Johnson identifies in a shift of the characterization of subjects and objects away from Keenan's empirical tests. Given his belief 'in a framework which asserts the symbolic nature of grammar (hence the meaningfulness of all grammatical elements)' (1995:5), Langacker
differs from Johnson in the attribution of conceptual content to the categories at issue; rather than an unanalyzed primitive, then, 'subject' is a category grounded in human conceptualization: it is the focus of interest, profiled participant, or foregrounded entity, which just happens by its salience to tend to have a prominent or central status with respect to grammatical/behavioral 'tests'. By this view, Keenan is confusing behavior with identity, connotational with criterial, the shadow on the cave wall with the object casting the shadow.

The appeal of Langacker's and Johnson's approaches is diminished, on the other hand, by the simple fact that an approach which defines any linguistic category independently of empirical evidence will, by its very nature, demand of us a potentially unacceptable degree of faith in the very existence of the category so defined. If we have an interest in offering supporting evidence for the nature and existence of the categories representing the focus of our study, then surely it makes a difference to us whether GRs are indeed 'there' in the world from which we draw our data. This is not to say that analyses performed by the two linguists mentioned thus far or their intellectual associates—working with 'cognitive' models or formalist models such as Relational Grammar—indulge in nothing more than empirically unmoored philosophical musings. This is by no means the truth, and RelG in particular places great reliance on empirical tests in the identification of the relational status of a nominal at one or another 'level' of derivation. We shall see, particularly in connection with what have been called 'unaccusativity mismatches', that this leads in a 'primitive'-oriented approach to GRs to contradictions just as troubling as those which, to Johnson, motivate the abandonment of Keenan's
empirically-based approach.

The issue of the status of GRs would be much less interesting if the scholarly community had universally rejected the view of subject 'tests' as anything more than secondary effects of an independently-characterized essence. In fact, some of the most compelling work on GRs over the last twenty years has taken the opposite approach or reached the opposite conclusions: it is the behavioral effects which are real, and the 'essence' which may very well be an illusion.

An early response of this kind is found in two articles by Schachter (Schachter 1976, 1977). In work inspired by Tagalog and other Philippine languages, Schachter (1977) points out that the 'subject' criteria in Keenan's list may actually serve to select two different kinds of nominal constituent: a nominal traditionally referred to as an actor by Philippinists, and a different nominal-type traditionally referred to as topic. Keenan's various subject tests, then, may be subdivided into two further lists: a reference-related list, serving to pick out reference-related properties of subjects or to point to the subject as a topic-like entity; and a role-related list, serving to pick out role-related properties of subjects or to point to the subject as an agent-like entity. 'In Philippine languages', then, 'there is no single constituent type with a clear preponderance of the syntactic properties that are commonly associated with subjects in other languages' (Schachter 1977:279).

Schachter's position, endorsed and extensively pursued in several works of Van Valin (Van Valin 1990, 1991, Van Valin and Foley 1980, Foley and Van Valin 1977, 1984) represents the conceptual antithesis of Johnson's in the following respect. Instead of viewing Keenan's subject tests as picking out imperfect echoes of some ineffable
essence of subjecthood, Schachter invites us to view those tests as sensitive to various properties or categories which any individual language may or may not conflate in a single nominal category-type. The empirically/behaviorally heterogeneous nature of subjects, then, rather than justifying a view of subjects as having no conceptual basis, points instead to the conceptually heterogeneous nature of what are commonly, and loosely, referred to as subjects.

Consider how this affects our evaluation of the facts of specific languages. First, we have the problem of 'quirky subjects'—'subjects' by some intuitive or behavioral criteria that have unexpected coding properties, as in this Old English example:

(3) forðām dyngē men lyst ælces dāra gooda for that reason men-ACC desires each-GEN the-GEN goods-GEN

ðē hi lyst (Boethius 34.88.10)
that them-ACC desires

'For that reason men desire each of the goods that they desire'

'Quirky subjects' may in fact turn out to be a non-problem if, instead of puzzling over how to reconcile the use of an 'object' or 'oblique' form to code a subject, we begin with the question of what it is about that argument in that verb's valence that provides a semantic motivation for an object or oblique form, and what it is that provides a discourse-pragmatic motivation for the subject-like behavior. In a syntax-oriented approach, the case marking, as an idiosyncratic lexical stipulation, is unimportant; in a semantics-oriented approach, the working hypothesis will be that the case marking provides insight into conceptual structure, and our initial task will be to rule out this hypothesis or confirm
it. After that task, we are still free to explore the respects (if any) in which the 'quirky'
subject behaves like a formally canonical one, and what semantic or pragmatic factors
might motivate this shared behavior.

Second, as mentioned above, it is a matter of no small importance in Johnson and
Perlmutter's Arc-Pair Grammar, or in the more widely followed version of Arc-Pair
Grammar known as Relational Grammar, to identify both the superficial and the 'deeper'
relational status of any given argument in any given clause. The tools used to make this
identification are empirically sensitive ones, such as control of reflexivization and
conjunction reduction, and overlap with those provided in Keenan's list. Given that
different 'tests' may pick out different entities as 'subjects', one important task faced by
those endorsing Johnson's conception of subjecthood is to reconcile this empirical
heterogeneity with the nature of any GR as a conceptual primitive.

To some extent, the goal may be achieved by dividing the tests among different
levels or strata in the model, such that one may point to a 'final' subject and another to an
'initial' subject. But even then, many problems remain. If the facts required the
identification of only two levels, then we could identify 'true' subjecthood with the
'deeper' one. Things are not, however, that simple. Different 'deep' subject tests may
conflict, prompting one to discard one or more as valid tests of relational status in a
particular language; thus: 'The fact that ergative NPs in Dyirbal cannot relativize and
undergo coreferential deletion is attributed to a subsetting condition to the effect that
ergative SUBJs cannot participate in these grammatical processes' (Johnson 1977:686).
Another approach is to permit the proliferation of levels to match however much
disjunction one finds among different tests within a language. For example, if the test of auxiliary selection and impersonal passivization fail to pick out the same class of verbs as 'unaccusatives', one could theoretically posit a two 'deeper' levels, each corresponding to the results of just one of the tests.

Whether one takes Johnson's 'subsetting' approach of arbitrarily rejecting the validity of certain tests for certain languages, or one instead opts for the approach of multiplying levels ad libitum, one is driven to the following questions. If subjecthood is an ineffable primitive, then why should any test function better than any other in the task of identifying the nominal linked to this relational status? And if relational status is a level-specific matter, that is if subjecthood is attributable to a given nominal only in the context of one given level of derivation, then what is it that subjecthood at one level shares with that at another? In what sense are all subjects 'the same'?

While we should not assume that these difficult questions raised by the notion of primitive subjecthood are unanswerable, it is a point of some importance that, in an approach such as Schachter's or Van Valin's, they do not even arise. Lacking the presupposition of some single subject primitive which we may identify (but ultimately never really understand or define) through empirical tests, we needn't worry about the nature of the essential unity of all things called subjects. This is not, of course, to say that we should feel comfortable ignoring the question of what many 'subjects' may have in common. But an essential ineffable unity is different from a linkage between what are in principle two different domains.

If GRs, as constructs which cannot be reduced simply to independently-required
role-related or reference-related constructs, are empirically justified, then we should not necessarily expect that their internal composition should conform to the view of categories as consisting of or unified by a single shared prime of some sort, whether this prime be semantic or formal. In this, our approach to GRs should be consistent with the empirically-based understanding of linguistic categorization developed in the work of Rosch (1975, 1977, 1978), G. Lakoff (1987), Sweetser (1990), Van Oosten (1984), Kemmer (1988), and many others. It is partly because the study of GRs serves as a medium for the testing and exploration of widely divergent traditions of the theory of human categorization, and as a lens through which our analysis of these traditions may be focussed, that this study is so interesting.

A particularly clear articulation of the approach taken in this study is provided by Comrie in several of his works, from one of which I cite the following:

If we make a tripartite division among semantics, pragmatics, and syntax, then it is reasonably clear why human languages need semantics and pragmatics. One of the functions of human languages is to convey meaning, therefore the ability to deal with meaning is a prerequisite for any human language. Since human languages are used both in social interaction and as cognitive devices, both of which require the presentation of new information against the background of existing information, it is clear why human languages need pragmatics.... But why should human language need anything beyond this? (Comrie 1988:265)

We may translate this into the domain of specific interest here by associating the categories actor/undergoer or agent/patient with semantics, topic/secondary topic with pragmatics, and subject/object with syntax. Or without restricting ourselves yet to any particular claim about the correlates of GRs, we might legitimately ask: If languages have
devices for coding semantic factors of relevance to, e.g., topicworthiness, and devices for coding information-structure factors of relevance to, e.g., topicality, why should languages need anything beyond this?

While we may join Comrie in concluding that languages do indeed have something beyond this—that, in particular, syntax and GRs do exist—the very fact of beginning with semantics and pragmatics as the only truly a priori necessary domains radically reorients our perspective from that proposed by Johnson, Perlmutter, and others. If instead of starting from the assumption of the universality of subjects and objects, we start from the domains of semantics and pragmatics and work towards syntax, we are much less likely to find subjects and objects wherever we look. The traditional exercise of identifying the translation-equivalent of the English (or what have you) subject does not even suggest itself. And where we do, after due consideration, find support for a third relational category-type in addition to behavioral reflexes of discourse-pragmatic and semantic categories, then by taking the ‘GR-last’ approach we will have arrived at a much richer understanding of GRs than that arrived at by a ‘GR-first’ approach. This will apply not just internal to any particular language, but across languages as well: one language’s ‘subject’ may turn out to be substantively different from another’s. While this admittedly will not prove that GRs are not primitives, or not universals (recall that the same essential evidence is used by Johnson to argue for the primitive and universal status of subjects), it reorients our perspective towards viewing GRs, along with other conventionalized linguistic categories, as constructs which different languages may instantiate in different ways and to different degrees.
The view of GRs that I pursue in this investigation, then, is that they are language-specific grammaticalized constructs motivated by, but not isomorphic with, independently-required constructs such as agent (or 'Actor') and topic. In fact, the strongest case can be made for the existence of subjects in a given language when grammaticalized constructs exist which are farthest from any kind of isomorphism with categories in either of the other independent categories. Put differently, the degree of instantiation of GRs in a language relates inversely to the degree that morphological coding and syntactic processes in that language may be characterized purely in terms of semantic or discourse-pragmatic correlates. By this view, then, the 'existence' of GRs in a language is not a binary matter, or at least not very insightfully conceptualized as such. Rather, GRs may be developed, instantiated, or grammaticalized to varying degrees—as we would expect from a grammaticalized category—perhaps depending on or at least correlating with typological or 'ecological' factors, i.e. other aspects of the language's structure.

The very fact of considering grammaticalization to provide a relevant model for the understanding of GRs has important implications. By the grammaticalization model, the lexical sources of grammaticalized entities are not arbitrary or random; if they were, it would be a fruitless task to attempt to identify grammaticalization channels across the world's languages. In this way, grammaticalization theory presupposes a view of language as embodying internal motivation: certain (types of) elements will tend to develop out of certain other (types of) elements (or certain elements will be extended into certain new uses) based on non-random patterns of conceptual relatedness. At the same time, it is a
demonstrable fact that any particular grammatical category may have developed along the lines of a number of possible grammaticalization channels, and that (virtually) no particular grammatical category need be instantiated in any particular language. Finally, the term grammaticalization signifies a certain degree of fixing or conventionalization (cf. many of the oft-discussed correlates of grammaticalization: paradigmaticization, fusion, and the process of a marker becoming obligatory in a manner indicating a certain degree of development beyond absolutely transparent motivation).

Grammaticalization as a model and a concept thus suggests a view of language as both motivated and conventional, in a way that is clearly not suggested by formalist models such as GB and RelG (which tend strongly to focus on the arbitrary and conventional, and therefore to interpret anything which is not absolutely semantically transparent and productive as simply arbitrary) or 'extreme' functionalist perspectives such as Hopper's (1987) conception of 'emergent grammar'. The entities identified as 'subjects' (etc.), I will argue, may instantiate any of any of a number of theoretically independent parameters. While it may appear presumptuous to deny the validity of any particular theory's own, theory-specific, definition of any particular construct, the kind of entity that most clearly, and most theory-independently, deserves a separate label or category 'subject', I believe, is one that intercalates topic-related and agent- (or actor-) related factors in the complex way exemplified (in rather extreme form, as I will argue below) by a language like Modern English.³

³ The degree of intercalation even in English is less than might seem at first blush, however. Although it is true that English subjects may be identified in "basic" active
2. Data and specific assumptions and claims

This dissertation presents a typological and historical investigation of grammatical relations (GRs), with data drawn primarily from Kashaya Pomo, a local California Indian language of the Hokan stock, Old English, and Modern English. I assume a theory-neutral conception of GRs as behaviorally or morphologically instantiated entities irreducible simply to semantic or discourse-pragmatic correlates (i.e., distinct from such constructs as 'agent', 'topic', 'highest-ranking semantic role', or 'most topicworthy participant'). Based on detailed morphological and syntactic analyses of these three languages, I argue that GRs are language-specific and derived constructs in two important respects.

First, languages differ in the degree to which semantics and discourse-pragmatics are conflated in their syntax and morphology, or (conversely) in the degree to which role-related factors such as agency and reference-related factors such as topicality interact with distinct formal mechanisms such as case marking and word order. Related to this is the fact that languages differ in the degree to which they will map an argument onto a single neutralizing 'pivot'—a derived 'shallow-structure' category to which syntactic operations are sensitive (Dixon 1979)—in order for that argument to participate in the sorts of construction generally taken to serve as 'tests' of subjecthood (Keenan 1976). The second respect in which GRs are shown to be language-specific is that their semantic and structures in terms of a semantic hierarchy (Fillmore 1968), with passivization providing a means for altering this identification according to discourse considerations, and with this second alternative mapping being in turn overridden in case of a certain degree of topicworthy asymmetry (e.g., when the actor is animate and the undergoer inanimate), the English subject/pivot may still be understood as largely pragmatic or reference-related (cf. Foley and Van Valin 1984).
discourse-pragmatic correlates may vary in a manner which poses severe problems for any attempt to identify any single universal subject (or object) prototype.

Kashaya Pomo, an active/stative language, features transparently semantically-based morphological categories of Actor and Undergoer, to which its syntax (including switch reference) is also sensitive. These categories reflect transitivity-relevant semantic parameters, primarily 'control' and secondarily telicity. As a fluid-S language, Kashaya permits manipulation of Actor and Undergoer status according to variation in agentivity and aspect. On the other hand, it largely resists discourse-influenced manipulation of case status, and in particular lacks a relation-changing passive and any evidence of 'raising'-type patterns. Naturally, Kashaya—like any language—does have discourse structure; but that domain of conceptualization is, by the empirical evidence, largely orthogonal to the domain of semantic case and case-sensitive operations.

Active/stative languages such as Kashaya are sometimes claimed (cf. Plank 1983) to lack a morphological 'subject' category based largely on the fact that they fail to conflate intransitive arguments with either the agent-centered or the patient-centered argument of transitive verbs. It has also been argued (McLendon 1977, based on Eastern Pomo) that some active/stative languages extend their morphological distinctions into their syntax, resulting in a lack of behavioral evidence for a 'subject' category as distinct from a semantic agent-based category. I find this perspective to be largely valid for Kashaya, after consideration of a wider variety of syntactic 'tests' than have been invoked in previous allusions to Eastern Pomo as a maximally 'role-dominated' language (Foley and Van Valin 1984).
The limited evidence that does exist for discourse-motivated neutralization of case semantics involves the overriding of Undergoer status in favor of Actor status when the participant is portrayed as distant from the speaker in the narrative—a function O'Connor (1983, 1987) has identified in terms of a neutral 'narrative' mode in Northern Pomo. In other words, the distinctive, semantically significant Undergoer coding may be overridden in favor of the unmarked Actor category for reasons having nothing to do with semantics per se. While manipulation of semantically-sensitive case categories under discourse considerations does represent a challenge to a view of Kashaya Pomo as maximally 'transparent' in Plank's sense, the resulting neutralized category bears little resemblance to an English-like subject: in particular, it fails to conflate agent-based semantics with high topicality or topicworthiness.

The neutralization displayed in Kashaya of an agent-centered Actor category with low topicality and topicworthiness is dependent on the status of Undergoer as the marked member of the Actor/Undergoer opposition. The distancing effect achieved by Actor coding of typically Undergoer-taking verbs thus corresponds to a sort of narrative agnosticism with respect to the degree of control and/or affectedness embodied by the coded participant, rather than to any positive attribution of control. Given this, the particular neutralization pattern displayed by Kashaya is a typologically-specific matter, and may be expected to be absent from other active/stative languages with the opposite markedness asymmetry, such as Lakhota. However, the relative lack of instantiation of neutralized GRs is not a phenomenon specific to active/stative languages such as Kashaya, let alone the subtype Kashaya represents. I demonstrate this with an analysis
of a nominative/accusative language closely related to Modern English, namely Old English.

I show that Old English, like Kashaya, lacks the extent of syntactic and morphological neutralization of internally-relevant semantic relational categories argued elsewhere to make Modern English a rather extreme example of Plank's 'opaque' language type or Foley and Van Valin's 'reference-dominated' type. Despite the fact that both Old and Modern English share a nominative/accusative typological categorization, Old English has, with respect to the instantiation of grammatical relations, a status intermediate between Kashaya Pomo and Modern English. The approach I take here is largely parallel in a diachronic domain to Hawkins' (1986) comparative analysis of Modern English and Modern German, whereby we may view the collapsing of semantic distinctions onto surface forms to show a kind of 'proper-subset' relationship between the two languages; as Hawkins himself puts it:

(4) Where the grammars of English and German contrast, the surface forms (morphological and syntactic) of German are in a closer correspondence with their associated meanings, in the following ways:
   a. **Ambiguity (and/or vagueness)**
      There is greater ambiguity (and/or vagueness) of surface forms in English, i.e. greater collapsing of semantic distinctions and of different semantic types onto common surface forms....
   b. **Destruction of semantic clause structure**
      There is less correspondence between surface clause structure and semantic clause structure.... (Hawkins 1986:121-2)

The entities onto which semantic distinctions are mapped, or in which they are neutralized, are grammatical relations in the sense assumed here, and I argue that the data clearly support a view of grammatical relations as more extensively instantiated in
Modern English than in Old English.

For example, I argue that the case system of Old English is 'transparent' relative to Modern English not only in the obvious sense of encompassing a larger and therefore less syncretic inventory, but in reflecting a wider array of semantic schemas in addition to the transitivity schema reflected in the Modern English subject-object opposition and in resisting neutralization of its case categories under discourse considerations. Old English displays only incipient evidence for 'raising' patterns, and passive plays a much more marginal information-restructuring role than it does in Modern English. Thus, both 'raising' and passive in Old English fail to exhibit their more recently-developed roles of manipulating argument coding in response to primary or secondary topic status, and they fail to interact in any of the ways familiar to the transformational tradition of the analysis of Modern English. Furthermore, there are many Old English constructions which pivot on a non-nominative but which optionally or obligatorily pivot on a subject in Modern English. For example, Old English conjunction reduction may feature a non-nominative gap in the second conjunct, and purpose clauses pivot on an accusative. The latter pattern, which is unexceptional in an Old-English-type language, has been retained as a minor pattern in the Modern English 'tough-movement' construction as the dominant syntax of English has changed.

In addition to developing an argument for the language-specific nature of GRs from a theory-neutral, descriptive perspective, I offer a critical evaluation of the status of grammatical relations in a variety of syntactic theories. One of the main claims of the dissertation is that Modern English, being a language which has developed relational
categories of subject and object embodying a cross-linguistically extreme degree of
semantic neutralization, is a particularly poor language upon which to base universally-
applicable syntactic principles and constraints. In this respect, the view of relational
categories espoused by Role and Reference Grammar and Lexical-Functional Grammar is
more satisfying than that of Relational Grammar. On the other hand the LFG assumption
of the universality and diachronic invariance of relational primitives cannot be supported.
In particular, I point out that Allen's (1995) LFG analysis (based exclusively on the
control of conjunction reduction and on certain facts of word order) of Old English as
instantiating a 'subject' category distinct from either the nominative case category or a
'topic' category breaks down when a wider array of constructions is taken into
consideration. While the LFG model presupposes the existence of some single invariant
'subject' category in any language, the evidence points to the diachronic development of
such a category being an incremental and construction-specific matter.

I also devote considerable space to evaluating the Government-and-Binding-
Theory approach to cross-linguistic configurationality differences in terms of language-
specific mappings of arguments onto structural positions at S-structure. The GB model, in
avoiding any direct reference to relational constructs of subject and object, offers certain
advantages over LFG or RelG for anyone taking the perspective of GRs as derived and
language-specific. However, the model's abstention from the attribution of any functional
correlates to structural positions means that the limited degree of nominative/non-
nominative asymmetries for which I do find evidence in Old English fails to receive any
kind of explanation at all in GB terms. Also, the impressive array of structurally-based
principles and constraints embodied in GB not only fails to contribute to an understanding of cross-linguistic differences in the instantiation of GRs, but clutters the analysis and even rules out or imposes descriptively inappropriate analyses based on supposedly universal formulations of structurally-based principles. Structural formulations of dominance and scope, in other words, are insufficient for explaining all facts of syntax.

Thus, I argue particularly strongly against the reduction of recalcitrant facts of linguistic data to a few supposedly universal principles and parameters, or to a single supposedly universal base. I consider this approach to be empirically responsible in a most straightforward way: any structures and categories claimed to be internally relevant must be shown to be so with reference to internally-applicable tests, rather than simply presupposed to be so because of theory-internal requirements or the assumption of the existence of a restricted universal grammar.

3 Organization of the dissertation

The dissertation is organized as follows. Chapter 2 presents an introductory discussion of the treatment of GRs in selected theories of syntax and cognition, specifically: RelG, GB, and the cognitive models of Chafe, Croft, and Langacker. This will serve as a means to examine the advantages and deficiencies of these approaches in somewhat greater detail than that provided in the foregoing adumbration.

Chapter 3 offers a detailed critical examination of a syntactic model which, I think, provides for an unusually insightful and responsible treatment of GRs on both a
language-specific and cross-linguistic basis; this model, Role and Reference Grammar (Van Valin and Foley 1980, Foley and Van Valin 1984, etc.), develops the early insights of Schachter, described above, into a well-articulated and ramified theory of syntax which avoids the overly reductive and restrictive approach to linguistic data which I argue to be characteristic of other theories discussed here, in particular GB and RelG.

The fourth chapter presents and analyzes the relevant facts of a language which, in a sense, provided the impetus for the entire present investigation, namely Kashaya Pomo. A question pursued here is whether a language such as Kashaya Pomo provides counterevidence to the view of GRs per se as universal. My conclusion is that, while Kashaya does display limited evidence for an interaction of semantics and discourse-pragmatics in such a way as to legitimize reference to GRs in the theory-neutral sense assumed here, the resulting categories (in particular, the 'subject' category) bears little resemblance to the 'subject' category of English and other nominative/accusative languages. This throws into doubt the desirability of endorsing a single typology-independent universal subject prototype as proposed by Comrie (1989).

In the fifth chapter, we begin our study of Old English and Modern English, a study which extends through Chapter Nine. As we shall see, even such seemingly well-mapped terrain may yield new insights. Many of the claims in the literature about Old English—the status of the OE case marking system as coding any significant level of conceptual structure, the instantiation of GRs in the language, and the status of relation-changing constructions such as 'raising' and passive that interact with GR assignment—are questionably valid. This follows, I will argue, at least partly from the fact that many

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interpretations of the data have been determined by the analysts' theoretical assumptions in terms of the opposition sketched above. This means, for example, that any evidence, no matter how slight, for the existence of GR-suggestive neutralizations or for the existence of a relation-changing passive or 'raising' constructions, has been claimed to show that 'nothing has changed' (Lieber 1979) between the OE and ModE periods. Such a conclusion begin to make sense only if we ignore the many important respects in which, for example, the domain and the role of passivization have changed in the language; passivization's changing domain and role must, I argue, be understood in the context of a far-reaching typological shift in the instantiation of GRs in the language, and in the centrality of (in particular) the 'subject' relation in a variety of the language's grammatical constructions.

Part of the value, then, of the analysis of GRs in Old English is that it shows us that many of the sorts of ways that GRs are relatively unmotivated in Kashaya Pomo are not restricted to languages of just the active/stative type. With respect to the instantiation of GRs, Kashaya and Old English are arguably more similar to each other than the latter is to Modern English.

This study of GRs in Old English allows us as well to focus in some detail on one further syntactic theory, Lexical-Functional Grammar, and to highlight limitations in the theory resulting from what I argue to be an unjustified view of GRs as historically and cross-linguistically immutable primitives or arbitrary elements decomposed into primitives at one further remove. It also provides the opportunity to further probe the GB approach to GRs as entities reducible to structural positions in innately-provided syntactic
trees. The two theories are clearly opposed in that one incorporates a rejection of the view of GRs as structurally-dependent entities embodied in the other, but ultimately they are equally insufficient. The failure of the GB position, I will argue, results from the impossibility of consistently applying the arguments for principled correlations between certain behavioral effects and structural positions; the reduction of GRs to structural positions, then, ultimately fails as well.

The analysis of Old English also provides the opportunity to test ideas of Plank (1983) and Hawkins (1986) about the legitimacy of 'transparency' as a coherent typological parameter for the comparison of languages. The usefulness of this parameter presupposes that degrees of sensitivity of a language's morphological and syntactic constructions (in Hawkins' words, 'surface clause structure') to what Hawkins refers to as 'semantic clause structure' will be nonrandomly distributed among that language's constructions. In his comparative analysis of English and German, this presupposition is borne out to the extent that the two languages show a consistent 'proper subset' relationship, with 'the surface forms (morphological and syntactic) of German [being] in a closer correspondence with their associated meanings...' (Hawkins 1986:121).

Old and Modern English offer a wealth of closely corresponding forms and constructions—for example, various cross-clausal cointantiation and control constructions such as conjunction reduction, equi, raising, and purpose clauses, and other constructions such as passive—by which Hawkins' model may be tested in a diachronic domain. My conclusion is that, while the same sort of 'proper subset' relationship may be supported between Old and Modern English, there are construction-pairs which pattern precisely
counter to expectations. These exceptions may be explained with reference to a parameter largely neglected in Hawkins’ comparative typology, namely the degree of instantiation of GRs in the theory-neutral sense assumed in this study. The increasing centrality of, especially, subjects as pivotal entities in complex multiclausal constructions, and the increasing role of relation-changing passivization and ‘raising’ constructions in the mediation of (in Hawkins’ terms) semantic clause structure and surface clause structure, means that certain coinstantiation and control constructions become more restricted (to subjects) than were their OE counterparts.

Finally, the tenth chapter summarizes the findings here, highlights the most important implications of these findings, and offers suggestions for further research. I discuss the conception of GRs as ‘emergent categories’ in the sense of categories which emerge as a result of numerous independent impulses and structural preconditions; these may interact to yield GRs of any of a number of different types, but no single factor is necessary for the emergence of GRs per se. Among other things, this means that any particular characteristic which we may, on the basis of a single language such as Modern English, consider characteristic of subjects may be absent from another language’s subject category. This is consistent with the view of subject tests as having (as in Langacker’s view) a secondary nature. If we view GRs in terms of these empirically verifiable characteristics, then GRs themselves must be viewed as having a secondary status, rather than either being provided a priori or representing the inevitable endpoint of a teleological process.

I argue further that the specific evidence provided by Kashaya Pomo serves to
caution against positing a single universal subject prototype consisting centrally of a
conflation of high animacy or agency with high topicality. The findings here thus cohere
with other studies (e.g. Park 1994) that have pointed to typology-dependent nature of
allegedly universal prototype categories such as Kemmer’s cognitive ‘map’ for middles.
These findings must be further tested against the evidence of other languages representing
descriptively underrepresented and theoretically underutilized types, especially languages
of the active/stative type.

In sum, a certain reconciliation of the many different perspectives on GRs may be
achieved by being cognitively realistic—viewing GRs as categories exhibiting a graded or
prototype nature rather than a set-theory-based binary structure—and by being historically
realistic—taking into account the role of historical accretions in introducing certain kinds
of apparent arbitrariness into a fundamentally motivated system. In addition, accepting
the perspective offered by grammaticalization theory, it is perfectly reasonable to view
GRs as being fed diachronically by different channels or underpinned by different
conceptual structures cross-linguistically. Assuming that many traditional conflicts in the
analysis of other grammatical categories, both ones such as the ‘perfect’ and ‘middle voice’
characterized in terms of a mix of functional and formal criteria, and even some formally
characterized categories such as reduplication (cf. Jurafsky 1993), may be similarly
resolved by adopting cognitive and historical realism of this sort, the approach and the
conclusions presented here have broad application to the study of language generally.
Chapter 2: The conception of grammatical relations in selected syntactic theories

1 Introduction

In this chapter, I present an overview of the status and definition of GRs in several models: Government-Binding Theory (GB), Relational Grammar (RelG), and the cognitive models of Langacker, Chafe, and Croft. The first two are 'formal' in the sense of representing language in terms of arbitrary primes or structural relationships which receive their functional correlations in a somewhat accidental way: either by way of varying mappings onto functional or behavioral correlates, or by way of links between formal or functional domains determined purely by formal, structurally based constraints.

Thus, all the behavioral and functional expressions of GRs are viewed in GB in terms of innately-provided structural configurations which happen to associate with certain functions in the application of this template to perceived situations in the world, and which happen to exhibit asymmetrical behavior (as in the standard subject-object asymmetries) because of formal contrasts holding between elements in asymmetrical positions in structural trees. This last assumption entails that wherever we observe a given functional or behavioral correlation with arguments of the relevant type ('subjects' or 'external arguments', or 'objects' or 'internal arguments'; cf. below), we must assume a certain structural configuration to be internally relevent to the language even lacking any other evidence for the language-internal relevance of such a configuration. The fundamental flaw here is that GRs are assumed to be covert universal structurally-defined elements equally present in all languages, and only secondarily (or epiphenomenally)
expressed in both functional and overtly verifiable formal domains.

In RelG, GRs are similarly viewed as universal, formal constructs correlating with functional or behavioral constructs in a way interpreted to fail to follow from any functional nature of the categories themselves. Any cross-linguistic variation in the instantiation of GRs follows, again, not from variation in the categories themselves, but from an essentially unexplained inconsistent interaction of those categories with superficial language-specific phenomena. According to both these perspectives, any apparently 'graded' character of GRs derives simply from the interaction of a single invariant category with merely superficial aspects of language—structural or primitive relational status with more language-specific associations of functions with structural positions, or the somewhat accidental association of covert relational status with different behavioral 'tests'.

Langacker, Chafe, and Croft, on the other hand, take the approach of explicitly grounding their understanding of GRs in conceptual structure. More particularly, they propose variations on the theme of subject as a conceptually privileged participant: the foregrounded participant or conceptual starting point. All these conceptions of subjecthood revolve around some intuitive notion of topichood, with semantic factors (the case role hierarchy and factors of 'topicworthiness') exhibiting a certain correlation with, but nevertheless ultimately failing to determine, 'subjecthood' in either a conceptual or a more 'surface' sense. We might say, then, that a truly empirically verifiable sense of 'subject' or 'object'—one that relies on directly observable facts of coding and behavior—will deviate from Langacker's, Chafe's, and Croft's more intuitive notion of these
constructs, and that languages that exhibit little or no such deviation show correspondingly little evidence for a domain of GRs separate from categories in a discourse-pragmatic domain.

While the cognitive approach is, then, in many ways more satisfying than the formalist conception of GRs as arbitrary constructs, we clearly need more than a concept of, say, subject as 'relational figure' to account for the empirical facts of language-specific coding and behavior.

2 Government-Binding Theory

One of the best-known characteristics of the GB conception of GRs is that of derivedness. In other words, unlike in certain other theoretical and pretheoretical frameworks, notions such as 'subject' are in GB merely convenient shorthands for NPs in certain defined structural relationships relative to other elements. Specifically, the 'subject' is simply that NP which is immediately dominated by the S node, while the 'object' is that NP immediately dominated by the VP node.

In addition, as a theory which takes seriously the autonomy of the syntactic module from considerations of language meaning or use, GB assigns no inherent semantic or pragmatic content to the subject or any other GR position. Thus, relation-changing processes, subject-object asymmetries and the like are attributed wherever possible to independently-identified principles (in the context of Binding Theory, in particular) bearing on the movement of elements or structural relationship of elements to one another in a syntactic tree diagram.
A simple example is provided by the GB account of passive, which, as is widely known, differs from that of 'classical' TG in positing a derivation independent of the passive's active counterpart. In Chomsky (1965), the passive structure was analyzed as deriving from an underlying active structure by a process which significantly altered the linear order of constituents and added passive morphology but left the truth conditions, and hence any meaning or semantics falling within the domain of the theory, completely unaltered. The intuitive appeal of the analysis, presumably, lay precisely in this identity of active and passive deep structures, given the model's placement of the 'semantic interpretation' component of the grammar at that level; truth-conditional identity, then, was naturally explained in terms of any operations serving to differentiate active and passive taking place after the semantic component had done its job of reading off the deep structure. Passivization was viewed as just another 'superficial' operation having the effect of obscuring underlying unity, or one-to-one pairings between form and meaning, within and across languages.\(^1\) The passive transformation was optional since both active and passive structures shared exactly the same underlying structure; nothing in the theory or the analysis, in other words, ever forced passivization to occur.

With subsequent weakenings in the theory (or revised versions of it) of the connection between deep structure and meaning and of the role of transformations (cf. especially Chomsky 1970, 1971), deep structure (or D-structure, d-s, remote structure, particularly...)

\(^1\)In this respect, the model featured a fundamental--although abstract--iconicity, overtly acknowledged and pushed further towards its logical conclusion in the works of Generative Semanticists. Interestingly, however, implicit iconicity still exists in GB, as for example in the mechanism of assigning case to an argument by analyzing it as 'starting out' in a position adjacent to its case-assigner despite overt non-adjacency.
etc.) completely lost any intuitive explanatory appeal of the sort just mentioned. In GB, there is a level corresponding to the Aspects deep structure in the sense of a locus of lexical insertion into the output of phrase-structure rules, and also in the sense that this is where theta-roles are assigned, but the semantic component such as it is ("Logical Form") reads off of S-structure, corresponding roughly to the Aspects surface structure. Specific transformations such as passivization have been replaced by the very general rule 'move alpha', with various constraints and filters supposedly handling any ill-formed structures thereby generated.

In the case of passive, movement is actually forced, a situation made possible by the loss of a shared D(eep)-structure between active and passive versions of a sentence. The GB D-structure representation of 'John was killed' is '

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In the case of passive, movement is actually forced, a situation made possible by the loss of a shared D(ep)-structure between active and passive versions of a sentence. The GB D-structure representation of 'John was killed' is '\_ INFL kill-en John'. In the GB analysis (Chomsky 1981), John is initially in object position to receive the patient theta-role (assigned by 'kill' at D-structure), but can receive no Case in this position due to the passive morphology having 'robbed' the verb of its 'ability' to assign it. Since any Case-less NP would be filtered out by the Case Filter applying at S-structure, John must move to some position where it can receive Case. Given that a subject position has been generated (due to an ad-hoc Extended Projection Principle (Chomsky 1982) which stipulates that all clauses must have subjects), which has been conveniently denied any theta-role due to the passive morphology having 'suppressed' the verb's 'ability' to assign such a role to that position, the patient NP is free to move there; also, this is licensed by the structural relationship ensuing between the moved NP and its trace, since the trace is c-commanded by the NP, as required by Binding Theory. Thus, the patient NP is both
forced to move from the position in which it's generated, and free to move to the subject position, where it also receives the Case assignment which permits it to pass the Case Filter—a clever arrangement which may be felt to provide more than enough elegance to compensate for whatever intuitive appeal was lost in the abandonment of the Aspects passive analysis.

Note that this analysis (like the Aspects analysis) leaves completely unaddressed any functional correlates of the passive structure in contrast to its active counterpart. Of course, a GB practitioner needn't necessarily deny that such functional correlates exist—they simply fall outside the theory's domain. To an analyst such as van Oosten (1984), on the other hand, the functional correlates of the marked passive structure are precisely the object of interest. What this means, then, is that completely different issues tend to be addressed in an analysis of syntactic constructs depending on the formalist or functionalist orientation of the analyst. This is presumably what LaPolla has in mind when he writes: 'I do not agree with the stated aim of some linguists (e.g. Kuno 1987:1, John Lu 1989) to try to unify formal and functional ways of looking at language; the two have different goals, methods, data, and applications, and should not be confused' (LaPolla 1990:5).

For this reason, part of what I will be doing in this presentation of extended GB treatments of 'subject' (and, less saliently, other GRs) is simply to present and illustrate the characterization or definition of that construct in those frameworks. To some extent, I will attempt to go beyond this modest task in evaluating claims about GRs (in particular, arguments for their universality) in the context of those frameworks. This turns out to be
more difficult than one might imagine, however, due to the theory-dependent nature of
many of those claims and arguments. It is not the case, for example, that one can simply
cite counterexamples to GB-based generalizations and consider oneself to have won an
argument based on the evidence of empirical data; rather, a counterargument would like
as not be offered by which the counterexamples would be reconciled with existing
generalizations by providing them with a different abstract analysis than one might have
initially supposed them to have. Because of this, I think the formalist objection to
functionalist explanations as 'unfalsifiable' or 'retrodictive' (in the words of Dik (1986)) is
particularly unfair: if anything, as will I think be amply illustrated below, formalists are
at least as guilty of indulging in unfalsifiable arguments as functionalists.

The first extended GB analysis I would like to present is Mark Baker's treatment
of noun incorporation (NI) (Baker 1987). The issue of NI is a particularly interesting and
useful one for our purposes because of the fact that it highlights differences between
various theoretical approaches to GR-related questions in particularly sharp relief. What I
would first like to do, then, is present Baker's analysis of this phenomenon to illustrate
precisely how function-independent his conception of GRs is.

It has often been noted (cf. e.g. Mithun (1984), to be discussed shortly, for a
thorough cross-linguistic analysis) that, within and across languages, certain types of
nominal constituent incorporate more readily than others with the verb of which they are
arguments, and that some types—even in polysynthetic languages—may in fact be
unincorporable. While the characterization of the 'types' of NP involved here—whether in
terms of semantic roles (Mithun) or grammatical relations (Baker 1987, Selkirk 1982)—is
a matter of dispute, differential incorporability of NP-types has been considered by various analysts, including Baker, to represent evidence of the sort of subject-object asymmetry that could be argued to support the universality of GRs independent of any independent behavioral properties (or 'pivot' status, in the terms of Dixon (1979) and Foley and Van Valin (1984) etc.) of GRs manifested in the language. Baker accounts for unequal possibilities of NI with reference to a universally uniform D-structure plus the following 'generalization' (henceforth G):

A noun can be incorporated into another category in the system of a polysynthetic language only if that noun would (head a noun phrase which would) be the sister of that category in the phrase structure system of an isolating language. (3)

Assuming a certain D-structure analysis, then, this amounts to the cross-linguistic impossibility of incorporating subjects (external arguments, subcategorized for and in a structural relationship of sisterhood not with the main verb but with the entire VP) or certain adverbials such as locative expressions into the main verb. (He considers this formulation superior to Mithun's (1984) characterization of such patterns in terms of semantic roles such as agent, patient, and instrument for the familiar reason that the categories involved are not strictly speaking agents, etc.—in the vein of Perlmutter (1984), Rosen (1984), etc. (to be discussed in the 'Relational Grammar' section below).) He adopts Mithun's observation about the greater ease of incorporation of intransitive patients than agents but adapts it to his RelG-influenced GB model, i.e. considers 'unaccusatives' to feature a D-structure object, etc.; thus, unaccusative verbs, but not unergatives, bear a sister argument at D-structure and can therefore incorporate that
argument.) B reconciles the possibility of incorporation of instrumentals even in relatively analytic languages (cf. hand-made clothes) with G by arguing that such nominals are underlingly objects of the verb, with instrumental prepositions superficially inserted in English-type languages. Benefactives, on the other hand, are underlingly objects of prepositions and are therefore unincorporable. Note that this account is motivated in the GB framework by the necessity of a moved (incorporated) element governing its trace (cf. Chomsky’s (1981) Empty Category Principle), which would not occur if any of the unlicensed movements took place.

Baker summarizes his arguments and observations in the following 'Universal Principles of Lexical Argument Structure':

(1) (i) verbs take patients and (optionally) instruments as nominal arguments.2 (ii) verbs never take agent/actor nominals as arguments; rather these are the arguments of the verb phrase as a whole (or arguments of adpositions, as with by-phrases in passives). (iii) locative nominals may be direct arguments of a small, semantically restricted class of verbs (locational verbs, posture verbs...). Otherwise, they are arguments of adpositional elements. (iv) benefactives and animate goal nominals are always the arguments of appropriate adpositional elements. (v) temporal 'adjunct' nominals are never the arguments of verbs. (vi) explicit productive causation is biclausal, with a full clausal complement as the argument of the causative element. (Baker 1987:15)

Thus, the subject-object asymmetry represented by the unequal possibility of subject vs. object incorporation is explained in purely structural terms, quite independently of the

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2 I'm not sure why Baker refers here to thematic roles rather than structural positions, given his earlier criticism of Mithun.
function or meaning of 'subjects' etc., and quite apart from any independent evidence for the relevance of GRs in the language. In fact, the very possibilities of NI are argued to constitute evidence for D-structure configurations which are formulated to explain those possibilities in the first place. We may therefore find the argument rather unsatisfying in its circularity, especially since any apparent counterexamples may be explained away by altering the D-structure representation; going 'night-skiing', 'spring-skiing', 'river rafting' or 'white-water rafting', for example, which would appear to counterexemplify (iii) and (v), would be taken as evidence that the incorporated nominals must in fact be sisters of the verb at a covert level. One would have to find internal contradictions within the context of the theory (other respects or tests by which the incorporated nominals would be required to be underlingly arguments of prepositions rather than verbs) to argue against this analysis.3

For further evaluation of Baker's account, let us now turn to the details of

3In fact, even this method of counterargumentation might not be as simple as one might think. Consider the following from Van Valin's review of Baker (1988):

In many instances of incorporation, particularly preposition incorporation or verb incorporation with a transitive verb, the incorporated element was a governor and Case assigner of an argument, and its presence in the unincorporated structure blocked the (incorporating) verb from governing the argument. After incorporation, however, some provision is necessary to ensure that the argument in question is still governed by a potential Case assigner, for otherwise a Case Filter violation would inevitably result. In order to solve this problem, Baker proposes the Government Transparency Corollary (GTC):

(4) **Government Transparency Corollary**

A lexical category which has an item incorporated into it governs everything which the incorporated item governed in its original structural position. (64)

(Van Valin 1992:203)

I think it is obvious that this sort of tactic effectively removes the claims of the analysis from even theory-internal, let alone external empirical, falsification.

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Mithun’s article. This article deals most centrally with establishing an implicational hierarchy among four different kinds of NI, but there are a number of points raised in it that are of greater interest for immediate purposes. First, it is important to note that NI has certain universal functional correlates. Even in highly polysynthetic (heavily incorporating) languages, there are always analytic/syntactic analogs of the incorporating structures; ‘the fact that productive morphological constructions of this type never exist in a language without syntactic analogs indicates that the morphologization itself must be functional’ (848). The fact that NI may be characterized in functional terms, then, suggests that any universal restrictions on NI of the sort that have been discussed in the literature may have functional explanations.

The specific functions attributed to NI by Mithun include the following. One kind of NI (her Type 1) is considered a subset of lexical compounding, by which lexical items are incorporated when the ‘entity, quality, or activity [depending on the lexical category of the head—N, A, or V] is recognized sufficiently often to be considered name-worthy in its own right’ (848); in the case of incorporation of a noun into a verb (which is what Mithun means by NI), the incorporated N is also characterized as being non-referential—it merely qualifies or 'narrows the scope of the V' (856). Thus, in an example like He is off berry-picking⁴, 'the word berry does not refer to a specific berry, nor to a particular bushful of berries; it qualifies the V, describing the type of picking in progress. Because it does not

⁴It is worth noting that Mithun considers examples of this type not to represent NI, but rather to be nominal compounds from which apparent examples of NI (e.g. to berry-pick) might be back-formed. This obviously bears on the significance of apparent counterexamples to Baker's principles discussed above.
refer, it is not marked for definiteness or number' (849). With such kinds of NI, 'their
generic character usually results in their use for habitual activities, for those directed at an
unspecificed portion of a mass, for those that incompletely affect an individual patient, or
for those that are simply part of a greater group effort' (890). Thus, the characteristics of
this type of NI are largely the complement of those of prototypical transitivity (Hopper &
Thompson 1980).

The next type of NI (Type II) appears to be an extension of Type I used for
manipulations of case involving promotions to object and subject of the possessor-
advancement sort. In both types, an incorporated N lacks formal and semantic salience,
but 'the two processes differ in their effect on the rest of the clause. Type I NI simply
lowers the valence of the V when it derives intransitive predicates from transitive ones;
but Type II NI advances an oblique argument into the case position vacated by the IN'
(856). The function of this type of NI is often to foreground (by expression as a formally
discrete core argument) a salient animate possessor and background a non-salient
possessum, e.g. the following from Blackfoot:

(2) N-o'kakíni á-isttsi-wa
my-back DUR-pain-it
'My back hurts' [non-incorporated version]

(3) Nit-á-istts-o'kakíni
I-DUR-pain-back
'I back-hurt/I have a backache' [incorporated version]

5Note, however, the apparent counterexample in [George] Bush-bashing, which does
not, however, violate the requirement of name-worthiness of the activity.

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(The T in the interlinear gloss is an agreement morpheme, and is not treated by Mithun as an incorporated experiencer.)

The next type of NI (Type III) is used in (typically) polysynthetic languages 'to background known or incidental information within portions of the discourse' (859). In addition to polysynthesis, language with Type III NI feature obligatory pronominal affixes which indicate the case roles of arguments, so that the expression of those arguments may be manipulated (expressed as morphosyntactically discrete and independent constituents, incorporated, or simply unexpressed) according to discourse considerations. Mithun explains the function of this type of NI as follows:

In such languages, V's—which carry most of the information—may of course be qualified by N's indicating the type of patient, instrument, or location involved in the action or state. However, the qualifying N's often represent known or incidental information, rather than significant new entities. A separate nominal constituent would sidetrack the attention of the listener; the solution is NI. IN's are not salient constituents in themselves, whose presence might obstruct the flow of information. They simply ride along with their host V's. (859)

The final type of NI (Type IV) involves an extension from Type II in a manner parallel to the extension of Type II from Type I, and may give rise to a classifier-like system:

A relatively general N stem in incorporated to narrow the scope of the V, as in

6To some extent, this function of NI parallels the expression of coreferential objects as 'light' middles rather than 'heavy' reflexives (Haiman 1983, Kemmer 1987) with 'introverted' verbs, that is, verbs whose default direct objects are coreferential with their subject (shave, wash, sit).

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Type III; but the compound stem can be accompanied by a more specific external NP which identifies the argument implied by the IN. Once the argument has been identified, the general, incorporable N stem is sufficient to qualify V's involving this argument in subsequent discourse. Since only general N's are incorporated for this purpose, a classificatory system often results. (863)

This type of NI may be viewed as a way of characterizing the type of verbal action involved according to the type of patient, instrument, etc., involved, without any change in the valency of the verb.

All types of NI, then, may be characterized in terms of the non-salience of the incorporated nouns at different levels of structure: 'While all types result in a backgrounding of the IN, Type I serves to reduce its salience within the V, Type II within the clause, and Type III within a particular portion of the discourse' (862). Only Type IV, representing the end-point of NI in diachronic terms, may involve a loss of this common function to the extent that it has developed into a grammaticalized, obligatory system independent of the speaker's conceptual manipulation. According to Mithun, these four types of NI may be arranged in an implicational hierarchy from which follows an invariant diachronic development: if a language has Type IV, then it will have Type III, and so on, but not vice-versa.

One aspect of this article that has been of particular interest to subsequent authors, in particular Baker, has to do with Mithun's generalizations about what types of argument may incorporate into verbs cross-linguistically, summed up in the following passage:

V-internally, IN's bear a limited number of possible semantic relationships to their host V's.... If a language incorporates N's of only one semantic case, they will be patients of transitive V's--whether the language is basically of the ergative,
accusative, or agent/patient type. Turkish and the Oceanic languages illustrate this. If a language incorporates only two types of arguments, they will be patients of transitive and intransitive V's—again, regardless of the basic case structure of the language. The majority of incorporating languages follow this pattern. Many languages additionally incorporate instruments and/or locations, such as Nahuatl.... (875)

Conspicuously absent from this hierarchy, then, are agents, which Mithun considers to be either absolutely unincorporable or relatively unlikely to incorporate. (She implies the former in the above statement about the 'limited number of possible semantic relationships' and the omission of agents from the hierarchy, but the latter is implied by, e.g., the following: 'A V like “run” is unlikely to incorporate because its single argument is an agent' (863).) Baker's explanation for the unincorporability of agents is explained in structural terms, although his account leaves unaddressed the possible reasons for an implicational relationship among the licensed incorporees. Mithun never explicitly explains why agents might be resistant to incorporation, but her characterization of the function of NI does suggest some reasons.

First, given the function of NI, arguments that are highly referential, individuated, and in general conceptually salient will resist incorporation. If a language had only Type I incorporation, then subjects in general (including agents in basic sentence structures, assuming a degree of conflation of agent and topic properties in a subject category as exists in English) would fail to incorporate assuming that subjects must be referential; non-incorporability, then, would follow from reference-related (topic-related) properties of subjects. Also, animate entities in general, and especially agents, might resist backgrounding because of the fact that such entities would be of central rather than
incidental importance in discourse: 'Since the primary purpose of NI is to background an argument, and since speakers are usually more interested in human beings (and perhaps animals) than in inanimate objects, animate N's are often not incorporated at all' (863).

However, such explanations would only account for a tendency for agents to fail to incorporate, not for any absolute proscription. It is apparently quite possible, according to the data cited by Mithun, to have incorporation of a 'subject' in the sense of the single argument of an intransitive verb, as long as that argument is non-agentive:

(4) ka'ás háb-'ič'ah-'f'-sa' plum PROG-eye-grow-PROG 'Plums are growing.' (Caddo, Type IV NI, p. 865)

(5) ná: kan-núh-'a' that water-run.out-will 'That water will run out.' (Caddo, Type IV NI, p. 865)

(6) k'onōhs-owá:neh her.onion-big 'Her onion is big.' (Cayuga, Type III NI, p. 881)

In all these cases, the intransitive argument is a non-agent, or an argument of an unaccusative verb, a fact which Baker considers to support his RelG-influenced structural analysis. Given that Type III NI may incorporate referential NPs (as the Cayuga example shows), the reference-related explanation just mentioned would not work for languages with this kind of NI. Further, it is clear that animate NPs may be backgrounded in discourse, so Mithun's own explanation for the resistance of animate NPs to incorporate into verbs would certainly not account for any absolute impossibility of such incorporation. Even in English, animate entities and even agents may form parts of

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compounds (although Mithun would argue that the following fail to represent true NI; see above fn.):

(7) He's been snake-bit ever since he was a kid. (agent)
According to Remains of the Day, Darlington didn't like fox-hunting. (animate)
He was too pussy-whipped to go out with us. (agent)
I woke up all mosquito-bitten. (agent)
I get sick of all this Clinton-bashing. (animate, human, and definite)

We may well wonder whether, in languages that have the relevant typological characteristics, the following would really be universally impossible:

(8) the-man-PAT dog-AG-bit
3SGPAT mosquito-AG-bit

Mithun's approach leads one to expect that, in languages that fail to have a relation-changing passive, and that possess the relevant kind of (Type I or III) incorporation, such structures would indeed be possible, corresponding to English 'The man was dog-bitten/bitten by dogs' and 'S/he was mosquito-bitten/bitten by mosquitos' respectively.

Given this, it is interesting to note that, in his review of Baker (1988), Van Valin cites evidence from Sasse (1984) that the Eastern Cushitic language Boni permits just such a structure:

(9) Miŋ ʔweegra kawáyd'adéed'i idohóo-d'isa
house Boni usually women-build.IMPF.3SGMASC
'Women usually build Boni houses.'
(Lit.: 'A Boni house usually women-build.') (Van Valin 1992:209)
Further, according to Van Valin, Sasse claims that all intransitive subjects are incorporate in this language. Obviously, such cases represent devastating counterexamples to Baker’s structure-based account of incorporation, but not to more functionally-oriented accounts such as that which we inferred from Mithun’s article. Another particularly devastating kind of data, according to Van Valin, is offered by languages such as Lakhota and Malayalam for which (by Van Valin’s analysis) no evidence exists for a VP constituent—since such flat structure would completely undermine Baker’s explanation for the sort of ‘subject’ effects discussed here.7 This brings us to one further extended GB treatment of GRs, or more accurately of ‘external argument’ as characterized by Williams (1984).

Williams argues for the dispensability of grammatical relations in a theory of grammar with ‘the correct case and theta-theories’, specifically, against LFG8 and for his own version of GB. Among other things, he clarifies the empirical distinction between ‘external argument’ and ‘subject’, arguing that the former but not the latter is an indispensable part of UG, and defends the universality of the VP constituent. The ‘correct’ theta-theory is one that entails not only the understanding of the argument structure of a verb in terms of a set of arguments (actor, theme, goal, etc.) each of which is ‘assigned to some NP, according to the requirements of the theta-criterion and other principles’, but

7 Uncorporability of subjects in the language would in itself, however, be considered by Baker to constitute evidence for the VP node.

8 The relevant point here is that LFG explicitly characterizes GFs in structure-independent terms; the LFG model and its application to Old English will be discussed in greater detail in Chapter 5.
also the notion of 'external argument':

In addition, one of the arguments is designated as the 'external' argument. This is the argument that is assigned to an NP external to the maximal projection of the verb, an NP that is in the 'subject-predicate relation' to the maximal projection of the V (VP) (Williams (1977; 1980)). The external argument of give is the actor argument, since this is the argument that is realized outside the maximal projection of give (the VP it heads). (641)

'External argument', then, unlike 'subject' in LFG, is a structurally-defined category with a host of properties following (within GB theory according to various principles) from its structural position (or from the structure and properties of its complement, the VP). All verbs have external arguments except for 'subjectless' raising verbs such as seem. Thus, ignoring for the moment the differences following from the fact that the two notions are really meaningful only within the context of their different respective theories, Williams' notion of external argument is basically what some others would call a theta-role-bearing subject.

Beyond showing that generalizations captured in LFG in terms of grammatical relations can be expressed in a GR-less GB theory featuring the appropriate notion of external argument (which he does in selected cases), Williams repeatedly argues that his theory is superior in that a host of subject properties which are simply stipulated in LFG are in his theory natural consequences of the unique structural position of the external argument (or VP) together with independently-required syntactic principles. He notes that

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9 This is the ideal, in any case. In fact, it is often unclear to what extent these properties follow automatically as opposed to requiring extra stipulations, 'rules', 'theories', revisions of previous independently-made generalizations, etc.
the formalism (specifically in f-structure) is too unconstrained ('practically nothing of consequence follows from the basic architecture of the theory;' 'we have an explosion of linguistic possibilities...[even though m]ost of them do not exist', etc. (665)), resulting in the fact that any subject properties may be simply stipulated in a rather ad-hoc manner. For example, 'subject' is stipulated to be exterior to VP in languages that have VP; it would be just as easy for the theory to stipulate that 'object' is exterior to VP, or that both subject and object are exterior (667). Similarly,

although the [LFG] 'subject/nonsubject' distinction has no special status in the theory of grammatical relations apart from other distinctions that can be defined there, such as the 'object/nonobject' distinction or the 'OBJ2/non-OBJ2' distinction[,] the 'internal/external' argument distinction in theta-theory ... is connected by definition to a difference in the manner of theta-role assignment and therefore has a status quite different from such theta-theory distinctions as 'agent/nonagent', etc. (642)

I think that these points about the arbitrary nature of GRs in LFG are valid, and that this arbitrariness stems from a misguided treatment of them as primitives at that stage of the evolution of LFG theory. (Actually, this criticism applies to later versions of LFG too, since the presence of a subject is simply stipulated by the 'subject condition', a stipulation that any predicate must have a subject, even if no argument has been so identified by the LMT mapping principles; this stipulation shows that the subject category is, in a sense, still a primitive in the theory despite the decomposition of GRs into 'restricted' and 'objective' features.) This and other features of LFG will be discussed in greater detail in Chapter 5, in connection with Allen's (1995) LFG analysis of case and GRs in Old English.
At the same time, it seems to me that Williams’ theory has comparable defects: first, as far as I can tell, there is nothing that captures the special status of ‘core’ arguments relative to ‘non-core’ ones (cf. Fillmore 1977), and second, Williams treats external argument as an autonomous construct with respect to topicality, i.e. to treat all the 'special' or 'privileged' qualities of subjecthood (or, in his terms, external-argumenthood) as being entirely unrelated to various instantiations of the universal correlation between what are identified as 'subjects' and topicality. This criticism has also been voiced by Bhat (1991), who argues that at least many of the phenomena which Williams argues to follow from the structural position of the external argument are simply explanations in terms of an autonomous-syntax model of what are essentially pragmatic or thematic (in the sense of theme-rheme) effects (110 ff.).

There are a number of ways that ‘external argument’-effects may be viewed as ‘topicality’-effects. If, for example (as already mentioned), we imagine a language in which a grammaticalized category of ‘subject’ precludes indefinite or nonreferential NPs, and subjects can’t be incorporated, then the non-incorporability of subjects may be explained with reference to the universal tendency to resist incorporation of referential or definite NPs (Croft 1991:121, Mithun 1984, Hopper and Thompson 1980), cf.:

We went fox-hunting, but we didn’t catch one/any/*it.

This is not strictly speaking restricted to incorporation, but extends, for example, to verbs that may in a given instance fail to incorporate but evoke a scene involving certain types of participants:

We went fishing, but didn’t catch any/*it.

What these two examples share is that their verbs notionally background or de-focus the patient, which presupposes the notional non-salience, and hence indefiniteness, of that patient. The fact that a Baker-like explanation is not sufficient to explain the facts of incorporation (in Williams’ and Selkirk’s sense, to be discussed in a moment, although not NI in Mithun’s somewhat narrower sense) is shown by the relative difficulty in English of incorporating proper NPs originating in a multistral analysis as direct object of the verb, and absolute unincorporability of personal pronouns:

*We went John-hunting.
*He started me-hitting.

(Cf. also *He’s a me-beater vs. He’s a child-beater; however, note the felicity of
A particularly vivid illustration of Williams' approach in this respect is provided by his explanation for the alleged universal unincorporability of subjects into verbs. (Williams responds specifically to Selkirk (1982), who, like Baker, treats 'subject' as opposed to, say, 'agent' or 'actor' as the relevant characterization of unincorporable nominals.) The problem is to explain the ungrammaticality of the following sorts of compound:

(10) *[girl swimming] (as in, 'Girl swimming is prohibited')
    *[weather changing] (as in, 'Weather changing can be sudden')
    *[kid eating] (where kids eat, and are not eaten) (as in, 'Kid eating can be messy')

Selkirk considers two solutions, one that 'the SUBJ argument of a lexical item may not be satisfied in compound structure' and the other that 'the external argument of a lexical item may not be satisfied in compound structure' (Selkirk 1982:34-5). She rejects the latter since the ungrammatical compounds could be derived from the following sort of NP without any violation of the external-argument constraint:

(11) [girls' swimming]
    etc.

Bush-bashing—the ultimate licensing factor seems to be that the compound denote an appropriately common or familiar activity, or one imaginable to be potentially so.)

In English, while it would not be possible to explain the nonincorporability of subjects in terms of a proscription against nonreferential or indefinite subjects (since there is no such proscription in English), the phenomenon could still be related to topicality in the following way. Given the historically and synchronically strong association between subject and topic in English, it makes sense that the incorporating constructions at issue would conventionally (i.e. as constructions) code a relationship between a verbal situation and something that would correspond to the non-subject in a paraphrase. Thus, the construction underlying the nominalization cop-killer conventionally codes a relationship between an agent (killer) and patient (cop), which would be the most typical case given the default or prototypical linking of agent to topic.
Williams counters by pointing out that the ungrammatical examples could also be derived from compounding with a nonsubject argument, and so would fail to be ruled out by Selkirk's subject constraint:

(12) [swimming by the girls]
    [the changing of the weather]
    [eating by kids]

(Incorporation from these non-sister positions would, by the way, be ruled out by Baker.) Therefore, according to Williams, 'the argument fails to make its point.' Further, Williams quite astoundingly claims to consider the allegedly ungrammatical compounds to be 'perfectly grammatical', so it is 'just as well' that they are not ruled out (653).

Williams' own explanation for the chestnut under discussion is as follows:

Suppose an intransitive verb were compounded with its subject. This would result in a verb with no external argument; such a verb could not take a surface structure subject:

(30) It was [boy slept]v
    I
    (A) [A='external argument.']

Although there are verbs with no external argument (seems), there are none derived through compounding. The property 'has an external argument' is inherited through heads; thus, the satisfaction of the external argument through compounding would result in contradiction: the resulting form would 'have an external argument' because its head had this property, but it would at the same time lack an external argument, that argument having been satisfied within the compound (see Williams (1979; 1980; 1981a,b)). (Williams 1987:653)
This explanation, intriguing though it may be, is difficult to evaluate, for a number of reasons. First, it is unclear to what extent it follows from independently-required principles, or to what extent it is ad hoc; second, it is difficult to know whether it would cohere with other aspects of the theory, or whether it would engender problems that would require adjustments elsewhere or even revisions in the explanation itself. ¹¹ Such difficulties, it seems to me, are typical with highly theory-specific explanations of this sort. Also, note that the explanation given here is intended to account for a tiny subset, at best, of the class of supposedly illicit incorporations that other analysts, including Baker, attempt to account for (cf. Williams' claim to find Selkirk's illicit compounds to be 'perfectly grammatical').

Finally, Williams presents arguments for the universality of the VP constituent (and, less directly, for the universality of external argument, which would presumably fail to exist in a VP-less language given the definition of the latter construct in terms of the former). There are two types of argument presented here, one somewhat more satisfying than the other. The less satisfying one is as follows. In response to Mohanan's (1982) claim that the VP constituent in an analysis of Malayalam would be an 'unmotivated artifact', and Bresnan's (1982) characterization of the VP as a 'procrustean conclusion' for that language, given that there are no rules or generalizations that require reference to that constituent, Williams comments:

[If VP is a universal part of f-(S-)structure, then it is a feature of f-(S-)structure, almost none of which is 'motivated' in the direct sense that is implied here. (651)

¹¹See the above discussion of Baker's 'Government Transparency Corollary'.

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He continues:

I believe there is another implicit argument against VP in nonconfigurational languages, an argument related to, but not identical to, the one above: that the existence of the VP in a nonconfigurational language would be hard to learn. But of course, if the VP is a universal part of f-(S-) structures, then there is nothing to learn. Furthermore, if the VP is not a universal part of f-(S-)structures, it is difficult to see how a language learner could infer the existence of VP in English, where it does exist by all accounts .... Surely the child does not rely on sentences in which VP fronting has applied (Standing on the corner was an old man) to determine that English has a VP. More likely, English has a VP because every language has one. (651)

This is an interesting but, we may feel, rather perverse argument: in effect, that the more marginal or tenuous the evidence for the existence of a given linguistic structure, the stronger the case for its being universal and innate, given the fact that it would otherwise be unlearnable. On the other hand, there are legitimate reasons (which Williams, as it happens, does not supply in connection with Malayalam) for positing English-like structures in languages that overtly lack them. For example, Williams points out that in Breton, a VSO language with a topicalization rule supposedly constrained to topicalize a single constituent, 'a verb-plus-object sequence can be topicalized [i.e., moved before the auxiliary verb], but a verb-plus-subject sequence cannot be' (652). This is, in my view, a legitimate form of argument, especially given its empirical foundation. It must be remembered, however, that a single isolated example providing evidence for VP constituency in a VSO language does not prove that VP constituents are universal—except by the learnability-related argument just described and rejected.

In sum, then, GRs in GB represent positions in a tree structure which are responsible for various effects manifested empirically in language, including
incorporation effects (e.g., the non-incorporability of certain arguments). These positions have no inherent semantic or functional content\(^{12}\), although it is quite possible that they would correspond to some such content either in Logical Form or in actual use; what is important, though, is that any effects observed to follow from or involve GRs are considered to follow from the structural position of those GRs together with structurally-defined rules and principles in the theory.\(^{13}\) Given the predilection of GB practitioners to view linguistic structures as not only innate (within the latitude provided by 'parameters' with different 'settings') but existing independently of the nature of the world or our perception of it\(^{14}\), any correspondence between linguistic structures and meaning or

\(^{12}\)Note in this connection that the 'relationship of predication' referred to by Williams in his definition of 'external argument' is a purely structural relationship.

\(^{13}\)At least, all the effects with which the theory concerns itself. Note that Baker shows no interest in the reasons for Mithun's implicational hierarchy of the ease of noun incorporation, as opposed to simply what is ruled in and what is ruled out. If it were the case that any given language distinguished in a strict and absolute manner between different points on the hierarchy, then this would presumably be handled by invoking a 'parameter' with different 'settings'. If, on the other hand, it seems to be the case that in any given language direct objects or patients are more readily incorporated than instruments, but with no absolute distinction between them, the theoretical framework within which Baker works would provide no handy way to explain this; such differences would presumably be shunted off to some peripheral 'performance'-oriented module of the grammar, or shunted out of the grammar altogether.

\(^{14}\)The 'but' clause is important, since innateness is by no means the exclusive intellectual property of structural-formalists; while virtually all linguists would agree that there obviously exists a certain degree of innate endowment or biological preparation for language acquisition (which would at the grossest level account for the fact that humans but not cats can acquire language, and at a finer level constrain what the child would consider to be a 'possible language' or 'possible structure' as opposed to all the theoretically possible but unattested ones), there is disagreement about the extent of that endowment and its nature, including the degree to which it may be shaped by the world or our perception of it. (See Lakoff (1987) for an extensive discussion of the fundamentally different philosophical positions involved.)
function is coincidental or trivial; to take a seemingly frivolous but legitimate example, it
would have nothing to do with human perception of the world that verbs universally
single out one or two core arguments (i.e., that they correspond to scenes in which one or
two participants are singled out from a potentially limitless number), as opposed to
twenty or thirty.

The two versions of GB discussed above both propose GRs (or, in the case of
Williams, 'external arguments' and 'internal arguments' governed by verbs or
adpositions/case affixes) as universals, in at least two ways or for two reasons. First, those
structural positions must be universal to the extent that the effects explained with
reference to those structural positions are universal; thus, for example, subjects and
adpositional objects must be universal to the extent that there universally exist
unincorporable arguments, given the explanation for that unincorporability provided by
Baker. Second, all such structural entities as VPs, external arguments or subjects, internal
arguments or direct objects, and adpositional objects are innate given, quite simply, the
view of such structures in the theory.

It must be emphasized, however, that neither kind of reason proves convincing.
The rationale within Baker's 'syntactic' view of NI for the universality of subjects (etc.) is
valid only to the extent that the effects he attempts to explain in structural terms are
independent of any functionalist explanation—which, as I have indicated, is by no means
necessarily the case. Also, the theory's view of the innateness of linguistic structures has
little more than axiomatic status—certainly, few theory-neutral observers would find
Williams' learnability-related arguments for the universality of the VP constituent to be
convincing. Finally, as pointed out above, arguments within the context of this and other formalist theories tend strongly to be relatively immune to empirical challenge, given the facts that, first, justification for the accuracy of an analysis is often considered to hinge on interaction with other theory-internal rules and principles, and, second, that there is wide latitude in the theory for manipulation of abstract structures that could only be challenged with reference to those other theory-internal rules and principles—which could even then, however, be extended or modified. The kind of circularity involved here is also exhibited in the next theory to be discussed, RelG. However, as I will show, it is a little easier to challenge the RelG conception of GRs as at least somewhat otiose and, more damningly, internally contradictory.

3 Relational Grammar

Given the fact that RelG incorporates GRs in a more direct and obvious manner as central and universal 'primitives' than does GB, and given the widespread acceptance of the theory, any investigation into the universality of GRs must deal with the claims and arguments of RelG. My argument against the treatment of GRs in RelG is basically two-fold. First, if one is to take a relatively 'classical' approach and assume, for example, the difference between unergatives and unaccusatives to be semantically determined even if syntactically represented (Perlmutter 1978), the role of GRs as syntactic as opposed to semantic entities is vitiated given that this difference is defined in terms of GRs at a covert level. On the other hand, if one is to take the approach of Rosen (1984), by which unaccusativity is argued to be essentially non-semantic (or essentially arbitrary), different
problems arise. One is that many of Rosen's claims about the arbitrary nature of unaccusativity may be shown to rest on an overly simplistic and naive kind of semantic analysis and view of human categorization. Another is that the existence of what have been called unaccusative mismatches (Levin 1985)—cases where different unaccusative 'tests' fail to agree on the 'unaccusative' status of a verb—within a language are far more devastating to Rosen's 'syntactic' approach to unaccusativity than are the cases of alleged mismatches across languages. This last fact, finally, also proves fatal to Perlmutter's view of unaccusativity in terms of semantic motivation and syntactic instantiation, since it shows that he too is overly simplistic in attributing a variety of semantic phenomena to a simple matter of the kind and/or number of GRs at a given stratum in the RelG model.

Given that the RelG position is that 'grammatical relations cannot be defined in terms of other notions such as word order, phrase structure configurations, or case marking' (Perlmutter 1980:196), any justification for a claim for the universality of GRs must lie precisely in the generalizations that the recognition of such entities as grammatical primitives allows. The validity of this cornerstone of the theory therefore crucially depends on the validity of these generalizations, since the RelG claim about GRs is otherwise reduced to empirical vacuity. The generalizations made by RelG with reference to GRs rely on an extension of GRs in such a way as to include phenomena that other frameworks may exclude from the domain of semantics-free syntactic relations, and demonstrate that, given this extension, certain grammatical patterns may be explained as

\[\text{Note that this RelG counter-argument to GB (or R(E(ST))) assumes that there are languages that lack a VP constituent, in which lack of overt case marking is equivalent to lack of Case, etc.--all of which would be challenged by Baker, Williams, and others.}\]
deriving from the assignment of nominals (at some 'stratum') to a given GR.

One of the best known examples of this relates to what Perlmutter has dubbed the 'Unaccusative Hypothesis' (UH), which states that intransitive verbs are to be understood cross-linguistically as being of two types: those in which the participant is actively responsible for the action represented by the verb (=unergatives) and those lacking such an active participant (=unaccusatives). According to RelG, this distinction is insightfully represented in terms of the unaccusative verb bearing an object but lacking a subject at some level of derivation, with that object being 'advanced' to subject in a subsequent stratum.

While no-one would disagree with the claim of a semantic distinction of some sort between verbs like die and verbs like run (which is not a claim original to RelG anyway), certain problems arise in the RelG treatment of this distinction. First, a claim such as the UH has little substance if it simply presents a notational representation of a semantic difference and nothing more. Second, while many languages differentiate verbs like die and verbs like run by some morphological or syntactic means (or, the distinction has morphosyntactic consequences), it is by no means the case that whatever distinction is involved is itself syntactic. Granted, it is certainly possible to represent any semantic distinction in terms of some sort of covert or abstract 'syntactic' (i.e., structural) configuration—a mode of exposition which has a history in TG predating its use in RelG. But the question remains: what does the RelG treatment buy us in terms of explaining the morphosyntactic facts of behavior in any language or cross-linguistically?

A parade example of the sort of advantage the RelG multistratal treatment is
supposed to give us in this connection, according to Perlmutter (1978) and Perlmutter and Postal (1984), is the 1-Advancement Exclusiveness Law (1AEX). The 1AEX states that no more than one argument may be advanced to subject position in the course of a derivation, and is invoked to explain the unacceptability cross-linguistically of forming passives, reflexive passives, or pseudopassives of unaccusative verbs. In German, e.g., a reflexive passive may be formed with an unergative verb like tanzen 'dance', but not with an unaccusative like sterben 'die':

(13)    Es tanzt sich gut hier.
   *Es stirbt sich leicht hier.

(Note that English manifests a parallel distinction by different morphosyntactic means in constructions like There's a lot of Xing going on here, which is better with unergative than unaccusative verbs, although the distinction is not as strict as in the German construction.) In English, so-called 'pseudo-passives' of preposition-taking verbs are ruled out by the same 'law':

(14)    The bridge was skied under by the competitors.
   *The bridge was existed under by the trolls.

As soon as we investigate the facts in a little more detail, however, the RelG argument breaks down. Consider the following:

(15)    *The lake was fallen into (by a duck).
Since fall is an unaccusative verb by the fact of lacking an agent (Perlmutter 1978), the unacceptability of (11) is fully predicted by, and therefore supports, the 1AEX. However, consider next the following:

(16) The box was fallen on and crushed by that clumsy child.

Here, the 'law' clearly makes the wrong prediction. Note that Perlmutter couldn't salvage his generalization by claiming that the verb in (16) is agentive and therefore in reality unergative, since an agentive reading is by no means necessary for its acceptability—in the above case, the modification of the NP in the by-phrase with clumsy rules out such a reading.

In this case, the relevant parameter responsible for the felicity of the pseudo-passive is the 'affectedness' of the prepositional object, not the agentivity of the subject. As Rice (1987) has shown, the acceptability of English pseudo-passives varies with the manipulation of a number of semantic parameters such as those identified by Hopper and Thompson (1980) in their seminal article on transitivity. The possibility of 'advancing' a prepositional object to subject therefore cannot be correctly characterized simply in terms of the unergativity or unaccusativity of the verb involved, at least if this verbal distinction is to be understood solely in terms of agentivity. Rather, a host of semantic parameters must be considered, including not only the agentivity of the subject, but affectedness and individuation of the object and telicity and punctuality of the predicate.

If the unaccusative/unergative distinction were to be cast in terms of these
numerous additional semantic parameters, then the 1AEX could of course be salvaged. The danger is that this tactic would possibly represent an abandonment of Perlmutter and Postal's (1984) own interest in 'falsifiable claims about language' (p. 211), since any counterexample to the 'law' could be handled in this ad-hoc manner, making it in principle unfalsifiable. Naturally, problems *would* arise if this reanalysis of the covert structure of clauses resulted in false predictions by other 'laws' or tests, a point to which we will return below.

We now turn to other RelG arguments for the existence of 'covert' GRs with reference to evidence that morphological or syntactic behavior characteristic or diagnostic of surface transitive subjects is exhibited in the case of only a subset of intransitive verbs. Since Italian data are frequently cited in this argument, I illustrate the point with Italian data taken from Rosen (1984):

(17) Mario ha difeso Luigi
has defended
'Mario defended Luigi'

Here, the auxiliary *ha* 'has' takes part in the formation of the perfect tense of the verb.

With intransitives, only some verbs form a perfect tense with *ha*:

(18) Mario ha esagerato
'Mario exaggerated'

but:

(19) La pressione è aumentata
'The pressure increased'
In the case of *aumentare*, the perfect is formed not with *ha* but with è 'is.' The 'test' of surface transitive subjects provided by the perfect auxiliary *ha* (that is, that the nominal with which it agrees is the subject) is extended to intransitives by in effect interpreting the lack of *ha* in the case of the perfect tense of a verb like *aumentare* to mean that, at some level or in some sense, *aumentare* lacks a subject. Specifically, the overt difference in auxiliary selection displayed by verbs such as *esagerare* on the one hand and verbs such as *aumentare* on the other is taken as evidence that the former take an initial 1 (i.e., a subject at the initial stratum), while the latter take an initial 2 (i.e., an object at the initial stratum). The Italian auxiliary selection rule is then formulated as follows:

(20) Select *essere* 'be' in any clause that contains a 1-arc and an object-arc with the same head. Otherwise, select *avere* 'have.' (Rosen 1984:46.)

This analysis, which assumes an initial level of GRs which may differ from an overt or surface one, is claimed to be superior to a 'monostratal' theory in its ability to express generalizations inexpressible or only clumsily expressible by the latter. Crucial to this claim is the assumption that the so-called 'unaccusatives' (verbs like *aumentare* which have an object but no subject at the intitial stratum), while differentiated from the 'unergatives' (*esagerare* etc.) by 'vaguely discernible semantic correlates', are not 'directly sensitive' or ultimately reducible to any semantic notions such as agentivity or animacy (Rosen 1984:45). *Scappare* 'escape', for example, while taking *essere*, is agentive, and semantically nearly identical pairs such as *andare* 'go' and *camminare* 'walk' are nevertheless differentiated by their auxiliary selection (*essere* and *avere* respectively). In
addition, Rosen cites numerous examples of verbs that are shown by semantic tests to be unaccusative in one language having translation-equivalents shown to be unergative in another ('sweat' in Choctaw and Italian, for example) (Rosen 1984:62).

Rosen's argument, in other words, is that even if 'unaccusatives' are distinguished from 'unergatives' in a way that appears to be non-random, the distinction is nevertheless not fully reducible to a semantic account. In this sense, the distinction is argued to be a syntactic rather than semantic one. There are, however, at least two respects in which this conclusion may be ill-advised. First, the irreducibility of the Italian unaccusative/unergative distinction to any of the semantic criteria Rosen mentions does not mean that the distinction is not amenable to a semantic analysis. It may be, in other words, that the correct semantic distinction is simply one that Rosen fails to identify. While this may seem to be a vacuous point in the absence of any identification of a semantic distinction that actually works\(^\text{16}\), in some cases RelG claims for the 'impossibility' of an economical semantic account of what is claimed to be a syntactic distinction are clearly wrong.

In support of his claim that passivization, reflexivization, and other syntactic processes of this sort may be adequately described only by a theory that assumes the kind of multi-stratal analysis embodied by RelG, Perlmutter (1984) purports to present evidence that

\(^{16}\text{Van Valin (1990), however, offers just such an alternative explanation. In this article, Van Valin rejects a purely syntactic approach to split intransitivity (as in RelG and GB) in favor of a semantic explanation in terms of inherent lexical aspect and agentivity. More specifically, he counters previous syntactic (most often RelG) analyses of unaccusativity in Italian, Georgian, and Acehnese by demonstrating not only that a semantic Role-and-Reference-Grammar account is perfectly feasible, but that the latter is in many cases more descriptively adequate as well. Van Valin's solution is presented in the next chapter.}
the verb agreement rule in Achenese (Acehnese) involves reference to the 'subject' of the 'initial stratum' of derivation only: 'The agreement affix on the verb of a clause \( b \) is determined by the initial 1 of \( b' \) (p. 8). In Russian, meanwhile, reflexivization is controlled either by an initial-stratum or 'surface' subject: 'Only a nominal heading a 1-arc can serve as an antecedent of a reflexive' (10). In English, finally, passivization is controlled by a nominal heading a 1-arc at the final stratum only.

Processes such as these, then, are argued to provide evidence for the superiority of an RelG-like bistratal theory over a monostratal one: 'In each case, the bistratal theory states as a single generalization what cannot be stated as a generalization under the monostratal theory. The monostratal theory thus implicitly claims that the nominals that behave alike have nothing in common, while the bistratal theory claims that they do have something in common: subjecthood' (12). Perlmutter cites Dik's (1978) treatment of Acehnese verb agreement of an example of the inability of a monostratal theory to state the sort of significant generalization achieved in a RelG-like account. Dik states simply that in Acehnese the verb agrees with the Agent, while Perlmutter shows that in fact the controller may be an Experimenter, Recipient, etc. 'This means', claims Perlmutter, 'that at best monostratal theories of Passive will have to state Achenese agreement by means of a clumsy disjunction of various semantic roles, thus claiming implicitly that the various nominals determining agreement have nothing in common and failing to explain why they behave alike' (9).

I fail to find Perlmutter's arguments particularly persuasive, for the following reasons. First, it seems to me that, once we translate the claims out of their RelG
terminology, what we end up with is the observation that some processes in some languages treat some relatively 'semantic' entities (let us call them 'Primaries', after van Oosten (1984): the argument bearing the highest-ranking semantic role) the same as 'surface subjects' such as the the subjects of passives (let us call them 'Subjects'); therefore (reasons Perlmutter), let's call Primaries and Subjects the same name in order to capture this generalization and to 'simplify' the relevant rule. (As far as processes go that don't unite Primaries and Subjects, these entities are still differentiated by 'strata', so this presents no problem.) Since, in other words, at some level of generality, Primaries and Subjects are 'the same' (with respect to the rule that unites them, anyway), we need to identify and name that which they share: 1-hood.

Note, first of all, that this paraphrase reveals one respect in which Perlmutter's refutation of a monostratal account of a process like Acehnese verb agreement fails to be compelling. Perlmutter claims that, 'if distinct syntactic levels are recognized, much of what has been interpreted as evidence for syntactic rules referring to semantic notions will turn out to be evidence for an initial syntactic level' (10). This is not necessarily true at all. Rather, the facts of Acehnese verb agreement simply seem to provide evidence for a semantic role hierarchy, with an adequate rule specifying a nominal picked out by such a hierarchy (i.e., a Primary, or perhaps (in Van Valin's terms) an Actor\(^\text{17}\)).

Second, it is important to note that Perlmutter's argument rests on an assumption

\(^{17}\)This is not to imply that Actor and Primary are synonymous—they are clearly distinct, with the latter term entailing greater semantic neutralization than the former. Durie (1987) has in fact provided an account of Acehnese morphology and syntax in terms of the categories Actor and Undergoer.
that rules of this sort (passivization, reflexivization, etc.) must refer to a single
characteristic or feature, a 'least common denominator' as it were. There is another view.
By this other view, rules may target (or morphemes, lexemes, constructions, etc. may
unite) any of a number of related but separate domains, sometimes accumulated through a
process of diachronic accretion. So, for example, as explained by Mithun (1991b), an
active-stative distinction may involve a number of related parameters which it would in
many respects be misguided to try to reduce to a single one. (This very fact is sometimes
taken to mean that there is no distinction involved other than a purely formal one.) This
reflects, or is at least most consistent with, a view of human categories as receiving their
structure with respect to a prototype or central member, rather than to a superordinate,
often extremely abstract least common denominator. Kemmer's (1988) 'middle' category,
for example, is a complex, structured category centered diachronically and cognitively on
a central 'direct reflexive', and proceeding outward to encompass categories that, by the
'least common denominator' approach, could only be united with each other and with the
central member by an extremely abstract (and woefully underspecifying) semantic
description such as 'subject-affectedness'.

Perlmutter's approach, then, is basically to forgo any explicitly semantic
unification of, say, the controller of the Russian reflexive, and to supply the supposedly
syntactic common denominator of 1-hood. An alternative is to take this kind of data as
providing evidence for the relatedness of the notions of 'Primarihood' and 'Subjecthood',
but not necessarily to assume that this relatedness takes the form of a single shared
semantic or syntactic 'feature'. In this sense, Perlmutter is once again incorrect in his
claim that the 'monostratal' approach entails a view of the different controllers or targets of a syntactic process such as Russian reflexivization as having 'nothing in common'.

In other cases as well, RelG claims superiority on grounds of 'economy' even where a semantic account is perfectly feasible. An example is Farrell et al.'s recent account of switch reference in Seri (Farrell et al. 1991). In Seri, switch reference seems to be sensitive not to 'final 1-hood' (i.e., the subject by the test of verb agreement), but to 'initial 1-hood' (i.e., the 'logical' subject):

(21) m-yo-a:?-kasni k-o-kasni so m-t-a?o ma
2sS-Di-Pa-bite SN-UO-bite (=’snake’) a 2sS-R-see DS
'You were bitten, after you had seen a snake' (434)

This example illustrates that the switch reference marker is sensitive to the 'logical' subject rather than the 'surface' subject, since the disreferential marker ('DS') is used even though the controller of agreement in the matrix clause is coreferential with the controller of agreement in the dependent clause ('you' in both cases). In certain cases involving 'raising' in the matrix clause, however, the 'raised' nominal determines choice of switch reference marker even though it is not the 'logical' subject of the clause. RelG permits a neat characterization of switch reference marking in this language:

(22) DS marking occurs if and only if the first 1 of clause a and the first 1 of clause b are not the same. (440)

Translated into non-RelG terms, what's going on here is that switch reference marking in Seri is 'semantically' rather than 'syntactically' controlled (i.e., controlled by the Primary
rather than by the 'subject' by the test of verb agreement) unless there is no referential Primary, as in the case of a 'raising' verb which takes an entire clause as its 'logical' subject (actually a 2 in an RelG analysis), in which case the 'surface' subject (or simply 'subject') is the relevant entity. In other words, the subject wins out over the Primary only in the absence of a referential Primary. Granted, the RelG statement is more concise, but not otherwise more adequate.

The simplicity and economy of the RelG analysis may thus be viewed as negative attributes to the extent that they distract us from a more detailed, semantically-oriented understanding of grammatical rules and categories. The entire approach of RelG actually seems to be to jump to the conclusion of the impossibility of a semantic analysis wherever the language presents patterns superficially amenable to a multistratal 'syntactic' analysis.

A third way in which Rosen's approach is misguided has to do with her claim that the non-correspondence of different languages' 'unaccusative' verbs somehow refutes any claim for a semantic basis for that category. In fairness, this claim is presented as a somewhat more specific one in a somewhat more specific context, namely as a refutation of Perlmutter and Postal's (1984) 'Universal Alignment Hypothesis':

(23) There exists some set of universal principles on the basis of which, given the semantic representation of a clause, one can predict which initial GR each nominal bears.

The point of refuting this claim, apparently, is to prove that, in the absence of any
universal 'homomorphism' between initial syntactic roles and semantic roles, any
'monostratal' analysis attempting to dispense with an initial syntactic representation and to
describe syntactic or morphological processes sensitive to 'unaccusativity' in terms of
semantics rather than syntax is doomed to failure. However, as Mithun (1991b) has
argued, the fact that different languages feature similar yet different categories in, say,
their active-stative systems doesn't mean that there is no semantic basis for or coherence
to those categories on a language-by-language basis. The reasons for differential
categorization in cases like these have to do with various factors which by no means
represent a threat to a semantic account of linguistic patterns of this nature. I will support
this position in greater detail in the next chapter, with reference to the underpinnings of
active-stative systems Kashaya Pomo and generally.

In sum, then, Perlmutter's work on 'unaccusatives' (and others' work on
unaccusative phenomena in the same model) does highlight the undeniably interesting
point that distinctions of the sort overtly present in active-stative languages (distinctions
of active or stative aspect or closely related distinctions of agentivity) are covertly present
in languages that have accusative or ergative case-marking or agreement patterns. (By
covertly present, I mean present as covert categories in Whorf's sense: even if they fail to
receive overt morphological coding, they are discoverable by rules or 'tests' with which
they interact, i.e., which are sensitive to their presence.) For all the reasons already
outlined, I view it as misguided to characterize such distinctions in purely syntactic terms,
i.e. in terms of initial or final 1s, 2s, etc. There is, however, one further argument against
the RelG position which, it seems to me, is most difficult to counter.
We may introduce this final argument with a question: How do we decide which tests are to be accepted as proof of covert 1-ood or unaccusativity? In Perlmutter (1978), Rosen (1984), etc., various tests are cited for a variety of languages, including have vs. be auxiliary selection for intransitive verbs, coding of the argument of intransitive verbs in active-stative languages, and the possibility of forming impersonal passives of intransitive verbs. As already discussed, any one of these tests may pick out different verbs for unaccusative status in different languages, based (in our terms) on a variety of factors including exactly what semantic parameter is of relevance in the distinction. What happens, though, when different tests pick out different verbs in the same language?

For example, German exhibits the same sort of distinction as Italian in auxiliary selection, with some verbs taking haben 'have' and others taking sein 'be' when forming compound perfects:

(24) Auxiliary selection by German intransitive verbs:

\begin{itemize}
\item \textit{haben} 'have':
\item \textit{denken} 'think'
\item \textit{gelten} 'be worth'
\item \textit{leiden} 'suffer'
\item \textit{liegen} 'lie'
\item \textit{lügen} 'tell a lie'
\item \textit{pfeifen} 'whistle'
\item \textit{scheinen} 'seem'
\item \textit{singen} 'sing'
\item \textit{sprechen} 'speak'
\item \textit{stinken} 'stink'
\item \textit{tanzen} 'dance'
\end{itemize}

\begin{itemize}
\item \textit{sein} 'be':
\end{itemize}
bersten 'burst'
bleiben 'remain'
erbleichen 'grow pale'
fallen 'fall'
fliehen 'flee'
fließen 'flow'
gedeihen 'thrive'
gehen 'go'
gelingen 'succeed'
genesen 'recover'
geschehen 'happen'
laufen 'run'

Given the fact that transitive verbs form compound perfects with haben 'have' (e.g., Ich habe ihn gesehen 'I saw him'), while passives take the sein 'be' auxiliary, it seems reasonable, in the RelG model, to attribute haben inflection of intransitives to unergative status and sein inflection to unaccusative status; in other words, this would be yet another case where the RelG model permits us to state the rules of haben vs. sein inflection simply and elegantly in terms of initial-level 1- vs. 2-hood.

Next, consider the fact that German also has impersonal passives of the sort used as diagnostic of unaccusativity in Dutch and Turkish (Perlmutter 1978). In the following cases, those intransitive verbs permitting passivization correspond to unergatives identified by the auxiliary test just described:

(25) fechten: Hier wird oft gefechten
    'There's often/once again fighting here'
singen: Dort wird oft gesungen
    'There's often/once again singing there'
tanzen: Hier wird jede Woche getanzt
    'There's dancing here every week'

Many verbs resisting passivization correspond to the auxiliary test's unaccusatives:

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Only the verbs picked out as unaccusatives by the test of sein-auxiliary selection may be impersonally passivized. Both auxiliary selection and impersonal passivization, then, appear to converge on a single class of unaccusative verbs.

However, not all verbs that form compound perfects with haben readily undergo impersonal passivization:

(27) gelten: *Dort wird oft gegolten
   'People often count for something [or have influence] there'
scheinen: *Hier wird oft glücklich geschiene
   'There's a lot of seeming to be happy here'

In these cases, despite the fact that the verbs are unaccusative by the test of auxiliary selection, something precludes their impersonal passivization. In addition, a few intransitive verbs that take sein may nevertheless passivize:

(28) laufen, schwimmen: Hier wird im Winter Schlittschuh
gelaufen, im Sommer geschwommen
   'Here (on the lake, e.g.) there's skating in winter, swimming in summer'

Some verbs, then, appear to be both unergatives and unaccusatives—an unacceptable contradiction in a model which assumes intransitive verbs universally to be one or the
other.

The language-internal conflict in the initial-level status (1-hood or 2-hood), subject-hood or object-hood) of these verbs' arguments means that, at least for a subset of the language's intransitive verbs, the two tests examined here cannot both be used to identify the relational status of an argument at an initial level. It seems to be an entirely arbitrary matter to select one or the other as the 'real' unaccusativity test for German.

A brief inspection of the interaction of the verbs listed above with the two unaccusativity tests indicates that the two tests may be dividing German intransitives according to two different semantic parameters. The test of impersonal passivization seems to be sensitive to something like agentivity, while auxiliary selection appears to distinguish intransitives of different aspectual profiles (i.e., according to such factors as telicity or punctuality), or intransitives that do or don't feature an argument undergoing some kind of change of state, or perhaps both. This hypothesis receives confirmation from other verb pairs—such as schlafen 'sleep' and einschlafen 'fall asleep'—each member of which is non-agentive, and each of which fails to accept impersonal passivization, but only one of which (in this example, the atelic, non-punctual schlafen) inflects with haben in the perfect:

(29) Ich habe drei Stunden geschlafen
    have three hours slept
    'I have slept three hours'

(30) Er ist eben jetzt eingeschlafen
    is just fell asleep
    'He only just fell asleep'
(31) *Hier wird jeden Abend geschlafen
'There's sleeping here every evening'

(32) *Hier wird jeden Abend eingeschlafen
'There's falling asleep here every evening'

A better analysis than the RelG one, then, is the one proposed by Shannon (1992) 'that [German] BE as perfect auxiliary is based on the mutative prototype, whereas passive is grounded in the transitive prototype' (102). The mutative prototype features a 'single participant [which] is affected and changes externally by changing state or moving' (102). Mutativity, then, involves transitivity-oriented features as outlined in Hopper and Thompson's (1980) prototype conception of semantic transitivity, but the specific parameters of relevance to mutativity, and thus to auxiliary selection, are different from those of relevance to impersonal passivization: impersonal passivization tends to require a certain degree of agency of its single (demoted) argument, while sein auxiliary selection requires, in Shannon's terms, that 'the single participant is affected and changes externally by changing state or moving'.

A single-participant verb which fails to meet the mutativity criteria may or may not be 'unaccusative' by the evidence of (resistance to) impersonal passivization, simply because a single participant which is unaffected or unchanged in the relevant respects may still be non-agentive. This explains why such verbs as scheinen 'appear' and gelten 'be worth' are 'unaccusative' by the test of passivization (they fail to be impersonally passivizable because their single argument is nonagentive) but are 'unergative' by the test of haben auxiliary selection (they are not 'mutative' enough to take sein).
For such reasons as these, Shannon concludes that 'there is no such syntactic property as 'ergativity' [= 'unaccusativity']' (105). Rather, there are non-syntactic factors to which the different 'tests' are sensitive and which may or may not coincide in such a manner as to give the illusion of a single 'unaccusative' category.

The attribution of a 'change of state or position' to verbs taking BE is, as Shannon notes, 'traditional wisdom'. But Shannon's prototype analysis is more flexible than the traditional one, since it allows for cross-linguistic differences of categorization in the case of verbs deviating from the semantic prototype, even if the different languages involved are all responsive to this prototype in auxiliary selection. It also allows for what may appear to be arbitrary intralinguistic differences in categorization in non-prototypical cases. This approach, then, handles the data more adequately than the simpler analysis of unaccusativity in terms of a single binary-valued syntactic parameter.

Next, consider the Turkish data raised and discussed by Özkarağöz (1980), in the context of an article in which she claims to provide evidence for the UH in the Turkish ArAk construction, illustrated as follows:

(33) Ayşe ağla-y-arak gel-di
    A. cry-GL-ArAk come-PST
    'Ayse, while crying, came' (p. 414)

The rules for this construction are presented as follows:

(34) i. The controller and the target of Equi [i.e. the deletion of the subject of the embedded clause] must bear the same initial grammatical relation.
    ii. The controller and the target of Equi must be final Is.
    (p. 414)
These rules account for the following (given here just in English translation):

(35) In Turkish:

The newspaper, while being understood, was read. (Both controller and target are final Is and initial 2s.)
*The newspaper, while (PRO) understanding (it), was read. (Both controller and target are initial 2s, but controller is final 1 while target is final 2.)
*The newspaper, while being understood, (PRO) read (it). (Both controller and target are initial 1, but controller is final 2 while target is final 1.)
The child, while chewing gum, kissed his mother. (Both controller and target are final and initial Is.)
*The child, while chewing gum, was kissed. (Both controller and target are final 1s, but controller is initial 2 while target is initial 1.)

(pp. 414-15)

The support for the UH comes from the behavior of intransitives, thus, crucially:

(37) In Turkish:

The patient, while bleeding, was brought to the hospital.
The Goodyear Blimp, while passing overhead, was watched with curiosity by everyone.
BUT:
*The student, while crying/shouting, was beaten.
*The girl, while playing (ball), slipped.

This constitutes evidence, given the generalization above, that 'bleed' and 'pass' bear initial 2s (are unaccusative verbs), while 'cry/shout' and 'play' bear initial 1s (are unergatives)—hence, evidence for the UH.

On the other hand, Özkargaröz also presents evidence against Perlmutter's (1978) argument for unaccusativity in Turkish with reference to impersonal passives. Perlmutter
(1978) argues that the impossibility of impersonal passives universally, including in Turkish, with unaccusative verbs constitutes evidence for the 1AEX, since such a structure would require double advancement to subject assuming that the verbs involved bear initial 2s. Ozkaragoz shows, however, that this doesn't stand up to the facts; specifically, whenever a supposedly unaccusative verb has a human (final) subject, it is acceptable in the impersonal passive construction:

(38) Burada kay-il-ir
here slip-PASS-AOR
'Here it is slipped' (p. 418)

Her conclusion is that 'the validity of the 1AEX Law (for Turkish) upon which the impersonal passive is based will have to be reexamined. Alternatively, it may be that the 1AEX Law does hold for Turkish but the advancement analysis of impersonal passive does not...' (420).

A different conclusion we may draw is that these sorts of facts underline the ultimate untenability of the RelG approach. Note that, independently, we might say that the impersonal passive test shows that human arguments of intransitives are necessarily initial 1s in Turkish. However, by the 'ArAk' test, such arguments are initial 2s. Thus, we have a case where different 'tests' simply pick out different verbs as unaccusatives. Hence, we have to accept the fact that 'initial 1-hood' or '2-hood' is not adequate to explain patterns such as these. Ultimately, then, the article presents evidence against, rather than for, the UH.

Cases where tests such as these pick out different predicates in different languages
are sometimes viewed as an embarrassment to a semantically-based 'monostratal' approach, and as supporting the multistratal RelG framework (Perlmutter (1984), Rosen (1984)). However, even if this were an embarrassment (and I trust I have shown that it is not), cases such as those just discussed, involving disagreement among different 'unaccusative' tests within the same language, are much more devastating to RelG. While it would be possible, in the case of manipulating the acceptability of the application of a single test to a given verb by manipulating the semantics of the predicate (recall 'pseudo-passivization' in English), to claim that the presence or absence of a (covert) initial-level 1 or 2 is thereby being manipulated as well, this solution would be contradicted in cases such as those discussed here by the evidence of the other test. All we could do, then, would be to claim in a rather arbitrary manner that one test or another is not 'really' a test for unaccusativity.\(^{18}\)

This brings us back to the question raised earlier: How do we know which tests are to be taken as diagnostic of covert (initial-level) GRs? The fundamental problem here is that the RelG model attributes a cross-linguistically and even intralinguistically

\(^{18}\)There is, apparently, another approach, taken by Legendre (1989) in her study of unaccusativity in French. She takes the position that, where different unaccusativity tests disagree (which she shows to be the case for French), each test is to be viewed in terms of a sufficient condition for unaccusativity, while a necessary condition is that at least one of the tests be passed. By Legendre's view, the only explanation for disagreement among the tests is that some of them have 'some kind of aspectual restrictions' (154), a fact which we may alternatively take as an indication that the real explanation for this disagreement lies simply in the different tests' sensitivity to different semantic factors. She has since (Legendre, Miyata, and Smolensky 1991) adopted a 'new approach that unifies the semantic and syntactic ideas' (156). This approach, in the context of what is called Harmonic Grammar, is more flexible than the traditional syntax-based approach and acknowledges both motivation (semantics) and conventionalization (syntax).
separable range of phenomena to a single underlying syntactic variable, initial N-hood. In any single case, it is difficult to counter a claim that a surface phenomenon is best attributed to a covert phenomenon such as initial-level GRs. On a case-by-case basis, the counterarguments would be as I have outlined above: such an analysis is uneconomical (i.e., GRs needn’t be invoked in addition to the relevant semantic factors plus, in some cases, pragmatic factors such as focus (Shannon (1992)), the initially obfuscating effects of grammaticalization, lexicalization or, most generally, conventionalization19), it falsely imputes an arbitrary (in this sense, 'syntactic') nature to semantically motivated phenomena, and it is unhelpful in distracting us from the finer-grained semantic details involved in the surface distinction.

From one perspective, these might not be considered devastating arguments. One might imagine ReL to provide a slightly different or complementary perspective on a body of facts relating to the syntax-semantics interface from that provided by an exclusively semantic analysis, or by a semantic/pragmatic analysis, and then perhaps quibble over the choice of the term 'subject' (etc.) to explain these facts, and leave it at that. However, the explanation of surface facts such as impersonal passivization, active-stative categorization, and so on in terms of covert GRs is shown to be clearly untenable in the face of the results of different unaccusativity tests in German, Turkish, and other

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19While the fact of conventionalization may indicate to some that a syntactic as opposed to semantic treatment is preferable, an ReL approach would still be untenable to the extent that different semantic categories have been conventionalized. In other words, the mere fact of a departure from completely transparent and productive semantics does not mean that a single syntactic parameter (initial 2-hood or what have you) is adequate to characterize the category involved.

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languages. The only way out, as mentioned, would be to claim that at least one of the tests is simply invalid, which would however throw all such tests for all languages into doubt as well, unless a principled explanation could be devised for one or the other test being somehow flawed for a particular language in which that test disagrees with others.

The results from German are actually perfectly consistent with what we found to be the case in English, where we encountered different degrees of acceptability of 'pseudo-passives' according to the manipulation of certain transitivity-related aspects of the clause. The absolute categorial nature of GRs in the RelG model would preclude an explanation of this sort of cline if the grammaticality of an English pseudo-passive were simply to be attributed to the covert relational status of arguments of the verb. In each case (English, German, and Turkish), then, an initially appealing, disarmingly simple allegedly syntactic explanation for the surface facts turns out to be at least overly simplistic and probably ultimately untenable.

In his recent article on the interaction between thematic roles and argument selection (i.e., generalizations about which thematic role of a verb is 'selected' for subjectivalization, etc.), Dowty points out that Perlmuter's 'unaccusative/ unergative' distinction corresponds to his own 'Proto-Patient/Proto-Agent' distinction (Dowty 1991:606). In other words, an 'unaccusive' verb may be understood as one featuring a single 'Proto-Patient', while an 'unergative' verb is one featuring a single 'Proto-Agent' argument. What Dowty does, then, is recast Perlmutter's supposedly 'syntactic' distinction in overtly semantic terms. It is clear, however, that this translation goes beyond a mere notational reformulation. The reason is that Dowty's approach, which endorses the role of
prototype structure in the characterization of the categories involved in the distinction, is
much more in line with the 'fuzzy' nature of the data bearing on or illustrative of the
distinction than Perlmutter's approach. Dowty points out that, if a one-place verb in a
given language has an argument that is both non-agentive and telic, it will be more clearly
categorized as an 'unaccusative' by the whatever tests are relevant in that language (e.g.,
impersonal passive, have vs. be perfects, etc.) than if the verb's argument represents any
other combination of values for these features).

In other words, if the 'tests' refer to semantic categories of agents and patients,
then indeterminacy of this sort is to be expected given an understanding of the semantic
categories involved having prototype structure. Consider the following:

(39) ??The post was struck at by John in a fit of rage.
 The post was struck by John in a fit of rage.
 Jimmy was struck by John in a fit of rage.

Indeterminate or scalar grammaticality judgments such as these would be extremely
difficult, if at all possible, to account for in a theory that attributes the possibility of
(pseudo-) passivization to John, or the post or Jimmy, being an initial subject or object.
What could one say? That John is 'more of a subject' in the second example than in the
first? Unless the theory were significantly revised to accommodate different 'degrees' of
subject- and object-hood (an accommodation explicitly provided for by Dowty in his
prototype-semantic account), then one would have to dismiss such data as
'epiphenomenal' or due to the effect of an independent or orthogonal factor (such as the
meaning or function of passivization), which would however in turn remove

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pseudopassive phenomena from the domain of facts accountable for by, and therefore supporting, the lAEX.

We may conclude from this discussion, then, that, in the multistratal RelG model, the notions of 'subject' and 'object' are vitiated as truly syntactic constructs to the exclusion of semantic factors. The theory, like other multilevel or transformational theories, permits the representation of semantics in terms of syntactic structure precisely because it features covert levels of derivation that are not directly accountable to the surface facts. Given the association of 'level 1' with such semantic parameters as are involved in notions like 'unaccusativity', endorsement of the RelG approach is equivalent to an acknowledgement that some 'subject' properties are more sensitive to syntax-independent semantic properties than others, with cases where the 'surface' subject is sensitive to these processes representing more complete degrees of grammaticalization.

This counterargument against the RelG interpretation of 'subject' effects transfers to GB as well. In the GB model, many of the same empirical data pointing to initial-stratum argument status in RelG are taken to point to the syntactic status of the argument as 'internal' or 'external' (cf. Haider 1985). Just as a single binary-valued initial-stratum status cannot handle unaccusative mismatches in RelG, however, attribution of of such phenomena to covert position of the argument inside or outside the VP must fail as well.

It is the position taken in the present analysis that, if 'subjects' and 'objects' are viewed as syntactic categories, they are only syntactic to the extent that they deviate from prototype values of independently-required semantic/pragmatic categories—especially in cases where these extensions involve the interaction of two or more different category-
types or the neutralization of one under the influence of another. This allows us to retain a view of the relevance of semantic parameters such as agentivity to subject categorization, without conflating or confusing the essentially semantic with the essentially syntactic, and it allows us to entertain the possibility of languages in which a 'subject' category has simply not achieved any significant degree of grammaticalization, if the language-internal facts so dictate. Thus, we may posit 'subjects' for languages in which significant generalizations require them (e.g., if conjunction reduction can't be expressed in terms of independently-required constructs like topic, agent, argument per se, etc.), while forgoing reference to them where they simply aren't required or relevant.

There are, however, other frameworks that endorse a semantic view of subjects and objects in a manner more explicit than RelG--where, in other words, grammatical relations are overtly defined as semantic entities, with syntactic properties (if any) being non-critical and simply tending to follow from their semantic properties. Like RelG, these other frameworks posit GRs as universals--although for completely different reasons and with a radically different view of the nature of these universal entities. Any investigation of the universality of GRs, then, must accommodate the valid insights of these other frameworks, to which we now turn.

4 The cognitive-functional frameworks of Langacker, Chafe, and Croft

I argued in the last section that, while the RelG conception of GRs is empirically oriented to the extent that the relational status of arguments at various (overt and covert) 'strata' of structure is identified on the basis of morphological evidence and behavioral
'tests', that conception is nevertheless flawed because of a simplistic attribution of these empirical effects to a single syntactic variable rather than to multiple separate semantic factors. In this respect, the RelG view of relational constructs (subjects and objects) is similar to that of Keenan discussed in Chapter One. While Keenan's approach is decidedly different from that of RelG in viewing subjecthood as a 'cluster concept' to the extent that it may be identified in any given language (or clause in that language) by a greater or lesser number of the syntactic or morphological tests, the two approaches are similar in being empirically oriented and, as has been noted by numerous analysts in connection with Keenan's paper (cf. especially Schachter (1976, 1977) and Dixon (1979)), in sharing the flaw of conflating what are in principle completely different 'tests' in many cases sensitive to different factors. It is in these respects, as we shall see, that the frameworks to be discussed next are emphatically different.

4.1 Langacker

The view taken by Langacker (1987, 1991) is one by which, in virtually any clause in any language, some nominal or other has the sort of 'special status' associated with a traditional and pre-theoretical notion of the subject as having 'conceptual prominence' or being the 'focus of interest' (Langacker 1991:318, 312, and passim)—regardless of whether such status has any consistent formal manifestation from language to language, or indeed any manifestation, consistent or not, within a single language. By this view, then, such behavioral subject-tests as those proposed by Keenan may indeed point to the most prominent NP and thus to the subject, but inability of such tests to pick
out any NP (a situation to be discussed below in connection with Mithun’s analysis of Cayuga) does not mean that no NP is conceptually prominent. Special status with respect to coding or behavioral properties, then, is not a necessary condition for subject status, which is (virtually) inevitably associated with some nominal simply by virtue of the human conceptual propensity to foreground one participant in a scene with respect to others or with respect to the scene as a whole. (Langacker identifies this distinction in terms of one between ‘identification of subjects’ and ‘characterization of this notion’ (Langacker 1991:305).) Unification of various argument-types (participant or semantic roles) or sensitivity of syntactic processes to argument-types not reducible to independent notions of semantic role or topic is, then, simply something that may or may not happen to subjects, not evidence for whether subjects do or don’t exist in any given language.

Langacker characterizes the subject as correlating cross-linguistically with what he calls topicality (or, in other and I think less confusing terms, ‘topicworthiness’). Essentially, the claim is that there are certain types of participant that humans will tend to perceive as salient in any given scene. Here, an action chain schema related to Fillmore’s (1968) case-role hierarchy comes into play: in an event corresponding to, or linguistically expressed in terms of, a prototypical transitive clause, humans tend to view the energy source or starting-point of the action as salient, and agents therefore tend to figure as subjects. Other factors may, however, in effect override this schema in the selection or perception of one participant as most salient or most important. Langacker presents what he calls an empathy hierarchy based on Silverstein’s (1976) animacy hierarchy (cf. also Kuno’s (1976) empathy hierarchy), which represents an egocentric cline of the likelihood
of a participant eliciting the empathy of the speaker, that is, the likelihood of a speaker choosing to in effect view the situation from that participant's perspective; since this hierarchy is orthogonal to the semantic/case-role/action-chain hierarchy, it must be represented separately:

(40) speaker>hearer>human>animal>physical object>abstract entity
    (Langacker 1991:307)

While this hierarchy is still relatively 'objective' or 'propositional' (in that the perception of an entity as human, animal, etc., is largely independent of the speaker's momentary discourse-perspective), it is arguably slightly less so than the semantic-role hierarchy or action-chain schema in being deictically-centered.

The next factor Langacker describes as bearing on the choice of subject (remember that we're still talking about some conceptual choice independent of any overt or formal manifestation of this choice) is the most subjective (or, in Traugott's (1982) terms, 'textual' as opposed to 'propositional')--namely, definiteness. Essentially, the conceptual basis of this factor is that definiteness presupposes the unique identification of a given referent, which would therefore be more focused or salient, ceteris paribus, than other participants.

Finally, Langacker invokes the highly subjective factor of figure/ground organization, i.e. simply the selection of one participant to function as figure or foregrounded participant. This final factor is, however, the least clearly defined, and least constrained in its application. Thus, while Langacker acknowledges that 'certain objective
properties (e.g. compactness; being in motion; contrast with surroundings) may 'encourage' the selection of a given participant as figure, in the final analysis all one may say about the choice is that it is ultimately a 'matter of construal' (1991:308). Moreover, given the fact that Langacker eventually concludes 'that the rather vague notion of 'focus of interest' reduces to the well-established phenomenon of figure/ground organization', or 'status of figure within the clausal profile' (1991:312), it is not clear whether this fourth factor, which potentially overrides the others, questionable substance beyond a restatement of the claim that, essentially, subjects are 'the point of departure...of the clause' (Halliday 1970a:356).

The view presented by Langacker, then, is that, in any given clause, one nominal will represent a participant that, as motivated by various propositional and subjective factors, has a special perceptual salience. It is important to reiterate that this salience is argued to be a conceptual or perceptual notion which need not have any overt expression—although the salience is somehow likely to result in that nominal being 'easily accessible for participation in grammatical constructions' (1991:308). In principle, then, the nature of the conceptual subject category proposed by Langacker is independent of grammatical behavior or behavioral 'tests' such as those proposed by Keenan:

[Such behaviors] need not be associated with the subject exclusively, nor is their inventory precisely the same from one language to the next. In short, they are symptomatic of the special prominence of subjects but do not per se constitute a characterization of subjecthood, which is claimed instead to be conceptual in nature. (Langacker 1991:309)

As I just mentioned, given the association between the notion of 'focus of interest'
(i.e., 'subject') and 'topicworthiness', Langacker may seem simply to be restating in his own terms the traditional pretheoretical view of subject as being 'what the predicate is about', or endorsing the understanding of subject and topic being simply two points on a diachronic and conceptual cline (see especially Givon (1976)). However, it is amply clear that subject and topic are in principle two different notions. Langacker thus takes care to distinguish them, a task which first of all requires that we clarify precisely what we mean by the term topic itself.

4.2 The nature of topics

First, the term topic has been used in different senses corresponding to the level of structure to which it is applied—e.g., clause or discourse. On the clausal level, the term topic often seems similar to Langacker's notion of profiled participant, clause-level trajector, or relational figure, at least if we assume a characterization along the lines of Halliday's theme: 'the point of departure—the takeoff point of the clause' (Halliday 1970a:356) or 'the peg on which the message is hung' (Halliday 1970b:161), an element which may or may not be 'given.' This is a sense of 'topic' that is often claimed to coincide with subject, although it is clear that the two may fail to coincide; according to Halliday, the first constituent in each of the following, whether nominal or not, would be analyzed as 'theme':

(41)  What did John do yesterday?  
    Yesterday John built a gazebo.  
    This gazebo I was left by my father.
There is, however, another sense of topic which is even more clearly distinct from that of subject. If we take the traditional view of topic as that which the discourse (rather than the clause) is about, then it is clear that subject and topic routinely fail to coincide. Langacker presents the following example:

(42) I've been thinking about the wedding. I only want to invite the immediate relatives. The back yard would be a good place. We don't need flowers... (Langacker 1991:313)

In this example, the topic at the discourse level is the wedding, which is established as such in the first sentence. In none of the subsequent sentences, however, does the wedding appear as subject. Rather, each sentence taken as a whole (rather than simply the predicate of each sentence) is, in a loose sense at least, a sort of comment on the discourse topic; conversely, the discourse topic 'represents the specific conceptual realm with respect to which the clause is meant to be interpreted and into which its content is integrated' (1991:314). Each sentence, in other words, would have a completely different interpretation if the topic were different, or would have questionable communicative value without a pre-established or understood discourse topic.

We may, then, consider both (discourse) topic and subject to represent reference points, but they are reference points at different levels of structure. While the topic represents the superordinate reference point with respect to which specific clauses are interpreted, the subject represents a subordinate reference or orientation point with respect to which the rest of each clause is interpreted. (Alternatively, we may consider topics to 'limit the applicability of the main predication to a certain restricted domain',

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while subjects limit the application of a predicate to the domain they themselves identify (Chafe 1976). The relationship between topic and subject therefore may be conceptualized in terms of a nesting structure. Given the different levels of structure involved, certain crucial formal differences follow. For one thing, the topic typically goes unmentioned after having been established or identified, or is at least referred to with an amount of material in inverse proportion to the degree to which the topic is unambiguously established in the minds of the interlocutors, with zero overt reference being the logical extreme.

This minimal expression of topic clearly follows from the fact that the topic is a supraclausal element which lends coherence to specific clauses and sequences of clauses, but is not itself contained within the scene represented by any particular subordinate-level clause. Another aspect of this same fact is the familiar point that a distinguishing feature of subject and topic is that there is no selectional relation between the topic and the verb, while such a relation does exist between subject and verb (Li and Thompson (1976), Chafe (1976)). Thus, we find topic-verb relationships such as those in the following examples from Korean and Japanese respectively:

(43) Siban-in, hakkjo-ga manso
     now-TOP school-SUBJ many
     ‘The present time (topic), there are many schools.’

     Gakkoo-wa, buku-ga isogasi-kat-ta
     school-TOP I-SUBJ busy-PAST
     ‘School (topic), I was busy.’ (Li and Thompson 1976:462)

The topic, in other words, does not (necessarily) function as an argument of the predicate.
Of course, this also points to certain respects in which it is not true that the topic-clause relationship is parallel to the subject-predicate relationship. First, the relationship between topic and clause is often one of inclusion, with the topic in effect representing a setting for the clause, or (in Chafe's oft-quoted characterization) 'set[ting] a spatial, temporal, or individual framework within which the main predication holds'--as in the Korean and Japanese examples just cited. The relationship between subject and predicate, on the other hand, is one involving the foregrounding of one argument (the subject) against the background of the rest of the predication. In many cases, subject and topic may nevertheless overlap, as in the following case involving a 'discourse space' which also functions as foregrounded participant in the scene represented by the subsequent comment:

(44)  
A: Where's your mother?  
B: She went to the store.

Of course, this overlap requires the identification of 'mother', rather than, say, the 'location' of the mother, as topic; it is further conceivable that the location of the mother itself figures within a larger, superordinate topic, as would presumably be the case if the question were preceded by an invitation from A to B to, say, go out to dinner.

A sequence such as this, which may in principle be continued indefinitely, is conceptualizable as involving a series of nested or hierarchically-arranged topics, with the lowest or most immediate one typically being easier to identify than the highest-level, most superordinate one. (This is a phenomenon investigated in some detail by van Oosten

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(1984) and characterized in terms of the 'layering' of topics.) In any case, instances where
the subject and topic coincide often involve the coincidence of subject with a relatively
low-level topic (which van Oosten calls the **Representor**) which may in turn be included
under a superordinate topic, and so on. Thus, Langacker explains, 'it is of course natural
for the subject, as the most prominent clausal element, to be the one through which the
connection with the topic is established' (315). As van Oosten makes clear, however, the
subject is typically a basic-level sub-part, potentially shifting on a sentence-by-sentence
basis, of a superordinate discourse-level schema more properly identified as the topic in
the sense of that which a stretch of discourse is 'about' and which in turn gives coherence
to that stretch of discourse.

It may reasonably be argued, then, that 'topic' represents a relatively diffuse,
complex scene or schema from which elements are selected and placed in focus on a
sentence-by-sentence basis; these specific elements are typically (but not invariably)
grammatical 'subjects' in English. Van Oosten calls them 'sentence topics', defined as 'a
constituent inside a sentence which most directly evokes the discourse topic which is
relevant in the current sentence' (van Oosten 1984:36). The relationship between topic
and subject (the latter term taken in its conceptual sense, although, as mentioned, this
conceptual entity will often coincide with the grammatical subject in English) may, then,
be understood in terms of the general conceptual relationship between schemas and basic-
level components of schemas: the latter are understood not atomistically or in isolation
but in terms of their place in the former, while the schema, as a relatively diffuse,
superordinate entity, is most naturally approached by focusing directly on basic-level
entities that figure within it.

It is partly in this sense, then, in which Langacker at least strongly suggests the subject relation to be universal. In other words, it is a characteristic of humans, rather than of particular languages or speakers of particular languages, that specific, basic-level sub-parts of schemas are brought into focus in discourse. This isn't to say that entire schemas are never brought into the kind of focus associated here with subjecthood—but this just means that superordinate entities may function as subjects in addition to the presumably more common or typical basic-level entities. The point is, something must always be focused on, at whatever level of concreteness or abstractness, and it is this basic fact of human conceptualization in terms of figure and ground to which Langacker relates the phenomenon of subjecthood. As already mentioned several times above, this view of subjecthood does not rely on any universal formal expression, or set of expressions, of subject categorization, since unified morphological coding or 'the grammatical accessibility of subjects is viewed as merely symptomatic of their conceptual prominence' (1991:318).

In certain respects, Langacker's characterization of the subject relation is intuitively plausible. One serious problem with it, though, is that it lacks empirical grounding. Also, even assuming an acceptance of the existence of a subject category in all cases, how could we possibly know which nominal fits it on a clause-by-clause basis? (Surely, if there is no way for an analyst to know, there is no way for a speaker to know, and the category is nonexistent.)

A further problem is that, even in a language such as English for which there is
ample evidence of the usual sort for relational categories, there are cases involving a
delevation of the overt subject (by the usual sorts of tests) from the 'subject' in Langacker's
notional terms. Examples would include those where, in van Oosten's terms, the apparent
subject cannot be claimed to be the 'sentence topic.' In an example such as the
following

(45) It seems to be raining.

it would be questionably meaningful to claim that the referentially void (although cf.
Bolinger (1973)) it is being focused or foregrounded. Given Langacker's semantic
characterization of subject, such a sentence is subjectless—as he himself admits. The usual
way Langacker would handle cases such as this would be to claim that the 'formal' subject
is somehow being conceptualized in terms of the semantic subject prototype from which
it deviates—he would not have recourse to the usual references to 'syntactic place fillers'
or the like, given a conception of grammar as invariably motivated by semantics. This is,
of course, the flip side of the first problem, both of which arise given a semantic

20Actually, it's not certain whether all such cases of non-overlap would truly represent
a non-coincidence of subject and 'subject'. Consider Chafe's (1976) mini-dialogue:

   A. What happened to the lamp?
   B. The dog knocked it over.

In B's response, a non-sentence-topic is most naturally chosen as subject. However, this
is due to the greater topicworthiness of the animate 'dog' relative to the inanimate 'lamp'
(cf. Langacker's empathy hierarchy), and it may well be that this greater topicworthiness
results in the dog being the conceptual figure rather than the more topical (but not more
topicworthy) lamp.
characterization of subject rather than a purely formal one.

Finally, there is the more general problem or question of the implications of the fact that, while 'subject' as conceptually foregrounded participant is believed to be a universal, different languages follow quite different rules in what is commonly described as subject selection, that is, the selection of grammatical subject, pivot (Dixon 1979), or the like. For example, given that different languages follow different constraints or conventions in this respect (with some languages' grammatical subjects being necessarily referential or definite, e.g., and, more generally, with languages differing in the degree to which their syntax and pivot selection are role-dominated or reference-dominated (cf. Chapter Three)), does this entail that different languages' speakers must be viewed as conceptualizing scenes differently due to the exigencies of their language, necessitating a Humboldtian or Whorfian view of the grammatical structure of a language constraining the world-view of its speakers? Note that, if this is the case, it is not true that 'subject' in Langacker's universal conceptual sense is wholly independent of 'subject' in a language-specific grammatical or syntactic sense.

Consider, too, the problem of ergative languages. While Langacker characterizes the conceptual subject as correlating with topicworthiness by various criteria, the energy-schema criterion clearly picks out the Actor or agent argument of a transitive clause as opposed to the Undergoer or patient. Do languages such as Dyirbal, which have grammaticalized an absolutive syntactic pivot, differ from languages like English on a merely superficial level, or on a level of conceptualization?

Langacker in fact argues that such languages instantiate a different cognitive
schema in their morphology and syntax from the energy-schema underlying a nominative-
type subject, namely a schema representing a 'natural path defined in terms of conceptual
autonomy/dependence', starting with the 'theme, i.e. the participant evoked as part of a
processual predication's conceptually autonomous core' (1991:382). Clearly, however,
many of the syntactic processes of such languages most centrally involve, and therefore in
an overt sense foreground, a different sort of participant from the allegedly universal
conceptual subject; can we really say with confidence that speakers of such languages
conceptually foreground the allegedly universal subject category to the same degree that
speakers of English do? Again, the problem is as follows: To what degree do we really
want to characterize a universal subject category independently of the internal evidence of
any particular language for which that category is assumed to exist?

4.3 Another perspective: Mithun's concept of subject as a 'grammaticalized'
category

Having, then, established Langacker's perspective on the universal nature of
subjecthood and discussed some of the difficulties entailed by that perspective, let us turn
to an analysis that makes different assumptions and comes to different conclusions. In an
article investigating factors bearing on the grammatical instantiation of the subject
category, Mithun puts Cayuga and Selayarese through the paces of the usual sorts of
Keenan 'subject'-tests (coordination, equi, etc.) and argues, on the basis of the results of
these tests, that those languages in fact lack any subject category (Mithun 1991a). She
argues that this characteristic may be understood as explained by the fact that all
'topicworthy' arguments are obligatorily coded in any clause in both languages, and all semantic features relevant to topicworthiness—person, animacy, agency—are obligatorily specified in this coding; cf. the following Cayuga example:

(46)  A-k-at-awę'-'hna-3
      AOR-1.AGT-SEML.REFL-bathe-PURP-PUNC
'I went swimming' (Mithun 1991:175)

Exactly why this should obviate the need to 'grammaticalize' what she calls 'clause topics' (a term I will explain in a moment) into 'subjects' is a matter of some speculation and inference, to which we now turn.

First, we may assume that, if all topicworthy 'core participants' are obligatorily expressed on the verb, then that nominal which in another language would by default, or typically, receive expression as subject is invariably expressed morphologically. Therefore, we might say, there is a certain obviation of the motivation for any further system to select one nominal and signal its special status or prominence, or even for ensuring that this privileged nominal is separately expressed. Given the obligatory coding of topicworthiness in the affixal nominal morphology, speakers/listeners would always be able to identify the nominal that corresponds to the subject, or that would be signalled out as subject, in languages that have 'grammaticalized' the category.

We may legitimately ask what it means for, say, a Cayuga speaker to 'identify the nominal that corresponds to subject' if 'subject' is not an internally-justified category in the language. The answer requires that we acknowledge the essential difference between Mithun's and Langacker's conception of subject. According to Langacker, 'subject' is

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clearly a conceptually-defined category in principle independent of any formal expression. For Mithun, on the other hand, 'subject' is a category defined precisely in terms of formal (morphological or syntactic) behavior, rather than notionally or semantically. The further question is, then, whether Mithun would consider justified a claim for the existence of something like Langacker's notion of subject independent of any overt evidence. In fact, she does assume just such a notion, only she does not call it 'subject', but rather 'clause topic.' It is precisely this 'clause topic' which a language may or may not grammaticalize as subject. The notion of 'clause topic' is in turn rather impressionistically characterized in terms of a strategy by which speakers 'select one participant as a starting point, then say something about it', with that participant being 'that... with which the speaker chooses to identify', which in turn is largely predictable in terms of Fillmore's (1968) and Silverstein's (1976) hierarchies: 'Speakers generally prefer first person topics to second, and second to third. They prefer humans to nonhumans, and agent to nonagents' (Mithun 1991:174).

Given that this notion of clause topic seems to be more or less what Langacker intends by the term subject, what we end up with is a largely definitional difference between Langacker and Mithun. Mithun, in other words, would not deny the existence of something like Langacker's conceptual notion of subject; what she is denying that Cayuga and Selayarese have is a different sort of 'subject' altogether, a 'grammaticalized' one representing a conventionalized formal category deviating from or neutralizing factors of topicality and topicworthiness. Any imagined disagreement between the two, then, would be parallel to a dispute about the universal status of evidentiality: given that speakers of

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any language can indicate the source or nature of the evidence on which they base an
assertion, evidentiality is a universally valid notion, even though only certain languages
grammaticalize the notion to the extent that they possess markers that we would
characterize as evidentials in a strict sense.

Recall that one of the difficulties raised by Langacker's analysis of 'subject' as a
universal category is that this category is characterized not simply in terms of a universal
human propensity toward figure/ground organization, but more substantively in terms of a
particular universal prototype. If we ignore this problematic aspect of his analysis, I think
it is valid to claim that Langacker and Mithun would agree in accepting a coherent
universal semantic or discourse-pragmatic category (whether we choose to call it 'subject'
or 'clause topic') which exists irrespective of whether any particular language manifests
this category by any overt morphological or syntactic behavior. We may reasonably ask
on what basis Mithun believes that, in any clause even in a language like Cayuga, one
participant is singled out as conceptual 'starting point.' To some extent, the belief is
axiomatic and rests on a claim for the universality of discourse coherence and of clause-
topichood as centrally involved in such coherence and as 'crucial to the understanding of
most speech' (173): 'Obviously topicality does not play a lesser role in Cayuga and
Selayarese than in languages like English [which have grammaticalized clause topics into
subjects]. Cayuga and Selayarese speakers normally speak as coherently as speakers of
other languages, exhibiting the same kind of topic continuity' (182-3).\textsuperscript{21}

\textsuperscript{21}Mithun thus explicitly relates the phenomenon of clause-topichood to discourse
needs, rather than to discourse-independent cognition as Langacker does, but this
difference need not concern us at the moment.
In addition to this pre-theoretical, intuitive justification of a claim for the universality of clause-topichood, and for the indispensability of a clause topic for virtually any clause in any language, there do exist in Cayuga overt discourse signals of the kind of reorientation of perspective that would in other languages be accomplished largely through subject-selection. Recall that the point of view endorsed by Mithun is that, in Cayuga as in all languages, the most topical NP will be largely predicted by factors relating to topicworthiness—an animacy hierarchy and something like Fillmore’s case hierarchy. If the orientation of each clause (in the sense involving the intuitive notion of a Langackerian ‘subject’ or Mithunian ‘clause topic’) were exceptionlessly predictable by these factors—i.e., if we always chose to view the situation represented by the clause from the perspective of the most animate (in a loose sense subsuming animacy in a strict sense and person, concreteness vs. abstractness, etc.) and most agentive participant (with perhaps fixed hierarchies of precedence or weight between the two hierarchies or among the factors subsumed under these two general hierarchies)—then there would presumably be little need for any device signalling the identity of that participant. Since speakers will often want to orient the discourse and particular clauses from the perspective of a participant that fails to rank highest by these factors, there exists a motivation for

22 Of course, the case hierarchy would work only for accusative languages, but might be simply flopped for ergative languages in the way that Dixon does with his agent-patient-prototype model (Dixon 1991). Note, though, that, according to Dixon, all languages, including syntactically ergative ones, unite A (the potential agent of a transitive clause) and S (the argument of an intransitive clause, and therefore also potential agent of that clause) by certain processes pointing, to him, to an invariant universal ‘subject’ category irrespective of accusative, ergative, or ‘split ergative’ (active-stative) typology.

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indicating the selection of a relatively un-topicworthy participant as most salient at a
given point in the discourse; also, even if a language were to restrict discourse- and
clause-perspective to the highest-ranking participant on a clause-by-clause basis, there
might still be a need to select just one in cases where neither one of the two participants
outranks the other (although this might be handled in some cases at least by topicality as
opposed to topicworthiness, i.e. by which participant has most recently been under raised
in the discourse). 23 In languages that have grammaticalized subjects, this selection will
often coincide with subject-selection:

(47) John just got hit on the head by Harry.
    Someone just got run over by that guy over there.
    The point was emotionally disputed by the Secretary-General.

Mithun explains that, in Cayuga, despite the fact that the language lacks any
grammaticalized subject, numerous 'stylistic devices' exist 'for alerting hearers to [topic]
continuity and for foregrounding and backgrounding primary participants' (176). These
devices include special clauses that signal a break or discontinuity of topic, as well as a
specification of the pronominal morphology's referent as an NP topic in clause-initial
position. Also, Cayuga has what Mithun refers to as a derivational process for
detransitivizing verbs and backgrounding what would be the transitive agent by removing
it from the verb's argument structure.

In other words, Cayuga does have numerous formal devices for signalling the

23 This corresponds to Langacker's ultimate characterization of subjecthood, that it is a
'matter of construal' in principle independent of, even though largely predictable by,
animacy, empathy, and definiteness.
orientation or reorientation of (clauses in) the discourse, corresponding in large part to what in many other languages would be signalled by subject-selection. The question that arises is, why don’t we say that in Cayuga itself these devices serve to identify the clause’s subject, especially since Mithun herself refers to subjects as entities that serve to ‘establish an orientation’ (176)? The answer is that this (re)orientation never expresses itself in Cayuga in the ways that are standardly argued to signal or correspond to subjecthood. For example, with the exception of the detransitivizing derivational processes, devices for shifting the topic or for maintaining topic continuity in Cayuga are completely independent of case marking, and the NP that would be identified as foregrounded or topical in a given clause has no special status as syntactic pivot by the usual tests. Of course, Langacker would simply counter that each Cayuga clause has a subject that simply fails to express itself in the standard set of overt ways. By his definition of subject as clause-level trajector or conceptually foregrounded participant, Cayuga is no more subjectless than any other language. The very fact of the existence of the topic-shifting stylistic devices identified by Mithun indicates that the foregrounded participant is always clear to both interlocutors, even if in a given clause taken out of context it may be impossible to identify that participant based on any formal clause-internal criteria, or if in any pair of clauses no consistent formal mechanism isolates that participant as pivot.

In a sense, then, work on topic-shifting structures in languages that have failed to grammaticalized subjects (in Mithun’s sense) may serve to provide substance to Langacker’s largely intuitive conception of semantic subjecthood. At the same time, the
fact remains that the two analysts assume two quite different senses of the term ‘subject’ reflecting, to a great extent, their different domains of interest. To Mithun, questions of language typology--specifically, what structural characteristics may motivate the development of grammaticalized subjects out of clause topics--are of compelling interest in themselves. To Langacker, on the other hand, such questions are only of interest to the degree that they provide insight into differences of conceptual structure, with the result that differences between, say, English and Cayuga of the sort that Mithun describes are emphatically uninteresting given that no appreciable difference in conceptual structure seems to be involved--both languages have basically the same notion of subjecthood (or clause-topichood) which simply manifests itself in superficially different ways.

We may have no doubt that speakers of any language have just as effective a set of devices for maintaining topic continuity and discourse coherence as English speakers. One reason that the sort of phenomenon that Langacker refers to as subjecthood is uncontroversial on an almost a priori basis (with the caveats indicated above) is that it corresponds so closely to the sort of notion of topichood that I indicated in Chapter One (with reference to Comrie) to be an intuitively necessary component of language. In fact, as mentioned in Chapter One, any justification for the invocation of GRs as a separate ‘level’ of linguistic structure may be viewed as inversely proportional to the degree to which those entities are distinct from independently-required semantic and discourse-pragmatic levels. It is in this sense that Mithun’s conception of subjecthood is more legitimate than Langacker’s—at least to the extent that the grammaticalization of subjects and other GRs entails, or tends to entail, some degree of departure from transparent
discourse motivation or isomorphism with discourse-related factors of topic continuity.

4.4 Chafe

The fundamental similarity between Chafe and Langacker in their views of subjecthood may, I think, be clearly seen in Chafe's suggestion, in response to the view 'that the status of a noun as surface subject of a sentence is a strictly syntactic status,...that it is a priori unlikely that a status which is given such prominence in English and many other languages would not do some work for the language, and would be only arbitrary and superficial in its function' (Chafe 1976:43). At the same time, Chafe cautions that 'we should not be surprised to find that this [cognitive] role has been confounded, in the course of a language's history, with other roles', to the point where 'that surface subject status is not associated consistently with a single cognitive status' (43).

What, then, would this cognitive status be? Chafe, like Langacker, endorses the traditional rough characterization of subjecthood in terms of 'what we are talking about', or that 'starting point' with respect to which we add communicated knowledge, or a 'hitching post for new knowledge' (pp. 43-4). As empirical psychological support for this intuitive characterization, Chafe cites a Perfetti and Goldman (1974) experiment in which two versions of a narrative are presented, one in which the serfs receives frequent mention while Baron Wozjik receives little mention, and the other in which the bias is reversed; both end with The serfs rebelled against the baron. Interestingly, while in the former version the serfs is a much more effective prompt for retrieval of the final sentence, in the case of the latter version, the baron is no more effective than the serfs.
Chafe comments: The serfs, of course, was the subject of the target sentence, and these results suggest that its subject provides a particularly effective prompt for a sentence, even when the preceding context has been predominantly about something else' (pp. 44-5).

Chafe also mentions that, while it is clear that 'languages differ in the prominence which they give to subjecthood, so far as surface manifestations of it are concerned', even in languages lacking any morphologically unified subject category, there will often still be evidence of subjecthood. (In Keenan's terms, a language may display 'behavioral' evidence of a subject category even though lacking such evidence according to 'coding' properties.) Thus, in Dakota, an 'active-stative' language, the linearly preceding argument in a transitive clause seems, based on an 'examination of contexts' and informants' reactions', to be the 'subject, in the sense that it is the particular about which knowledge is being added' (p. 46). Even though Dakota has no true passive, then, Chafe considers a passive structure to be the best translation of a sentence such as the following:

(48) thaló he šū-ka he yûte
    meat-the dog-the ate
'The meat was eaten by the dog'

Two more pieces of evidence Chafe presents in support of the analysis of a subject category in active-stative languages are, first, that the switch-reference system of Dakota seems in some instances to be sensitive to a topic-like or subject-like nominal which diverges from a clause's actor, and second, that the Iroquois active-stative pattern seems to be disintegrating in favor of a nominative-accusative system.
I think that it is clear that this intuitive notion of subjecthood as a conceptual 'starting point' or 'what we are talking about' is precisely what needs to be clarified if we are to make any real progress in determining the status of GRs as universal categories. It is obviously essential to establish the distinction between whatever Chafe means by subject and the general notion of 'topic', as well as to reconcile the claim that subjects have a conceptual nature of the sort alluded to by Chafe with the existence of cases where the subject is clearly not 'what we are talking about', e.g.:

(49) It seems that...

You know that guy we were talking about? Well, he...

If the distinction between topic and subject isn't clarified, then much of the alleged evidence for subjecthood might otherwise be nothing more than evidence for some sort of topichood (cf. especially Chafe's discussion of the Perfetti and Goldman experiment, which we could interpret in terms of topichood if we consider the grammatical subject position as the default topic position, and the evidence for 'subjects' in Dakota). It seems that Chafe's approach would lead us towards an understanding of subjects as discourse-based entities that depart from any strict determination in terms of semantic categories such as 'actor' or 'agent' (cf. Iroquois), or that involve a neutralization of such distinctions. If we additionally accept the notion that the grammaticalization of subject in English entails the existence of subjects which depart from the conceptual content of Langacker's and Chafe's notions of subjecthood, then I think that this approach will yield a satisfying
characterization of subjecthood in English.\textsuperscript{24}

I think that one reason Chafe fails to distinguish subjecthood from topicality more clearly is that he assumes a somewhat stricter conception of topic or topicality than indicated above in connection with Mithun and Langacker. In the article, much of his discussion of topics in English is limited to an explanation of why so-called 'topicalization' structures such as \textit{As for the play...} and \textit{John I like} actually involve foci of contrast rather than topics; the implication of this section actually seems to be that 'topic' is a category of questionable relevance to English! In connection with Chinese, Chafe provides his oft-quoted definition of topic as something which 'limit[s] the applicability of the main predication to a certain restricted domain', or as something which 'sets a spatial, temporal, or individual framework within which the main predication holds' (p. 50). Thus, according to Chafe, 'real' topics 'are not so much 'what the sentence is about' as 'the frame within which the sentence holds'" (p. 51).

Given this definition of topic (intended to characterize a structure in 'topic-prominent' languages like Chinese), it isn't quite true to say that English lacks topics, just that the structure English employs to code topics is much more limited in use and restricts what may be treated as topic in ways that Chinese apparently doesn't do. For example, \textit{In connection with X...} seems to be used most readily in formal discourse when the \textit{X} is relatively abstract; thus, we would say,

\textsuperscript{24}Cf. van Oosten (1984), in which 'marked' structures such as clefts and passives are argued still to be characterized as responsive to a central function of subjecthood as formal signals of a departure from the prototypical function of subjecthood.
In connection with that plan we mentioned earlier, I think the best thing to do would be to...

but not,

*In connection with that tree, the trunk is gnarled and contorted

It is also the case, as Chafe mentions, that we freely use a preposed preposition+NP sequence to set a spatial or temporal framework within which a predication holds, as in

On Mars, microwaves melt plastic and ovens self-destruct if you put metal in them

or

On Tuesday, nobody got murdered in the whole city of Oakland

We might take note of the fact that adverbial phrases featuring with often depart from strict spatial or temporal restriction in a way reminiscent of the Chinese topics he cites:

With Martians, you have to be careful to watch your back every minute

or

With that plan we mentioned, I think John should do the driving and I'll do the shooting

In examples like these, with radically under-specifies the relationship between the adverbial phrase and the main predication in a way parallel to where in English relative clauses such as

He told me about a plan where I'd do the driving and he'd rob the bank
Another common 'true' topic-establishe in English (as opposed to a structure for presenting a contrastive focus) is You know X? However, this construction tends strongly to be used to establish a framework which spans many subsequent predications, rather than just one, and may be analyzed as therefore operating on a higher discourse level than the topic construction mentioned by Chafe in Chinese. What all this indicates, of course, is that Chafe's definition of topic is somewhat different from Mithun's conception of 'clause topic'—indicating, among other things, that the term 'topic' can be as inconsistent a term as 'subject'! I think that it would be fair to say, however, that the kind of orientation involved in Chafe's notion of topichood is not so much qualitatively different from that involved in Langacker's subject or Mithun's clause topic as differentiated by application at a different level of conceptual structure.

4.5 Croft

Croft (1991) takes an approach similar to that of Langacker in relating clause structure to cross-linguistically-valid schemas; for example (joining Jackendoff [1987], Dowty [1991], and others), he characterizes theta-roles (corresponding to Fillmore's semantic case roles) not as unanalyzed primitives but as derivative of independent semantic building blocks—in his case, in terms of a force-dynamic causal-chain model. A causal sequence such as

(57) That's a situation where I'd be careful to watch my back
(58) John broke the boulder with a hammer

is analyzed as follows:

(59) John hand hammer boulder (boulder) (boulder)
    . ------>. ------>. ------>. ------>. ------>. ------>
    VOL Grasp Contact Change Result
    State State

In this schema, 'atomic events [are] represented by directed arcs, and the participants [are]
represented by nodes linking arcs' (169). VOL stands for volitional causation, 1 of 4
causation types identified by Talmy (1972, 1976):

(60) Physical causation: physical object acting on physical object;
    Volitional causation: volitional entity acting on physical object;
    Affective causation: physical object 'acting on' entity with mental states;
    Inducive causation: volitional entity acting on entity with mental states. (166)

The depiction specifies a 'hand' endpoint of the VOL arc 'because the commonsense
ontology prohibits telekinesis outside the body' and, more importantly, because such
body-part instruments may find overt expression in examples such as He broke the
boulder with his hand (169). All the participants are aligned in the direction of
transmission of force.

'Privileged', 'direct' theta-roles ('privileged' in their default mapping to subject and
object) are defined with respect to causation types as follows:

(61) Agent: the initiator of an act of volitional causation (a VOL arc);
    Patient: the endpoint of an act of physical causation (a PHYS arc; recall that acts

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of volitional causation must be mediated by a physical entity that physically acts on the patient); 

**Experiencer:** the endpoint of an act of affective causation (an AFF arc); 

**Stimulus:** the initiator of an act of affective causation (an AFF arc).  

(176-7)

'The oft-noted priority of these theta-roles in subject and object choice', explains Croft, 'is due to the semantic structure of the verbal lexicon, namely, that verbal causal segments tend to begin with VOL arcs and end with PHYS and AFF arcs' (177). 'Oblique' roles are then characterized with respect to these direct roles—in terms of the model, by placement relative to the direct roles in the causal chain.

As far as mapping to GRs goes, Croft points out that 'subject and object choice is semantically highly underdetermined' (181). A variety of basic lexical options will often be available for selecting one or the other of the 'direct' roles onto subject and/or object based on various conceptual and pragmatic factors, and many languages additionally have a 'construction type such as the passive that allows a "reassignment" of argument NPs from the unmarked configuration of GRs to the desired one' (150). As far as the pragmatic conditions underlying subject- and objecthood, Croft notes that 'when a choice for subject is involved, topicality governs the choice, and ... when a choice is not involved, the NP that is grammatically required to fill the subject slot is a "natural topic" (Hawkinson and Hyman 1974)' (151). Croft ultimately believes, however, that 'the primary explanation for the conceptualization of subjects and objects is based on the conceptualization of verbs' (155), to which we now turn.

In an adaptation of the Dowty-Vendler verb classification system (Vendler 1967, Dowty 1979), Croft identifies 'three common causal-aspectual verb types':
(62) **Causative:**

The rock broke the window.

rock  window
  .      . ----> (.) ----> (.)
  Cause  Become  Broken

**Inchoative:**

The window broke.

window
  . ----> (.) ----> (.)
  Become  Broken

**Stative:**

The window is broken.

window
  . ----> (.)
  Broken

(262-3)

These three event types correspond to Dowty-Vendler's accomplishments, achievements, and states respectively, with other types (including Dowty-Vendler's activity), viewed as being subsumed under one or another of the primary types ('inchoative' in the case of activity). Croft views these three types as forming parts of a single ICM (idealized cognitive model; cf. Lakoff [1987]); as is fairly clear from the decompositions, they differ simply in how much of or which part of the entire causal chain they place in perspective—they are, in other words, simply three different views of (or parts of) a simple event, or event views (263).
The support Croft adduces for the three event types being part of a single 'simple event ICM' (i.e. for the view that they are three different ways of conceptualizing any event) is that 'any event has the potential to be conceptualized as a causative, and inchoative, and a stative' (263), e.g.:

(63)  
- John is sick. (state)
- John got sick. (inchoative)
- The food made John sick. (causative)

Any restrictions on this have to do with 'implausibility, not ungrammaticality'—that is, cases where particular verbs resist expression in terms of one of the event types results not from any characteristics of the ICM (or from the failure of the three event types to cohere in a single ICM) but from the relative difficulty of construing, say, certain events as leading to states that are the result of these events (267)."\n
The ICM presented here is argued to play a fundamental role in structuring our perception of events (i.e. imposing individuation on 'an extremely complex causal network' lacking the objective individuation of nouns), with a prototypical verb (and a prototypical event) being represented in terms of the entire causal sequence, and thus

\[25\] It seems that there is more than just this. There is an asymmetrical implicational relationship among the event types as follows: caus>inch>state, so that (most) accomplishments/causatives imply an achievement/inchoative, which in turn implies a resulting state—as indicated quite transparently in Dowty's and Croft's own decompositions. But the reverse does not hold. While temporary states may imply an inchoative and often a causative event, inherent states do not; also, many inchoatives fail to imply causation. I don't think, however, that this affects the argument adversely, especially since any state or inchoative can be expressed as a causative, even if it changes the objective situation or truth conditions: Lots of good food made me tall. Integration into society, rather than mere genetic endowment, is what makes one human—therefore, abortion is not murder.
being 'transitory, processual, and [having] binary valency' (270). The cause-become-state causal structure is easily isolable from the more general causal network (or the ICM is especially applicable) to the extent that the isolated event is 'conceptualized as not having a prior cause and not itself causing another event—that is, the event must have a clear starting point and a clear endpoint' (271). Where no external cause is identified for a change or a state, the participant involved is still the 'starting [point] of the verbal segment and so must clearly delimit its beginning' (271). It is this 'starting point of the verbal segment' which Croft explains to map onto the morphosyntactically privileged category of subject (in accusative or 'deep' accusative languages at least); from this perspective, human agents are prototypical subjects not because of some egocentric notion of topicworthiness but because they are most clearly 'autonomous sources of causation' and thus most clearly the starting point. (Croft notes elsewhere in this connection that many languages resist encoding instruments as subject—despite Fillmore's [1968] English-based case hierarchy—unless that instrument is conceptualized as autonomous or as an ultimate cause.) Complementarily, the endpoint of the segment is mapped onto object; assuming the plausibility of Croft's claim that 'a completely affected object is not going to change further, and ... [that] the resulting state is not likely to affect anything else' (271), objecthood is prototypically associated with complete affectedness.

This explanation for the 'privileged' status of subjects and objects with reference to the conceptualization underlying them is similar to Langacker's. We might simply point out that, given the validity of the scenario Croft presents for the salience of endpoints in a directed event, and the plausibility that, if a language were formally to
conflate some topic-marking structure with some structure marking a participant in an
event, it may indeed make sense for that conflation to involve a salient participant with
the starting- or endpoint. However, it does not follow that a particular language need
conflate the two types of structure, or do so to any great extent. In Kashaya, as we will
see, Actor and Undergoer arguably derive from the same sort of ICM that Croft presents
here, and it can indeed be shown that Actor is unmarked relative to Undergoer, and that
both are unmarked relative to obliques. It may well be, in other words, that a
core/periphery distinction is universal. This is, however, not to say that Kashaya
Actor=subject or Undergoer=object in any meaningful sense.

In my view, the advantage of Croft’s approach over Langacker’s is that he stops
short of equating subjecthood with its supposed conceptual underpinnings. Thus, while he
motivates the fact that many languages do instantiate morphosyntactically privileged core
categories of subject and object, he abstains from redefining GRs in his own terms (i.e.,
he fails to make the claim that those morphosyntactically most privileged entities that
others have referred to as subjects are not ‘really’ subjects at all). It is partly, indeed,
because of the excess of different definitions of subjects and objects and their resulting
questionable usefulness that some analysts choose to abstain from invoking them
altogether, in their theoretical terminology at least. This brings us to the syntactic
framework described in the next chapter, Foley and Van Valin’s Role and Reference
Grammar.
5 Summary

In this chapter, we have reviewed several perspectives on GRs, all of which offer valid insights, but from all of which I have attempted to distance myself in various respects. Both GB and RelG encourage us to consider ways in which a language may show evidence of covert structure potentially at variance with straightforwardly overt structures such as case markers and word order. To some extent, the evidence for these covert structures—initial-level 1-hood, a bipartite subject-predicate division, and so on—is empirical and indisputable.

However, the interpretation of this evidence is open to dispute. In particular, the attribution of such empirical effects as impersonal passivization and auxiliary selection to a single arbitrary syntactic variable has been argued here to follow more from an incorrect view of human categorization than from the empirical facts themselves. Perhaps even more crucially, the phenomenon of language-internal unaccusative mismatches offers theory-internal problems for the interpretation of initial-stratum relational status, which would force the abandonment of at least some of the model’s assumptions in any case.

In addition, both models depart from empirical accountability in extending covert categories identified on a limited language-specific basis to all languages, or to universal grammar. As I have argued in particular connection with Williams’ approach to the notion of ‘external argument’ and the VP constituent, such a methodology relies on arguments that are ultimately circular, and results in analyses that are (to adopt a word used in this context by both Dixon [1979] and Bresnan [1982]) ‘procrustean’.

The cognitive approaches reviewed here take a more satisfying view of GRs in
terms of their functional underpinnings. However, I have argued that Langacker's approach goes too far in equating subjecthood with the notion of what Mithun has referred to as 'clause topic'; while Chafe and Croft do acknowledge the fact that the conceptual motivation for subjecthood will potentially diverge from 'subjects' in a more overt, language-specific sense, their focus, like Langacker's, remains on that conceptual motivation rather than on the language-specific reflections of the supposedly universal conceptual structure. One result of this is that language-specific differences are ignored. From this in turn results a departure from empirical accountability not unlike that which we have observed in connection with the formalist models. The difficulty, then, is that the understanding of subjects purely in terms of 'clause topic', 'foregrounded participant', or the like fails to help us very much in describing the many ways that languages appear to differ in the instantiation of GRs.

As a final comment on the cognitive approach represented most clearly by Langacker, we may review some specific problems with the view of subjects—English or otherwise—in terms of discourse-pragmatics; this will also serve to adumbrate some issues that will be pursued in later chapters.

If we endorse a view of English subjecthood as largely reference-related (cf. Foley and Van Valin 1984)—in other words, that what is sometimes referred to as the 'surface' (potentially 'derived') subject is more clearly correlated with (some level of) topicality than with topicworthiness or the semantic case-role hierarchy per se—we must still acknowledge that neither subjecthood nor objecthood is free of semantic (as opposed to discourse-pragmatic) effects. Thus, coding as direct object as opposed to prepositional or
indirect object has semantic implications which go beyond what we would identify as pure discourse-pragmatics—a fact recognized in Fillmore (1977) in terms of 'perspective', but which might be more clearly identified in terms of a semantic transitivity-related notion of 'affectedness' (Hopper and Thompson 1984; see Borkin 1973 for a similar perspective).

The semantic correlates of (direct) objecthood don't just have the effect of imposing a certain semantic perspective on an argument appearing in the secondary topic (direct object) position. The correlation of object with patient status—more clearly manifested, as we shall see in Chapter 5, in the Old English accusative case, but to some extent still maintained in the Modern English object category—means that some participants (in particular, ones relatively low in 'topicworthiness', i.e. in semantic factors of relevance to topicality) may not receive object coding, especially when another coded participant is higher in topicworthiness:

(64) I beat him with a stick
    ??I beat the stick against him (cf. Fillmore 1977)

(65) I threw him the ball
    *I threw the wall the ball

These constraints, then, show that—in English as in many other languages—a characterization of subjecthood and objecthood in something like Langacker's topic-like notion of profiled or foregrounded participant is insufficient for characterizing all overtly-instantiated subjects and objects, that is for characterizing GRs as overtly empirical constructs.

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When we add to this the observation that a transitivity-sensitive construction such as passive not only requires a certain degree of semantic transitivity of the truth-conditionally-related active counterpart, but frequently imposes a higher degree of transitivity than would necessarily be the case with the active counterpart (cf. Rice 1987), it is quite clear that even as information-structure-oriented a construction as the English passive incorporates semantic features irreducible to some discourse-pragmatic notion of topicality alone. Any expectation that 'form' would not feed back on 'function' in this way could only result from a false dichotomy between the two domains—the same sort of dichotomy that might make us feel we should study GRs in function-independent formal terms or form-independent functional terms.
Chapter 3: A better model: Role and Reference Grammar

1. Introduction

In this chapter, I present an overview of a model which I argue to have decisive advantages over those discussed in the previous chapter. Unlike Government-Binding Theory and Relational Grammar, Role and Reference Grammar abstains from reducing a broad range of empirical facts of coding and behavior to a single, irreducible category or group of categories of one or two types (e.g. 'N-hood' and 'stratum'). Rather, the RRG approach is to view a range of empirical effects, including 'subject' effects, in terms of the interaction of a relatively large number of constructs corresponding to different positions on a continuum between 'semantics' (e.g. 'Logical Structure') and form or 'syntax' (e.g. 'pivot'). Compared to Langacker's approach, RRG thus also provides a broader assortment of tools for analyzing language-specific empirical facts of coding and behavior on their own terms.

The RRG model is advantageous as well in allowing us to avoid the invocation of categories of 'subject' and 'object' in favor of more consistently defined constructs such as 'pivot', 'Actor', and so on. One or more of these more specific constructs (in particular, 'Actor' and 'pivot') are what is often meant by the term 'subject' anyway. The RRG approach allows us, too, to point to 'subject'-like constructs on a clause-by-clause basis within a language. And the separation of 'pivot' and 'trigger' (surface morphosyntactic constructs) from their motivation or conceptual underpinnings allows us to characterize individual constructions in a language, and individual languages, as having pivots which
correlate with reference-related ('pragmatic') factors or role-related ('semantic') factors. While any neat bipartite division along the lines of role and reference is, naturally, an idealization, the model explicitly overcomes the danger of false dichotomy by characterizing this opposition in terms of a continuum.

We will also explore the issue of possibly undesirable aspects of the application of certain model-internal constructs. In brief, the undesirable features of their application are as follows. While the apparatus of the model does indeed permit a GR-free account, in this particular instance it does so at the expense of introducing an arbitrary quality to those constructs which bear much of the burden carried by other models' GRs: Actor, Undergoer, macrorole (MR), and 'transitivity'. This sacrifice results in a danger of treating semantically-based constructs as somewhat arbitrary variables to be manipulated at will, with little more than a general economy metric serving to distinguish the 'best' analysis from competing analyses.

If we are to retain the essential features of the model rather than abandoning it altogether, the solution I propose is implicit in this criticism: Actor, Undergoer, MR status, and the notion of transitivity are to be grounded more explicitly in semantics. This means, among other things, that we are to take seriously the prototype forming the basis for all these constructs, which is the transitivity prototype described in Hopper and Thompson (1980). All language-specific instantiations of these constructs, then, represent language-specific mappings of semantic parameter clusters represented in the general transitive prototype.
2. General features of RRG: the concepts of role, reference, pivot, Actor, and Undergoer

The name 'Role and Reference Grammar' derives from the postulation of 'two major systems in clause-level grammar, one concerned with the semantic (case) role structure of the clause, and the other with the referential or pragmatic properties of the NPs in the clause' (Van Valin and Foley 1980:334).

Under role structure are included the aspectual category of the predicate, and thematic relations or case roles in Fillmore's sense. The latter category divides into two subsystems, one derived and the other primitive or basic. The basic system consists of an opposition between participants that perform, effect, instigate, or control the situation denoted by the predicate, and participants that do not perform, instigate, or control any situation but rather are affected by it in some way' (Van Valin and Foley 1980:335). The former are referred to as Actors and the latter as Undergoers. This distinction, and the sort of consideration that influences the choice of one participant in a setting as the Actor, is often extremely subtle. As is well known from Fillmore (1977), a single situation may permit more than one Actor-choice option, reflecting some rather intangible notion of perspective rather than any brute-force concept of dominance vis-a-vis the other participant(s) (buy/sell, borrow/lend), and it is often difficult to imagine how the participant instantiated as the subject in English (and hence supposedly conceptualized as Actor) is really being conceptualized as 'performing' or 'being in control of' the situation.

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1In some works they capitalize these terms, in others they don't; I will follow the convention of capitalizing them to indicate that they are used in a technical sense defined here.
e.g.:

(1) a. John resembles Harry.
   b. Five dollars will buy you two Bongo Burgers.

Although it is difficult to characterize the distinction involved in precise semantic terms, for the moment we may just note the terminology and note that the two categories or macroroles subsume more specific semantic roles in a manner completely uninfluenced by 'reference'-related factors, to be explained in a moment.

'Transparent' role-dominated active-stative languages such as Lakhota are argued to display the relevant semantic distinction in a perspicuous manner even with intransitive predicates, rather than allowing that distinction to be neutralized in a single surface case as in accusative or ergative languages. As explained in somewhat greater detail in Van Valin (1990), such systems may be shown to encode role-related distinctions of aspect and thematic relations; systems of this alignment type, in particular that of Kashaya Pomo, will be discussed in some detail in the next chapter.

In Van Valin and Foley's system the traditional inventory of thematic or Fillmorean case roles (agent, patient, instrument, etc.) is treated as derived (or as 'deductive inferences') from the Actor/Undergoer opposition along with three other factors: the aspectual semantics of the predicate, the inherent lexical content of the NP argument, and the coding of the non-core arguments. Van Valin and Foley illustrate how the derivation of a semantic role is supposed to work as follows:
In a sentence like The man (A) smashed the window (U) with a hammer ... the man is the human Actor of an action verb of physical destruction and is therefore an agent. The second NP, the window, is an inanimate Undergoer of a verb of physical destruction and is therefore a patient. Furthermore, hammer is an inanimate object of the preposition with, co-occurring with an action predicate of physical destruction and a human Actor, and hence it can only be interpreted as an instrument. In The hammer (A) smashed the window (U), on the other hand, it is the Actor of smash but must still be interpreted as an instrument because it is inanimate; despite the fact that it does not initiate or control the action of the verb, it does effect it, and is therefore the Actor. (Van Valin and Foley 1980:337)

The other major system in clause-level grammar involves what Van Valin and Foley call pragmatic structure, with a pivotal element within that system being what they call the pragmatic peak\(^2\), or the NP singled out for special morphosyntactic treatment based on its being the 'pragmatically most salient NP' (338). It is crucial to understand that both pragmatic structure and PrP are defined in terms of formal characteristics, such that a given language may actually lack both. Such languages (called role-dominated) are not precisely claimed to lack a most salient NP in a given clause, it is just that they lack any grammaticalized structure for signalling or marking that NP within the clause, and interclausal phenomena such as reference-tracking mechanisms (switch-reference, e.g.) fail to exhibit any sensitivity to PrP as distinct from, say, Actor; PrPs simply fail to display any special status with respect to morphosyntactic tests. A salient characteristic of pragmatic-structureless languages is an absence of true, relation-changing passivization.

An important characteristic of PrPs, then, is that, while they are motivated cross-linguistically by discourse and inherent referentiality, they are not defined in terms of

\(^{2}\text{This is the terminology used in the 1980 paper under from which this introductory characterization of the theory is drawn. Earlier (pre-RRG) work referred to 'referential peak', while later work refers to 'pragmatic pivot'.}
some universal and invariant conceptual category independent of language-internal
evidence. In fact, even in languages that equally instantiate the category in their
morphosyntactic structure, it is a language-specific construct to the extent that any
particular language may choose its own particular criteria (from the universal list so to
speak) for determination of PrP, and the overt evidence (type of coding) for the PrP will
vary to some extent from language to language; additionally, a role-dominated language
may exhibit little or no evidence in its coding for such a construct. Thus, it is important to
keep in mind that PrP is a language-specific formal construct with a cross-linguistic
functional (semantic and/or discourse) motivation. In this sense, it is distinct from
Langacker's 'focus of interest' or 'clause-level trajector.'

In an early paper, Foley and Van Valin illustrate the way that different languages'
PrP may differ and yet still be equally correctly designated by the term (Foley and Van
Valin 1977). They identify as PrP the ang-marked NP in Tagalog (corresponding to
Philippinists' 'topic' or Schachter's 'subject as a topic-like, reference-related, entity
[Schachter 1977]), presumably because: (a) there is independent of ang-marking an
inventory of case markers more transparently reflective of semantic roles such as agent,
patient and instrument, and (b) the ang-marked NP is always definite. It is therefore clear
that ang-marking is reference- rather than role-related. In Navajo, meanwhile, clause-
initial position of an NP is determined by the inherent referentiality of the NP in terms of
the referentiality hierarchy: if a clause features, say, an animate and an inanimate
argument, the animate argument must be first regardless of semantic role. Foley and Van
Valin call both Tagalog ang-marked NPs and Navajo clause-initial NPs referential peaks
(=pragmatic pivot or pragmatic peak), despite their differences, primarily (it seems) because each entity is related more closely to considerations of reference than considerations of role. They are nevertheless significantly different in that one is determined by momentary discourse perspective while the other is determined by inherent animacy.

While the construct PrP plays a central role in Tagalog and Navajo in numerous syntactic processes identified by Keenan as 'subject tests' (coreferential deletion, relativization, etc.), Lakhota on the other hand lacks any kind of instantiation of PrP in either coding or behavior. Lakhota is a 'role dominated language,' meaning that 'the organization of clause level grammar is controlled by semantic roles and their interactions' (Foley and Van Valin 1977:298). Discourse-based referentiality considerations do influence word order, but in a manner Foley and Van Valin distinguish from clause-level grammar. In isolation, word-order indicates the semantic role of the argument, with Actor preceding Patient; in context, however, a topical NP may occur clause-initially (in a manner that would render it ungrammatical in isolation) even if it is not the Actor and there is a separate Actor in the clause; in Foley and Van Valin's terms, 'contextual factors at higher levels may override clause level constraints' (300). The upshot is that none of the 'subject tests,' even the ones such as relativization and coreferential deletion which are cross-linguistically reference-related, are sensitive to referential status in Lakhota; all the tests are either unrestricted in this respect or pick out an NP with a given semantic role (e.g. Actor in reflexivization, which is cross-linguistically role-related).
Foley and Van Valin's conclusion is that, given the fact that 'subject tests' pick out different kinds of entities across languages or even within a single language (Actor, PrP, etc.), they fail to identify subjects at all in anything but the rather vacuous sense entailed by an ad-hoc RG-type analysis whereby these different constructs are identified as 'subjects' at different levels or strata. They therefore conclude that 'subject' has no theoretical value in universal grammar.

In subsequent work (starting, I believe, with Foley and Van Valin 1984), PrP is replaced by the term pragmatic pivot\(^3\) (conveniently still abbreviated PrP) while its role-related counterpart is designated semantic pivot (SmP), with those two constructs being conceptualizable in terms of ideal types at opposite ends of a continuum. This taxonomy, I would like to argue, proves far more satisfying than simple reference to 'subject' in a number of respects. First, has often been noted (elsewhere as well as in previous chapters here), many characterizations of or references to subject falsely conflate under a single rubric what are in fact heterogeneous entities and effects. Keenan's subject tests, for example, pick out a variety of properties that may or may not converge on a single category in a given language, in part because those tests are sensitive primarily to semantic ('role') or pragmatic ('reference') properties rather than to some supposedly primitive notion of 'subjecthood' per se. RelG unaccusativity tests, too, may be shown to pick out a variety of semantic properties (specifically, ones related to aspect and agency) that are far more complex and detailed than simple reference to the presence or absence

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\(^3\)This is a term used by Dixon (1979); they also cite Heath (1975) as a source.
of an initial-stratum 'subject' would imply. Even divisions of the Keenan tests into behavior/syntactic and coding/morphological properties (Anderson 1976, 1977) fail to acknowledge the potential heterogeneity of different behavioral and different coding properties in a single language (Dixon 1979).

Foley and Van Valin improve on these approaches in a number of respects. First, the notion of 'pivot' itself represents a refinement of the notion of 'subject' in making relatively explicit what it is that is often meant by 'subject' in the first place, viz. an NP which is treated as central or privileged with respect to syntactic rules or grammatical constructions: 'The pivot of a syntactic construction is the NP which is crucially involved in it, i.e. it is the NP around which the construction is built' (Foley and Van Valin 1984:110).

A second way in which this approach is superior to others is that the notion of 'pivot' is explicitly construction-specific, as may be seen in the definition just cited. In any particular language, this may or may not be advantageous, but cross-linguistically it irrefutably is. One reason, presumably, that many analysts have been content to identify a 'subject' on a language-by-language rather than construction-by-construction basis is that there are languages, like English, in which a variety of inter- and intraclausal phenomena ('case' to the extent that it still exists, verbal cross-referencing or agreement to the extent that it still exists, passive, 'raising,' conjunction reduction or coordination ellipsis, etc.) do agree in identifying a single NP-type as central. However, in other languages (with the

4 Even in English, however, there are problems with this approach. First, there are exceptions to the 'privileged' cross-constructional status of grammatical or notional subjects: the 'tough' construction (easy to please, e.g.) notionally targets an
most widely-cited example being Tagalog (Schachter 1976, 1977) syntactic and
morphological processes are divided among largely role and reference lines.

This last division, whether within or among languages, is characterized by Foley
and Van Valin as one between PrP and SmP. English may be considered to be a language
in which pivot selection is largely pragmatically rather than semantically determined5, in
the following respects. First, while one may say that the unmarked choice of subject in
English is Actor (i.e. highest-ranking NP in a (primary) subjectivalization hierarchy
(Fillmore 1968)), the Actor functions as pivot only in the unmarked situation, i.e. when
the verb is used in a basic, unmarked active clause, with passivization entailing a
mapping of Undergoer or non-core argument to pivot status according to the demands of
discourse topicality. Second, to the extent that discourse-topicality manipulation of pivot
is constrained, it is constrained by factors that are still reference-related, specifically

object/Undergoer, and relativization fails to target subjects exclusively; also, object-
controlled equi targets a subject but is controlled by an object.

Additionally, it is impossible to characterize interclausal phenomena independent
of construction-specific function or meaning; for example, one cannot simply claim that
relativization may target a grammatical subject, for example, given the non-
relativizability of clefts.

Also, some phenomena, such as the imperative, fail to target 'subjects' so much as
semantically-characterized subset of subjects.

5Of course, as we have already seen, the distinction between 'semantics' and
'pragmatics' may seem a somewhat arbitrary one. While semantic (macro)role may seem
obviously semantic, it may be viewed as pragmatic to the extent that it bears on
topicworthiness. (One important factor in our classification of semantic roles in this
respect is whether we view agents/Actors and, to a lesser degree, patients/Undergoers as
salient and core-GR-worthy because of a semantic schema as in Croft (1991) or because
of 'empathy'-related factors (we tend to view ourselves, and other entities we view as
similar to ourselves, as controlling and affected participants).)
factors of topicworthiness or 'natural topicality' (Hawkinson and Hyman 1974)⁶.

In other languages, such as Choctaw, pivot selection 'is accomplished on entirely semantic and lexical grounds' (Foley and Van Valin 1984:117), without the possibility of pragmatically-governed manipulation of pivot selection as in English. In other words, each verb features one argument that functions as pivot for the purpose of switch reference tracking, and that pivot status is fixed; in the case of an Actor-taking verb, the Actor is pivot (i.e., is monitored or tracked by the switch reference marking); otherwise, an Undergoer is pivot to the exclusion of a dative and a dative is pivot in the absence of both an Actor and an Undergoer. Foley and Van Valin thus consider active-stative-language switch reference processes that differentiate between 'same' and 'different' Actors regardless of discourse topicality to be sensitive to SmPs, even if both Actor and Undergoer arguments of intransitive verbs are grouped together with transitive Actors for the purpose of selection of switch reference marker. The SmP, then, would correspond to Dixon's universal semantic 'subject' category. In other words, generalization across or

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⁶This seems, however, to be complicated by cases where relatively non-topical agent NPs naturally figure as subject in favor of clearly more topical non-agent NPs that are no less 'topicworthy' by the empathy hierarchy. Thus, the (a) response below may be marginally more natural than the (b) response:

What happened to John?
(a) The Feds killed him.
(b) He was killed by the Feds.

While the difference here is not so obvious as that in cases where one participant differs in topicworthiness by the empathy hierarchy, as in Chafe's (1976) mini-dialog:

What happened to the vase?
(a) The dog broke it.
(b) ?It was broken by the dog.

it nevertheless does seem to be the case that role-related factors may constrain (if not so clearly 'override') reference-related factors in subject-choice in English.
surface neutralization of semantic (macro)roles does not in itself constitute a threat to SmP status; pivots would only be categorized as non-SmPs, or as PrPs, if there were positive evidence of neutralization due to specifically reference- or topicality-related factors.7

Interestingly, processes in active-stative languages which fail to exhibit this kind of neutralization of unergative and unaccusative arguments are considered to be pivotless rather than sensitive to a SmP. In other words, identification of a pivot is justified only in case it is not isomorphic with any semantic (macro)role. Thus, in Eastern Pomo, a language whose switch reference system supposedly differentiates not only transitive Actors from Undergoers but intransitive Actors and Undergoers as well (i.e., intransitive Undergoers are grouped with transitive Undergoers rather than with transitive Actors) (McLendon 1978), 'there is no separate syntactic notion of pivot at all, and ... the syntax is directly sensitive to semantic roles like actor and undergoer. There is no intermediary abstract notion of pivot, semantic or pragmatic, with an important function in the syntax'

7Note that this kind of grouping of transitive Actors with intransitive arguments irrespective of the latter's semantic or morphological status should no more be taken as evidence of a 'subject' category than should the existence of a semantic role hierarchy, or differentiation of transitive arguments into Actor and Undergoer, i.e. any generalization across specific participant-roles and semantic roles. At least, this is the case as long as we have a definition of subject (unlike Dixon 1979) that assumes some degree of departure from role-related determination--some sort of neutralization of semantic roles or Macroroles due to discourse topicality. In other words, while it may be that all languages have evidence of some sort of semantic role hierarchy (remember that Foley and Van Valin consider their Macroroles to be non-derived universals), it does not follow from this that all languages have 'subjects.' This will be important when we return to a discussion of Kashaya.
Similarly, if a syntactic process in a language exhibits complete freedom in targeting an NP-type irrespective of case manipulation (or even if the controller and target must match in their case), then the process involves no pivot rather than a pragmatic (or semantic) one. (We would then say that the targeting is pragmatically or semantically controlled, but not that there is a pragmatic or semantic pivot.) As an example, consider the following Old English examples of conjunction reduction from my own collection:

(2)a. ponne sceal ic tha oxan to felda drifan and [0] to þære
then shall I the oxen to field drive and to the

sylh geocian
plough yoke

'Then I shall take the oxen to the field and yoke (them) to the plough' (Ælfric's Colloquy; Mitchell and Robinson p. 183)

b. he scrytt me wel and fett [0]
he clothes me well and feeds
'He clothes me well and feeds (me well)' (ibid.; p. 184)

It is, however, a bit rash to assume that there is 'no separate syntactic notion of pivot at all' on the basis of a single syntactic process (switch reference). The same criticism applies to the analyses presented in this chapter of other languages' syntactic typologies as well: in each case, a single syntactic reference-tracking process is cited as evidence about the type of pivot instantiated in the language as a whole.

In both these cases, what the language saliently lacks is an intraclausal process whose function may be viewed as promoting a non-pivot argument to pivot status (i.e., it lacks a passive). This is also a feature of languages with a SmP. In some cases (e.g., with pivotless languages like Eastern Pomo and and SmP-languages that simply generalize across transitive actor and intransitive participant (which Foley and Van Valin call 'the most common type of SmP cross-linguistically' (117)), the difference between languages with and without pivots seems far less significant than the difference between languages with PrPs and ones with SmPs.
By these examples, Old English conjunction reduction is quite possibly constrained to the extent that the target and controller have to match case roles, but (given the fact that ellipsis of nominatives, and perhaps other cases as well, was permitted in addition to accusatives as in these examples) the process is not constrained to center on one invariant pivot-type as in Modern English. In this sense, then, 'pivot' is a syntactic notion whose invocation must be justified by being shown to be empirically distinct from independently-required semantic and pragmatic notions.

Foley and Van Valin arrange languages along a 'typological cline' between those like English and Dyirbal in which 'the semantic predicate-argument relations indicated in the logical structure of the predicate' are most extensively neutralized in the pivot by pragmatic considerations (reference-dominated languages) and those that provide no evidence for syntactic pivot by the criteria just discussed. In between are those languages like Choctaw whose semantic neutralization is less extensive than that displayed in English pivots and those like Tagalog that have a mix of pivot-types:

(3) Reference-dominated languages Role-dominated languages

Dyirbal English Tagalog Choctaw Kewa Archi

<----------------------------------------------->

Greatest Least

Distinctiveness of grammatical relations from semantic roles

10\[I believe 'Eastern Pomo' must have been inadvertantly omitted from the right end of this cline in the book production process.\]
Those languages on the right of the continuum are ones in which 'grammatical relations are not significantly distinct from ... semantic relations' (124), and in which GRs would therefore (by the above reasoning, we may reasonably infer) be relatively otiose in our analysis. In this framework, 'subject' is a derived (and imprecise and therefore not very useful) category whose 'properties are divided between the notions of actor and pivot' (124). In other words, a 'subject' is a 'pivot' in the sense of an NP central to syntactic processes (cf. (many of) Keenan's tests), or simply an 'Actor' in languages that show no evidence for the kind of syntactic constraints that would justify the identification of a pivot. (One could also say that 'subject' is 'Actor' in the sense of the covert-category-type revealed by RG unaccusativity tests (i.e., initial-stratum 1), or in the traditional sense identified by Halliday as 'logical subject' (Halliday 1970b:164).)

To a great extent, this amounts to saying that various analysts have simply been referring to a variety of different entities as 'subject,' with the result that the term is a virtually useless component in a technical vocabulary. I think that this is irrefutably correct. It may, however, still be a useful and interesting exercise to analyze particular languages in terms of the degree to which they instantiate 'subjects' in the sense of pivots that depart from isomorphism with semantic roles or Macroroles or, for that matter, with nominals transparently identifiable as 'topics.' What I would like to do in the next section, then, is to return to the data of Kashaya, in order to determine to what extent, or in what sense, we might identify 'subjects' in the sense of pivots (clause-internally
identified NPs around which syntactic constructions are built or on which interclausal syntactic processes are centered) that depart from such isomorphism.

3. RRG in detail: the full array of model-internal constructs

The basic lexical entry (or Logical Structure—'LS') of a verb consists of an atomic predicate representing the idiosyncratic semantics of the verb, plus the listing of variables or argument-slots corresponding to the obligatory arguments (as opposed to optional adjuncts) of the verb, plus one or more semantic primes which serve to differentiate individual verbs into four Aktionsart classes.

Identification of the primes, and thus assignment to Aktionsart class, is intended to follow from a series of 'tests' originally proposed in Dowty (1979). For example, States and Activities are differentiated from the other two classes in being atelic or temporally unbounded; hence, in English they are identifiable by cooccurrence with for rather than in, as in I sat for an hour (State) or I ran for an hour (Activity), but not *I sank the boat for an hour (Accomplishment). The value for telicity is indicated in a predicate's LS by presence ([+telic]: Achievements and Accomplishments) or absence ([-telic]: States and Activities) of an inchoative BECOME prime:

(4) State:
The clock is broken. broken' (the clock)
Activity:
Fred ran. run' (Fred)
Achievement:
The clock broke. BECOME broken' (the clock)
Accomplishment:
Fred ran to the house.
[run' (Fred) CAUSE [BECOME be-at' (the house, Fred)]

Activities are differentiated from States in being inherently durative and in resisting conceptualization in terms of volitional participation of the referent coded by the argument listed in the LS. Rather inconsistently, this distinction fails to receive coding in terms of any semantic prime or primes in the LS of these Aktionsarten. Empirical tests for the distinction, in any case, are occurrence with progressive inflection and occurrence with adverbs such as vigorously, carefully, etc.

Achievements and Accomplishments are differentiated from each other in that 'achievement verbs involve changes of state or location, while accomplishments are for the most part lexical causatives coding caused changes of state or location' (Van Valin 1991:158). This distinction is indicated in the LS by the presence (Accomplishment) vs. absence (Achievement) of a CAUSE prime, and the test for the distinction is occurrence with the same adverbs of volitionality, or 'adverbs denoting dynamic action', which serve to differentiate the two classes of atelic predicates.

Additional complicating factors are the interaction of agency with a predicate's LS

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11This has been revised in Van Valin's most recent treatment of Aktionsart classes ('An overview of RRG', presented at LSA Summer Institute, 1995), in which States and Activities are differentiated in their LS representations by the presence (Activity) or absence (State) of a do' prime:

State = predicate' (x) or (x,y)
Activity = do' (x, [predicate' (x) or (x,y)])

Other revisions will be discussed below.
representation, and the Aktionsart categorization of a clause in a manner which fails to follow from the LS of the clause's verb. While Activities and Accomplishments are 'dynamic' in the sense of being compatible with a reading of volitionality, this does not mean that any particular use of the predicate will be interpreted in terms of a volitional agent, even if the participant corresponding to a potentially agentive argument position is human. Thus, break (tr.) is a potentially agentive Accomplishment predicate, but any particular use may or may not involve a volitional action on the part of the 'breaker'.

We will have more to say in a moment about the sorts of implications involved here for the concept of semantic role, but for the moment we may simply note that Van Valin reserves an operator 'DO' for those verbs which 'must be interpreted as agentive; otherwise agency is treated as an implicature involving animate arguments of activity verbs' (160). The identification of which verbs must be interpreted as agentive is to be expected to be a rather thorny matter. As an English example, Van Valin offers steal. One may assume that predicates which strictly rule out inanimate Actors (such as 'kill' in Turkish or Ozark English; Plank 1983) may be relatively likely to resist interpretation in non-agentive terms.

Second, while 'the Aktionsart of a verb is the basis of its interpretation in a clause, ... the interpretation of the clause as a whole is not always the same as that of the verb alone' (159). Thus, the basic LS of run is that of an Activity verb; however, when it is used with a 'bounding' complement such as to the park, it receives an Accomplishment interpretation:
(5) John ran to the park in/*for an hour.

A verb's LS, then, represents the semantics of the verb in terms of the verb-specific non-decomposable meaning plus one or more semantic primes of more general applicability, plus an indication of the number of arguments of the verb. Semantic roles of the sort 'agent', 'patient', etc. are not notated directly in the LS, since these roles are viewed as derived or inferred from the LS rather than stipulated therein. As Van Valin (1991:162) puts it:

The derivation of thematic relations from argument positions in LSs has an important consequence: because there are syntactic and semantic criteria for determining the class of a verb and because the thematic relations of a verb are to a large extent attributable to its class and hence to its LS, the assignment of thematic relations to verbs in RRG is independently motivated. (Emphasis in original.)

In actual fact, the independent motivation of semantic roles may be overstated here. Semantic roles do not follow in any automatic way from the Aktionsart class of the predicate (note the hedge 'to a large extent'), but rather follow at most from the Aktionsart class together with the verb's irreducible semantics. For example, the fact of a stative verb involving a semantics of 'perception' rather than 'possession' means that the verb's arguments are experiencer and theme, rather than locative and theme. Since there is in fact not even a single semantic role all States have in common, one may legitimately

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12 In some cases, a predicate may be further decomposed into primes which fail to enter into the categorization in terms of the major Aktionsart classes, e.g. steal into CAUSE BECOME NOT have.
question whether semantic roles follow in any meaningful way from Aktionsart or even, in at least many cases, from semantic primes apart from the atomic predicate. In any case, we may simply acknowledge that semantic roles as traditionally conceived are claimed to have no special or privileged status in the theory.

There is, however, another 'tier' of semantic roles which is not claimed to receive independent motivation (i.e., is not claimed to derive from other aspects of a verb's LS) and which is claimed to play a central role in the model. The semantic roles at issue here are the 'Macroroles' (MRs) Actor and Undergoer. On the one hand, MRs may appear to be derived in the sense that they follow from the implicational hierarchy represented here:

(6) Actor-Undergoer Hierarchy

\[
\begin{array}{c}
\text{Actor} \\
\searrow \\
\text{Undergoer}
\end{array}
\]

\[
\text{Agent Effector Experiencer Locative Theme Patient (Van Valin 1991:163)}
\]

In this sense, MRs may seem to be derivative of 'traditional' semantic roles, which are claimed to be derivative of the predicate's LS. However, the hierarchy applies only given a prior identification of one or more arguments as MR-bearing. That is, if we know that both of two arguments listed in a predicate's LS are MR-bearing, then the hierarchy is intended to 'predict' which one is the Actor and which the Undergoer; given the stipulation that only one argument is MR-bearing, then the hierarchy should predict whether that argument is Actor or Undergoer. In this way, MR nature is derived, in the unmarked case at least. However, MR number, while claimed to follow some general default principles, is a locus of considerable stipulative idiosyncrasy, as we shall see
shortly.

In addition to all the constructs introduced thus far—MR, Actor, Undergoer, Aktionsart class, the semantic primes BECOME and CAUSE—RRG utilizes a concept of direct core argument (dca). Dca is similar to, but not completely coextensive with, MR. The difference between them is intended to be roughly that between a relatively overt or surface-syntactic construct (dca) and a relatively covert semantic construct (MR). Recall that an 'argument' simply corresponds to a variable in the valence or LS of a predicate. An argument is therefore viewed as any nominal which corresponds to an obligatory part of the verb's valence, and is therefore opposed to 'adjunct'.13 A 'core argument' is simply an argument in the sense just defined (cf. Van Valin 1991:171 fn.: "Core arguments" are the arguments represented in the LS of the verb'), and is therefore an otiose variable. 'Direct', on the other hand, is a significant variable corresponding to the expression of an argument

13 The notion of 'obligatoriness' is not quite as straightforward as it might at first seem, since an 'obligatory' argument may or may not be expressed in a given use, especially in languages which permit free discourse-controlled omission of arguments without any cross-referencing morphology on the verb (e.g., Japanese, Korean, and Kashaya Pomo). The relevant distinction may be drawn with respect to a cluster of English verbs and nouns participating in a unified semantic frame (Fillmore 1982): threat, threaten, danger, harm, protect, safe, unharmed. These relate to a frame in the classic Fillmorean sense of a complex situation presupposed by each individual lexical item, without which these lexical items would arguably be meaningless. This frame involves at least a source of potential harm, a potentially harmed participant, and a potential barrier. Even though the valence of protect only features slots corresponding to the barrier and potentially harmed participant, it would be conceptually incoherent without an implicit acknowledgement of a source of potential harm. This source is optionally expressed in an oblique from-phrase, but is an adjunct rather than an argument. The verb threaten, meanwhile, features the source of potential harm as an argument rather than adjunct, along with the potentially harmed participant; the potential barrier, however, fails to correspond to any slot in the verb's valence.
in terms of case marking imposed by the verb itself or in terms of case marking imposed by a governing preposition or postposition; 'direct' is therefore understood to be opposed to 'oblique'. Of course, the very definition of 'oblique', and therefore of 'direct', is to some extent a theory-specific, and to some extent a language-specific, matter. 'Oblique' (as we shall see in the section on Fischer's GB treatment of OE case) is often used in the sense of 'inherent' or 'semantically significant'. In fact, given the fact that the Icelandic 'quirky' case to be discussed in a moment has as a salient property the fact that it can't be 'overridden' by syntactic relation-changing processes, any case marking deviating from the default nominative-accusative pattern prototypically associated with semantically transitive valences in accusative languages would be construed as 'oblique' by some.

Van Valin's use of the term, however, is more restricted: 'oblique' simply refers to nominals governed by a preposition or postposition, and 'direct' refers to nominals which receive (overt or zero) case marking with no adposition. While the argument/nonargument status of a nominal is indicated by its appearance in a predicate's LS, the same can't be said for direct/oblique status. Consider the LS for give:

(7) [do' (x)] CAUSE [BECOME have' (y, z)]

This LS indicates that give is an Accomplishment predicate with three arguments. Nothing in the LS itself indicates the form that these arguments will take, e.g. whether (y, z) will be direct or not. The general Actor-Undergoer hierarchy (cf. 3) predicts that x (as effector and, by inference, possibly agent) will be Actor, while the theme will receive
unmarked correspondence to Undergoer. It does not, however, follow from this that either argument should be 'directly' coded, since (1) no universal principles dictate the coding of Actor and Undergoer as direct arguments, and (2) specific oblique (prepositional) objects in English nevertheless may have the status of Undergoer. And in fact, the 'recipient' (corresponding to the variable 'y') may receive coding as either an oblique or a direct argument:

(8)a. John sent the package to Fred.
   b. John sent Fred the package.

In (8b), Fred receives 'marked' assignment to Undergoer, by the test of passivization. But again, the direct coding of that argument fails to follow automatically from this assignment, since, as mentioned, Undergoer status fails to entail direct coding in English.

A generalization which is apparently missed here is that the Undergoer status and the dca status of the argument John are non-coincidentally related. In other words, it is not the case that (8a) and (8b) represent two alternative codings of a constant conceptual content. Consider Van Valin's explanation of the pattern represented here: 'Marked assignments to undergoer are possible, as in the English "dative shift" alternation in which the locative, not the theme, is undergoer, e.g., John (Agent-Actor) sent Fred [Locative-Undergoer] the package [Theme]' (1991:163). However, it is not the case that Fred holds a constant semantic value across the two patterns. Rather, direct expression correlates with more prototypically patient-like values by Hopper and Thompson's criteria. In particular, the 'locative' is obligatorily animate in the dative shift alternant, but
not in the pattern in which that argument is coded as an oblique; also, the implication is
stronger in (8b) than in (8a) that Fred actually received the package, i.e. that the goal
instantiates the end-point of a successfully bounded directed event-type. The insight that
semantic roles (both 'traditional' roles and MRs) and overt expression are interrelated (or,
put slightly differently, that semantic roles can't be viewed independently of coding) is, I
will argue in greater detail below, insufficiently acknowledged in RRG, although this is
probably a correctable deficiency.

The next formal construct in the RRG inventory is that of pivot, which is similar
to that of trigger. The first of these may be introduced by recalling the general appeal of
the RRG model: in brief, it allows us to describe individual languages, and individual
constructions in those languages, on their own terms. For our purposes, one of the most
important aspects of this is that the constructs 'subject' and 'object' have no place in the
model. Rather, there are other, more precisely defined and consistently applied constructs
which bear the burden otherwise borne by the traditional grammatical functions. Among
these constructs, that of pivot has a central importance, corresponding roughly to the
conception of 'subject' as the syntactically central nominal with respect to a given
syntactic process: 'A construction has a syntactic pivot when it requires a restricted
neutralization of semantic roles for syntactic purposes' (Van Valin 1991:166). Note the
lack of imposition of any requirement that one construction's pivot correspond to that of
another. Pivot selection may be relatively strongly reference-dominated or role-
dominated, that is, discourse or semantic factors may contribute to different degrees in
different constructions or in the sum of constructions in the language as a whole to the
choice of the argument which maps onto this function. Thus, pivot is in itself a purely formal construct with no necessary particular semantic/functional content.

In addition to pivot, which is reserved for behavioral (syntactic) processes, RRG avails itself of an equally concrete notion of trigger, which seems always to be at least implicitly modified by 'coding'; thus, trigger and pivot respectively allow for a straightforward reference to the controller of verb agreement and the central construct in a given syntactic construct such as passive or raising. Again, the highly specific and precise nature of 'trigger' precludes the sort of confusion that arises from the use of 'subject', especially in languages or constructions where the two may fail to coincide.

3.1 Problems with the model

3.1.1 The verb-class (Aktionsart) system

While it does appear likely that the primitives featured in Dowty's decompositional schemata and adopted, with some changes, in Foley and Van Valin (1984) and later works, have cross-linguistic and perhaps even universal validity, it is less clear that the four general Aktionsart classes should have the privileged status often attributed to them. In addition, even assuming the universally valid salience of the four classes, these distinctions by no means manifest themselves in the same way in the grammar of all languages, or have equally important repercussions in the core morphology and syntax of all languages. In fact, only two of Dowty's English-oriented tests unambiguously single out one Aktionsart class from the rest, and these two tests by no means involve morphosyntactically central processes. One is the 'X is Ying entails X
has Yed' test, which is a rather roundabout test for the presence of what Van Valin eventually comes to refer to as a [+dynamic] prime given a combination of [-punctual] and [-telic] (i.e. presupposes occurrence with progressive); this test singles out Activities. The other is not even an empirical test: 'Has inherent causative semantics'; this test singles out Accomplishments. In general, the classes can only be identified via a number of tests taken together.

On the other hand, the classes are sometimes claimed to receive fairly transparent justification in languages which relate them to each other by overt patterns of verb derivation; Van Valin (1993:37) provides the following examples from Tepehua:

(9) ?aknu:-y 'A is underground' [State] -> ta:knu:-y 'A goes underground' [Achievement] -> ma:knu:-y 'B buries A' [Accomplishment]

Even in English, there is a productive periphrastic derivational relationship among the same State, Achievement, and Accomplishment classes as follows: (1) The watch is broken/The bird is dead; (2) The watch became broken (=The watch broke)/The bird became dead (=The bird died); (3) The boy did something to cause the watch to become broken (=The boy broke the watch)/The boy did something to cause the bird to become dead (=The boy killed the bird). What this points to is the fact that the semantic primes BECOME and CAUSE are at least internally meaningful in both English and Tepehua, and to the extent that behavioral or morphological processes interact with predications featuring these primes in such a way that they may be shown to differentiate large and linguistically significant categories, these categories are significant in both languages--
despite the different repercussions of the primes on the languages' morphosyntactic processes.

The odd class out in the inventory is that of Activity predicates, which like States lack any inchoative or causative semantics, but unlike States have an inherent 'action' or 'dynamic' semantics. The claim for the universal validity of this class depends on the universal presence of processes sensitive to an 'action/state' or 'dynamic/nondynamic' distinction among non-inchoative (nonpunctual, atelic), non-causative predicate-types. In English, this distinction is signalled by Jackendoff's (1987) 'What X did was--' test for Actors (as opposed to the 'patients' or Undergoers of a stative predication), with Activities then being those predicate-types which respond positively to this test but not to tests for the inchoative or causative prime.

It is not clear, however, whether the particular primitives singled out in the composition of the four Aktionsart classes in the particular combinations in fact yield a cross-linguistically uniquely privileged array of categories. This fact is acknowledged by Van Valin (1993) when he cautions that the specific, narrowly Dowty-based verb classification system presented therein is 'only a first approximation to the kind of decompositional system which is required for deeper lexical semantic analysis' (37).

Indeed, Van Valin's current classification system has changed significantly from that presented in works through Van Valin (1993). The current system features five classes rather than four, with the following decompositional representations:

(10)a. STATES
Leon is a fool. be' (Leon, fool)
b. ACTIVITIES
   The children cried. do' (children, [cry' (children)])

c. ACHIEVEMENTS
   The window shattered. INCH shattered' (window)

d. ACCOMPLISHMENTS
   The snow melted. BECOME melted' (snow)

e. CAUSATIVES
   The dog frightens Sam. [do' (dog,0)] CAUSE [afraid'(Sam)]

The most obvious change here is the re-naming of the Accomplishment class as
Causative, and the creation of a new distinction within the Achievement class, with that
class now distributed across two classes now labelled Achievement and Accomplishment.

In other words, the 'new' Accomplishment class bears no resemblance to the 'old' one, as
is clear when we compare examples:

(11)   'Old' Accomplishment
       Joan tossed the journal
            on the desk.
       Max ran to the office.
       The baby broke the watch.
       Connie showed the painting
to Sam.

       'New' Accomplishment
       The snow melted.
       The sky reddened.
       Mary learned French.

As mentioned, this new Accomplishment class is taken from the 'old' Achievement class,
with a rather subtle aspectual distinction now differentiating them. As indicated in (7),
Achievements are now defined as featuring an INCH(oative) prime, while
Accomplishments feature a BECOME prime; the distinction between these two primes is
supposed to be as follows:

(12)   ('New':) State [-dyn] [-telic] [-punct]
In other words, the distinction between INCH and BECOME is one of punctuality, with Accomplishment predicates now representing state-changes which are gradual rather than punctual: thus, *The snow melted in an hour but The window shattered in an hour. The revised system thus, among other things, responds to a certain equivocality in the status of Achievement predicates in the old system, as indicated by the variable behavior of that class of predicates in response to the original tests listed in Dowty (1979), Foley and Van Valin (1984), and so on, corresponding to a distinction between punctual and durative Achievements.

The new class of Causatives (actually, a new label for the old Accomplishment class) makes explicit in its name the fact that this is a class consisting of any predicate-type under the scope of a causative semantic prime. A final substantive change from the system described in Van Valin (1993) and earlier is the loss of the operator DO as an indication that a participant 'is necessarily acting volitionally', formerly used to differentiate 'controlled' from 'uncontrolled' Activity verbs. It is likely that a distinction along these lines must still be handled somewhere, although it is not clear that it should be integrated into the basic Aktionsart inventory.14

14The most straightforward lesson drawn from a language such as Kashaya, in which the case marking of intransitive arguments is manipulated to express different values of a 'control' parameter, is that 'inherent causative semantics' should in fact not be integrated into the basic LS representation of a predicate. This amounts to saying that the distinction between controlled and uncontrolled is neither stable nor clear-cut. In Kashaya, a class of predicates is potentially uncontrolled or so construed in the default
An indication that this revised system is still provisional is supplied by the fact
that it, like the old system, fails to differentiate Achievements such as jump or depart
from those such as shatter or die. It is not the difference in volitionality which is at issue
here—the volitionality contrast is agentive rather than aspectual, and could still be handled
by a cross-cutting agency-related parameter or inference—but rather the fact that only the
latter predicates are meaningfully represented in terms of entrance into a State. Given that
the only decomposition provided for Achievements indicates the modification of a State
predicate with an inchoative prime, a predicate such as jump appears to be out of place in
the Achievement class, even though this is where Dowty’s tests would place it, and no
other category offers itself as more appropriate. More work, then, needs to be done here.

3.1.2 The trouble with Macroroles

It is by now well known that there are a number of respects in which MRs are

interpretation, and it may be useful to include a [-control] or [-volition] prime in the basic
representation of the predicate in order to single out just this group; however, [-control] is
not so much an invariable, inherent part of the semantics of these predicates as a default
value which may readily be overridden. This appears to parallel the behavior of English
predicates, in that a default ‘uncontrolled’ act such as fall may nevertheless be interpreted
in context as controlled, even though this may more naturally prompt a different lexical
choice:

He fell on purpose. - He threw himself down.

In any case, divisions of predicates ('Activity' or otherwise) into 'controlled' and
'uncontrolled' classes is, as we shall see in the discussion of Fried (1995), often quite ad
hoc, relying on murky intuitions upon which different speakers may fail to agree. As with
other agency-related parameters, this one may be best left to a realm of inference rather
than the basic LS entry.
controversial, of which two stand out: one, why is it necessary or even desirable to have 
this extra level of semantic roles in addition to that of the more fine-grained 'traditional' 
roles; and two, what is the status of MRs as semantic or syntactic constructs?

The first question arguably involves a false presupposition that the level of 
traditional roles constitutes a legitimate part of the model. This is not to say that MRs are 
intended to do all the work which would be performed by traditional semantic roles in 
other theories. In fact, MRs only assume part of the burden performed elsewhere by the 
traditional roles, with the LS of the predicate assuming part of the burden; as Van Valin 
puts it:

In Fillmore's original proposal (1968), the 'case frame' of a verb, e.g. [A (I) O], 
was intended to be a partial representation of the meaning of the verb, and it also 
fed into the operation of grammatical rules, e.g. the subjectivization, 
objectivization and raising rules. In RRG, thematic relations have only the second 
function; the LS of the verb is its semantic representation, and the role labels like 
'effector' and 'theme' are mnemonics for the argument positions in LS. 
(Van Valin 1993:43)

The second question, that regarding the semantic or syntactic nature of MRs, 
points to a potentially far greater problem theory-internally. Van Valin himself most often 
seems to identify Actor and Undergoer as semantic entities, as in the following 
frequently-cited definition from Van Valin and Foley (1980:335):

The basic system consists of an opposition between participants that perform, 
effect, instigate, or control the situation denoted by the predicate, and participants 
that do not perform, instigate, or control any situation but rather are affected by it 
in some way.

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Note, too, that Actor and Undergoer are described as 'subsum[ing] a number of specific thematic relations', making them seem to be simply coarse-grained semantic roles on the assumption that the semantic roles themselves are 'semantic' rather than 'syntactic'. Also, the transparent identification of MRs as semantic entities is shown in comments such as the following: 'They correspond to what is pretheoretically commonly called "logical subject" and "logical object", but these labels are not utilized in RRG because "subject" and "object" are normally used to refer to syntactic, not semantic relations' (Van Valin 1993:43; emphasis added).

In general, RRG uses the construct of (direct or oblique, core or non-core) argument to capture generalizations across 'syntactic' patterns different from those captured by the relatively 'semantic' level of MRs. The syntactic nature of these constructs is immediately apparent when we consider that the way to tell whether an argument is oblique or direct is simply by looking at its coding. In English, this means whether it is zero-marked as opposed to coded in a prepositional phrase. In many cases, dca status corresponds to MR status, that is, they entail each other. For example, in the English 'dative shift' construction, the shifted core argument becomes both a dca and an Undergoer, whereas in the 'unshifted' version it is neither. The evidence for dca status is simply unmarked coding as opposed to coding with a preposition, while the evidence for Undergoer status is participation as pivot in the passive construction. The latter presupposes the independent generalization that the passive pivot in English is the Undergoer (as opposed to some larger class of non-Actor arguments), which in turn entails that passivizable prepositional objects must be viewed as Undergoers despite the
fact that they are not direct core arguments. Hence, the two classes are seen to be distinct.

In general, the divergence between dca and MR is clear from the RRG claim that, while a verb may have more than two dcas, it may at most have two MRs. This last claim may appear to lack any empirical basis, and perhaps to derive simply from a conception of Actor and Undergoer as agent- and patient-centered categories respectively, together with an understanding of languages universally treating these two categories, or formal categories based on them, as 'privileged' in a variety of morphosyntactic ways. Undergoer, then, may be understood as the dca (a purely formal category) with a sufficiently patient-like status (a complex semantic criterion). Thus, it is fairly routine for a dca to fail to have MR status, e.g.:

(13) I ate fish for an hour.

Here, fish is a dca, but not un Undergoer: 'activity verbs can have only actor macroroles, never undergoer, because the prototypical thematic relation for undergoer, patient, never occurs with activity verbs' (Van Valin 1993:48)\textsuperscript{15}. This reiterates the relatively 'semantic' status of MR compared with dca: 'semantic transitivity...refers to macrorole number, and

\textsuperscript{15}The Aktionsart-relevant contrast between definite and indefinite objects is most closely related to Hopper & Thompson's 'individuation' parameter, although this is really impossible to separate neatly from the 'affectedness' parameter; both contribute to the global 'transfer' property of transitivity: 'An action can be more effectively transferred to a patient which is individuated than to one which is not; thus a definite O is often viewed as more completely affected than an indefinite one' (Hopper & Thompson 1980:253). In languages of the appropriate typological category (cf. Mithun 1991b; Hopper & Thompson cite Comrie's (1973) example of Chukchee), objects coded as indefinite in English are incorporated into an overtly intransitive verb.

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syntactic transitivity...refers to number of direct core arguments' (48).

In English, the distinction between dca and MR (specifically, Undergoer) allows for a straightforward GF-independent treatment of passivization. Consider the following:

(14)a. Bill sent his lawyer the notice.
b. His lawyer was sent the notice.
c *The notice was sent his lawyer.

Of the three dcas, only one (his lawyer) may function as pivot of passive; we may, in fact, consider passivization to offer a test for distinguishing dca from Undergoer, given the formulation of passive for English:

(15) Universal formulation of passive:
Foregrounding: \(-A=\text{Pivot}\)
Backgrounding: \(A=\text{X}\)

English formulation of passive:
Foregrounding: \(U=\text{Pivot}\)
Backgrounding: \(A=\text{X}\)

('X' is nonoccurrence or occurrence as a peripheral oblique.)

Two conceivable challenges to the necessity of invoking any notion of Undergoer in addition to that of dca share the common characteristic that they both imply a possibly redundant role for this construct. First, the NP 'foregrounded' in English passive, in examples like (14) at any rate, may be identified quite straightforwardly independently of any notion of Undergoer or MR, simply as the verb-adjacent dca. Second, it seems plausible that the unacceptability of (14c) may be explained with reference to functional factors independent of MR status: given a dative shift function roughly characterizable as
promotion to 'secondary topic' status of the beneficiary/locative NP over the theme NP, and given a passive function roughly characterizable as promotion to 'primary topic' status of the theme NP over the actor and beneficiary/locative, what we end up with is a clash of relative promotions. Note that there is, of course, a perfectly good way of simply promoting the theme relative to the other arguments which fails to involve promotion of the beneficiary; in this version, the 'input' to passivization is the unshifted version:

(16) The notice was sent to his lawyer.

One response to the first objection would be that a formulation of passive in terms of the verb-adjacent dca, i.e. in terms of syntactic coding associated with a different construction, presupposes a transformational model which we may independently wish to avoid. We are therefore prompted to look for common semantic factors which map onto verb-adjacent dca and passive pivot. These common semantic factors quite clearly center on the participant corresponding to the active object16. Both passive and dative shift

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16 Passive appears to falsify Hopper & Thompson's 'Transitivity Hypothesis':
If two clauses (a) and (b) in a language differ in that (a) is higher in Transitivity according to any of the features [in the Transitivity prototype], then, if a concomitantly grammatical or semantic difference appears elsewhere in the clause, that difference will also show (a) to be higher in Transitivity. (255)

This hypothesis, which claims that transitivity-related parameters will coincide (or, more properly speaking, that no process or structure which selects a 'high-Transitivity' value for one parameter will select a 'low-Transitivity' value for another), would be falsified by passive if the latter picked out high-Transitivity values for the object but low-Transitivity values for the subject.

In fact, however, what passive requires is a highly affected and individuated subject, an association which has no clear relation to the transitive prototype, and an object low in subject-related transitivity values but not in object-related ones. It is not...
involve arguments high in individuation and affectedness and, given the association of these factors with aspect, they involve telic predicates as well. Other, somewhat more subtle semantic factors may be at play; citing Green (1974), Hopper & Thompson point out that in Clara sent Santa Claus a letter, but not Clara sent a letter to Santa Claus, the 'prior existence' (a referential and therefore 'individuation'-related factor) of 'Santa Claus' is presupposed. The same would naturally apply to Santa Clause was sent a letter (by Clara).

A second response would be that dca status is not required for promotability under passivization, so that any formulation of an English passive rule in terms of dca would be inadequate. One of the most obvious changes in the passive construction over the history of English has been the development of the passivizability of prepositional objects:

(17)a. This bed was slept in by George Washington.
   b. It looks like the chair was peed on.

While passivization of non-dcas is generally precluded by the presence of an object-like dca, there are even some marginally acceptable exceptions to this:

(18) I've been reviled, threatened, spat at, sent hate mail to,...
(19) ?It looks like the couch was spilled beer on.\textsuperscript{17}

\textsuperscript{17}Some speakers seem to judge this kind of example more harshly than others; even for those who are decisive in ruling it out, however, it is still not as bad as a comparable example with a more highly referential dca:

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Crucially, these examples involve direct objects relatively low in referentiality—precisely the sorts of objects which tend to be incorporated into the verb in typologically appropriate languages. In general, it is obvious that the passivizability of prepositional objects is by no means a purely 'syntactic' matter, as Rice (1988) has demonstrated. The most readily passivizable prepositional objects are precisely those which are most patient-like by Hopper & Thompson's (1980) criteria, including those most readily conceptualizable as being affected by the action represented by the verb. Thus, e.g., unaffected locative-setting prepositional objects consistently resist passivization relative to affected patient-like analogs:

(20)a. *This bowl was been in by three cherries.
    b. This bowl was pissed in by three yaks.

(21)a. ??Rome is lived in by almost three million inhabitants.
    b. This house looks like it's really lived in.

In many of the respects discussed here, English passivization supports the view that the targeted argument (the pivot) is a semantically-characterized Undergoer, rather than any formal construct such as dca, direct object, etc. This is true regardless of the arguably additional validity of other considerations in the incompatibility between dative shift and passive, discussed above.

Note that, in general, the English-language processes which involve manipulation of Undergoer status are not simply 'syntactic' in nature; that is, while they may have

*It looks like the couch was spilled a bottle of beer on.

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formal consequences (conversion of a peripheral oblique into a dca), they also have semantic consequences. The best-discussed class of examples of this involves the 'load'-type alternation, which involves what Fillmore (1977) called a manipulation of an object 'in' or 'out' of 'perspective':

(22)a. We loaded hay into the wagon.
    b. We loaded the wagon with hay.

When the wagon appears as dca—and also as Undergoer, maintaining our assumption of the validity of passivization as a test for Undergoer status—it is more patient-like in the sense of being more completely affected by the action. The dative shift construction, too, requires an animate goal, or imposes such a reading on the argument—in Hopper & Thompson's (1980) terms, it selects an argument high in the 'individuation' parameter in being human as opposed to inanimate.

On the other hand, there are numerous indications that the RRG concepts of Actor and Undergoer are in fact not, or not purely, semantic entities. Note, first, a crucial hedge which recurs frequently in Van Valin's works:

It must be emphasized that the label 'undergoer' should not be taken literally, just as 'actor' should not. The actor of see does not do anything but is nevertheless an actor in the sense intended here, i.e. the logical subject; similarly, the undergoer of see does not undergo anything, unlike the undergoer of e.g. kill, but it is still the undergoer of the verb, i.e. the logical object.

(Van Valin 1993:46)

Second, consider the following:
Macroroles are motivated by the fact that in grammatical constructions groups of thematic relations are treated alike. For example, themes and patients function alike for certain purposes in the grammar. It is necessary to distinguish them on semantic and other grounds. But nevertheless, the grammar, for certain purposes, treats these roles as essentially the same, e.g. they can both be the direct object in an active and the subject in a passive.

(Van Valin 1993:43)

This last quote indicates that MRs, while having some degree of semantic coherence, are perhaps ultimately syntactic entities, much the way that constructs like 'subject' and 'object' are. At the same time, it is clear that Actor and Undergoer are supposed to be distinct from 'subject' and 'object'—cf. the distinction drawn in the quote cited above, as well as the explanation that, 'in an [English] active clause, the actor is subject and the undergoer direct object, while in a passive the undergoer is subject and the actor is a peripheral PP' (Van Valin 1993:43-4). Thus, again, Actor and Undergoer are indicated to be semantic constructs held constant under syntactic permutations such as passive.18

With this last point in mind, we may find Van Valin's analysis of the following

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18It may in fact turn out to be better to regard the by-argument of a passive as failing to retain Actor status. Note that it is optional or even, in many languages, unexpressed, and thus not even an argument by Van Valin's criterion of obligatory status. In a language like English in which it is optionally expressed, this is still only an option, and expression occurs as a non-core oblique. To my knowledge, this is the only instance in which a non-core argument (let alone a non-argument) would correspond to a MR. Note further that the 'demoted' Actor would fail to respond positively to Actor tests, e.g. *What Fred did was the bagel was eaten by. All in all, then, there are serious empirical and theory-internal problems with regarding the 'demoted' argument to retain Actor status. Note that this would not affect the 'Foregrounding' half of the RRG formulation of passive, only the 'Backgrounding' half:

Foregrounding: ¬A = Pivot
Backgrounding: A = X

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Sama data (from Walton 1986) to be rather puzzling:

(23)a. O-b'li ku taumpa' ma si Andi  
    UP-buy 1SG shoes for PM Andy  
    'I bought the shoes for Andy'

b. O-b'li-an ku si Andi taumpa'  
    UP-buy-BEN 1SG PM Andy shoes  
    'I bought Andy some shoes' (Van Valin 1993:70)

In the (b) example, unlike the (a) example, the beneficiary argument 'appears as undergoer'

(Van Valin 1993:70). Similarly, consider the following 'raising to object' example:

(24)a. I believe that he is...

b. I believe him to be...

In the second case, but not the first, the 'logical' subject of the embedded verb is an Undergoer of the matrix verb. Thus, in these cases, MR status fails to hold constant under syntactic permutation.

The challenge with the MRs Actor and Undergoer is to ensure that they are defined in a restricted enough manner—whether this definition is semantic or syntactic—that they cannot be invoked simply, as Jackendoff cautions with respect to thematic relations (i.e. semantic roles), 'as a thinly-disguised wild card to meet the exigencies of syntax' (1987:371). To a great extent, the intuitive appeal and empirical plausibility of the MR categories derive from the fact that languages routinely neutralize semantic-role distinctions across different verbs' valences. In particular, it is routine for two arguments of a two-argument-taking verb to code agent and effector alike, as opposed to patient and
theme. Frequently, with operations such as passive, it is precisely these general
categories, not the finer-grained traditional semantic role ones, to which the operation is
sensitive. The overt distinction between an agent-centered category and a patient-centered
one is in turn neutralized at a further level of generalization in the coding of the single
argument of an intransitive verb in an accusative or ergative language. In active-stative
languages, however, the Actor/Undergoer distinction is at least to some degree preserved
even here. Even in accusative or ergative languages, an intransitive Actor/Undergoer
distinction expresses itself in what have been called 'unaccusativity effects' (cf. Chapter
2), i.e. various empirical divergences between unaccusative predicates (Undergoer-taking
intransitives) and other ('unergative') intransitives.

This raises a number of questions. First, given that different active-stative
languages are sensitive to different semantic parameters in their active-stative distinctions
(roughly divisible into agency-related parameters such as volition or control and aspect-
related ones such as stativity), it seems that Actor and Undergoer are language-specific
categories in a stronger sense than that usually attributed to traditional semantic-role
categories such as agent and patient. It is generally assumed that traditional semantic role
categories have an invariant universal characterization, despite the fact that languages
may differ in their conceptualization of specific situations, or their lexical instantiation, in
terms of agent- or patient-related parameters. If we endorse the perspective that the Actor-
Undergoer distinction is 'most readily apparent in stative-active languages like Lakhota'
(Van Valin and Foley 1980:336), however, then this distinction, and the distinguished
categories, must vary in substantive ways from language to language. Also, in cases of
'unaccusative mismatches' (cf. Chapter 2), where different unaccusativity 'tests' disagree, we obviously have to dissociate the evidence of these tests from the identification of Actor and Undergoer in any specific language.

The ultimate question, then, remains: which semantic factors are to be considered criterial in the diagnosis of Actor and Undergoer, or in distinguishing the two? In the case of intransitive arguments, it would be an oversimplification to say that any one 'test' picks out Undergoer as opposed to Actor or vice-versa. Rather, as we saw in Chapter 2, different tests are sensitive to different parameters involved in the transitive schema. In the case of active-stative languages, the Actor/Undergoer distinction is language-specific in the same way that transitivity is language-specific: overt Actor versus Undergoer coding may draw on any of the transitivity-relevant parameters, so that there is no single universal determinant of MR status in this respect.

Further evidence for the legitimacy of a semantic transitivity-oriented of Actor/Undergoer status may be drawn from passages such as the following:

Multiple argument activity verbs [eat pizza, as opposed to eat the pizza] never have an undergoer MR, for the following reason. Actor and undergoer have agent and patient as their respective prototypes, and in order for a class of verbs to have one of these MRs, at least some of the members of the class (state, activity, achievement, or accomplishment) must take either agent or patient arguments.... Although it is unusual, there are state verbs with agentive arguments; Dowty (1979) gives the human subjects of verbs like sit, stand, and lie as examples. (Van Valin 1993:48)

Note that Actor and Undergoer are centered on a transitive prototype: As Van Valin (1993:43) puts it, 'these are the two primary arguments of a transitive predication'. Given
that eat pizza is less transitive than eat the pizza, it makes sense that the argument of the first (Activity) predicate should fail to be an Undergoer. What we have here is further evidence for the clustering of the properties identified in the transitive prototype: Activity predicates are non-telic and nonpunctual, and so already deviate considerably from prototypical transitivity; such predicates only feature second arguments low in transitivity features, i.e. those features listed under Hopper and Thompson's general 'individuation' parameter\(^\text{19}\). Use of a nuclear predicate such as eat with an argument high in referentiality disqualifies it from being an Activity predicate; it is now an Accomplishment or, under the revised system, a Causative.

Also, note that the options for MR number are not limited to one or two: there is a third option, namely zero. Zero-MR ('atransitive') predicates include weather predicates, although apparently similar to intransitive predicates such as be happy or swim, are distinct from the latter in featuring no referential nominal\(^\text{20}\). Again, we see that referentiality plays a crucial role in determining whether a nominal is to count as a 'true' argument and therefore a MR, just as with the second argument of activity predicates.

One might think that, given the transitivity-centered nature of Actor and Undergoer, intransitive predicates would fail to feature any MRs. This is, of course, not true. Rather, the single (referential—this is crucial) argument of an intransitive predicate

\(^{19}\)These features are: proper vs. common, human/animate vs. inanimate, concrete vs. abstract, singular vs. plural, count vs. mass, and referential/definite vs. non-referential.

\(^{20}\)Of course, this has been disputed (see Bolinger 1973). Once again, we run into the problem that assimilation to the intransitive pattern of, in some cases, cross-linguistically or historically zero-argument predicates either influences, or reflects, a semantics deviating from that supposedly underlying the atransitive pattern.
may be either Actor or Undergoer. According to the 'default' principles (Van Valin 1993:47), the MR nature of an intransitive argument depends on the predicate's Activity or non-Activity status: 'If the verb has an activity predicate in its LS, the MR is an actor....If the verb has no activity predicate in its LS, the MR is undergoer'. States and Achievements, then, take Undergoers, while Activities and some Achievements take Actors. Independently, it is not clear that there should be any correlation of Actorhood or Undergoerhood with high or low transitivity values of intransitive predicates. In other words, given that a State is [-telic], [-punctual], one might expect it to correlate with other features of low transitivity.

However, neither the agent-centered Actor nor the patient-centered Undergoer is higher or lower than the other in transitivity: both are part of the transitivity prototype. And indeed, predicates low in transitivity according to telicity and punctuality may feature either Actor or Undergoer, according to whether they are Activities or States.

By the most recent feature-decomposition system, Activities and States are differentiated by a [dynamic] feature. However, this feature fails to correspond to agency, since predicates in either class may be agentive or nonagentive. For example, consider Dowty's agentive States sit, stand, and lie when predicated of a human. Nonagentive Activity arguments would presumably include the subjects of predications such as put up with racial slurs and suffer indignities. Of course, it may be questioned whether these predicates in fact fit the State and Activity class respectively. Van Valin acknowledges the membership of sit, stand, and lie in the State class, so apparently stativity, while definitionally [-dynamic], is not definitionally [-agentive]. Note, though, that agentive

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States fail consistently to pass Dowty’s stative tests: in particular, they do occur with progressive, they do occur with at least some adverbs which seem to presuppose something like volitionality and which are generally bad with other stative predicates, e.g. attentively (cf. I stood attentively vs. *I was attentively happy), and I am standing (etc.) entails I have stood (etc.). Agentive States, then, are indeterminately States or Activities. Nonagentive Activities, conversely, have some of the characteristics of States.

One task, then, is to clarify the nature and status of the [dynamic] feature and to determine its independence from [agency]. We shall see in the next chapter that Kashaya predicates which appear to be States ([-dynamic], [-telic], [-punctual]) may or may not be coded as Undergoers, and in fact may most typically receive Actor coding in their overt morphology. Apparent Achievements, meanwhile (both Achievements and Accomplishments in the new system), may receive Actor or Undergoer coding depending on some parameter of affectedness or volition. If it is true, then, that the agency-independent Aktionssatz of a predicate determines the Actor or Undergoer status of its argument, this status must be at a more abstract level than that involved in the overt active/stative coding of arguments in languages of this case-marking type. On the other hand, it may be that agency should be viewed as more fundamentally tied to Actor/Undergoer status than indicated in Van Valin (1993), perhaps with the specific relevant parameters being variable from language to language.

One thing we want to avoid is a universal algorithm for identifying MR nature independently of language-internal evidence for the validity of such identification. In other words, if a given array of tests identifies a given predicate in a given language as a
State, we do not want to have to say that the argument of every stative verb must be an Undergoer, whether or not there exists language-internal evidence for this. Also, if the language itself appears to grant central importance to, say, agency-centered Actor/Undergoer categories (i.e., if such categories seem to be of central morphosyntactic importance), then we don't want a universal algorithm to force us to identify, say, an aspectually-defined class as the Undergoer or Actor class of the language.

Recall from our earlier discussion of RelG that the empirical phenomena called 'unaccusative tests', while showing that superficially identical intransitive subjects are at some 'deeper' level dissimilar, fail to identify some unique 'deep' subject and object status since some unaccusative tests may show a single argument to be a 'deep' object while others show it to be a 'deep' subject. The conclusion in Chapter 2 was that the basic error of the RelG approach was to attribute unaccusativity phenomena to the effects of a single syntactic category while in fact such phenomena point to a complex array of semantic distinctions which may or may not converge on a single argument.

What we must take care to avoid in the context of RRG is a parallel error: namely, that various empirical indications of commonality between certain intransitive arguments and certain transitive 'objects' be automatically interpreted as evidence of common categorization at a single level of the grammar, namely as Actor or Undergoer. For example, as already discussed, different active-stative languages draw on different semantic parameters in their overt morphological categorization of intransitive arguments with transitive Actors or Undergoers, and even languages which draw on the same set of parameters may differ in their categorization depending on whether Actor or Undergoer
has the unmarked or default status.

In addition, again as discussed, overt Actor or Undergoer categorization may be in conflict with categorization indicated by behavioral tests, as is the case with Kashaya Pomo morphologically double-Undergoer predicates (to be presented and discussed in Chapter 4). Facts such as these indicate that groupings of intransitive arguments with transitive Actors or Undergoers may exist at any of a number of levels of the grammar; it then becomes a vexing question which, if any, level is to be taken as the 'right' level for 'true' MR identification. The danger to be avoided, then, is precisely that which proved to be the downfall of RelG's 'syntactic' approach to 'deep' relational status: arbitrary and unprincipled singling out of one level or test as somehow of greatest importance relative to all others.

Finally, there are certain problems with the assumption that Undergoer status is a prerequisite for passivization. One is that there is no universal requirement that passivized arguments be Undergoers. In fact, Van Valin argues that passivization in Icelandic and Kinyarwanda are not sensitive to Undergoer status. In Icelandic, by Van Valin's analysis, the passive pivot may be either the accusative-marked Undergoer or the dative-marked recipient/experiencer, so that the proper formulation of passive for that language should make reference to a broader class of arguments than simply Undergoers. In Kinyarwanda along with other Bantu languages, the applicative construction may encode a beneficiary as a dca along with the theme, and either may function as pivot of passive. Since it would presumably be circular to claim that the argument is Undergoer just in case it functions as
passive pivot\textsuperscript{21}, and since the model prohibits multiple Undergoers, passivization in 
Kinyarwanda must be formulated in terms of a broader class of inputs to promotion than 
simply Undergoers.

At the same time, other Kinyarwanda constructions which license the dca 
expression of arguments otherwise expressed as obliques fail to 'promote' these 
arguments to Undergoer status, by the test of passivization; thus, e.g., of the three dcas 
following the verb in the example below, only umugabo 'man' may function as passive 
pivot:

(25) Umwáana y-a-andik-i-yé-mo umugabo igitabo
child SUBJ-PAST-write-APPL-MOOD-LOC man book

izfná rye
name of him

'The child wrote in the man's book his name' (Van Valin 1993:72)

This, then, succinctly illustrates the trouble with Undergoer identification: on the one 
hand, passivization is used as a diagnostic for Undergoer status, while on the other hand 
independent considerations may dictate that passive has a broader domain; we are left 
with no reliable diagnostic, then, for identifying Undergoers.

3.1.2.1 Problems with the RRG exploitation of 'transitivity' and MR status: 'quirky' 
case in Icelandic

\textsuperscript{21} Also, such an interpretation would vitiate the semantic nature of Undergoer (as 
opposed, say, to some models' concept of 'object') if no independent way could be 
conceived to test the Undergoer status of one dca to the exclusion of another.
The general facts of Icelandic case marking as presented in Van Valin (1991) are quite similar, as we shall see, to those of case marking in Old English. They are as follows. The most common case marking pattern for verbs which subcategorize for two dcas is nominative-accusative. Thus, a verb such as taka 'take' features a nominative-marked agent and an accusative-marked theme; these two arguments correspond to what would be standardly referred to as subject and object respectively. Verbs which subcategorize for a single argument assign nominative case to that argument.

(26) Löreglan tók Siggu fasta
    the.police(N) took (3pl) S.(A) fast(A)
    'The police arrested Sigga'

(27) Hún dansaði
    she(N) danced

In these straightforward cases, the nominative argument has all the internally applicable morphological and behavioral properties of subjects as listed in Keenan (1976): control of verb agreement, acting as target of 'raising', control of reflexivization, and control of 'equi'.

On the basis of such data—representing the clear majority of Icelandic verbs—Van Valin formulates the following generalizations:

(28) RRG Case Marking Rules for Icelandic
    a. Highest ranking macrorole takes NOMINATIVE case.
    b. The other macrorole takes ACCUSATIVE case.
    c. Non-macrorole arguments take DATIVE as their default case.

(171)
(29) **RRG Agreement Principles for Icelandic**
   a. The finite verb agrees with the highest ranking macrorole in its clause.
   b. Predicate adjectives and passive participles agree with the undergoer of the
      predicate of which they are a part.  

There are, however, other case marking patterns in which morphological and
behavioral 'subject' properties fail to converge so neatly on a single nominal:

(30) **henni hefur alltaf þótt Ólafur leiðinlegur**
    her(D) has always thought O.(N) boring (Nsg)
    'She has always considered Olaf boring'

(31) **mér *hef/hefur/hafa alltaf þótt**
    me(D) have(1sg)/have(IM P)/have(3pl) always thought
    þeir leiðinlegir
    they(Npl) boring(Npl)
    'I have always considered them boring'

(32) **mér kolnar**
    me(D) get.cold(IM P)
    'I'm getting cold'

(33) **mig vantar peninga**
    me(A) lack(IM P) money(A)
    'I lack money'

(30) and (31) show that the verb bykja 'think, consider' subcategorizes for a dative
experiencer and a nominative theme; the order shown here, with initial dative
experiencer, is unmarked. The verb either agrees with the nominative theme (30, 31) or is
impersonal (31); (31) also shows that it cannot agree with the dative experiencer. (32)
shows that the verb kolna 'get cold' fails to subcategorize for any nominative argument;

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its single argument takes dative case and it features default third person singular
('impersonal') agreement. (33) shows a verb vanta 'lack' which subcategorizes for two
dcas both of which take the accusative case otherwise associated with objects; verb
agreement, once again, is third person singular or 'impersonal'. The question, then, is
which if any of these arguments controls the behavioral properties independently
associated with nominatives, i.e. independently associated with 'subjects'.

With all these verbs, behavioral 'subject' properties are exhibited by the initial
non-nominative NP only, as the test of raising shows:\n
(34) Henni virdist alltaf hafa þótt Ólafur leiðinlegur
her(D) seem allways have(INF) thought Olaf(N) boring(N)
'She always seems to have found Olaf boring' (147)

(35) *Ólafur virdist alltaf henni hafa þótt leiðinlegur
Olaf(N) seem always her(D) have(INF) thought boring(N) (147)

(36) mig virdist alltaf vanta peninga
me(A) seem always lack(INF) money(A)
'I always seem to lack money' (147)

(37) *peninga virdist alltaf vanta mig
money(A) seem always lack(INF) me(A) (148)

What we have here is a dissocation of morphological (agreement, case marking) and
behavioral 'subject' (= RRG's 'pivot') properties. Such data motivate LFG analyses (e.g.,
Zaenen et al. 1985) of Icelandic case marking by which general association principles of
what is called 'functional case assignment' (= GB's 'structural case') map subject onto

\22 Van Valin states that 'all of the [subject] tests pick out the same NP' (1991:146), so
'reaising' is treated as criterial for subjecthood.

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nominative and object onto accusative, with other mappings (corresponding to GB's oblique or inherent case assignment) idiosyncratically stipulated (for particular verbs such as bykja) as holding between a thematic relation and a morphological case; as Van Valin explains, 'because the case feature is tied to a thematic relation and not to the G[rammatical] F[unction], it appears regardless of which GF the argument has' (1991:150):

(38) bykja: V <experiencer, theme> [+DAT] (SUBJ, OBJ)

Van Valin's interpretation of these same facts is as follows: most of the case marking in Icelandic which has been treated as 'quirky', and subjected to treatments by which that case marking is 'explained' only with reference to arbitrary stipulation, may in fact be understood as perfectly regular once we have lexically stipulated the relevant predicate's 'transitivity' value. In other words, the 'quirkiness' is reduced to a stipulation of a verb's transitivity, intransitivity, or atransitivity—which, as Van Valin explains, 'is an area of notorious lexical idiosyncrasy, and every theory ... simply stipulates the transitivity of exceptional verbs in its lexical entry' (179).

The relevant examples of 'quirky' case are categorized into two groups:

(39) non-nominative arguments of apparently intransitive verbs:

a. mér kolnar
   me(D) get.cold(IM P)
   'Tm getting cold'

b. mig þyrstir
   me(A) get.thirsty(IM P)
   'Tm getting thirsty'
(40) various deviations from N-A coding of the arguments of an apparently transitive (or ditransitive) predicate:

a. mig vantar peninga
   me(A) lack(IMP) money(A)
   'I lack money'

b. henni hefur alltaf þótt Ólafur leiðinlegur
   her(D) has always thought O.(N) boring (Nsg)
   'She has always considered Olaf boring'

c. ég skilaði henni peningunum
   I(N) returned(1sg) her(D) the.money(D)
   'I returned the money to her'

d. ég hjálpaði honum
   I(N) helped(1sg) him(D)
   'I helped him'

Let us consider Van Valin's analysis of the 'transitive' predicates, starting with (40b).

Note, first, that this predicate appears to feature two direct core arguments. Assuming, then, that 'her' and 'Olaf' are experiencer and theme direct core argument respectively, what we would expect is for 'her' to be Actor and 'Olaf' to be Undergoer, and for these two arguments to take nominative and accusative case respectively. This follows from the independently-formulated 'Default Macrorole Assignment Principle' a.1.: 'If a verb has two or more arguments in its LS, it will take two macroroles' (164), and from the default mappings from SR to MR.

Given the independently-characterized Icelandic case marking rules—that the 'highest-ranking macrorole takes NOMINATIVE case', 'the other macrorole argument takes ACCUSATIVE case', and 'non-macrorole arguments take DATIVE' (171)—the 'quirkiness' or idiosyncrasy might be interpreted to lie in the mapping from MR to surface
case. However, such an analysis would require three idiosyncratic stipulations: one, that the case of the Actor is dative; two, that the case of the Undergoer is nominative, and three, that the agreement should be with the theme 'Olaf' rather than the experiencer 'her', since the latter would be the highest-ranking MR if both had MR status.

If, however, we change our assumptions slightly, we end up with a less stipulative analysis. Specifically, if we assume that bykja is intransitive instead of transitive, then everything else follows generalizations independently motivated for the language. As a one-MR State (rather than Activity) verb, the single MR is an Undergoer, with the theme outranking the experiencer for the Undergoer MR. Therefore, 'Olaf' rather than 'her' is the single MR argument of the verb; as the highest-ranking MR (by default), this argument takes nominative case, and the nominative NP serves the expected role of agreement trigger. 'Her', meanwhile, as a non-MR-bearing argument, takes the default dative case. In this way, once having made the initial stipulation that the predicate is intransitive, everything else—case marking and agreement—is perfectly regular.

An additional advantage of this analysis over analyses which treat bykja as transitive is that it naturally accounts for the fact that bykja can't be passivized:

(41) *Ólafur hefur allt af verið þóttur leiðinlegur af henni
Olaf(N) has always been thought boring(N) by her(D)
'Olaf has always been considered boring by her' (p. 176)

(The fact that an impersonal passive is impossible is accounted for by the independent proscription in Icelandic against impersonal passivization of stative intransitives.)

Transitive analyses, on the other hand, would have to come up with some independent
There is, however, at least one apparent problem here. Recall that bykja is analyzed as an intransitive predicate, with the nominative-marked argument being its only MR-bearing argument. The nominative argument, then, is what might loosely be called the 'subject': the one direct core argument of an intransitive verb, nominative-marked, and controlling agreement. However, the reason that the dative-marked argument is the one which, say, an LFG analysis would identify as the subject is that it has behavioral properties of subjecthood, notably serving as pivot in a 'raising' construction:

(42) Henni vírðist alltaf hafa þótt Ólafur leiðinlegur
    her(D) seem always have(INF) thought Olaf(N) boring(N)
    'She always seems to have found Olaf boring' (p. 147)

The nominative-marked NP, on the other hand, can't serve as 'raising' pivot:

(43) *Ólafur vírðist alltaf henni hafa þótt leiðinlegur
    Olaf(N) seem always her(D) have(INF) thought boring(N) (p. 147)

Van Valin handles this simply by formulating the Icelandic 'pivot' selection rule independently of the rules bearing on case marking or agreement trigger selection:

(44) Accessibility to pivot hierarchy: the highest ranking argument with respect to the actor end of the hierarchy [presented below], regardless of whether it is a macrorole or not, is the pivot. (p. 181)

<table>
<thead>
<tr>
<th>Actor-Undergoer Hierarchy</th>
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<tbody>
<tr>
<td>Actor</td>
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Note that such an analysis is completely unproblematic in a model in which pivot selection and coding properties are treated as independent of each other. Such questions as which NP is 'really' the 'subject' simply do not arise.

Next, consider the analysis of predicates such as those in (37c) and (37d) which feature a nominative 'subject' and dative 'object(s)'. The non-accusative case marking on the object-like argument(s) is what needs to be explained. The RRG explanation is already implied by the foregoing: on the assumption that Undergoer arguments take accusative case not just typically but invariably, we may consider dative marking to indicate that the relevant argument is not an Undergoer and, given that all indications (case marking, agreement and behavior) are that the nominative-marked argument is the Actor, any dative-marked argument would therefore be non-MR-bearing. In other words, given an understanding of transitivity in terms of MR number, these apparently transitive predicates are in fact intransitive. Proceeding from there, given the generalization about non-MR-bearing direct core arguments receiving dative case, everything else is perfectly regular.

In addition, the verbs at issue fail to undergo 'normal' relation-changing passivization; rather, only impersonal passives are possible:

(45) Henni var skilað peningunum
her(D) was(IMP) returned the.money(D)
'She was returned the money'
These 'passives', then, are precisely what one finds with impersonal passivization in Icelandic in general, which is independently claimed to operate only on 'intransitive verbs which have an activity predicate in their LS and which take animate actors' (189). In this way, too, the impersonal passivizability of predicates such as 'return' and 'help' as opposed to the non-passivizability of 'consider', is predicted: only the former, but not the latter, feature an Activity predicate in their LS, and an Actor, as opposed to Undergoer, argument.

Finally, consider apparent intransitives such as those already cited under (36):

(46) bátnum hvolfdi
    the.boat(D) capsized(IMP)
    'The boat capsized' (p. 178)

(47) mér kólñar
    me(D) get.cold(IMP)
    'I'm getting cold' (p. 178)

Normally, Achievement verbs such as these would take a single Undergoer argument. If we assume, however, that the irregularity of these verbs lies in their being atransitive (taking no MR) rather than intransitive, everything follows unproblematically just as with the apparently transitive 'quirky' verbs. Once again, the verb's non-MR-bearing dca takes the default dative case.

In sum, then, the 'quirkiness' of all these predicates lies not so much in their case marking as in their transitivity. The distinction between dca and MR-bearing argument allows us to understand these special predicates as involving a divergence between the two: they all represent situations where a dca that would be expected to bear a MR in fact...
fails to bear one. This fact must be stipulated in the verb's lexical entry, but that is the only thing that must be handled stipulatively; everything else is perfectly regular in terms of independent generalizations about the case marking, agreement trigger properties, and behavioral properties of arguments in Icelandic. Thus, as Van Valin points out, 'no instance of a dative subject or object [in Icelandic] counts as quirky case. The only ones that do are those involving accusative or genitive subjects and genitive and some instances of accusative objects' (179). Such predicates include the following:

(48) mig þyrstir
    me(A) get.thirsty(IM P)
    'I'm getting thirsty'

(49) mig vantar peninga
    me(A) lack(IM P) money(A)
    'I lack money'

(50) hana dreymdi um hafíð
    her(A) dreamed(IM P) about the.sea(A)
    'She dreamed about the sea'

(51) snjóa leysir á fjallinu
    snow(A) melt(IM P) on the.mountain(D)
    'Snow melts on the mountain' (pp. 179-80)

In these instances, on the assumption that these verbs lack 'normal' case-marked arguments because they lack the expected transitivity value (i.e., again because of the just-discussed discrepancy between dca and MR number), the accusative case marking on the first argument of each verb is indeed 'quirky' given the understanding of dative case being normal or 'default' for such arguments. Thus, by all of the assumptions discussed thus far, 'all instances of quirky case in Icelandic involve the replacement of dative case
by either the accusative or genitive, and accordingly, *quirky case is restricted to arguments which would not otherwise receive nominative or (normal) accusative case* (180). The upshot, then, is that 'true quirky case marking in Icelandic is much more restricted than other analyses have assumed' (180).

While Van Valin thus presents an 'economical' analysis in the sense of requiring fewer stipulations overall than conceivable alternative analyses, the fact remains that case marking is relegated to a purely formal, semantically inconsequential domain. Van Valin claims that his analysis is superior to LFG analyses such as that of Zaenen et al. (1985) in that 'the RRG case assignment rules in [28] treat dative case as one of the regular cases along with nominative and accusative, whereas dative is treated through an ad hoc lexical feature in the other accounts' (174). What he means here is that by his account dative is the default case for non-MR dcas. However, given that manipulation of MR status is answerable only to often somewhat indirect theory-internal formal consequences (in general, the effects of such manipulation on independent generalizations about pivot status, case marking, and agreement), dative case is divorced from any semantic import.

A basic problem here is that the only diagnostic offered for the identification of an argument as Actor or Undergoer is the rather indirect one of the implications of such identification for independently-formulated generalizations which make reference to MR status.

Thus, the problem which emerges out of this analysis is that there are too few constraints on the identification or invocation of such constructs as Actor, Undergoer, MR, and such concepts as 'transitive'. These supposedly semantically-based categories are
all too vaguely defined to prevent them from being used, again to paraphrase Jackendoff (1987), as arbitrary wild cards invoked to meet the exigencies of syntax. In analyses such as that of passivization or 'quirky' case in Icelandic, we have relatively overt syntactic patterns, pointing to clearly empirical constructs such as pivot and dca, along with overt morphology such as case marking. Beyond this, relatively abstract constructs such as MR, Actor, Undergoer, and the traditional semantic roles are posited on the basis of central examples, with their boundaries and precise range of definition left up to the imagination of the analyst or requirements of the analysis. Roughly, then, the approach is as follows: assuming the existence of variables such as dca, MR, Actor, and Undergoer--and without worrying too much about what these labels actually mean--can we construct an analysis of specific phenomena such as passivization which makes reference to these variables and avoids reference to such variables as 'subject' and 'object'?

The answer, of course, is 'yes'—but perhaps only, one suspects, because of the very absence of any independent precise delimitation of these variables' denotata. The problem we face, then, is parallel to that faced when considering the value of, e.g., an RelG analysis of morphosyntactic patterns in terms of arbitrary variables of levels and 'numbers', or an LFG analysis in terms of mapping of arguments onto undefined relational categories such as 'subject'. While RRG permits a grammatical function-free analysis, then, what we have to ask ourselves is in what way such an analysis is superior.

4 The view of semantic roles endorsed here

The RRG system is claimed to be 'the only theory in which the assignment of
thematic relations to a verb is independently motivated' (Van Valin 1993:33), rather than simply stipulated as part of the semantics of a given predicate. (In fact, this is not quite true, and Van Valin himself equivocates on the point in his acknowledgement of Jackendoff (1976) as offering an approach by which semantic roles are 'defined in terms of the argument positions in the decomposed L[ogical] S[tructure] representations', rather than being listed in a verb's lexical entry (39).) It is clear, however, that any system must start with a lexical entry in which certain aspects of the predicate's semantics are 'stipulated' rather than derived or independently motivated. How theories differ is in what precisely bears the burden of the initial stipulation.

The treatment of semantic roles is to view them as interactions between the LS of a predicate and cross-cutting classifications of predicates into 'Locational', 'Nonlocational Perception', 'Nonlocational Possession', etc. While semantic roles are thus identifiable by empirically-based algorithm to the extent that they link up mechanically to argument positions in a predicate's LS (which, recall, is derivable by a slew of empirical and intuitive tests), they are intuitively-based to the extent that they are identified by introspective analysis of the predicate-specific meaning within the LS representation. The problem with this, of course, is that the introspective or intuitive identification of a predicate's argument may differ from person to person, and may fail to derive justification from any overt/empirical tests in the language at hand. In other words, if we are to adhere to a conception of semantic roles as linguistically significant categories, then they should have clear linguistic repercussions as opposed to merely some sort of vague intuitive plausibility.
It should be understood that there is no issue here of the RRG framework falling into the trap of identifying semantic roles exclusively in terms of intuitions\textsuperscript{23}. In this respect, RRG differs markedly from radically localist or reductionist treatments which consider all semantic roles to reduce to 'theme' and 'locative' universally, although the degree of abstraction advocated by Langacker (who, for example, treats the subject argument of have as 'locative' because of general cross-linguistic patterns associated with the translation-equivalents of this English verb) is indeed represented here. The point is not that interesting generalizations are to be avoided for the sake of slavish attention to the details of surface coding, but that it is precisely these details which provide insight into internally legitimate, linguistically instantiated conceptualization.

One of Fillmore's (1977) most important points of revision of Fillmore (1968) is the insight into the problematic nature of viewing semantic roles as 'deep semantic' primitives in a theory of lexical semantics. The basic problem is that semantic roles cannot be viewed as surface-syntax-independent constructs mapping onto surface coding configurations. Ultimately, the independence of 'surface' from 'deep' meaning is shown to be false. In this respect, Fillmore (1977) is similar in spirit to other studies of the same period such as Green (1974) and Borkin (1973).

\textsuperscript{23}Recall, too, that the traditional semantic roles are claimed to lack any real theoretical importance, so the entire discussion may be moot; however, a discussion of the traditional semantic roles does lay the groundwork for a discussion of those semantic roles which are claimed to be of central importance to the theory, namely the MRs Actor and Undergoer.
The approach of Foley and Van Valin (1984) and later works is consistent with these findings as well as with those of Jackendoff (1976). The identification of semantic roles in the traditional sense follows from overt features of the predicate's LS together with less overtly-signalled predicate-specific aspects of the verb's semantics. For example, the fact of a stative predicate involving 'perception' rather than 'possession' means that the two arguments are experiencer and theme, rather than locative and theme. With certain activity or accomplishment predicates, semantic role status depends on the inherent semantics, specifically animacy, of one of the arguments. I broke the window and The rock broke the window, while apparently identical aspectually, are otherwise distinguished in that the effector is interpreted as agent in the former case only. Similarly, Activity and Accomplishment predicates such as cry or break (transitive) may have an agentive or non-agentive interpretation depending on the volitionality of one of the arguments.

In some of these cases of variable semantic role status, the evidence for the proper role at issue is overtly empirical, while in other cases it is introspective. The [volitional] and therefore [agent] status of the subject of cry, for example, could be signalled by adverbial modifiers which either presuppose or assert volitionality: 'I tried to cry', or 'I cried on purpose'. In this case, then, semantic role status may be claimed to be identifiable by empirical tests of the sort independently required for any linguistic construct claimed to be internally relevant to any language, such as 'subject', 'telic', etc.

However, the fact that adverbials such as 'on purpose' or 'by mistake' may be used with predicates such as cry shows that semantic role status is not simply a matter of
inherent LS, but rather an interaction between inherent LS and a host of factors including the nature of the argument(s) appearing in the predicate's argument slots (thus, a human may 'try to appear healthy' but a tree may not) and a pragmatic understanding of the role of a given referent in a situation of the given type. The typical inference from an assertion that John broke his leg is that John acted non-volitionally, but this inference may be preempted by an assertion that John broke his leg on purpose, or even by inclusion of a certain type of instrumental adjunct (with a hammer). Many factors beyond the semantic details of the Accomplishment predicate and the animacy of the subject argument are potentially involved here, including discourse context and independent, sometimes culture-specific, pragmatic knowledge. Any or all of these factors may be involved in the interpretation of the subject of each of the following as agent or not:

(52)a. John destroyed his car.
   b. Joe McCarthy destroyed the careers of many actors.
   c. I destroyed Max because he had rabies.
   d. I destroyed my chances of ever getting promoted.

(53)a. Every son breaks his mother's heart sooner or later.
   b. Every monk breaks his vows sooner or later.
   c. Every avid skier breaks his leg sooner or later.

This source of semantic-role lability, then, is one of the reasons it is frequently difficult, and ultimately misguided, to assign semantic roles to the arguments of a given predicate out of context. Another reason for such difficulty is that it is not the case that, intuitively or by any empirical tests, arguments such as the ones under discussion are clearly and unambiguously either agentive or not. If volitionality is crucially involved in such a
determination, the problem is that situations are rarely of such simplicity that the participant 'in control' of the Accomplishment can have his or her volitionality with respect to the Accomplishment accurately identified in terms of a value of a binary feature.

The most one can do, then, is make statements such as that the subject of an Accomplishment predicate will be at least potentially construable as an agent if animate, or, more strongly: the subject of an Accomplishment predicate will necessarily be interpreted as effector rather than agent if inanimate. In such cases, the agent/effector distinction captures an intuition which has empirical consequences, that is, an intuition about the potential volitionality of certain participant-types in certain event-types; the parameter of volitionality, then, is both intuitively real and linguistically significant. In English, it is not however the case that this parameter figures centrally in the core morphology or syntax of the language, e.g. in case assignment, the determination of the number of Macroroles in a verb's valence, the passivizability of a predicate or the promotability of one of its arguments, etc. It is only somewhat indirectly, through interaction with optional adverbial material, that the parameter manifests itself empirically.

To the extent that volitionality figures in the assignment of agent status, however, it is still not the case that volitional entities, even ones occupying certain positions in the LS of certain predicates, may be said to be agents to the exclusion of other semantic roles, e.g. experiencer. One way to put this would be to say that, intuitively, experiencers may be more or less agentively involved. Once again, however, this illustrates the difficulty of
identifying arguments with semantic roles as clearly or unambiguously as we might like.

Thus, given the fluid and context-dependent nature of the semantic-role
interpretation of arguments, it does indeed (as argued by Jackendoff 1987, Dowty 1991,
and Foley and Van Valin) seem reasonable to view SRs as inferences from a more stable
and basic semantic representation, plus the inherent semantics of the arguments' referents,
plus context. The compatibility of the subject argument of an Accomplishment
predication such as $X$ fall on $Y$ with either a theme or an agent reading needn't be entered
into the semantic entry of the predicate. The animacy of the subject will determine
whether that argument is compatible with an agentive reading, and then the likelihood of
an agentive inference will be determined by the nature of the prepositional object, plus
overt or covert context. Thus:

(54)a. The eggs fell on the floor. [theme]
b. John fell on the floor. [theme or agent]
c. John fell on the live bomb in order to save his comrades. [agent]

In addition, the relegation of SRs to a theoretically marginal position means that
disputes about the number and nature of SRs may be largely ignored. This is especially
advantageous given that semantic roles are entities which are delimited in nature and
number neither intuitively nor, probably, after due empirically-based consideration. In
this respect, they are different from many other linguistic constructs, including relatively
overt ones such as morphological cases and relatively abstract ones such as distinctive
phonological features. If we rely on judgments of intuition in identifying semantic roles,

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then the problem is that we can in theory arrive at a limitless regress of ever-finer
distinctions, e.g. ever-finer divisions of coarse granularity such as 'locative' into not just
the frequently-cited source, path, and goal, but also nameless ones such as whatever
semantic roles are involved with a predicate such as pass (cf. Jackendoff 1987).

If, on the other hand, we require empirical language-internal evidence for the
semantic roles we posit for any language, then it is still the case that there is a
theoretically limitless number of them. At least, this is true if we broadly conceive of
semantic roles as semantic distinctions with empirical consequences. Then, not only
semantic distinctions bearing on the selection of morphological case, pivot selection, and
so on, but even such relatively peripheral syntactic 'processes' as choice of or
compatibility with adverbials, will provide evidence for semantic roles. Since the number
of empirical phenomena in any given language is presumably non-delimited, then so is
the number of semantic roles.

We may get around this problem (if it is indeed to be construed as such) by
placing a priori limits on the type of process which we will consider to be of relevance to
semantic role identification. This is Dowty's (1991) approach in focusing just on those
semantic factors which appear to be of relevance to (proto-) subject/object selection. The
essentially arbitrary nature of such a decision underscores the fact that semantic roles
should not be viewed as constructs having any independence of the uses, so to speak, to
which we as analysts choose to apply them.

In the case of some roles, there is lacking even the sort of non-empirical, intuitive
appeal underlying those of agent, patient, experiencer, stimulus, source, goal, and
The most notorious such role is theme. In Van Valin (1993), theme identifies the 'content' of a verb of perception or cognition, the possessee of a verb of possession, the attributive argument of an 'equational' predicate ('John is a lawyer'), an argument located relative to a landmark ('The book is on the table'), the argument of a predicate of uncontrolled motion ('The ball rolled'), and much more. By the rules of the present investigation, any category imposed on the data of any language would need to be justified not only intuitively but empirically, with reference to language-internal processes which treat members of the proposed semantic-role class alike in distinction to members of other classes. In the case of the role 'theme', however, the category lacks either intuitive or empirical grounding. At least, no empirical justification of the category presents itself beyond the somewhat circular one of placement relative to other semantic roles in the semantic role hierarchy, in which case we could assert that the theme is the argument which is neither a patient, nor a locative, nor experiencer, effector, or agent, and which has a position between locative and patient in its access to subjecthood, pivot status, or Actor status on the one hand or objecthood or Undergoer status on the other.

There is perhaps one way to reconcile the invocation of such a category with the approach taken here, and that is to define theme as the default or least-marked semantic-role type. As long as all the other proposed semantic roles, then, have a clearly identified empirical grounding, we may represent theme as simply unmarked for the parameters definitionally involved in the other roles with which it stands in paradigmatic opposition. Given this conception, it would not be so much the case that theme has any particular conceptual content, but that it is defined in terms of its lack of conceptual content relative
to other roles.

More likely, however, the best way to regard the supposed theme role is as a behaviorally underdifferentiated (or minimally-differentiated) assortment of roles properly regarded as distinct. In other words, it is not really the case that an argument of a predicate of uncontrolled motion, the object of a predicate of visual perception, and an argument located relative to a landmark are conceptually undifferentiated. Rather, they are simply undifferentiated with respect to the semantic role hierarchy. At the same time, this lack of differentiation is one by default, as it were, since the only one of the predicate-types listed which involves more than one argument is the transitive perception type. As far as the other predicates are concerned, it makes no difference to the validity of the predictions made with reference to the semantic role hierarchy which role the argument is assigned to.

The overall situation is made somewhat less problematic if we find in a given language a given overt case role configuration for situations we intuitively feel to be prototypically of, say, the experiencer-stimulus type, and a different configuration for, say, prototypically transitive (agent-patient) situation types. This is the case, as we will see in Chapter 5, with OE predicates of the 'dream/remember/like' class, as opposed to those of the 'hit/kill' class. In this instance, we may rely on overt language-specific evidence to determine the assignment of semantic roles, while relying on our intuitions only for the initial insight into the semantic distinction reflected in the coding.24

24Even this initial insight is too big a leap for some analysts, including such structuralist-minded formalists as Williams (1984) who view the only 'meaning' of cases to lie in their formal difference from other cases, rather than in any link to system-
This is different from simply relying on intuitive criteria for identifying semantic roles in general. One reason intuitions are a doubtful guide to semantic roles is that they often derive from alternative valences of the same predicate or even from semantically similar but strictly distinct predicates. To rely on such related but distinct linguistic encodings in the identification of the semantic role of a given argument of a given predicate would be to ignore the insight that different valence arrays instantiate substantively different conceptualizations of a given situation.

Strictly speaking, then, the coding instantiated in *It seems to me that...* should no more be taken as evidence of the experiencer or goal status of the animate participant of *I think that...* than should one language's coding be taken as evidence for another language's conceptualization. To ignore this fact is to ignore the myriad insights into the non-arbitrary relationship between form and meaning offered by the tradition of linguistic analysis represented by Green (1974), Borkin (1973), Givon (1979, 1984), Haiman (1983), and Fillmore (1977), and to abandon the most clearly principled methodology available for the determination of semantic roles or semantic status in general.

This, then, provides a way out of the apparent circle of interdependence between abstract and formal constructs (between, for example, semantic roles and overt coding)—by acknowledging the canonical semantics associated with certain case marking patterns. Thus, it may be true that *I in I saw John* or *I like John* has the status of experiencer at least by intuitive criteria and perhaps also by the fact of rough semantic equivalence with the overtly goal- (and thus metaphorically experiencer-) marked prepositional object in *John* external semantics.

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appeared/appeals to me; however, we should also acknowledge that I is coded here in the argument-slot associated with the valence pattern prototypically characteristic of agents in a transitive event-type. This has empirical consequences beyond coding as 'subject' or prepositional 'object'; e.g., only in the transitive valence is the first-person singular nominal readily compatible with tests of volitionality:

(55)a. I tried to see/like John
   b. *I tried to have John appear/appeal to me
   c. *I tried for John to appeal to me

We will see that an acknowledgement of the basic semantics associated with valence patterns ('schemas', in Fried's (1995) terms) allows us to view dramatic changes of coding patterns in English as involving an increasing assimilation of historically non-transitive predicates to the transitive schema. This may be understood on a predicate-specific level as construal of predicate-specific semantics in terms of transitive semantics, or on a language-wide level in terms of the increased liberality of the transitive schema with respect to the situation-types it accepts and with respect to the participant-types it accepts for coding as the arguments associated with the transitive schema. These arguments are Actor and Undergoer.

With many of these predicates, what we have is a formal assimilation, in the most crude aspects of argument coding, to independently-identifiable predicate- or valence-types, yet with certain behavioral differences remaining between them and other, perhaps more prototypical, examples of those predicate-types. For example, the sensory predicates see, hear, etc., as well as psychological predicates such as like and fear, are formally
transitive, although they deviate intuitively from prototypical semantic transitivity, just as many of these predicates deviate historically in English and deviate cross-linguistically from a formal valence pattern associated with prototypically transitive predicates. Their non-prototypically transitive nature remains reflected in certain behavioral traits, such as failure to respond positively to agent and patient tests, e.g.:

(56) *What I did to John was hear/like him

Also with predicates such as roll, what we have is a neutralization of a semantic distinction from [+control] predicates such as run or dance. The identity of coding, despite the intuitive conceptual/semantic distinctions which may be overtly and directly coded in an active-stative or middle-marking language, provides evidence for a unified mode of conceptualization at some level. A visual perception predicate such as see, then, is coded and conceptualized in terms of the semantics associated with the transitive valence, but the ‘stimulus-experiencer’ semantics of the predicate—i.e. that semantics which diachronically, cross-linguistically, and to some degree language-internally motivates different coding patterns for see-type predicates from hit-type ones—remains present and constrains the cooccurrence of adjuncts and embedded complements with the predicate itself.

One implication of this is that, while the basic valence of a predicate does indeed provide insight into the language’s categorization or conceptualization of a given situation, it is also necessary to look beyond this coding pattern to determine further
nuances of conceptualization beyond the rough-grained, often rather conventionalized basic valence of the predicate. The degree to which, or ways in which, it will be necessary to look beyond the basic valence is ultimately a language-specific matter. A 'fluid-S' active-stative language such as Kashaya Pomo signals in its case marking semantic factors which can only be teased out relatively indirectly, with recourse to 'unaccusativity tests', in a language such as English. The idea, then, is not that the categorization of intransitive arguments in terms of the agent-like argument or the patient-like argument of transitives is something unique to those languages which code this conceptualization directly in their case morphology, but rather that the basic unaccusative/unergative distinction is widespread and perhaps universal. The specific parameters involved, however, as well as which predicates are grouped into which class, will vary to some degree from language to language.

Herein, however, lies an apparent problem: How can we say that the unaccusative/unergative distinction is universal, but at the same time not only language-specific in the specific formal details of its manifestation but also language-specific in it semantic makeup? In other words, how can we say that a universal semantic distinction has language-specific semantic content?

In fact, there is no single unaccusative/unergative split, but rather many semantic parameters which in individual cases may or may not converge on a single predicate. This is the reason for the well-known 'unaccusative mismatches' found in the literature on unaccusativity phenomena, as well as for the lack of dependable correspondence between different active-stative languages in the specific predicates, or even classes of predicate.
categorized into one or the other group. One consequence of this is that it would be wrong to say that any given active-stative language expresses in superficially transparent way, in its case marking, the same unergative/unaccusative split an accusative language manifests in a less overt manner.

This also means that it is at least misleading for Van Valin to refer to the Lakota active-stative system as providing direct insight into a universally valid assignment of the arguments of predicates to Actor and Undergoer categories. Rather, any given active-stative language will reflect in its argument coding a subset of a sizeable pool of semantic parameters (some agency-related, some aspect-related) which may be distinct from that subset conventionalized in the case-marking opposition of another active-stative language; such a language may additionally provide evidence for unaccusativity phenomena which reflect distinct semantic factors from those instantiated in its case marking system.

This, then, raises the question of whether the single argument of any given intransitive predicate in a given language may be unambiguously categorized as an Actor or Undergoer. This is a far more serious problem than that represented by cross-linguistic disparities in the mapping of intransitive predicates or predicate-types onto Actor-taking (unergative) and Undergoer-taking (unaccusative) categories. It seems that an unambiguous categorization is possible if we rather arbitrarily restrict ourselves to a given test for Actor or Undergoer status. Recall that the MR argument figuring in the LS of a stative predicate is universally assumed to be an Undergoer. Thus, it would be assumed that in the following Kashaya clause man 'she' is an Undergoer:

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However, the overt case marking of the argument indicates that it is what we would language-internally identify as an Actor (Undergoer coding would appear as *madal 'her'). This, then, is the question: Why should we allow Van Valin's universal stipulation (which makes primary reference to aspectual factors) override the evidence supplied by the language itself (which, as we have seen, is sensitive primarily to agent-oriented, not aspect-oriented, semantic factors in its Actor/Undergoer or active-stative system)?

In order to make my position on this issue completely clear, an illustration of the RRG approach to unaccusative mismatches will be helpful. Here, then, is a brief synopsis of Centineo's (1986) analysis of unaccusative phenomena as presented in Van Valin (1990).

In this article, Van Valin shows how RRG permits an empirically optimal treatment of unaccusative phenomena, for example auxiliary selection and the rules of ne-cliticization in Italian, without any reference to the kind of 'deep-relational' status posited in RelG. By Van Valin's account, the rules for intransitive auxiliary selection and ne-cliticization make reference to the lexical decomposition of the LS independently of 'deep' subject/object (or, for that matter, of agent/patient or Actor/Undergoer) status. The auxiliary selection rule states that *essere 'be' is selected if the LS contains a State predicate; thus, States and Achievements take *essere, but Activities don't.

The rule of ne-cliticization also makes reference to the presence of a State...
predicate in the verb's LS:

(58) Ne realizes the lowest-ranking argument on the actor-undergoer hierarchy in the state predicate in the LS of the predicate in the clause. (233)

This applies both to objects of transitive Accomplishments (which feature a State predicate embedded under a CAUSE and a BECOME prime) and to any intransitive which contains a State predicate, i.e. States and Achievements, but not Activities:

(59) Maria ne ha comprati due.  
M. of.them has bought two  
'Maria bought two of them'

(60) Ne arriveranno molti.  
of.them arrive-FUT-3pl many  
'Many of them will arrive' (Van Valin 1990:231)

Given that both the auxiliary selection rule and the ne-cliticization rule single out intransitives with State predicates, it is expected that with intransitive verbs the two will coincide. Van Valin explains, however, that this is not invariably the case. Essere itself takes essere, but is incompatible with ne:

(61)a. Molti esperti sono buoni  
many experts are good

b. *ne sono buoni molti  
of.them are good many (Van Valin 1990:234)

The reason ne is ruled out is that 'identificational and attributive constructions are two-place stative predicates which ... have theme and locative arguments.... The theme argument is the attribute, and the locative argument is the bearer of the attribute. Hence
the LS for [54a] would be be’ (molti esperti, [good’])’ (234). In other words, the theme is the attribute—which ‘is never realized syntactically as an argument’ (234). Hence, it can’t be realized by ne25.

This illustrates the RRG explanation of ‘unaccusative phenomena’ without reference to grammatical relations (‘deep’ or otherwise). The problem, then, is not whether unaccusative phenomena and active/stative splits are explicable independently of a RelG-type concept of ‘subject’ and ‘object’, but rather what implications these phenomena have on the internal identification of MR nature (i.e., Actor or Undergoer status). In Italian, the two unaccusative phenomena mentioned are sensitive to Aktionsart-related parameters, not to agency per se; this is underscored by examples such as the following, where an agency-imposing adjunct is perfectly compatible with essere:

(62) Luisa è corsa di proposito a casa
L. is run on purpose to home

The empirical commonalities between some intransitive arguments and the ‘promoted’ argument of a passivized predicate are explained not in terms of the ‘deep’ object or the Undergoer status of the behaviorally similar arguments, but rather in terms of common

25 A problem with this account, however, is that it would appear to predict the following to be grammatical:

*nne sono professori molti
of.them are professors many
‘Many of them are professors’

This shows that the ungrammaticality of the ne-clitic in (54b) can’t be attributable to the supposed incorporation of the theme argument into the predicate.
features of stativity. By the general MR assignment principles, the Actor or Undergoer status of an intransitive argument is determined by the presence of an Activity predicate in the verb's LS; therefore, given that non-Activities either consist of (States) or include (Accomplishments, Achievements) a State predicate in their LS, the Aktionsart distinction which figures in this account will parallel a distinction in terms of MR status. At the same time, since the relevant distinction is one which correlates with MR status rather than being defined simply and directly in terms of the presence or absence of a 'deep' object or an Undergoer, there is greater latitude for an empirically adequate account in cases involving the so-called unaccusative mismatches.

As Van Valin acknowledges, however, both unaccusative phenomena and active-stative splits may be determined by factors other than Aktionsart. In Acehnese, for example, the parameter relevant to the coding and behavior of the intransitive argument is agency, not Aktionsart. In both languages (and, tentatively conjectured by Van Valin, universally), the two different kinds of parameter will single out the Activity class of verbs as patterning with transitive subjects/Actors since Actor status in terms of Aktionsart and Actor status in terms of agency will coincide here. Other than with this one Aktionsart class, however, the two different types of language will diverge in such a way that the relevant parameter-type is more clearly discernible.

The problem, though, lies in the implications of these facts for the possibility of a universal characterization of Actor and Undergoer. Van Valin's procedure is to interpret the evidence of behavior and coding as pointing to an agency-oriented Actor/Undergoer distinction in Acehnese, as opposed to the Aktionsart-oriented distinction following from
the general MR assignment principles. On the one hand, this is an empirically responsible approach. On the other hand, it calls into question the semantic foundation of these two categories. If they are permitted to vary in this manner from language to language, then there is no universal semantic characterization of the MR categories, even though they are universal in the sense that all languages are claimed to have them; Actor and Undergoer thus take on some of the appearance of syntactic primitives—much like the categories 'subject' and 'object'.

A possible way out of this dilemma would be to identify a common semantics shared by both general types of Actor/Undergoer (that is, the agency-defined type and the Aktionsart-defined type) rather than interpreting one in terms of the other. This common semantics is to be found in the transitive prototype. Undergoers in the transitive prototype are associated with patientlike (nonvolitional, affected) semantics and telicity. The Activity/non-Activity split in Italian is represented by Van Valin in terms of the absence/presence of a State predicate in the verb's LS. The State/Activity opposition is arguably primarily agency-related, as shown by the test of adverbial modification: 'occurs with studiously, attentively, carefully, etc.' The 'X is Y-ing entails X has Y-ed' test, while overtly aspectual, follows from this, since X is Y-ing presupposes 'active' involvement; hence, this test simply fails to apply to States.

With Achievements and Accomplishments, while it is true that the RRG LS features an embedded State predicate, only Achievements share with States the absence of active/agentive semantics; this is shown by the fact that Achievements are grouped with States (as opposed to Accomplishments and Activities) in their failure to occur with
studiously, attentively, etc. But Achievements also share an aspectual feature with Accomplishments as opposed to States (and, for that matter, Activities): the former, but not the latter, are telic. In this respect, the single argument of an Achievement predicate shares not only affectedness- and volitionality-related parameters with transitive patients/Undergoers, but aspect-related parameters as well.

While it may be objected that it is the transitive predication as a whole which is telic, and that the transitive agent (as part of this predication) is just as strongly associated with telicity as the patient, this is not true: it is the patient, not the agent, which bounds the predication and gives it its telicity. This may be demonstrated by the fact that manipulation of the 'individuation' (Hopper and Thompson 1980) of the patient has clearer telicity effects on the predicate as a whole than any analogous manipulation of the agent:

(63)a. John ate the pizza/John ate pizzas.
   b. The flies ate the pizza/Flies ate the pizza.

Thus, the single argument of an intransitive Achievement is shown to be the intransitive argument associated with transitive patients/Undergoers by both agency-related and aspect-related factors. The single argument of an Activity is related to the transitive Undergoer by neither parameter-type, while States are mixed:

(64) Ach. State Act.

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<th></th>
<th>Ach.</th>
<th>State</th>
<th>Act.</th>
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<td>agency</td>
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<td>aspect</td>
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(+'=shares value with transitive Undergoer)
The conceptualization of intransitive arguments in terms of theoretically distinct features which converge on the Undergoer argument in the transitive prototype, then, allows us to preserve a universal (albeit somewhat underspecified and schematic) semantic characterization of the MR categories. We may then claim that the language-internal categorization (as determined by coding and/or behavior) of intransitive arguments into Actor and Undergoer classes involves the conceptualization of those arguments in terms of the Actor or Undergoer of the transitive prototype. This in turn explains the fact that both agency-oriented and aspect-oriented active-stative languages categorize the arguments of intransitive Achievements with transitive Undergoers and the arguments of intransitive Activities with transitive Actors, and that it is precisely the verbs of these Aktionsart categories which are generally the least useful in identifying the relevant language-internal parameter-type. In this way, we are free to retain a universal characterization of the MR categories which is still responsive to language-specific facts.

However, we are still left with a bit of a dilemma when a single language shows evidence of both agency- and aspect-related parameters in active-stative or unaccusative splits. This is, as we shall see in the next chapter, the case represented by Kashaya, for which both agency and aspect are relevant to the coding of intransitive arguments, and Dutch (cf. Zaenen 1988), in which 'impersonal passivization is sensitive to the agentive/nonagentive contrast, while auxiliary selection is based on Aktionsart distinction' (Van Valin 1990:253). In Dutch, only intransitive arguments construed as agentive may be impersonally passivized, while auxiliary selection is based on a
telic/atelic distinction, thus grouping together ‘states and activities (atelic), which have hebben “have”, in opposition to achievements and accomplishments, which have zijn “be” (253).

The question here is not whether RRG has at its disposal an adequate number of appropriate variables to make the relevant distinctions (it has), or whether RRG provides a more satisfying way of dealing with such splits than RelG analyses which interpret these effects in terms of ‘deep’ relational status (it does), but rather what implications unaccusative mismatches of this sort have for the language-internal identification of Actor and Undergoer. In particular, are Dutch intransitives to be interpreted as following the general (Aktionsart-determined) principle that the argument of a State is an Undergoer—despite the empirical evidence for an agentive/nonagentive contrast within the State category in impersonal passivization?

It seems, in fact, to be something of an arbitrary matter whether we allow agency or aspect to be the determining factor for intransitive MR status in Dutch. Ultimately, we see that it makes no difference for the purpose of an adequate characterization of the language-internal facts whether we identify a given Dutch intransitive argument as an Actor or Undergoer: nothing having to do with the behavior of intransitive arguments makes crucial reference to MR nature, which reinforces our conclusion that the categorization of intransitive arguments into unified Actor and Undergoer categories represents an oversimplification of the facts.

Note, though, that this fails to undermine the validity of the MR categories as labels for the two arguments in the transitive prototype, or the explanatory value of that
prototype for certain aspects of the coding or behavior of intransitive arguments. In addition, to the extent that invocation of one or the other label in reference to intransitive arguments is meant to highlight empirical and, at a further remove of abstraction, semantic commonalities between that argument and one or the other of the two opposed arguments in the transitive prototype, use of the MR labels for intransitive arguments is just as convenient, and just as justified, as the use of such traditional SR labels as 'experiencer' and 'goal'.

The characterization of MRs that I will endorse here is as follows. First, they are by no means 'purely' semantic entities in the sense of being constructs which correspond to some semantic content independent of formal instantiation. It is impossible, in other words, to identify Actors and Undergoers independently of the valence of the predicate coding the situation in which the participants corresponding to those MRs participate. In this respect, MRs are similar to traditional semantic roles.

Second, given the fact that, as we have seen, 'traditional' semantic roles are themselves dependent on conventionalized instantiation (or, in Van Valin's system, partly determined by the LS), viewing MRs as subsuming more fine-grained semantic roles fails to require a view of them as purely semantic in the strongest sense26.

Third, while it is indeed impossible to characterize MRs completely independently of formal instantiation (predicate-valence positions, 'syntax', etc.), this is not necessarily a

26This is, in fact, the currently most standard view of semantic roles. Jackendoff (1987) does discuss frame participants as multiply instantiating several roles taken from the same 'tier', e.g. 'buyer' as simultaneously source (or money) and goal (of goods), but this sort of conception of semantic role is relatively idiosyncratic.
drawback. To some extent, it does seem possible to anchor linguistic categories in non-linguistic entities, for example to anchor a cross-linguistic 'noun' category in relatively stable, concrete referents in the world independently of language. However, any methodologically sound, empirically defensible, non-circular characterization of such a category relies crucially on the language-internal formal facts. Formal criteria, rather than intuitive ones alone, tell us what a 'prototypical noun' or a 'prototypical transitive verb' is. Methodologically, the discovery procedure may be rather complex, with empirical facts imbricated with intuitive leaps, but purely intuitive procedures are of little use or interest. Since it is impossible to identify the semantics of a predicate independently of its formal instantiation, there is no way to prove (or disprove) that a predicate's formal valence is determined by its meaning. From this perspective, it would actually be undesirable for MRs to be defined as purely semantic entities. Rather, what we would hope for would be overt patterns of coding and behavior which have an intuitive grounding or anchoring. Actor and Undergoer are, then, precisely such entities: empirically identifiable, but enjoying a more coherent semantic basis than such categories as 'subject' and 'object' in languages such as English.

The justification and grounding proposed here for the constructs Actor and Undergoer will remain faithful to the following observation of Van Valin (1993:48): 'The macrorole number of a verb parallels closely the traditional notion of transitivity, i.e., single macrorole verbs are intransitive, 2 macrorole verbs are transitive'. At the same time, the kind of transitivity of greatest relevance to MR number and status is less of the traditional, relatively superficially 'syntactic' sort than of the semantically-oriented sort.
described in Hopper and Thompson (1980). 'Syntactic' transitivity, meanwhile, correlates more closely with the number of direct core arguments (dcas) in a verb's LS. In an example such as *The book is lying on the table*, the two coincide, as *the table* is neither a dca nor a MR-bearing argument. In an example such as *Joe ate pizza*, on the other hand, they diverge: *pizza* is a direct core argument of the syntactically transitive verb *eat*, but it fails to bear a MR. The referentiality, then, of the 'object' argument bears directly on the semantic transitivity of the predication, and therefore on whether that argument bears a MR.

Note that, in *Joe ate the pizza*, *the pizza* is a MR-bearing Undergoer; the predicate itself, meanwhile, is an Accomplishment as opposed to an Activity predicate, with a 'plus' value for telicity. This illustrates what Hopper and Thompson's transitivity prototype instantiates, and what other analysts including Givon (1983) and Stirling (1993) have emphasized: that 'nominal', participant-oriented factors, and 'verbal', action-oriented factors, while in principle separable, in practice blend together in language or contribute to Gestalts involving both 'nominal' and 'verbal' aspects (with Hopper and Thompson's 'transitivity prototype' being just such a Gestalt). Givon (1983), for example, considers three contributory 'levels' of continuity in discourse to include action continuity and topic continuity, with these two theoretically separate kinds of linguistic structure therefore participating in a single function. Stirling develops this observation to argue that Haiman's notion of switch reference embodying a kind of violation of categorial iconicity ('verbal' affixes used for a 'nominal'--reference-tracking--function) is invalid in its assumption that switch reference is exclusively, or even primarily, 'nominal' as opposed
to 'verbal'. As she puts it:

SR systems encode meta-level information about the relative reference and other characteristics of clauses. Although it must be acknowledged that referential meaning is classically associated just with NPs in semantic theory, I would argue that SR is a clause level function which does not deal with the reference of NPs as such but with degrees and types of cohesion between eventualities.

She continues:

Further support for this position is provided by the fact that there are numerous cases in languages where a particular type of meaning may be encoded either nominally or verbally. For example, the fact that an eventuality is iterated may be indicated cross-linguistically either on the verb or adverbial elements or by using a distributively quantified NP, or even in English by a 'floating quantifier'.... Similarly, certain adverbial distinctions, for example between completed and incompleted events, may be indicated by the definiteness of a nominal argument as well as by the form of a verb (Mourelatos 1978).

(Stirling 1993:136)

While it may still be the case that the particular facet of the general Gestalt of 'eventuality cohesion' singled out by a particular switch reference language is some kind of referent-continuity (that is, it may still be the case that languages exist which exhibit 'canonical switch reference' systems with the reference tracking function having been singled out from all the other possible parameters of eventuality cohesion and having thus been grammaticalized as criterial), the point is undoubtedly valid: 'nominal' and 'verbal' semantics, or relationships between clauses and between referents or participants in the situations represented by them, fail by many indications to be rigidly separated in language, both synchronically and diachronically.

In the case of an opposition such as eat pizza vs. eat the pizza, then, the definite vs. indefinite status of the object NP bears on both the telic nature of the predicate (and
therefore its Aktionsart status) and that NP's MR status. Recalling the quote from Van Valin (1993), a highly transitive predicate will feature two MRs, while one low in transitivitiy will take either one or none. The distinction between intransitive (one MR) and 'atransitive' (zero MR) predicates, like that between intransitive and transitive, hinges at least to a great extent on the referentiality of that predicate's nominal. Weather predicates, then, are atransitive rather than intransitive because they fail to feature any referential nominal at all.\(^{27}\)

The MR status of a predicate's nominal thus partly reduces to the status of that nominal as an argument in the predicate's LS since, for example, rain would have an LS lacking any argument at all. But the nonreferential status of fish in eat fish is in no way directly encoded in the LS of that predicate; consider the following LS representations (following Van Valin 1993:38):

\[(65) \text{John ate fish } = \text{do'} (\text{John}, [\text{eat'} (\text{John}, \text{fish})])\]

\[(66) \text{John ate the fish } =\]

\(^{27}\)This ignores numerous possible complications. On the one hand, there is cross-linguistic evidence supporting the atransitivity of weather predicates in that many languages, including older stages of English, require no nominal at all in weather predications. On the other hand, it is an open question whether all languages featuring an overt nominal in weather predications in fact construe this nominal as devoid of referentiality. Bolinger (1973) has argued that this is not the case even in English. In Kashaya Pomo, it is common to predicate 'verbal' raining, snowing, 'wind-blowing', etc., of nominal rain, snow, wind, etc.; given the relatively animistic Pomo world-view, plus the fact that there are formal indications (such as cliticization with the Actor-marker - ?em) that the nominals are indeed referential, it would probably be wrong to view all languages' weather predicates as atransitive. Further, if Bolinger is right about the 'pleonastic' it of English weather predications featuring various degrees of referentiality, then this too presents serious problems for a system which confers MR status in terms of binary values rather than in terms of a cline-sensitive index.
Also, arguments which are core but non-direct (e.g. prepositional objects of three-place predicates) never bear a MR. In fact, some highly referential direct core arguments, such as the letter in John sent me the letter, fail to bear a MR. These are all respects in which MR status, or the level of structure with which MRs are associated, is dissociated from the predicate's semantics (argument status) and the overt syntactic instantiation of an argument (whether it is 'direct', for example, or whether it appears as the subject of the predicate in a raising-to-subject predicate). Thus, MRs are constructs on the syntax-semantics interface, transitivity-based 'semantic' constructs which are dependent in numerous respects on (or, conversely, which have numerous repercussions on) relatively 'surface' syntax and morphology.\(^{28}\)

If we consider again the parallel between MR number and transitivity, it should come as no surprise that MRs, while claimed to be semantic constructs, in fact could not possibly be semantic to the exclusion of syntactic factors. The reason for this is as follows. While semantic transitivity along the lines of Hopper and Thompson's prototype is claimed to motivate semantic transitivity cross-linguistically, syntactic transitivity can't

\(^{28}\)It is worth noting that there are at least two quite different ways for a construct to be associated with or identified as being on an interface (syntax-semantics, syntax-morphology, etc.). One has to do with those factors from one domain which are of relevance to, or which interact with, the other domain. Thus, 'animacy' is on the syntax-semantics interface while 'color' is not. The other has to do with entities which can't be defined purely in terms of one domain or the other; if these are semantic entities which can't be described in purely semantic terms, then it might be better to say that they are syntactic entities with semantic grounding. It seems likely that MRs are interface items of the latter sort. MRs, then, are syntactic constructs with a far simpler and, in this sense, more coherent grounding than the English 'subject' and 'object' categories.
be reduced to or legitimately claimed to be determined by semantic transitivity. For example, if we proceed from the assumption that a given structure used to code a prototypically transitive action in a given language is a 'transitive' structure, then that language will draw the line in a different place from another language in the determination of how semantically transitive a predication need be in order to qualify for transitive coding. Inanimate effectors have restrictions on participation in transitive coding in many languages. In parallel fashion, on the assumption that the passive construction has throughout the history of English held a constant function of coding an Undergoer as pivot, then (as we shall see in the coming chapters) the construal of a given argument in a given predication as a participant in a 'transitive enough' predication to be an Undergoer has changed considerably over the last millennium.

We may retain the view of semantic roles as 'convenient mnemonics' for argument positions in the LS of a predicate, even if the LS of a predicate with respect to which a given argument bears a specific semantic role will not always be specified. Where we may choose to diverge from Van Valin is in extending this view not just to the 'traditional' SRs but also to the MRs Actor and Undergoer. Thus, it may frequently be convenient to refer to 'the' Actor or Undergoer of a clause or predicate, in which case what is meant is some empirically significant entity which is centered on an agent or patient prototype; at the same time, it will be understood that these categories relate to independent transitivity-related parameters which may have no unique single point of neutralization in the language.

The derived, form-dependent nature of semantic roles should also be a crucial
assumption in any analysis. In other words, it should be considered illegitimate to identify
an argument as instantiating a given role independently of the evidence provided by
behavioral tests or morphological coding. As a practical matter, given that behavioral
tests are more difficult to apply to a dead language than morphological tests (and intuitive
tests are strictly speaking inapplicable, despite the fact that they are often applied—cf.
Rosen 1984), a given valence pattern (involving a given array of case-roles) will be linked
to a given array of semantic roles if such a link suggests itself on intuitive grounds.29 All
in all, the perspective decisively rejected is that of semantic roles having some sort of
status independently of formal instantiation, that a given predicate in one language must
match the semantic-role array of a translationally-equivalent predicate in another
language, and so on.

Legitimate questions will remain unresolved regarding the theoretical necessity of
SRs, including MRs. For example, it is uncertain whether we really need MRs in addition
to the construct pivot, plus perhaps other straightforwardly empirical constructs such as
dca, plus fine-grained semantic parameters which may be characterized as mapping onto
pivot in language-specific, although perhaps universally constrained, ways. 'Pivot' is a
straightforwardly empirical, construction-specific category with no pretense of semantic
grounding; it overlaps with what would be referred to as 'subject' in more traditional

Note that this intuitive leap is different in nature from the illicit sort just ruled out; the point is, there's a difference between a speaker of language A asking himself whether a predicate of language B 'has inherent causative semantics' and that speaker asking himself whether some distinctive coding plausibly corresponds to some distinctive semantics; in the latter case, the speaker is in essentially the same position as a native speaker would be.
systems, corresponding to the notion of subject as that nominal which is most important or central with respect to a language's syntactic processes. It differs from the notion of subject in a number of ways, including in the construction-specific character of pivot but not subject, and, even more dramatically, in that pivot is only meaningful with reference to given syntactic processes with which it interacts; out of context of such processes, it would be meaningless to refer to the pivot of a sentence. The usefulness of this construct seems fairly clear.

If we didn't have MRs, then how would we identify the generalizations underlying mapping of arguments or argument-types onto pivot? Instead of saying that the Actor maps onto pivot, we could make reference to the semantic role hierarchy, assuming that the Actor we could otherwise make reference to corresponds to the highest-ranking semantic role. If we wanted to identify the argument which functions as pivot of passive, we would have several possible options. One would be to refer to direct core argument, if this is the relevant category. If we wanted to differentiate accusative from oblique arguments, we would lack the last-mentioned option if the oblique arguments include datives, genitives, etc., since these are also direct. Of course, we could simply refer to the case form, but what would we refer to in explaining the mapping onto this? This would, of course, depend on the details of the semantic underpinnings of the language's case categories, but for OE we would not simply be able to refer to 'patient' given the broader semantic range of OE accusatives. This is precisely where Undergoer seems most useful for those who wish to avoid reference to 'object'. On the other hand, we could do the same thing we did with pivots which correspond to Actors, but in reverse: we could say that the
highest-ranking semantic role with respect to the other end of the hierarchy is what maps onto pivot here. In this case, 'Undergoer' is simply a shorthand notation for this implicationally-defined category. In both these cases, Actor and Undergoer seem equivalent to Dowty's Proto-agent and Proto-patient respectively, and we are once again reminded of the conception of MRs as corresponding to the two arguments in a prototypically transitive predication.

5. Summary

In this chapter, we have reviewed a model that has decisive advantages over those reviewed in Chapter 2. The array of constructs offered by RRG is rich enough and precise enough that it allows us to avoid the single main problem identified in the previous chapter in the approaches of GB and, especially, RelG: the attribution of myriad empirical effects to a single syntactic and/or covert structural variable. RRG also gives us the tools to perform a much more detailed and satisfying analysis of language-specific facts of coding and behavior than would be possible with very broad, universal functionalist characterizations of GRs such as that represented by Langacker. It is not so much the case that there is a conflict between the functionalist perspective and Van Valin's more formally-oriented functionalism; rather, RRG allows us study a broader range of phenomena—phenomena independently discussed in terms of GRs—many of which would simply be excluded from the domain of GR-relevant facts by Langacker. While we would not want to make the formalist error of attributing the entire range of such phenomena to any single, simple covert category status, we may still have an interest in
studying such language-specific facts as mapping onto pivot status which Langacker might consider to be relatively uninteresting.

I have also presented the argument that there is a certain risk of the RRG categories Actor, Undergoer, and Macrorole being applied in something like the arbitrary manner we identified in connection with the RelG attribution of a given relational status to a given argument at one or another level of derivation. While a certain kind of stipulative quality is inevitable in the identification of MR status and nature—after all, as explained, it is by no means the case that we should expect these essentially semantic variables to be identifiable independently of language-specific facts—it is still desirable to constrain our analysis of MR status with reference to the complex notion of semantic transitivity outlined in Hopper and Thompson (1980). The reduces the arbitrariness of the analysis without imposing the inappropriate degree of unfalsifiability attributed in Chapter 2 to certain cognitive conceptions of 'subjecthood'.

In the next chapter, we will see how the categories provided by RRG, in particular Actor, Undergoer, and pivot, allow us to describe the facts of active-stative languages, in particular Kashaya Pomo, in a clear and precise manner without the usual sort of consternation about whether a given argument in a given clause is 'really' a subject or object or not. The analysis to be presented will also underscore the point that we must avoid any language-specific identification of MR status independently of language-specific empirical facts. In Chapter 5, we will investigate the issue of the grounding of MR status in semantic schemas, including a transitivity-related one.
Chapter 4: The instantiation of grammatical relations in a 'transparent' active-stative language: Kashaya Pomo

1 Introduction

In this chapter, I present an analysis of the Kashaya Pomo active-stative case marking system, and of the interaction of that system with morphological and syntactic operations traditionally (cf. Keenan 1976) considered to be useful in identifying GRs.

Two issues in particular are investigated here:

1) What sort of evidence (if any) there is for relation-changing operations serving to make certain arguments accessible to operations sensitive to a pivot at variance with independently apparent semantic and/or discourse-pragmatic categories in the language.

2) What sort of evidence (if any) there is for a neutralization of Dixon's (1979) 'S' (intransitive argument) with either 'A' (transitive Actor) or 'O' (transitive Undergoer) such that a semantic 'subject' category in Dixon's supposedly universal sense may be shown to exist in Kashaya.

Any evidence for either phenomenon would serve to counter Plank's (1983) claim that active-stative relational systems are by their very nature incompatible with the instantiation of neutralized, 'opaque' GR categories.

The arguments I present are, first, that the constructions exhibited in Kashaya are either sensitive, to varying degrees of exclusivity, to the semantic features coded in the
active-stative case morphology itself (e.g. switch reference), or that they are pivotless in Foley and Van Valin's (1984) sense of exhibiting no restricted neutralization of argument-types (e.g. conjunction reduction). It is, then, no coincidence that Kashaya lacks a relation-changing passive construction altogether: no other constructions in the language appear to require the 'promotion' of an argument to pivot status in a manner which would represent the sort of neutralization of semantic features under information-structuring considerations of the sort we find in Modern English. Thus, to use Dixon's words (1979:112), by the evidence of 'transformations needed to place an NP in "pivotal function" ... for a variety of syntactic and discourse purposes', Kashaya Pomo fails to provide evidence for a 'subject'.

Second, I discuss problems associated with Dixon's claim for the universality of a 'subject' category conflating S and A. Of course, it must be remembered that 'subject' in this sense is a semantic category representing one higher level of generalization or neutralization from that exhibited in the morphologically instantiated Actor and Undergoer categories themselves. Dixon's proposed semantic basis for the category is that both S and A represent 'potential agents': 'A and S functions are grouped together as "subject". These are the NP's which refer to participants that can be the initiating/controlling agents' (1979:108). The evidence by which this universal grouping is proposed to reveal itself is clearly role-related (imperatives, jussives, modal verbs used deontically). Therefore, Dixon's universal 'subject' category really fails to correspond to
'subject' in the sense of a category deviating from semantic correlates.¹

Beyond this, the fact of occurrence in an imperative or jussive construction imposes or presupposes the very semantic parameter most centrally at issue in the Kashaya active-stative opposition, namely agency-related potential control or volitionality. Note that the same problem manifests itself in, for example, German, with nonagentive 'unaccusatives' by the test of impersonal passivization nevertheless usable in the imperative (Sterbe! Die!).² In Kashaya, as in other languages, 'agency' or 'control' is not so much an invariant, inherent part of a verb's lexical semantics as a typical or default feature which may nevertheless be manipulated conceptually and (in the Kashaya 'fluid S' case marking) in its overt formal expression as well. Thus, even though there are some active-stative languages which permit only 'active' verbs to take the imperative form (Guarani: Gregores and Suarez 1967), the invocation of this 'test' for the identification of a semantics-independent 'subject' category is problematic to say the least.

There are, however, some constructions which do differentiate intransitive Undergoers from the Undergoer argument of a transitive verb, or which differentiate the

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¹Note that 'subject' in this sense also deviates from what is routinely called the subject in Modern English:
*Strike me as stupid!
Also, Dixon claims that 'the object of the main-clause verb must be, at the level of deep structure, coreferential with the S or A NP of the verb in the subordinate clause' (114); however, this supposed universal, motivated by the semantic 'subject' universal, fails invariably to hold for Modern English:
I ordered him killed
I commanded the chairs to be removed from the premises

²Of course, in such cases we must begin to question what function is associated with the imperative form; many imperatives of unaccusatives have the flavor of optatives.
two different Undergoer-marked arguments of a morphologically double-Undergoer-taking verb. It would not be correct, then, to say that the Kashaya active-stative marking is truly 'transparent' in the sense of representing in surface morphology all internally relevant semantic groupings of arguments. Rather, the active-stative marking represents semantic groupings at a certain level of 'granularity' (Croft 1991), with other, finer-grained semantics corresponding to groupings within these morphologically-instantiated Macroroles. What this points to is the internal relevance of relatively specific semantics corresponding to traditional semantic roles—showing that the level of abstraction represented in the morphological Actor and Undergoer cases fails in any way to preclude the internal relevance of finer-grained features for some operations. Alternatively, we could say that Kashaya constructions which differentiate the Undergoer of an Actor-Undergoer valence from the Undergoer of a double-Undergoer valence indicate that the morphological Undergoer of the latter is not 'really' an Undergoer. While this may make us question whether the morphological marking should be considered to give us unique insight into language-internal Macrorole status, it does not point to either the necessity or the desirability of invoking GRs at variance with semantic correlates.

Finally, we shall consider evidence far more significant than any mentioned thus far for a neutralization of the 'transparency' of the Kashaya role-dominated pattern. This evidence comes from a highly speaker-oriented (and therefore truth-conditionally inconsequential, and therefore rather subtle) discourse-pragmatic manipulation of Undergoer status independently of any strictly semantic factors. This one of many functions of 'fluid S' manipulation in the language also accounts for what appears to be a
certain kind of free variation in the use of switch reference markers, whereby an intransitive Undergoer may be treated as either 'the same as' or 'different from' an intransitive or transitive Actor. The many possible factors correlating with this fluctuation in switch reference marking include a kind of discourse-pragmatic consideration which may be interpreted as pointing to a 'subject' category along Dixon's lines.

More crucially, if it is true that the otherwise semantically 'transparent' Actor/Undergoer opposition may be employed for discourse-pragmatic purposes, then we do find some evidence in Kashaya for GRs in the theory-independent sense assumed in this dissertation. At the same time, the resulting neutralized category conflates an Agent-based Actor category with low topicality and/or topicworthiness, and therefore fails to correspond 'intuitively' to an English-like subject category or to the cross-linguistic subject category as characterized, for example, by Comrie (1989) in terms of a conflation of topicality with agency.

In a variety of ways, then, Kashaya fails to exhibit evidence of anything corresponding to the ModE reference-oriented 'subject' category. Kashaya role-sensitive processes, most saliently 'fluid S' case marking, fail to interact with reference-sensitive processes, including conjunction reduction and switch reference, in ways that resemble the interaction between these domains in, for example, the mutual 'feeding' of passive and 'raising' processes in Modern English. Where Kashaya does permit the manipulation of otherwise role-sensitive morphology in response to 'textual' (Traugott 1989) or discourse-pragmatic considerations, the resulting neutralized category is manifestly un-'subject'-like by most accepted criteria. Rather than pointing to the universality of GRs in any
meaningful sense, then, Kashaya seems to provide evidence of the ultimate artificiality of a rigid role/reference or semantics/discourse-pragmatics opposition in language. In other words, even as extensively 'role-dominated' a language as Kashaya fails invariably to keep these two domains entirely separate. From the perspective indicated here, a confusion of the supposed universality of 'subjects' and 'objects' with the universality of a tendency to blend 'semantics' with 'pragmatics' results in erroneous conclusions about the innate nature of GRs in universal grammar.

The evidence of Kashaya and other Pomo languages, then, indicates that, if 'subject' and 'object' are universals, they are so perhaps only in the sense that languages universally fail to keep the domains of role and reference as rigidly distinct as we might suppose to be theoretically possible. The difficulty we as analysts sometimes have in keeping the two domains separate—for example, in separating 'topicality' from 'topicworthiness', or in deciding whether to view hierarchies of 'topicworthiness' or 'egocentricity' (Silverstein 1976, Dixon 1979, etc.) as 'semantic' or 'discourse-pragmatic'—fails necessarily to indicate any fundamental conceptual imprecision or confusion on our part, but rather may result from the fact that these distinctions ultimately break down in human conceptualization. We are reminded once again of the appropriateness of the view of language afforded by grammaticalization theory, whereby different functions of lexical/grammatical material ('propositional', 'textual', and 'expressive' functions in Traugott's (1989) terms, or 'pragmatic' and 'grammatical' functions in Fleischman's (1983) terms) are linked diachronically, and therefore conceptually, rather than being rigidly segregated domains of grammar.
This poses no problem for RRG, since, recall, the typological characterization of a language as 'role-dominated' or 'reference-dominated' is something of an abstraction, or a characterization in terms of proximity to either of two hypothetical extreme points on a scale. At the same time, the precision of the RRG analytical tools still allows us, as explained in the last chapter, to avoid unwarranted reference to 'subject' and 'object', and to avoid the common erroneous presupposition that such constructs correspond to some sort of fundamental, fixed, conceptual primitive which languages may express in a one-to-one or many-to-one manner. Again, this coheres with the perspective offered by grammaticalization theory that there are different functions theoretically associated with any linguistic element, but only a subset of which may be conventionalized in the functional associations with that form; the predictable diachronic unfolding of associations, then (cf. Traugott 1989, Sweetser 1990, inter alios), would be inexplicable if language began with an undifferentiated domain of associations and then proceeded towards a segregation of these associations. Thus, again, the perspective argued for here involves an inversion of the conceptualization of GRs embodied in a model such as RelG.

2. Basic relational typology: nominative-accusative, ergative-absolutive, and active-stative systems

It is standard (cf. Fillmore 1968, Dixon 1979, Comrie 1989) to identify the languages of the world as falling into one or another of three major relational or argument-alignment types: nominative-accusative, ergative-absolutive, or active-stative.
The fundamental distinctions involved here may be illustrated with a simple diagram of the following sort:

The diagram here, which uses Dixon's terms 'A' to stand for the transitive agent-centered argument type, 'O' for the transitive patient-centered argument type, and 'S' for the single argument of an intransitive verb, indicates that the existence of A, O, and S is universal—in Dixon's terms, they are 'universal syntactic-semantic primitives'. The grouping of A with S or O with S in the mapping onto 'pivot' function for operations such as coordination and subordination, on the other hand, varies from one language to another in a manner corresponding to the typological identification of the language as 'nominative-accusative' or 'ergative-absolutive' respectively. The third major typological category identified here, 'active-stative', fails to conflate S with either A or O, at least in its morphological case system: the single argument of an intransitive verb may be marked
like an A or an O, depending on the semantic content of the verb or of the NP.

This typological system represents an idealization of the facts to the extent that many languages are 'mixed' in exhibiting different alignment patterns in different morphological or syntactic constructions—case marking, agreement, and various behavioral-syntactic processes, for example. To some extent, this may reflect a division between 'syntax' and 'semantics' in the sense that a language showing a given predominant syntactic alignment pattern may still show evidence of a conflicting semantic association of argument types. For example, in certain constructions a clearly nominative-accusative language such as English may still group certain intransitives with transitive objects as opposed to transitive subjects:

(1) the fallen man  
   the felled tree  
   *the danced man

(2) He broke it  
   It broke

This sort of pattern, which Dixon refers to as 'lexical ergativity' (1979:117), should have no bearing on the typological categorization of a language. In Dixon's view, much of the RelG evidence for 'deep' syntactic relational status is in fact evidence for 'deep' semantic groupings.4

3See the synopsis below of Mithun's explanations for 'disagreement' among different dimensions of coding and behavior.

4Considering how influential Dixon's article has been, it is surprising how many analysts continue to take the evidence of jussives and the like to argue for the disagreement of 'true' relational status with morphology in active-stative languages (cf.,
3 Active-stative languages as 'transparent' and as failing to instantiate grammatical relations: general points

Given the fact that they fail to conflate A and S, or O and S, in the manner leading in nominative-accusative or ergative-absolutive languages to an identification of two nominal categories, active-stative languages have been claimed (Plank 1983) to feature a 'transparency' in their morphology which by its very nature confounds the identification of 'subject' and 'object'. In other words, given an understanding of GRs as constructs which neutralize semantics, or which represent categorizations at a higher level of grouping than Actor and Undergoer, then active-stative languages fail to instantiate these categories in their morphology. Rather than treating all intransitive arguments like transitive Actors, on the one hand, or transitive Undergoers, on the other, they preserve universally-valid semantic distinctions in their morphology by marking some intransitive arguments like transitive Actors and others like transitive Undergoers.

The assumption here appears to be that the absolutive category in an ergative language is a 'subject' in precisely the way that a 'nominative' category is a subject. (This is, in fact, the assumption reflected in Keenan's identification of the Dyirbal absolutive NP [the unmarked, obligatory NP which most consistently functions as pivot] as the 'subject'.) In order for this view to have any validity, it must be accepted that we define GRs in terms of overt empirical facts—in this instance, case marking. The view would not have any validity if we adhered simply to an a priori semantic conception of, say, 'subject' as 'potential agent', as in Dixon's universal semantic 'subject' category. Since, then, active-
stative languages fail to offer the relevant empirical evidence for 'subjects' in this sense, then they might be thought to be 'subjectless'.

The most obvious objection to this view is that a language may still display evidence for conflations of the sort found in ergative and nominative languages even though they may fail to show this in their case marking. If there is such evidence, then we might simply say that the morphology is unrevealing of GRs—not that GRs in the sense just described fail to exist. A parallel counterargument has been presented (cf. in particular Anderson 1976, 1977) to the claim that ergative languages fail to instantiate an English-like 'subject' category conflating S and A. The standard practice in presenting this kind of counterargument has been to downplay the significance of coding or morphology relative to behavior or syntax, with the latter argued to have a privileged status in providing insight into cognitively significant language-internal categories, and the former frequently claimed to represent nothing more than frozen, accidental 'relics' of patterns which never even reflected syntactic ergativity in the first place. Thus, the evidence for ergative morphology having arisen in some languages (cf. especially Chung 1977 on Polynesian) by way of a pragmatic de-marking of a passive construction is generalized to all morphologically ergative languages as a universal explanation for the origins of the ergative pattern. Where languages are found which do exhibit syntactic ergativity in addition to morphological ergativity (for example, Dyirbal, which actually displays more syntactic ergativity than morphological ergativity—cf. Dixon 1979), this is explained by appeal to some kind of analogical extension of a superficial pattern into the syntax. (For a well-known representation of these views of the insignificance of ergativity, cf., once
again, Anderson 1976, 1977.)

The problems with this position are, in turn, well known. On the most general level, the risk of 'explaining away' non-English-like patterns in a manner which may have some plausibility, but which is nevertheless highly speculative, is obvious. On a more specific level, there is considerable counterevidence to the general, let alone universal, validity of the development of ergativity by way of a passive construction; as Dixon (who takes into consideration a far wider range of ergative languages to which he applies a far more detailed analysis than Anderson) points out, 'there seems no doubt that the morphological phenomena grouped together under "ergativity" have evolved in a variety of ways from diverse beginnings' (1979:100). Finally, as we shall see in connection with Kashaya, it is obviously incorrect to view all non-nominative/accusative morphological patterns in all languages as providing no insight into conceptual structure.

At the same time, we may consider the view of case morphology, in particular active-stative morphology, as providing uniquely privileged insight into a language's internally relevant nominal groupings to be just as incorrect as the opposite view of morphology as inconsequential. Therefore, it is certainly necessary to look beyond case marking alone to determine the nominal groupings of relevance to a particular language, and we shall do this in our analysis of Kashaya.

A second objection to a view of active-stative languages as 'transparent' in Plank's sense involves the claim that the case morphology instantiated in such languages in fact fails to correspond to any coherent semantic basis at all—whether or not this basis is associated with GRs. Such a view would be harmonic with Rosen's (1984) objection to
the notion of the semantic coherence of 'unaccusativity', which then justifies a view of
unaccusativity as a syntactic (read: 'arbitrary') phenomenon. By Rosen's approach, in the
absence of any universal homomorphism between initial syntactic roles ('1', '2', and so on
in the RelG model) and semantic roles, any 'monostratal' analysis attempting to dispense
with an initial syntactic representation and to describe syntactic or morphological
processes sensitive to 'unaccusativity' in terms of semantics rather than syntax is doomed
to failure.

However, as Mithun (1991b) has argued, the fact that different languages feature
similar yet different categories in, say, their active-stative systems doesn't mean that there
is no semantic basis for or coherence to those categories on a language-by-language basis.
The reasons for differential categorization in cases like these have to do with various
factors which by no means represent a threat to a semantic account of linguistic patterns
of this nature.

First, it is clear that, while many languages may have active-stative systems in the
sense of case marking systems (or agreement systems) that treat some intransitive
arguments like transitive agents and others like transitive patients (or like the Macroroles
these specific roles prototypically represent), the specific semantic parameters relevant to
this differentiation may vary to a considerable degree. In fact, the very name 'active-
stative' for systems of this type misleadingly implies that the relevant parameter is
necessarily aspectual, while it may in fact be 'control', 'agentivity', 'volitionality', or some
other semantic characteristic related to, but in principle separate from, verbal aspect.

In Lakhota, for example (Mithun 1991b), verbs like 'sing' and 'dance' feature the
pronominal prefixes associated otherwise with transitive agents, while verbs like 'be mad' or 'be cold' bear the prefixes associated with transitive patients; in addition, 'live' and 'be prudent' pattern like transitive agents, while 'fall' and 'die' pattern like transitive patients, showing the relevant parameter to be something along the lines of agenthood vs. patienthood rather than activity or eventhood vs. stativity. In Guarani, on the other hand (Mithun 1991b), 'event' verbs like 'run' and 'die' pattern like transitive agents irrespective of their argument's agentivity, while stative verbs like 'be wise' and 'be sick' pattern like transitive patients. Thus, even though the Lakhota and Guarani 'active' categories, and the two languages' 'stative' categories, overlap significantly (due to the fact that many events do involve an agent, while many states do involve a patient) they are easily shown to be distinct, due to the fact of their organization according to distinct semantic parameters.

In various Pomo languages (Eastern, Central, Northern, and Southwestern [Kashaya]), meanwhile, the verbs just mentioned in connection with Lakhota ('sing', 'be mad', etc.) display the exact same categorization as the latter, and the Pomo active-stative systems may therefore likewise be claimed to be sensitive to agentivity as opposed to eventhood-stativity. However, there are certain verbs for which this correspondence fails to hold. In Lakhota, 'sneeze' and 'shiver' are classed with transitive agents, while in Kashaya these same verbs are classed with patients. Data such as these indicate that different facets of what has thus far rather loosely been referred to as 'agentivity' are in fact relevant in the two different (sets of) languages: what Mithun refers to as 'performance/effect/instigation' in Lakhota, and what McLendon (1978) has called 'control' in (Eastern) Pomo; a fairly restricted set of data (the argument-coding associated
with verbs such as 'sneeze' and 'shiver') thus serves to identify parameters more specific than 'agentivity' as being relevant to the languages' active-stative categorizations. Note, by the way, that a 'Rosenesque' approach to these same data might be to say that the differential treatment of 'sneeze' and 'shiver' points to the impossibility of a semantic analysis in terms of agentivity; what it actually shows, however, is the inadequacy of one particular semantic analysis, not of a semantic analysis per se.

In fact, it turns out that the identification of 'control' as the relevant semantic parameter in Pomo active-stative systems may not be quite right for all the Pomo languages. In Kashaya, intransitive verbs formed with the -laya stem display variable marking of the argument, as follows:

(3) to malaya?
    1SG-UND
    'I slipped'

(4) ?a malaya?
    1SG-ACT
    'I missed the target (with my foot)'

(5)a. to silaya?
    (UND)
    'I skidded'

b. ?a silaya?
    (ACT)
    'I missed (the ice cream, trying to lick it)'

c. to dulaya?
    (UND)
    'My hand slipped (trying to pick something up)'

d. ?a dulaya?
    (ACT)
'I missed an object (trying to pick it up with my hand)'

e. to dalaya?
   (UND)
   'My hand slipped (I was trying to prop myself up with it)'

f. ?a dalaya?
   (ACT)
   'I missed hitting (someone's bottom, etc.) with my hand'

In each case, it is difficult to reconcile the Actor-marked version with the notion of control, given that someone who misses a target of some sort is no more 'in control' than someone who slips or skids. For cases like this, a parameter of 'volition' works better—at least, 'volition' with respect to the initiation of the act or an intended outcome, not with respect to the actual outcome.

For Central Pomo, on the other hand, Mithun provides a small amount of evidence that the relevant parameter is control rather than volition:

(6) to: tho? ca:q'ya

'T'm on a lucky streak (gambling)'

'If I win in gambling', she explains, 'I may have wanted or even intended to win (volition), but I cannot be said to have been in control' (520). Although the evidence is meagre, then, it seems possible that the active-stative systems of Kashaya and Central Pomo in fact differ in the semantic parameter to which they are sensitive—even though this difference would manifest itself in an almost absurdly small number of cases due to the almost invariable co-occurrence of the parameters involved. One might even expect that there be
some inter-speaker variation, within either language, in the categorization of one of the few crucial verbs as active or stative.

As described thus far, Lakhota and Pomo case-marking is straightforwardly determined by an agentivity-related semantic parameter which may vary slightly from language to language. Since Central, Northern, Eastern, and Kashaya Pomo are 'fluid S-marking' languages, it is relatively easy to test the validity of the claim that control or volition (as the case may be) is the relevant parameter; the following are from Kashaya:

(7)a. to haʔtiw
   1SG-UND sneeze
   'I sneezed'

b. ?a haʔtiw
   1SG-ACT sneeze
   'I sneezed on purpose/pretended to sneeze'

(8)a. mukito sinam?
   3MSG-UND drown
   'He drowned'

b. mu sinam?
   3MSG-ACT drown
   'He willingly gave his life/He drowned himself'

Pairs such as these show that the semantic parameter we have identified (volition or control) is indeed involved--productively involved, in these cases--in the active-stative alternation.

However, things get somewhat less simple when we discover that an active-marked version of a normally patient-taking verb is not invariably interpreted as volitional. In some instances, a distinction may be provided that seems to indicate that
some sort of verbal aspect may be involved (again, these examples are from Kashaya):

(9)a. ?a T'onu
    1SG-ACT be(come).tired
    'I am/was tired'

b. to T'onu
    1SG-UND be(come).tired
    'I got tired'

(10)a. mu čhoyi?
    3MSG-ACT die
    'He's dead'

b. mukito čhoyi?
    3MSG-UND die
    'He just died'

In these examples, the distinction seems to be in terms of eventhood vs. stativity—despite the fact that we already ruled out this sort of verbal aspect as the relevant parameter in the Pomo active-stative system. As we shall see, the Kashaya active-stative opposition does indeed embody a variety of semantic and discourse-pragmatic factors. In other words, the categories in the opposition are complex—which is, however, quite a different thing from saying that they are unmotivated or arbitrary.

4 The Kashaya active-stative case marking system: general description

4.1 The active-stative opposition and 'fluid S' case marking in Kashaya

With a Kashaya verb that subcategorizes for two arguments, those arguments will typically be coded by pronouns or suffixes drawn from two complementary lists. One list
may be considered to center semantically on agents, and may thus be characterized as
including agent markers; the other list centers on patients. These are the semantic roles
they clearly encode in prototypical transitive clauses:

(11) ?a mukito phanem
1SG.AG 3MSG.PAT hit
'I hit him'

The 'agent' and 'patient' markers also encode other semantic roles which pattern cross-
linguistically with the prototypical transitive participant types:

(12) ?a mukito čadu
1SG.AG 3MSG.PAT see
'I saw him'

Given the semantic range covered by the 'agent' and by the 'patient' markers, and given
the fact that a two-member system is clearly more appropriate here than a fine-grained
one including a larger number of semantic roles, Foley and Van Valin's terms Actor and
Undergoer—'the two arguments in a transitive predication, either one of which may be the
single argument of an intransitive verb' (1984:27)—are eminently useful labels for the
opposition involved. The pronoun paradigms are as follows:

<table>
<thead>
<tr>
<th>ACTOR</th>
<th>UNDERGOER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG ?a</td>
<td>1PL ya</td>
</tr>
<tr>
<td>2SG ma</td>
<td>2PL maya</td>
</tr>
<tr>
<td></td>
<td>1SG to</td>
</tr>
<tr>
<td></td>
<td>1PL yal</td>
</tr>
<tr>
<td></td>
<td>2SG mito</td>
</tr>
<tr>
<td></td>
<td>2PL mayal</td>
</tr>
</tbody>
</table>
Corresponding to the Actor and Undergoer pronouns are suffixes used on full NPs. The Actor suffixes are -*va?* and -*?em*, while the Undergoer suffixes are -*?el* and -*?o*. (The last two might be analyzed as being present in whole or part in the Undergoer-pronoun paradigm.) The allomorphs are to some extent conditioned by lexical class, with -*?o* suffixed to names, and -*va?*, -*?em*, and -*?el* to other NPs. These suffixes are frequently omitted, but less so with NPs coding human participants than other NPs, and less so with Undergoers than Actors.

(13) Gene Daveto phanem
    G. D.-UND hit
    'Gene hit Dave'

(14) ?ima:taya? hi?baya?el phanem
    woman-ACT man-UND hit
    'The woman hit the man'

(15) s'ihta?em hophune?el hanem
    bird-ACT rat-UND kick
    'The bird kicked the rat'

If a verb subcategorizes for just one argument, that argument may receive Actor or Undergoer coding, with the choice being largely semantically determined. The use of
Actor or Undergoer forms for the argument of a one-place predicate appears quite transparently to correspond to the presence or absence of the control that argument exercises over the state or action represented by the verb. Thus, the following intransitive verbs all typically take Undergoer arguments:

(16) Kashaya Undergoer-taking intransitives:

čhoyi 'die'
če:li 'fall'
silaya 'skid'
ha?tiw 'sneeze'
hiTa 'fart'
močow 'turn/become' (to k'is močow = 'I turned red')
muhkuna 'feel embarrassed'
wolo? 'survive'
s'u?tuš'u?tu 'shiver'
mihčelčiw 'stumble'
lol 'fall (from a height)'
sinam? 'drown'
balayibi? 'bleed'

In addition, a smaller number of two-argument-taking verbs subcategorize for two
Undergoer-marked arguments. Examples of these verbs, which will be discussed in the 'non-fluid S' subsection, are as follows:

(17) to mukito daw  
1SG-UND 3MSG-UND like  
'I like him'

(18) to mukito qa?adi:du  
1SG-UND 3MSG-UND dream  
'I dreamed about him'

(19) to mukito duyaka:du  
1SG-UND 3MSG-UND remember  
'I remembered him'

With most intransitive verbs that typically take Undergoer-marked arguments, Actor marking may be availed in order to convey a semantics of a greater degree of control exercised by the argument over the action or state represented by the verb. For example, ?a ha?tiw (with an Actor-marked argument) has 'I sneezed on purpose' as a typical translation. Mu sinam? (again with Actor marking) has been translated as 'He willingly gave his life' (that is, he 'drowned himself'). Actor or Undergoer marking on the argument of čhoyi? 'die' may serve to distinguish between death by natural causes or by accident.

This phenomenon of manipulation of the case of an intransitive argument in an active-stative system in a manner expressive of the semantics of the verb or the NP has been called 'fluid S-marking' by Dixon (1979). It is important to note that, in Kashaya, it is only the class of typically Undergoer-taking intransitives that permit manipulation of case marking along these lines. In other words, it is not possible in Kashaya or any of the
other Pomo languages to code the argument of an Actor-taking verb such as čohta? 'leave' as an Undergoer in order to convey a semantics of something like 'leave under duress'.

4.2 Fluid S-marking in Kashaya due to factors other than agency

It was pointed out above that the Kashaya fluid S-marking system, while displaying evidence of sensitivity to a semantic parameter of control or volitionality, additionally appears to show sensitivity to other factors, including aspectual ones. Recall the examples listed under (9) and (10) above, repeated here:

(20) (Kashaya:)
   a. ?a Tonu
      1SG-ACT become.tired
      'I am/was tired'
   b. to Tonu
      1SG-UND become.tired
      'I got tired'
   c. mu čhoji?
      3MSG-ACT die
      'He's dead'
   d. mukito čhoji?
      3MSG-UND die
      'He just died'

A clue to the puzzle of the truly relevant semantic factors involved in the Kashaya active-stative opposition is provided by data such as the following:

(21) ana: č'išqan man (/*ma:dal)
very pretty 3FSG-ACT (*3FSG-UND)
'She's very pretty'

(22) (Central Pomo:)
?a: 7e qol
1sgAG BE tall
'T'm tall' (Mithun 1991b:521)

Note that these examples are, in one sense, difficult to reconcile with our analysis of Pomo case-marking as being determined by 'control' or 'volitionality', given that the participant is in neither case volitionally involved in or in control of the state represented by the predicate. Examples like these contrast with ones like the following:

(23) (Kashaya:)
to qo?di t'a:law
1SG-UND good feel
'I feel good'

(24) (Central Pomo:)
to: kits'ciw
1sgPAT be.scared
'T'm scared' (Mithun 1991b:519)

Inherent properties tend to require Actor coding, while contingent, ephemeral ones tend to take Undergoers. Mithun, O'Connor (1987), and others interpret data such as these to indicate that case marking in Pomo is sensitive not just to a parameter of control or volitionality, but to one of '(perceived) affectedness' as well, on the assumption that, as Mithun puts it, 'the coming into being of a state is viewed as affecting a participant more than simply being in a state' (1991b:521).\footnote{Dixon implies a different, and yet not altogether distinct, explanation when he notes that 'something that is complete can be viewed either from the point of view of the patient...}
Of further crucial importance here is the fact that the Kashaya class of Undergoer-taking intransitives is a small one relative to the class of Actor-taking intransitives. Undergoer-taking intransitive verbs, then, are 'marked' in the sense of being the exception to the numerically predominant case marking pattern. This class is formally 'marked' as well in that full NP Actors tend more strongly than full NP Undergoers to receive zero marking, as in the following example:

(25) Gene t'o Kirato čadu munati Kira t'o čadu thin
G. CONTR K.-UND see but K. CONTR see NEG
'Gene saw Kira but Kira didn't see [him]'

The Undergoer-taking class is also 'marked' in the sense that it is the class which has the clearer semantic coherence—specifically, in terms of a predication of lack of volitionality or control, with the intransitive Actor simply failing to correlate as clearly with this semantic parameter in any way, either positively or negatively. The intransitive Actor marking therefore has a default status semantically, a fact which has obvious implications for the future development of the system. That is, if the semantic coherence of the active-stative system were to become sufficiently attenuated that it were to give way to a system in which the intransitive argument category ('S') were to become neutralized with either the transitive Actor or the transitive Undergoer, Kashaya would presumably go the former route. Kashaya, then, would acquire a nominative-accusative rather than an ergative-

("Something happened to X") or of the agent ("Y did something"); but a prospective activity is best viewed in terms of a proclivity of an agent' (1979:71).
In addition, Undergoer marking on Undergoer-taking verbs in Northern and Central Pomo is 'usually used for first persons, [while] an agent-case pronoun is used for third persons' (Mithun 1991b:522), and the the few verbs in Kashaya that are fixed Undergoer-taking predicates (i.e., not fluid S—see the next subsection) are predicable only of non-third-person arguments. These facts are explainable, given an understanding of Undergoer marking as involving not only a predication of a lack of volition/control but also as Actor marking as involving an abstension from a judgment of the participant's volitionality or affectedness with respect to the event or state represented by the verb, in terms of the relative 'inaccessibility of any but our own [or, next in terms of Kuno's (1976) empathy hierarchy, our interlocutor's] internal experiences' (O'Connor 1987:205), or the notion that 'speakers do not [readily] claim to feel what another individual is feeling' (Mithun 1991b:522). For this reason, Actor-marking on the arguments of Northern Pomo 'unaccusatives' is associated by O'Connor not just with control but also with a relatively neutral, 'reportorial' point of view.

What turns out to be the case, then, is that the Pomo active-stative systems,

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6 Dixon (1979:100) considers (and dismisses the adequacy of) this sort of scenario as an explanation for the origins of ergativity. A serious problem with such an explanation is the lack of evidence for active-stative languages with an open, unmarked class of 'stative' verbs together with a closed class of 'active' verbs. Of the frequently-cited active-stative languages, Lakhota may come closest to this particular asymmetry, with a larger class of 'statives' than 'actives', but even here but the class of 'actives' comprises several hundred members (Legendre and Rood 1992:383). The problem, then—assuming that the universal bias towards the 'active' class is not a result of an insufficient sample—is that while it is easy see that nominative-accusative languages would evolve out of active-stative languages, it is much harder to see how ergative-absolutive languages would do so.

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although initially seeming to be neatly organized according to an objective, propositional parameter of volitionality or control, are in fact 'subjective' in potentially being influenced by or reflecting the speaker's momentary discourse perspective, and may therefore appear to be somewhat messy. (In these ways, this categorization is similar to that involved in the 'compound perfect' in a language like English.) With an intransitive 'fluid S' verb that falls into the Undergoer-taking (i.e. 'unaccusative') class, then, Undergoer-marking may be analyzed as representing [-volitional/control, +affected]. If Actor-marking is used on such a verb's argument, this could mean either that the value on the [control] parameter is switched to positive (i.e., the speaker is attributing control to the participant in an event or state which would typically lack a controlling participant); or that that value is switched to neutral (i.e., the speaker is abstaining from any such judgment); or that the value on the [affected] parameter is switched to neutral or negative—as in the cases cited above involving different aspectual readings, or in cases such as the following [Kashaya]:

(26)a. T'o Thoʔo da:qa
   1SG-ACT CONTR acorn.mush like
   'I like acorn mush'

b. to T'o Thoʔo daw
   1SG-UND
   'I really like acorn mush'

In the cases where the 'control' or 'affected' parameter-value is neutralized, the speaker may be described as taking a relatively neutral, detached point of view, with the active-stative distinction thus serving in some cases to code speaker attitude. We may therefore
attribute to the Pomo active-stative systems a variety of related functions, from relatively propositional to relatively subjective.

How could these facts even be reconciled with the RelG model? We might imagine an analysis along the following lines. Fluctuations in case marking of the arguments of 'fluid S' verbs might be attributed to two factors: the possibility of the case-marking rule referring to initial or final stratum, or the manipulation of the subject or object status of the argument at the initial level depending on an attribution of control and/or affectedness to the argument. In other words, we may reasonably assume that a (typically, i.e. potentially) Undergoer-taking verb such as 'die' would be analyzed as being a 2 on the initial stratum unless volitionality or control were attributed to the argument, in which case it would be an initial 1. That initial 2 would in any case head a 1-arc at the final level (given the 'final 1 law', which is simply a stipulation that any clause have a final 1), so in cases of a 'detached' point of view we could simply say that the case-marking rule refers to the final rather than initial stratum. If the argument heads a 1-arc at the initial level, on the other hand, there is no possibility of anything but the case-marking associated with 1, i.e. the case-marking of transitive agents, so that is what the case-marking would be regardless of whether or not the speaker is taking a 'detached' point of view. This is, in a way, a neat representation of the facts, and corresponds well with the general association of the initial stratum with narrow-scope propositional semantics and the final stratum with discourse perspective (e.g., passivization).

However, RelG takes great pains to dissociate its levels from such semantic or pragmatic correlates, as exemplified most clearly by Rosen's (1984) protracted argument
that there is no 'homomorphism' between semantic roles (or semantics in general) and initial-level GRs. GRs, then, are purely formal (not semantic) constructs discoverable only by formal tests, not semantic intuitions. In the case of Pomo the evidence of case marking would simply serve to identify an intransitive argument as an initial-level 1 or 2, case closed. The test of overt case-marking would determine whether a verb is an 'unaccusative' or an 'unergative', i.e. takes a 1 or 2 on the initial stratum, despite the fact that, as we have seen, entirely different kinds of factors may contribute to the overt case-marking of an argument. (In fact, the heterogeneous, apparently 'messy' nature of the determinants of case-marking might even be taken as evidence of the superiority of a purely syntactic, non-semantic treatment of the Pomo data.)

4.3 Non-fluid S-marking in Kashaya

As explained above, the case marking of normally or potentially Undergoer-taking intransitive verbs may be manipulated in Kashaya to signal any one of a complex of related 'objective' and 'subjective' meanings. There are, however, certain exceptions. One group of exceptions, already mentioned above, involves words formed with the -laya root:

(27)a. to malaya?
   1SG-UND
   'I slipped'

   b. ?a malaya?
   1SG-ACT
   'I missed the target (with my foot)'

As already discussed, while this is by no represents a completely idiosyncratic or
unmotivated opposition in terms of the general nonvolitional semantics of Undergoer coding in Kashaya, it nevertheless seems to be true that the different cases are associated with somewhat conventionalized verb meanings not fully predictable from the semantics normally conveyed by the active-stative marking. Of course, this interpretation of data such as (27) depends partly on how abstractly we gloss the meaning of the -lava root. The ma- prefixed to the root is an instrumental prefix meaning ‘with the sole of the foot’, one of 20 productive instrumental prefixes in the language; if we gloss -lava as something like '(one object) to move past or against (another)', then we may derive the above translations as two of many possible instantiations of the perfectly transparent, compositional semantics of the component morphemes of the verb-plus-nominal-case syntagm. Be that as it may, the Actor version of the variously-prefixed -lava root seems almost invariably associated with a meaning of missing some sort of intended target, while the Undergoer version never features this specific meaning as part of its translation.

The next set of exceptions to fluid S-marking in Kashaya is represented by the following verbs, which only accept Undergoer-marked arguments:

(28) Undergoer-taking Kashaya verbs:

daw 'want, like'
dawai: 'want (food)'
phisew, basew 'dislike'
T'a:du 'feel (good, etc.)'
qa?adi:du 'dream'
duyaqa:du 'remember'
nisa:n 'hate'

While these verbs only accept Undergoer arguments in this form, they do all have
apparently causative-marked counterparts which only accept Actor-marked experiencer arguments:

(29) Actor-taking Kashaya verbs:

da:qa? 'want, like', etc.
dawanqaw
phiseqa?, baseqa?
T'anqaw
qa?adinqa?
duyanqanqaw
nisanqaw

Oswalt (1983) points out that at least some of these might be analyzed as bearing a causative-plus-reflexive sequence, as what may be an allomorph of the reflexive suffix (-č) appears when the phonological environment permits:

(30) daqac'khe 'like'-FUT
qa?adinqac'khe 'dream'-FUT
phiseqac'khe, baseqac'khe 'hate'-FUT

The others show no evidence of a reflexive morpheme. In any case, no causative or reflexive semantics is consciously accessible to the consultant or revealed in the translations. The only semantic differences I have found between any of the pairs is an optional predication of stronger emotion with daw as opposed to da:qa?, and a similar greater affectedness of the experiencer with T'a:du as opposed to Tangaw:

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(31)a. ?a hanem da:qa?
   1SG-ACT kick want
   'I want to kick'

   b. hanem daweto
   kick want-1SG-UND
   'I really want to kick'

(32)a. ?a T'o Tho?o da:qa?
   1SG-ACT CONTR acorn.mush like
   'I like acorn mush'

   b. to T'o Tho?o daw
   1SG-UND CONTR acorn.mush like
   'I really like acorn mush'

(33)a. ?a qo?di Tanqaw
   1SG-ACT good feel
   'I feel good' OR 'I think it's good'

   b. to qo?di T'a:du
   1SG-UND good feel
   'I feel good'/*'I think it's good'

Many of the verbs listed in (28) are transitive; in other words, they are morphologically double-Undergoer verbs. Given the fact that word order in Kashaya does not correlate strictly with mapping to semantic or participant roles, we might expect the following to be ambiguous:

(34) to mukito daw
   1sgUND 3MSG-UND like

(35) madal to duyaqa:du
   3FSG-UND 1SG-UND remember

However, (34) can only mean 'I like her', not *'She likes me', and (35) can only mean 'I
remember her', not '*She remembers me'. Daw, duyaga:du, da:wan, pisew and basew may only take 1st- or 2nd-person singular or plural experiencers. Even when daw takes a sentential object or embedded clause, it can't be predicated of a third-person experiencer:

(36)a. ?imata?el hanem daw
    woman-UND kick like
    "I (we, you) like to kick the woman."
    "*The woman likes to kick."

b. *?imata?em hanem daw
    woman-ACT kick like

Thus, the only ambiguity of participant-roles that could possibly arise in the use of double-Undergoer verbs would be when both arguments are 1st- or 2nd-person, which might be conjectured to rarely in fact lead to ambiguity due to the deictically-grounded nature of 1st- and 2nd-person pronouns. The only exception among the verbs listed in (28) to the restriction to 1st- and 2nd-person experiencers is qa?adi:du "dream":

(37) mukito to qa?adi:du
    3MSG-UND 1SG-UND dream
    'I/he dreamed about him/me'

(38) mukito qa?adi:du malayaçphi mubiçkhe
    3MSG-UND dream slip-CoR run.away-FUT
    'He dreamed he would slip and run away'

As discussed above, these exceptions to fluid S-marking are by no means completely idiosyncratic in terms of the general complex of functions of active-stative case marking in Kashaya. The fixed-S verbs will, however, play an important role in our investigation of behavioral evidence for semantic or relational categories that depart from
those coded by case. We turn now to this investigation.

5. The instantiation of GRs in Kashaya Pomo

As mentioned in Chapter One and in the introduction to the present chapter, the active-stative case marking system manifested in Kashaya is a kind of system that, according to Plank, may be viewed as maximally 'transparent' and in which 'it could seem doubtful whether genuinely grammatical relations (such as subject and object, as distinct from active and inactive participant) are to be recognized ... at all' (Plank 1983:8). The transparency and questionable relevance of GRs are, presumably, two facets of the same thing, assuming a conception of the latter in terms of a neutralization of verb-specific semantics in a manner giving rise to a 'default' argument category which we may, by one rather pre-theoretical conception anyway, identify with the verb's 'subject'.

As I hope to have made clear, however, it is a dubious strategy to equate 'subjecthood' with neutralization of verb-specific semantics, since neutralization of semantic distinctions occurs in several steps or layers from the level of verb-unique participant roles, through semantic roles, through semantic Macroroles, through S-A neutralization which Dixon claims to represent a universal semantic 'subject' category, to the kind of neutralization of the A-S or O-S distinction (in Dixon's terms) that may result in the classification of a language (or certain aspects of it) as typologically or syntactically ergative-absolutive or nominative-accusative. At each level of neutralization, certain facts of morphological or syntactic behavior may be sensitive to the distinctions remaining, and, it seems to me, it would be somewhat arbitrary to identify one level as that where
GRs are 'created'. Also, 'subject' as a category representing a neutralization of semantic roles would clearly fail to correspond, except in a subset of cases, to the subject category as grammaticalized in a language like English. Finally, as argued above, isomorphism with semantically-based or semantically-characterizable categories at some level of abstraction renders somewhat superfluous the identification of a separate level of GRs. On the other hand, where discourse factors are involved in the neutralization such that morphologically or syntactically relevant categories are created that could not be identified with reference to semantically-based categories (or, for that matter, with a transparent discourse category such as 'topic' in the sense of van Oosten's (1984) 'sentence topic' or Mithun's clause topic\textsuperscript{1}), the invocation of GRs may be considered justified.

We have already seen that it is somewhat inaccurate to characterize the Kashaya case marking system as simply 'transparent'. While it is true that the Kashaya system is motivated relatively strongly by Plank's transparency principle in preserving case distinctions with intransitive verbs where they could serve no disambiguating function, the marked Undergoer case of an intransitive argument (although not of a transitive argument) may indeed be manipulated by discourse-pragmatic considerations in a manner obscuring the semantic factors otherwise involved\textsuperscript{7}. I will return below to the implications of this kind of discourse-pragmatic manipulation of case marking for the identification of

\textsuperscript{7}It is also true that the Kashaya system fails to achieve maximal transparency independently of this kind of semantics-free manipulation of speaker perspective, in that the Actor case is, as explained above, somewhat underspecified semantically to begin with. However, all active-stative systems presumably fail to achieve maximal transparency in this respect, as all such systems seem to be divided between one relatively large, default category and one smaller, semantically marked category.

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a 'subject' category in Kashaya. Before that, though, I would like to introduce and discuss some facts, relevant to the discussion of behavioral evidence for GRs to be discussed a little later on in this section, indicating that the Kashaya case system is a little less fluid, and a little less 'transparent', than it might seem at first. These, then, are facts indicating a lack of complete transparency independent of the opacity created by discourse-manipulation of case roles.

Next, I would like to investigate the question of the existence in Kashaya of GRs independent of the evidence of case marking. Given that there exists a view of coding properties (case and verbal cross-reference) that they provide less insight into a language's 'deeper' or psychologically significant patterns than do syntactic or behavioral properties (Anderson 1976, 1977), Plank's view of morphological transparency rendering questionable the validity of an identification of GRs may seem to be somewhat simplistic. After all, as already acknowledged above, there are languages that display a superficially ergative pattern in their morphology while displaying evidence of an Actor syntactic pivot, just as in English in basic active clauses. One interpretation of this situation is that the morphology is nothing more than the frozen remnant of a former syntactic pattern or process (specifically, passivization) which has lost any 'true' psychological significance (for the development of this view, cf. especially Anderson 1976). This view may be seen as harmonic with evidence that NPs (experiencer arguments of English verbs, for example) are historically integrated into a 'subject' category by behavioral tests before their morphology eventually falls into place (Cole et al. 1980, Allen 1995 [discussed in Chapter 5])—thus indicating that syntactic behavior is a more fluid, sensitive, and
insightful indicator of GR status than morphological marking. While it certainly wouldn't be reasonable to argue that morphology is nothing but a frozen relic of some formerly lively pattern in a fluid-S language like Kashaya (and, as we shall see in the 'Morphology' section below, it would in any case be a mistake to reduce all morphological and syntactic patterns to the same set of motivations), it remains a valid point that other areas of the language's morphology or syntax may reveal patterns more indicative of GRs in one sense or another. This is, then, what we shall investigate here.

5.1 The evidence in Kashaya morphology for GRs

As Dixon (1979) has pointed out, since some languages exhibit a variety of patterns in their morphology it should not be assumed that, just because one pattern is revealed in, say, case marking, the same pattern must reveal itself in verbal agreement. Mithun (1985) has investigated this issue and derived a number of implicational relationships with explanations for those relationships based on the (often discourse-based) functions of the coding mechanisms involved.

For example, 'some languages, like Ngandi, exhibit accusative pronominal affixes on verbs, ergative cases affixes on nouns, and purely pragmatic constituent ordering. No other combination of these three has been attested' (61). The explanation she provides for this is that, assuming that ergative patterning involves the grammaticalization of 'a purely discourse-level notion, that of significant new information' (61) (cf. DuBois 1985), it makes sense, since new participants are introduced with full NPs, that, if there is going to be ergative marking for either agreement affixes or full NPs to the exclusion of the other,
it should be full NPs. Accusative systems, meanwhile, have grammaticized the
discourse-level notion of topic, with strong concomitants of semantic features like
agentivity and animacy, since animates and agents tend to be more topical than their
complements (61); thus, agreement affixes as representing (or at least diachronically
derived from, cf. Givon 1976) formally reduced coders of highly topical participants more
naturally follow an accusative pattern than full NPs. Agentive (active-stative) systems,
meanwhile, 'have grammaticized the predicate-level semantic notion of agent', with
active-stative marking therefore most naturally occurring on NPs. We have seen that
Kashaya codes NPs according to an active-stative pattern. Is there evidence elsewhere in
its morphology for alternative patterns?

As it happens, Kashaya (like the other Pomo languages) has no real verbal
agreement system. It also fails to distinguish anaphoric pronouns from full NPs in its case
marking system (both are marked according to the active-stative pattern). There are,
however, two fairly restricted agreement-like verbal affixes that potentially cross-
reference one of the arguments of the affixed verb. The first is what Oswalt (1961) calls a
'plural agent' affix, illustrated as follows:

(39)a. ?a qo?di T'anqaw
    1SG-ACT good feel
    'I feel good'

b. ya qo?di T'ac'qaw
    1PL-ACT good feel-PL
    'We feel good'

The marker is a replacive-morph affix occurring, in this case, between the t'ad-root and
the -qa- causative suffix (although, as explained above, this is a causative suffix by formal indications only and not by any accessible 'causative' semantics). It replaces a /d/ (in this case, the [n] allomorph of the /d/ phoneme) with a /£'/ to indicate the plurality of the verb's argument. Note, by the way, that the affix is of relatively restricted use given the structural description of the replacement rule: a /d/ must be present in the verb's root. Although Oswalt calls this a 'plural agent' affix, he fails to demonstrate that it is in fact sensitive to a plural agent as opposed to highest-ranking argument in general (i.e., Dixon's 'subject'). If, in fact, we take a phonologically appropriate Undergoer-taking intransitive verb and provide it with a plural argument, the replacement fails to be triggered; the following involves the Undergoer-taking counterpart of T'angaw, T'a:du:

(40)a. to qo?di T'a:du
   1SG-UND good feel
   'I feel good'

b. yal qo?di T'a:du
   1PL-UND good feel
   'We feel good'

Therefore, this affix is indeed sensitive to the same semantic Actor-Undergoer distinction manifested in the case-marking system; it fails to neutralize this distinction in a manner some might claim to be indicative of 'subjecthood'.

The other agreement-like marker is called 'plural act' by Oswalt; it appears as a dental affix as in the following:

(41)a. mukin sima?
3MSG-ACT sleep
'He (finally) slept'

b. ma:čal simatabiw
3PL-UND sleep-PLACT-PERF
'They fell asleep'

(42)a. ?a čahqaw
1SG-ACT cut-CAUS
'I cut down one (tree)'

b. ya čathqaw
3sgACT cut-PLACT-CAUS
'We each cut down one (tree)'

As may be seen from these examples, this affix fails to differentiate between Undergoers and Actors, and might therefore be considered to neutralize that distinction in a manner indicative of a 'subject' category such as Dixon's. However, it turns out that the morpheme fails to invariantly indicate the plurality of the S and A to the exclusion of O in a manner revealing of such a category:

(43) ?a čathqaw
1SG-ACT cut-PLACT-CAUS
'I cut down several (trees)'

According to Oswalt, this morpheme can apply equally to one act performed repeatedly by one person or to one act performed independently (i.e. not in unison) by several people. It fails, in other words, to pick out a 'subject' in Dixon's sense and may more insightfully be regarded as an aspectual morpheme than a plural agreement marker. In sum, then, all available morphological evidence (if, that is, we restrict 'morphological' to case and agreement) indicates that the Actor-Undergoer distinction is consistently

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5.2 The evidence in syntax for the instantiation of GRs in Kashaya

In the above discussion of RRG, we saw that a kind of evidence routinely cited by Foley and Van Valin for syntactic pivot status is the behavior of switch reference systems in languages that have such systems. Kashaya, like other Pomo languages, does have such a system, which Oswalt (1961) has characterized as tracking the reference of the agent from clause to clause. In addition to tracking the reference of the agent (by Oswalt's description), the switch reference markers carry a variety of other information: the sequentiality or simultaneity of the events represented in two hierarchically-arranged clauses, as well as the orientation of those events relative to speech time, with the deictic information neutralized in the 'simultaneous' markers. The full system of markers originally identified by Oswalt, plus illustrations of their use, is as follows:

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Actually, it is not necessarily true that all the other Pomo languages have true switch reference systems. While Oswalt and McLendon have characterized Kashaya and Eastern Pomo respectively as having switch reference systems that track the agent from clause to clause, Mithun (1993) has argued that the Central Pomo system has a primary function of 'specify[ing] relations between actions and events, not participants', while O'Connor claims that the Northern Pomo counterpart is really the sort of 'restricted' versus 'open' reference system Nichols (1982) has identified in languages of the Caucasus. While there might be some temptation to extend the analysis of one Pomo language's switch reference system to all the other languages as well, it is probably more likely that all the analyses are basically valid. All available evidence indicates that switch reference and switch reference-like systems are extremely labile, with a strong tendency for connotational or secondary functions to be reanalyzed as criterial or primary (cf., e.g., Ohori 1992 on the diachronic fate of switch-reference-like clause connectors in Old Japanese).
Table 2: Kashaya Pomo switch reference paradigm

(44)a. tubičba wa:du?
stand-CoR walk
'I got up and left'/I left after getting up'

b. ?a tubili mukin soh čaw
1SG-ACT stand-DR 3MSG-ACT just sit
'I stood up but he just sat there'

(45)a. ?a manephi čahnokhe
1SG-ACT dance-CoR sing-FUT
'Tm gonna dance and (then) sing'

b. ?a manephila čahnokhe
1SG-ACT dance-DR sing-FUT
'Tm gonna dance and then someone else is gonna sing'/Someone's gonna sing after I dance'

CoR=coreferential, DR=disreferential, following O'Connor (1987). These terms, unlike those such as SS ('same subject') or SA ('same agent'), avoid prejudicing us with regard to the nature ('subject', 'agent', etc.) of the referent-type involved.
(46)a. mukin čahnon manew
   3MSG-ACT sing-CoR dance
   'He sang and danced'

b. mukin čahnowem Dave manekhe
   3MSG-ACT sing-DR  D. dance-FUT
   'He's gonna sing and Dave's gonna dance?/Dave's gonna dance while he sings'

An illustration from extended narrative, showing a sequence of several markers

    from.it 1PL-ACT righteousness know already people
    'From it, we, having become people, knew righteousness--

    čič'ba-- čahno lowač'ba--nineč'ba.
    become-CoR-- story tell-CoR--study-CoR
    having told the story, and having studied' (Oswalt 1964:40-41)

If it is true that the Kashaya switch reference markers are indeed sensitive to the reference of the agent or Actor, then this clause-linking system functions exactly like that described for Eastern Pomo (McLendon 1978) and, in Foley and Van Valin's terms, Kashaya would display evidence of a straightforwardly semantically-based pivot in its syntax, at least with respect to this particular syntactic process. On the other hand, O'Connor's analysis of the Northern Pomo switch reference system (featuring a set of markers transparently cognate with the Kashaya markers) is that it codes 'restricted' vs. 'open' reference between clauses, with 'restricted' reference being specified as necessary coreference of subjects in Dixon's sense—i.e., a category including both Actor and Undergoer intransitive arguments and Actor transitive arguments (O'Connor 1983, 1987). Is it really the case, then, that the Kashaya switch reference system is sensitive to the same Actor/Undergoer distinction relatively transparently coded in its case-marking system?
The obvious way to test this would be conjoin\(^{10}\) clauses that share coreferential 'subjects' in Dixon's sense but not Actors by the morphological evidence—clauses, in other words, at least one of which features an Undergoer-taking verb:

\[(48)\]

\begin{align*}
 & \text{a. bahčuba malaya?} \\
 & \quad \text{jump-CoR slip} \\
 & \quad \text{I jumped and slipped}^{11}
\end{align*}

\begin{align*}
 & \text{b. Gene bahčuli malaya?} \\
 & \quad G. \text{ jump-DR slip} \\
 & \quad 'Gene jumped and slipped'^{12}
\end{align*}

\[(49)\]

\begin{align*}
 & \text{a. čeličba muhkuna:} \\
 & \quad \text{trip-CoR feel.embarrassed} \\
 & \quad \text{I tripped and felt embarrassed'}
\end{align*}

\begin{align*}
 & \text{b. čelili muhkuna:} \\
 & \quad \text{trip-DR feel.embarrassed} \\
 & \quad \text{I tripped and felt embarrassed'}
\end{align*}

In the above examples, 'slip', 'trip', and 'feel embarrassed' are Undergoer-taking verbs, and it appears that either the CoR or the DR marker may be used with retention of reference of the verbs' argument. In a sense, then, the behavior of switch reference both supports

\(^{10}\)Strictly speaking, the clause whose verb bears the switch reference suffix seems to be subordinated by a number of criteria: the tense-deficient switch reference-marked clause is oriented relative to the tense-bearing reference-clause, the clauses may be transposed with no iconic sequential implications, etc.

\(^{11}\)Note that pronouns are omitted, as is common in Kashaya, and there is no agreement marking on the verbs. Of course, this sequence of clauses could mean 'He jumped and slipped', 'You jumped and slipped', etc.

\(^{12}\)Given fn. 11 and the DR marker on the embedded verb, this could also mean 'Gene jumped and someone else slipped', etc. This kind of reading is always possible when the DR marker is used and no more than one verb's argument is overtly mentioned. Since, however, this reading is not of interest to us, I will not indicate it in the gloss.

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and contradicts both hypotheses that we are considering: first, that it tracks the reference
of the Actor, and second, that it tracks the reference of the 'subject' in Dixon's sense. Of
course, given the evidence of (44-6), it would be perfectly possible to come up with a
superficially adequate characterization of the markers in terms of Actorhood, as follows:
the CoR markers mean 'not different Actor', while the DR markers mean 'not same Actor'.
However, note:

(50) bahćuba malaya?
    jump-CoR slip
    '*I jumped and he slipped'

In other words, given that 'slip' fails to subcategorize for an Actor, the 'not different Actor'
(=CoR) marker should be compatible with the translation indicated; however, the CoR
markers are never compatible with disreferential Primaries (the argument bearing the
highest-ranking semantic role; cf. van Oosten 1984) or 'subjects'. Our only recourse, then,
would be to characterize the CoR markers as 'same subject' (in Dixon's sense of 'subject')
or 'same Primary' (in van Oosten's terms) with the DR markers being 'not same Actor'. In
RelG terms, the CoR paradigm would be sensitive to final-level Is, while the DR
paradigm would be sensitive to initial-level Is.

While this would handle the facts adduced so far, it is potentially unsatisfactory in
at least two ways. First, it may strike us as unpalatable to consider the elements of such a
tightly grammaticalized paradigmatic system to display this kind of heterogeneity, and
second, it begs the question of the true synonymy, or interchangability, of the CoR and
DR markers in cases where the verb of at least one of the clauses lacks an Actor and the
participant of one verb is identical to that of the other.

We will address the question of synonymy (or free variation) in a moment, but we should first acknowledge that, given (44-6), it is still quite possible that the switch reference markers are indeed sensitive to Actor reference. Since, in other words, case marking of intransitive Undergoer arguments is fluid, and since the arguments in the examples in (51-4) are not overtly coded, it is quite possible that case marking is being covertly manipulated with the switch reference markers tracking the reference of the Actor, as follows:

(48')a. [?] bahčuba [?] malaya?
   [1SG-ACT] jump-CoR [1SG-ACT] slip
   'I jumped and slipped'

   b. Gene bahčuli [mukito] malaya?
   G. jump-DR [3MSG-UND] slip
   'Gene jumped and slipped'

   etc.

Apart from the fact that malaya?, as explained above, would not normally be translated as 'slip' if its argument is Actor-marked, however, this hypothesis is easily falsified with reference to the following:

(51)a. 7a wayiĉqali to muhkuna:
   1SG-ACT waken-CAUS-DR 1SG-UNDfeel.embarrassed
   'I woke someone up and then I felt embarrassed'

   b. 7a wayiĉqaba to muhkuna:
   1SG-ACT waken-CAUS-CoR 1SG-UND feel.embarrassed
   'I woke someone up and then I felt embarrassed'
First, even though it is typical for the nominals to be omitted in clause sequences of this sort, it seems to be perfectly acceptable to code them overtly, as in (51)—with the alternation in switch reference markers clearly occurring independently of any manipulation of case marking. Second, given the fact that, as explained above, T'a:du "feel" (future form T'ankhe) and qa?adi:du (with an Actor-taking counterpart qa?adinqa?) are non-fluid-S obligatorily Undergoer-taking verbs, we know that covert case manipulation couldn't account for the facts of (52)\textsuperscript{13}. Therefore, we must discard the hypothesis that covert case manipulation will account for the alternation of switch reference markers involving Undergoer-taking verbs in general.

Pending an investigation of the question of the synonymy of pairs such as that in (51), a reasonable question to ask would be as follows: Assuming an analysis of the

\textsuperscript{13}This test would therefore work even if neither verb's argument were overtly coded. There is, by the way, independent evidence that the sentence-initial nominal could be the argument of the embedded (immediately following) verb or of the matrix verb:

\begin{quote}
\begin{verbatim}
to [qa?adinphi] qo?di t'ankhe
OR
[to qa?adinphi] qo?di t'ankhe
\end{verbatim}
\end{quote}
switch reference system (or, at least, the CoR markers in that system) as tracking the reference of 'subjects' from clause to clause, how justified would an invocation of 'subjects' be in a language in which all overt morphological evidence points to the internal validity of Actor and Undergoer categories, but not of a neutralized 'subject' category? Of course, as already discussed, it would not be unusual for syntactic tests to reveal semantic or grammatical categories that differ from those signalled in case and agreement. Is there, then, any independent syntactic evidence for such categories?

One of the standard tests for the identification of a 'subject' in the sense of syntactic pivot is conjunction reduction (i.e. ellipsis in coordinate structures). In Kashaya, the most common structure for translating conjoined clauses such as I hit someone and left is one involving a switch reference marker. Since it is precisely the behavior of the switch reference system which is under investigation (since switch reference is indeterminate with respect to subject-sensitivity or Actor-sensitivity), we must find a different coordination strategy. Coordination without switch reference markers is possible with munati 'but'; examples are as follows:

(53) ?a t'o ōhto? munati soh čaw
1SG-ACT CONTR leave but just sit
'I left but he just sat there'

(54) Gene kafe ana: da:qa? munati Kira ana: nisanqaw
G. coffee very like but K. very hate
'Gene likes coffee a lot but Kira really hates it'

(55) Gene t'o Kirato čadu munati Kira t'o čadu thin
G. CONTR K.-UND see but K. CONTR see NEG
'Gene saw Kira but Kira didn't see [him]'

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These examples show that Kashaya conjunction reduction not only fails to point to a consistent syntactic pivot but is unconstrained by semantics in the sense that the case role of the deleted nominal (the target) needn't match that of the controller. In other words, there is no restricted neutralization here of the sort required for the identification of a pivot (cf. Foley and Van Valin 1984 and Chapter 3 above); conjunction reduction in Kashaya is, therefore, pivotless. These facts are consistent with the general freedom of omission of the arguments of verbs in the language. For example, Kashaya has no true passive in the sense of a relation-changing promotional or demotional (foregrounding or backgrounding) process. Translation-equivalents of English passives simply involve the omission of the Actor argument:

\[(57)\]
\[
to \text{phanem}
\]
\[
1SG-UND hit
\]
\['I got hit'/Someone hit me'
\]
\[
(cf. mu to \text{phanem}
\]
\[
3SG-ACT 1SG-UND hit
\]
\['He hit me']

(This sort of functional equivalent of the passive—or the lack of a relation-changing passive whereby case and possibly pivot status are manipulated according to discourse perspective—is, as already mentioned, a salient and presumably necessary feature of an extremely 'role-dominated' language in Foley and Van Valin's terms; Dixon (1979) notes...
that no active-stative language has a true passive in the usual sense.) Given the fact, then, that conjunction reduction exhibits the typically free, syntactically unconstrained omission of nominals independently manifested in the language, it provides no evidence for a 'subject' category neutralizing Actor and Undergoer.

It might seem that reflexivization and reciprocalization would be inappropriate tests for our purposes, since these processes apply to transitive verbs and the verbs of interest to us—those for whose Actor or Undergoer arguments we are attempting to find evidence of neutralization with respect to syntactic processes—are intransitive. However, recall that a number of the non-fluid-S verbs are transitive, obligatorily bearing two Undergoer-marked arguments. What happens when we try to reciprocalize or reflexivize them? The results are shown below:

(58)a. to daw
1SG-UND like
'I like (someone)'

b. ya damu?
1PL-ACT like-RECIP
'We like each other'

c. ma?ca damu?
3PL-ACT like-RECIP
'They like each other'

(59)a. to pisew
1SG-UND dislike
'I dislike (someone)'

b. ya pisemu
1PL-ACT dislike-RECIP
'We dislike each other'
Although these verbs only accept Undergoer-marked experiencers, then, their reciprocalized or reflexivized versions obligatorily take an Actor-marked experiencer. These two processes, then, may appear to neutralize the distinction between the Undergoer experiencers of these verbs and the Actor arguments of other transitive verbs.

However, given the fact that the very nature of these processes is to assert coreference between the two arguments of a transitive verb, we really cannot say that they differentiate 'subject' Undergoers from 'object' Undergoers, and their behavior is therefore somewhat equivocal with respect to the identification of a 'subject' category neutralizing the morphologically-coded Actor/Undergoer distinction. In addition, it is clearly the case that it is by virtue of being the argument of a reflexivized verb, or of controlling reflexivization (which is, after all, cross-linguistically role-related (Schachter 1976, Foley and Van Valin 1984)) that the argument is an Actor.

Somewhat clearer results are obtained from what we might call 'equi', i.e. embedding under a verb such as 'want' (with square brackets indicating constituent structure, not omissibility):
These examples show that the target may be an Actor or Undergoer (as may the controller). Also, the semantic Macrorole (Actor or Undergoer) need not match, so the target cannot simply be characterized in terms of control by a matrix argument bearing the same case role. Therefore, the process appears to neutralize the categories of Actor and Undergoer in just the way indicative of Dixon's universal semantic 'subject' category.

We have just seen, however, that certain interclausal deletion processes are completely unconstrained, failing to provide evidence for a 'subject' category in this sense as distinct from non-'subjects'; in other words, they simply provide evidence for an 'argument' (or perhaps 'core argument') category. Does equi, then, once again represent syntactically and semantically free deletion of arguments irrespective of GRs is this sense? The following data indicate that this is not the case:

(67) ʔa hanem da:qaʔ
1SG-ACT kick want
'I want to kick (someone)'
'*I want to get kicked (by someone)'

(68) ?a hanemqa? da:qa?
1SG-ACT kick-CAUS want
'I want to get kicked' (or 'I want to make (someone) kick (someone)')

(67) shows that the matrix argument can't target or control the Undergoer of an embedded transitive verb (i.e., only the embedded Actor may be targeted). (68) shows that, if we wish to express coreference of matrix argument and embedded transitive Undergoer, the causative suffix must be used on the embedded verb in what Oswalt (1977) has called its reference-switching function. In other words, the causative indicates that the matrix and embedded Actors are disreferential—hence, the matrix Actor cannot control the embedded Actor as would normally be the case in the equi structure. While this function of the causative may appear to represent promotion to 'pivot' status in a manner indicative of a more reference-dominated language, this is not actually the case. All the embedded causative actually signals here is that matrix and embedded Actor are disreferential; hence, the interpretation of the matrix Actor controlling a coreferential embedded Undergoer is merely one of many possible interpretations consistent with the stricter translation indicated in parentheses under (68).

The parallelism between the embedded causative and the switch reference DR markers -li, -phila, and -(w)em has led Oswalt (1977) to add the causative to the inventory of Kashaya Pomo markers of switch reference. Further examples are given below:
In fact, it is possible to get roughly synonymous versions of (70) using switch reference markers instead of -qa:

(72) diyaduli ʔa tubiʔ
tell-DR 1SG-ACT get.up
'(He) told me to get up'

(73) Dave cóhtoʔ Bun diyaduli
D. leave B. tell-DR
'Dave left because Bun told him to'

However, the embedded causative differs from the other switch reference markers in a crucial respect not noted by Oswalt. Recall that the switch reference markers are indeterminately Actor- or 'subject'-sensitive due to the apparently free variation exhibited in (48-9). Thus, among other things, in a case where an Undergoer-taking intransitive is embedded under an Actor-taking intransitive, either the CoR or DR marker could be used if the two arguments are coreferential. Embedded -qa, on the other hand, while otherwise corresponding to the DR switch reference markers, cannot be used in such a case:
In other words, the embedded causative does clearly group intransitive Actors and Undergoers with transitive Actors in a single 'subject' category—'subject', that is, in Dixon's (1979) semantic sense—in opposition to transitive Undergoers. In addition, the equi structure discussed above differentiates the experiencer Undergoer of a double-Undergoer transitive from the stimulus Undergoer:

(75) [to [duyaqa:du] daw]
1SG-UND remember want
'I want to remember'/*I want to be remembered by you'14

The reference-switching embedded causative, then, shows that there is an internally valid covert distinction in Kashaya between what we might call 'object' and 'subject' Undergoers, and that what we might call 'subject' Undergoers are treated like Actors.

With a bit of digging, then, we have found evidence of the sort of semantic (Macro)role neutralization that might be associated with a 'subject' category. Apart from specific definitions of subjecthood (i.e., irrespective of whether any particular individual or theory defines 'subject' in this way), we might acknowledge that the rules of equi and reference-switching causativization require reference to 'subject' simply by virtue of the fact that we must have some sort of Macrorole-independent entity to refer to in the structural descriptions of these rules. We can't, in other words, say that equi targets an

14'I want to be remembered (by someone)' would be ruled out given that this form of the verb may only be predicated of first- and second-person arguments.

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embedded Actor (or, for that matter, an embedded topic in any meaningful or falsifiable sense); 'subject', then, simply presents itself as a convenient label for the particular neutralization of semantic roles represented by the target of this process.

We have, in fact, already encountered this kind of claim in connection with Perlmutter's claims about the facts of Acehnese necessitating reference to GRs--to which I objected that the facts of Acehnese simply seem to point to the necessity of invoking some sort of semantic role hierarchy. Note in connection with Kashaya, too, that the facts under discussion point to the necessity of invoking a hierarchy 'Actor>Undergoer'. In equi, for example, the target must be coreferential with the controller, and it must be the highest argument in terms of the Actor>Undergoer hierarchy. The facts under discussion, in other words, simply point to a level of generalization or semantic-role neutralization beyond the level of Actor and Undergoer (which in turn represents rougher semantic 'granularity' in Croft's terms than that represented on the level of agent, patient, experiencer, etc., which in its own turn represents a neutralization of participant roles or verb-specific participant semantics). Van Oosten's term 'Primary' is, it seems to me, more satisfactory and more accurate a term for such an entity than 'subject', given that the former term fails to imply the kind of discourse-based role manipulation often entailed by the latter. Isomorphism with semantic categories at some level of generality or specificity, as I have repeatedly argued, obviates identification of a separate syntactic level of GRs in much the same way that Foley and Van Valin argue reference to syntactic pivots to be obviated by isomorphism to semantic categories.

There is, it must be admitted, one significant problem with characterizing the
behavior of syntactic processes in Kashaya with reference to an Actor>Undergoer hierarchy. Recall that equi differentiates experiencer from stimulus Undergoers in the case of double-Undergoer verbs. Switch reference, too, treats the two identically-marked arguments differently:

(76) duyaqanba čohto?
    remember-CoR leave
    '(I) remembered and left'/*I left after being remembered (by you)'

Coreference of matrix Actor and embedded Undergoer-marked stimulus (i.e., the 'remembereee') is not sufficient to license the CoR marker, although that marker may be used when the embedded experiencer Undergoer (the 'rememberer') is coreferential with the matrix Actor. Thus, the two identically-coded Undergoer arguments are distinguished syntactically—one is categorized with other verbs' transitive Undergoers by case marking but not by other tests. It is interesting to note in this connection that Van Valin (1990) claims the identification of one of the arguments of a transitive verb as Actor and the other as Undergoer to be a universal, independent of the logical structure of the specific transitive verb involved (Van Valin 1990:227). The evidence of Kashaya, then, is that this differentiation is valid by behavioral tests independent of the evidence of case marking.

The experiencer, being higher on the 'Actor' hierarchy than the theme (i.e., stimulus), is accurately predicted to be chosen as Actor, with the theme predicted to be selected as Undergoer (cf. Chapter 3)).

We have seen, then, that there is indeed evidence independent of switch reference marking for the syntactic neutralization of the Actor-Undergoer distinction in intransitive
verbs. Given this, it might not surprise us if the behavior of the switch reference system does indeed point to the same kind of neutralization. However, the evidence of switch reference is not so simple as that of equi and embedded causativization, since the former system, as we have seen, actually exhibits positive evidence (in addition to counterevidence) for Actor- as opposed to 'subject'-sensitivity. A question raised before, yet to be answered, is whether the reference-independent alternation of switch reference markers in an appropriate sequence of clauses is simply a matter of free variation.

On the one hand, it is to some extent reasonable to conjecture that the kind of alternation at issue may represent an erosion of the syntactic relevance of the semantically-based active-stative case system, since by most accounts (Foley and Van Valin 1984, Dixon 1979, Langacker 1991) it would be highly marked for these categories to play a central role in any language's syntax. As Dixon has claimed, '[N]o language carries this distinction between [intransitive Actor and Undergoer] into its shallow syntax. All types of language treat S NP's of all kinds in the same way for operations of coordination, subordination and the like' (Dixon 1979:107).

While Dixon's claim is contradicted by the fact that Kashaya routinely does distinguish between intransitive Actors and Undergoers in its switch reference system by using a DR marker when linking a sequence of coreferential intransitive Actor and Undergoer, the fact remains that the (morphological) Actor-Undergoer distinction is ignored whenever CoR markers are used in those same sequences. As mentioned already, Foley and Van Valin claim that 'most switch-reference systems monitor exactly this notion of semantic pivot' (Foley and Van Valin 1984:117). There does appear to be an
overwhelming amount of evidence, then, for the syntactic conflation of S and A even in languages that distinguish intransitive Actors and Undergoers (i.e., different kinds of S) morphologically.

There is some evidence, on the other hand, that the reference-independent variation of CoR and DR markers in relevant sequences is not absolutely or necessarily 'free' in the sense of being completely independent of semantic implications. While pairs such as those indicated in (48-9) are routinely judged to mean 'the same thing', certain differences do sometimes emerge. Most consistently, CoR marking is associated with 'reason' clauses, as follows:

(77) malaya? bahcéba
    slip       jump-CoR
    'I slipped because I jumped'

CoR marking is often used when, in the words of the consultant, 'you're explaining how it happened'—typically in response to a question that presupposes the occurrence of the explained event:

(78) A: he?en Ta mu Taba:du
    how   3MSG-ACT get.hurt
    'How did he get hurt?'
B: čelićba
  trip-CoR
  'He fell'

It seems that such 'reason' clauses are preferably postposed, as in (80). A DR marker on such a postposed clause is almost invariably given a disreferential reading only, cf.:

(79) čohto ?iphe hiT'a:li
In these cases, it is difficult to attribute the ‘motivating’ semantics to the switch reference marker alone. At the same time, the semantic effect is not entirely dependent on the final position of the embedded (switch reference-marked) clause. The consultant repeatedly and consistently differentiated the following by pointing out that the first, but not the second, might naturally be provided as an explanation of how somebody died:

(80)a. č'elič'ba čhoyi?
   trip-CoR die
   'He fell down and died'

b. č'eili čhoyi?
   DR
   'He fell down and died'

It is important to note, though, that the CoR suffix can't be characterized as featuring a motivating semantics independent of reference. In other words, the CoR-marked example in (80) could never be used to mean, say, 'I died because he fell down'. The motivating or causative semantics may therefore be analyzed as exploitable by speakers in only an extremely restricted set of cases, where, as Langdon and Munro have expressed it, 'the choice of one or the other [marker] cannot be based on purely grammatical grounds' (Langdon and Munro 1979:340)\textsuperscript{15}. It is in fact questionable whether

\footnotesize

\textsuperscript{15}Langdon and Munro note that the type of phenomenon described here—which they attribute to speaker 'confusion' about whether to categorize a given nominal as 'subject' when normally overlapping criteria fail to coincide—is extremely common among Yuman languages and well attested among other Amerindian languages. Their conclusion is that it is questionably feasible to offer 'purely grammatical or purely semantic
we should attribute the semantic difference discussed here to the switch reference markers themselves, or whether it may not actually be more reasonable to attribute distinctions such as that made between pairs such as (80) to the widespread tendency for language learners and adult speakers to assume or to seek semantic differences wherever any formal differences exist (cf. Bréal 1964 [1897]), with the specific differences often following from independently-established associations with component elements of the theoretically synonymous pairs. With this in mind, it is interesting that there is an independent association of Actor marking and motivating semantics, in the following respect. If a normally Undergoer-taking verb is predicated of an argument as an explanation for a resulting state or event, the argument will most typically take Actor coding:

(81) A: he?en Ta mu T'aba:du
     how 3MSG-ACT get.hurt
     'How did he get hurt?'

characterizations of "subject" in such languages' (321)—which, of course, presupposes that the rules of switch reference in these languages must be described as sensitive to a 'subject' category. Other kinds of clause sequence for which speakers of Yuman languages often exhibit 'confusion' in their choice of switch reference marker include ones involving weather predicates. This is true also for Kashaya, cf.:

ihčé dibučba ?ihyu siTe
rain rain-CoR snow snow
'It rained and then it snowed' (lit. 'The rain rained and the snow snowed')

This sequence of clauses is also perfectly acceptable with the DR marker -li, with no obvious change in meaning. Only a DR marker may be used, however, when a 'weather' clause is joined to a clause with a non-weather 'subject', whether Actor or Undergoer:

?ihyu duhtal ihčé dibuli/*ba
bones ache rain rain-DR/*CoR
'My bones ached because it rained'
This indicates that CoR marking is used in a subset of cases exactly parallel to a subset of
those in which Actor marking is used in self-standing clauses in a certain discourse
context, suggesting that an explanation for differences articulated between roughly
synonymous pairs such as those in (44-6) may derive from a full understanding of the
parameters involved in the textual manipulation of the case marking of nominals. At the
same time, it must be noted that this sort of semantic/pragmatic association with the
switch reference markers in this subset of cases cannot be tied straightforwardly to the
manipulation of the case of the nominal, given data such as the following:

(82a) Daveto moli ē'eli
    D.-UND run-DR trip
    'Dave ran and fell'

b. Daveto monba ē'eli
    D.-UND run-CoR trip
    'Dave ran and fell'

(82b), explained as being more appropriate than (82a) as a response to a question such as
'How did he fall?', features not only the expected CoR suffix on the embedded verb but
also an Undergoer-marked argument\(^{16}\). Also, as explained above, \textit{malayaʔ} in (77) would

\(^{16}\)It should be noted that I presented the consultant with these examples for his
grammaticality judgments and translations. In other words, it is by no means necessarily
the case that (86) would be the most natural way to respond to the question. However, it
is significant that the CoR marker is not dependent on manipulation of the case of the
normally Undergoer-marked argument.

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not normally be given the translation 'slip' with an Actor-marked argument, and 
duvaqa;du in (76) is a non-fluid-S, invariably Undergoer-taking verb.

All in all, it seems that the best analysis of the Kashaya switch reference system is
in terms of Actor-tracking, given that it is precisely in cases lacking a sequence of Actors
that problems for this analysis arise. In such cases, the category to which the system is
sensitive optionally expands to highest-ranking macrorole, semantic 'subject', or Primary-
—for which, as we have seen, there is a certain amount of independent evidence in the
language. At the same time, this 'optional' expansion is by no means necessarily free of
semantic or pragmatic implications—which we may attribute to independent correlates of
the Actor/Undergoer opposition or, perhaps (although I have not explored this option
here), to inferences from the primarily-coded Actor switch or retention. It may in fact be
due to the tendency for switch or retention of core participants in systems of this type to
correlate with other semantic parameters (e.g., causation or motivation and subject-
to be so labile.¹⁷

¹⁷Note, by the way, that the Kashaya association between CoR and motivating or
causal semantics may be somewhat anomalous from a cross-linguistic perspective and in
terms of evidence internal to the language, given the independent reference-switching
function of the Kashaya causative. It may therefore be unlikely that this particular
ancillary association would ever be reanalyzed as primary or criterial. It should also be
noted that the Pomo family offers prima facie evidence of the lability of switch reference
or switch reference-like systems given the fact that analysts of Northern, Central, Eastern
and Kashaya Pomo have offered substantively different analyses of the systems in those
four closely related languages. Clearly, an integration of the evidence presented by these
different languages into a reconstruction of the hypothetical proto-system is required.
6 Conclusion

We return, then, to the question posed above: To what extent, or in what sense, would it be valid to say that GRs are instantiated in Kashaya? In case marking and agreement (to the extent that the latter exists), the most obviously relevant categories are semantically-based ones of Actor and Undergoer, maintained even in cases (involving intransitive verbs) where the distinction is unmotivated by the 'functional' principle of participant-role mapping. In syntax, there is a certain amount of evidence for sensitivity to categories that deviate from those overtly coded in the case marking, in two ways. First, some processes (equi, embedded causativization, and switch reference in restricted environments) display evidence for sensitivity to a more general category of 'highest-ranking argument' in a manner that results in a grouping of S and A to the exclusion of O (i.e., Dixon's universal semantic 'subject' category). Second, these syntactic processes do differentiate between the morphologically identical arguments of a double-Undergoer verb. Neither kind of evidence, however, points to a category that would fail to be describable in semantic terms. Essentially, in other words, these processes simply point to some sort of semantic hierarchy or semantic categorization above or below the level of Macrorole. Thus, there is no evidence in the syntax of Kashaya for the necessity of invoking entities that deviate from isomorphism with semantic categories in a manner I have argued would justify the identification of GRs.

On the other hand—and, in a way, somewhat ironically—there is evidence for such entities in the case marking system. As described above, while the Actor-Undergoer distinction may be characterized largely in terms of semantic parameters of volitionality

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and aspect, it is nevertheless true that a subset of instances involving manipulation of
Undergoer case marking may be understood in terms of discourse perspective—including
what O'Connor has characterized as a distant 'reportorial' point of view, with no necessary
implications regarding the volitionality of the participant or the aspectual structure of the
predicate. In this way, the active-stative distinction extends into a relatively subjective
realm reminiscent of the textual function of subjectivization (in Fillmore's terms,
'secondary topicalization') in languages like English. Further parallelism may be found in
the fact that, in English, a system of case marking, historically used primarily for
relatively transparent semantic coding, has come to subsume discourse-pragmatic
functions formerly coded by entirely different means (word order).18 Perhaps, then, some
might find suggestions of an emergent 'subject' category in the Kashaya Active case—and,
as mentioned above, a model such as RelG would attribute discourse-pragmatic
manipulation of active-stative case marking in a language like Kashaya to manipulation
of an argument's 'subject' status at some level of derivation.

However, note how little this category corresponds to 'subject' categories
representing a conflation of agent and topic properties (as the English subject category
has been argued to do). It is obvious, for example, that it would be difficult to reconcile
the Kashaya Actor case with notions of topicality or topicworthiness: in particular, the

18I am not, of course, saying that word order is not associated with discourse-pragmatic
functions in Modern English; however, there is a stronger association between the
descendant of nominative case marking and pivot status (mediated by the intraclausal
process of passivization) in interclausal syntax than was the case in Old English. Another
way of putting this would be to say that nominative (in the pronoun paradigm) and topic
coincide more regularly in Modern than in Old English.
"reportorial" point of view—argued to motivate the over-riding of Undergoer case marking in Pomo in general—is preferred with participants relatively low on the empathy hierarchy over participants relatively high on the hierarchy (third person over first or second person, e.g.), and certain Kashaya obligatorily Undergoer-taking verbs may be predicated only of first- or second-person arguments.

Even though, then, the Actor case extends to the kind of conflation of semantic and discourse-pragmatic parameters that I have argued might justify the invocation of a 'subject' category or GRs in general, it is obvious that the Kashaya subject characterized in this way would bear little resemblance to the subject of a language like English. We arrive, then, at the following dilemma: Either we characterize the Kashaya subject as a semantic category (in which case it is otiose and, as explained above, bears little resemblance to what is called the subject of a reference-dominated language like English) or we characterize the Kashaya subject as a category involving the neutralization of semantic distinctions due to discourse-pragmatic factors (in which case it may not be otiose, but nevertheless has none of the characteristics, semantically, formally, or discourse-pragmatically, of subject as a 'privileged' or 'central' nominal). The facts of Kashaya, then, clearly present difficulties for any conception of the universality of GRs.

As noted above, even though the Kashaya morphological Actor and Undergoer categories diverge in various ways from the transitivity-based semantics argued to underlie them, they fail to exhibit a salient characteristic of the Modern English reference-oriented subject category. This characteristic, which in the transformational-generative tradition has been taken to represent perhaps the clearest departure of 'syntactic'
categories of 'subject' and 'object' from a semantics-based definition, is the manipulation of relational status for the purpose of reference-oriented passivization and for the 'feeding' of passivization by 'raising' operations. Even if Kashaya is taken to be somewhat atypical in its partial maintenance, in syntactic operations, of an Actor/Undergoer distinction within the intransitive argument class, it is Modern English which would represent an atypical language in the degree to which argument status is manipulated for the purpose of functioning as syntactic pivot. Beginning with Chapter 5, we shall see how Old English represents a status intermediate between the extremes of Kashaya Pomo and Modern English in its position along the role-reference continuum.
Chapter 5: Old English as a 'transparent' language: The interaction of morphological case with grammatical relations and with semantics

1 Introduction

With this chapter, we introduce a multi-chapter investigation of the morphology and syntax of Old English, and of the evidence for the instantiation of GRs within that language. We begin here with an analysis of the simplest exponent of a language's 'transparency' in Plank's (1983) sense, namely its case morphology. I will argue in this chapter that the OE case system does indeed represent a high degree of transparency relative to its ModE descendant, even though there are—just as in Kashaya—varying degrees of transparency, or markedness, associated with different cases in the system. I will also begin to develop the argument, to be further developed in subsequent chapters, that the relative transparency of Old English is matched by a relative resistance to the sort of information-structure-motivated manipulation of case status corresponding to the language-internal instantiation of GRs according to our theory-neutral view.

1.1 Traditional views of case marking in Old English and cross-linguistically

In the substantial literature pertaining to the topic of OE case marking, analysts have taken positions ranging from a belief in a one-to-one mapping of 'surface' case to semantics to a belief that the various case categories are moribund reflexes of semantic distinctions possibly once, but certainly no longer, of any psychological validity in the language. This opposition matches a general difference of predilection towards a view of morphology (or, at least, well-articulated morphological systems) as 'transparently'
reflective of conceptually significant categories (Plank 1983), or towards a view of morphology as superficial flotsam bearing but little relationship to any important (read: 'syntactic') categories of current validity in the language (Anderson 1976). As I have already indicated in the chapter on active-stative systems, this opposition is false. Even well-articulated case systems fail to instantiate a perfectly iconic (or privative, or bi-unique) mapping to conceptual categories; at the same time, this fails to mean that such a system is purely 'formal' or conventionalized as opposed to semantically contentful.

Analyses following the tradition of identifying 'covert' case categories at variance with ones marked overtly (Fillmore 1968, Anderson 1971; for the term 'covert category', cf. Whorf 1956) have often drawn a distinction between 'deep' and 'surface' case. The integration of this distinction into a formalist transformational-generative tradition has expressed itself as an opposition between case assigned at D-structure along with a theta-role ('oblique' or 'inherent' case) and case assigned at S-structure independently of a theta-role ('structural' case). 'Oblique' or 'inherent' case, while assumed to correspond to some semantic content, is typically left unspecified as to the details of this content. In the model, after all, the specific content is unimportant; all that is important is that some formal mechanism exist to differentiate one kind of case from the other, both in order to capture the traditional dichotomy between 'grammatical' and 'concrete' case (Kurylowicz 1964), and in order to account for such empirical effects as 'promotable' vs. 'unpromotable' arguments under passivization, or for the distinction between those arguments which may have their case marking altered by syntactic processes versus those which may not.
In this formalist application of a long-standing distinction, we once again encounter the perpetuation of a false dichotomy. Just as individual languages may be arranged along a continuum between 'transparent' and 'opaque' (Plank), or between 'role-dominated' and 'reference-dominated' (Foley and Van Valin 1984) with respect to their morphology and syntax, so may individual cases be arranged along a continuum of 'semantic contentfulness'. Also, if, say, all dative marking is characterized simply as 'inherent' or (to use more traditional terminology (Kurylowicz 1964)) 'concrete', as opposed to 'structural' ('grammatical'), then how are we to explain the fact that different dative arguments in Old English have different diachronic fates—with some becoming 'structural' arguments (either 'subject' or 'direct object') and others becoming obliques (prepositional objects)?

It is partly this last issue that motivates the sort of distinction between 'structural' and 'functional' categories embodied in Lexical-Functional Grammar. According to the perspective supplied by this model, some OE non-subjects become (overtly—morphologically or 'structurally') reanalyzed as 'subjects' because they are already subjects, while others are reanalyzed as objects or functional obliques because they already have these functions as well. Of course, this begs the question of the reason or motivation behind this distinction at an earlier stage of the language (or why, at a further remove, some arguments are [+restricted] while others are [-restricted], and why some arguments are [+objective] while others are [-objective]).

In the LFG analysis reported on below, Allen (1995) does relate functional-relational categories to semantic factors, but certain features of her adopted formal model
are thereby called into question. One is the very assumption of relational categories (or
the arbitrary features underlying them) as primitives. In addition, given the LFG view of
functional-relational categories themselves as immutable universals, and of any category
in the inventory as simply linked or not to a given argument, any inconsistent response of
a given nominal to different 'tests' of subjecthood would be inexplicable. Given that
different 'subject' properties fail to accrue simultaneously to a given argument of a given
predicate (Keenan 1976, Butler 1977), the facts call into question certain fundamental
assumptions of the model itself. When we add to this the fact that the sort of
differentiation that LFG permits between 'surface' (morphological) and 'deep' (functional)
case is equally formable in a RRG model which lacks the flawed assumptions of LFG,
we see that there are no good reasons to adhere to the latter model or the view of
grammatical relations it incorporates.

A moment ago, I mentioned in a disfavorable light the structuralist-based
formalist conception of case categories as deriving their significance by virtue of standing
in opposition to other markers in the system, and I indicated that the view taken here
would be that case markers have inherent significance along a continuum of 'semantic
contentfulness'. This should now be clarified and qualified. First, while any strict
adherence to a structuralist perspective outside of the realm of phonology is

This view is just as problematic as the somewhat more traditional one (Jespersen and (in
a more recent adaptation) Lightfoot) that the mapping of 'nonsubjects' onto 'subjects'
proceeds diachronically by reanalysis due to ambiguity—a view which presupposes that it
is truly sensible to talk of 'subject' as having the very same meaning in Old English as it
has in Modern English.

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unsupportable, it nevertheless remains true that any closed system of grammaticalized markers—a case system, for example—embodies a tension between meaning inherently associated with each marker and meaning derived by virtue of the other markers with which each marker stands in opposition. The truth of this is so obvious as to be virtually axiomatic; after all, to hold otherwise would be to claim that the number of markers in a closed system—whether a case system consists of two or ten different categories—fails to bear on the range of meaning each marker bears. At the same time, an extreme commitment to the structuralist perspective requires a belief in such patent implausibilities as that it is pure coincidence which semantic domains tend to be differentiated casually, rendering investigations such as Fried's (1995) or Anderson's (1971) invalid a priori. (In this respect, structuralist analyses even in the domain of phonology are rarely 'pure'; consider Martinet's (1953) invocation of physical constraints—the compression of the rear end of the vowel triangle—to buttress his 'drag-chain' analysis of the Hauteville vowel system.)

Second, there is admittedly a risk of vagueness in the claim for case categories as being organized along a continuum of 'semantic contentfulness'. Given that any language's case system, no matter how rich, has the task of coding an infinite semantic domain with finite means, can we really claim that any one case corresponds to more distinctions than another?

In fact, given a schema-based approach such as that developed in Fried (1995), we can. Assuming that all languages instantiate some kind of formal reflection of a differentiation between a transitivity-oriented and spatially-oriented conceptualization of
events, we may identify a given case as semantically diffuse if it is used as the typical marker for participants in more than one of these basic event-types. For example, in Old English the nominative case is used to code the agent-based Actor in the transitive event-type as well as the theme (trajector) in the motion or location event-type. Nominative is therefore identifiable as semantically diffuse not simply in that the 'agent' category is itself quite broad, but in that it is used to code at least two distinct participant-types across two distinct schemas.

The schema-based approach also allows us to view differences among languages, or changes from one historical stage of a language to another, in terms of the relative dominance of the two different most basic schemas (Transitivity and Motion) in the case-marking system. For example, a given language may feature cases that correspond relatively straightforwardly to the spatial schema(s), or it may not. If one were to characterize in general terms the difference between Old English and Modern English in this respect, one would say that in Old English there is a larger number of non-central schemas—in particular, 'experiencer' and 'befalling' schemas—that draw on distinct motion-schema-based cases for their formal expression. In Modern English, on the other hand, reflexes or lexical replacements of those 'experiencer' or 'befalling' predicates tend to feature argument arrays that are formally and behaviorally indistinguishable from those associated with the Transitivity schema. The motion-oriented conceptualization formerly instantiated in distinct (non-transitive) case marking is not, of course, lost from the language, and it may be taken as axiomatic that all languages will have some distinct and explicit means—that is, some means formally distinguishable from that used for coding
transitive semantics—for coding spatial semantics. In Modern English, this explicit means takes the form of prepositional coding, which continues a mechanism already available in Old English. However, many predicates that in Old English availed themselves of a motion- or location-schema-based coding for their arguments in what one would characterize as a basic or typical valence do so in Modern English only in a marked valence deviating from that which would most plausibly be identified as the 'normal' one. In this respect, too, the domain of transitivity has expanded.

One frequent traditional error made in the analysis of case systems is the assumption that, given a certain tendency (most clearly expressed in Modern English) for a formal transitive pattern (including even intransitive coding, if we are to view the intransitive argument in terms of the dominant argument in the transitive pattern) to achieve the sort of dominance alluded to here, the transitive cases (nominative and accusative, or subject and direct object) are to be viewed as 'syntactic' rather than 'semantic'. This essentially reduces to a claim that transitivity is a purely formal phenomenon.

In fact, this is not true even for a language such as Modern English in which the range of the transitive pattern is so broad that one must accept a certain attenuation of the semantic basis of the pattern and the cases participating therein. And it is even less true for languages such as Old English. In Modern English, the transitive pattern is semantically underspecified in two ways. One, as just explained, a relatively broad array of semantic schemas corresponds to formally transitive expression in Modern English compared to Old English. In addition, in Modern English, the transitive pattern represents
a greater degree of neutralization of role- and reference-related factors than in Old English. In other words, given a reduced reliance on distinct formal mechanisms (most importantly, position and case marking) for coding reference- or topicality-related meaning and role-related meaning, the category referred to as 'nominative' or 'subject' in Modern English does instantiate a certain degree of neutralization of role-related meaning relative to the OE nominative; an analogous claim for the accusative and secondary topic is valid as well. (In fact, the view of a cross-linguistic 'subject' category as a neutralization of 'agent' and 'topic' (Comrie 1989) is based on this sort of observation.) However, as a considerable body of evidence has convincingly demonstrated (Borkin 1973, Hopper and Thompson 1980, Rice 1987), role-related factors continue to restrict the manipulation of case marking (subject or object status) for purposes of information structure manipulation. These restrictions are only explicable with reference to a semantically contentful transitive prototype to which the formal transitive pattern continues to relate, despite the fact that the pattern has broadened its domain considerably relative to Old English.

In Old English, there are clearly greater restrictions than in Modern English on information-structure-influenced manipulation of case role. When we add this to the fact that the transitive-oriented cases—nominative and accusative—are less clearly dominant in Old English than in Modern English relative to spatially-oriented 'oblique' cases, it is apparent that the OE transitive pattern and the cases participating therein are even less accurately dismissed as merely 'syntactic' or 'grammatical' than in Modern English.

In the investigation of the OE case system presented in this chapter, both
transitive semantics and non-transitive, spatially-oriented semantics will be analyzed as underlying the array of cases found in the language. A reliance on the insights of Fried (1995), as well as earlier analyses such as Anderson (1971), will serve to counterbalance the overly transitivity-biased (and overly arbitrary) approach of Van Valin (1991) to the approach of 'quirky' case in languages such as Icelandic. At the same time, I will resist the tendency (relatively tentative in Fried, but quite enthusiastic in Anderson) to view all case marking as underpinned by spatial semantics to the exclusion of transitive semantics.

In this investigation, I will take care to avoid two shoals upon which evaluations of the semantic significance of formal markers, including case systems or more particularly of OE 'quirky' case, typically founder. One is the assumption that if a case such as the OE dative is semantically significant, it must be so in one simple, highly restricted manner: say, that all uses of the dative must share some common feature which, then, would be identified as the meaning of the dative in all uses. Such an approach ignores at least two important factors: one, that the OE dative has multiple diachronic sources, and two, that even categories which have a single diachronic source (say, a given language's 'middle' marker) may be semantically complex enough that no single common denominator may be identified for them except, as it were, by triangulation to a common semantic core (cf., e.g., Kemmer 1988).

Much work from disparate theoretical perspectives--e.g., Fried (1995) and Allen (1995)--has pointed to the importance of viewing case marking in a syntagmatic and paradigmatic context, rather than in isolation. In other words, if a nominal has a given case marking, we must ask ourselves not simply what meaning this case marking is
associated with in other valences or uses, but also what cases the nominal is
syntagmatically opposed to in this valence and what semantic difference would be
entailed by the use of a different case in the same context. To this we should add the
importance of the structural/typological context of the oppositions instantiated in the
language's case system as a whole—what its alignment typology is, and what specific
functional primes are relevant to the formal distinctions within this system, which
categories within the system are marked and which unmarked, etc². Thus, dative (like any
other case, including nominative) is not so meaningfully defined in isolation, but valence-
specifically: dative may have different meanings when paradigmatically opposed to a
nominative in an intransitive valence and when opposed to accusative in a transitive
valence.

The second faulty assumption is that the attribution of a given semantic
characterization to the dative must be falsifiable in a very restricted way: namely, that we
always be able to say, given a certain rough semantics, precisely which case-form will be
selected by the verb, and that a given case-form always point us unambiguously to a given
semantics associated with one form but not the others. The actual facts of the OE case
system are, however, less simple, less privative, and less bi-unique: each form is
associated with a range of functions and a given function may be select more than one
case.

²

To take one example already discussed, the meaning of both of the primary cases in an
active-stative system will depend at least on the relevance of an agency-oriented or an
aspectually-oriented semantic parameter in the opposition, as well as of the semantically
marked or unmarked nature of each of the categories.
2. 'Subject' as an invariant category: Allen (1995)

In this section, I begin a discussion of the OE case system with a summary and criticism of Allen's (1995) analysis of OE case marking and case marking patterns. One of Allen's main points is that, despite claims for the 'transparency' of OE morphology in coding grammatical relations, late Old English already displayed a neutralization of morphological case distinctions in a 'subject' category which corresponded not just to nominative-marked arguments but to dative-marked experiencers as well. Any OE case assignment rules and subject-selection rules must therefore diverge, a fact which is handled perfectly adequately by the Lexical-Functional Grammar model she adopts.

Given the fact that Allen is probably better informed of the facts of Old English than just about any other theoretically-oriented syntactician, any opinion of hers, and any study, is worth heeding. In the present study, she provides an invaluable, exhaustive inventory of a theoretically and descriptively important subset of OE 'quirky' case patterns. She also provides important new information about the syntactic behavior of some non-nominative arguments, specifically the ability of dative experiencers to function as pivot in one syntactic construction (coordinate subject deletion (CSD)) which otherwise centers on nominatives. Also, she presents a persuasive argument that OE word-order rules cannot be reduced to factors of weight, animacy, and topicality to the

This sort of adequacy is not unique to LFG. Van Valin (1991) handles analogous patterns in Icelandic with his RRG model, and I will show below how the kinds of OE facts discussed here might be handled in RRG. RelG, of course, could quite easily handle this kind of divergence by reference to relational status at different 'strata'.

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exclusion of other factors arguably at least correlating with some conception of grammatical relations. These arguments, and the data adduced in support of them, serve to caution against overly simplistic claims that OE syntactic processes neatly distinguish factors of role (agency, etc.) from those of reference (topicality, etc.). Finally, she offers insight into semantic factors which are associated with non-nominative arguments which, at least in late Old English, show some tendency to map onto this subject category, and she thereby provides insight into the semantic underpinnings of the emerging English subject category.

These last insights, however, are shunted off-center by the adoption of an LFG model which views subjecthood, along with the other grammatical functions, as primitives. Her analysis, then, suffers from a certain reluctance to come to terms with one of her central objects of study, namely grammatical relations. This shows itself in a telling indecisiveness: on the one hand, disclaiming any particular position on the nature of grammatical relations and frequently treating them as if they were unanalyzable primitives, while on the other hand making repeated reference to semantic or functional correlates of these supposedly primitive constructs.

In the LFG model, the specification of, say, dative case for arguments which might otherwise be expected to be nominative or accusative (i.e. the specification of 'inherent' as opposed to 'structural' case) is handled by an idiosyncratic lexical marking.

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This is technically untrue, since LFG currently decomposes grammatical functions into primitives of [restricted] and [objective]; these latter, however, are purely formal constructs lacking any semantic grounding.
Mapping of arguments onto grammatical functions is handled separately by manipulation of [restricted, objective] feature-values such that each argument is associated with the appropriate function as suggested by behavioral tests. The features themselves, however, are not 'functional' or 'semantic', and there is no allowance made for, or mechanism provided for the expression of, functional correlates of grammatical relations. In brief, the model is a satisfactory one for languages such as Icelandic and Old English because it allows for a dissociation of morphological case from grammatical functions (allowing for an unproblematic treatment of noncanonical mappings), and thus overcomes what Allen identifies as the traditional misconception of 'the assumption of an extremely close relationship between case marking and grammatical relations' (3).

What the model fails to provide, however, is any natural way to explain case marking in terms of anything but idiosyncratic stipulation, or 'subject' properties in terms of anything but arbitrary variables. One of the tasks of this section, then, is to bring the implied semantic insights into the forefront, in particular to identify the semantic characteristics of dative experiencer arguments which contributed to their reanalysis as subjects; this will prepare the way for an integration of the facts Allen presents into a semantically-oriented analysis of English case and relational categories.

This section will be organized as follows. First, I present an overview of the 'quirky' OE case-marking patterns deviating from 'normal' nominative-accusative transitive and nominative intransitive patterns, along with synopses of Fischer & van der
Leek's (1983) and Allen's inventories of the subset of these valences associated with 'experiencer' semantics. Next, I summarize Allen's reasons for viewing some of these patterns as including arguments which deviate from the typical morphological case expressions of subject and object functions (nominative and accusative respectively) but which nevertheless display behavioral evidence of being associated with these functions.

All of this will set the stage for an integrated, semantically-oriented analysis of case marking and grammatical functions in Old English, and a description of the semantic factors of relevance to the reanalysis of certain arguments from nominatives to subjects in Middle English; this will include a semantically-based explanation of the overall typological shift from the relatively 'transparent' morphological pattern of Old English to the 'opaque' ModE type.

2.1 The OE 'quirky' case-marking patterns

In any language in which the typical case-marking on an intransitive argument is the same as that which is typical for the argument of a transitive agent, the label used for this case category is nominative; the category at least typically associated with transitive patients is conventionally called accusative. Given this predominant morphological alignment, the 'normal' case marking for an OE transitive verb is nominative-accusative, and that for an intransitive verb is nominative.

In addition to the nominative case-marking pattern for intransitives, we find a class of verbs which subcategorize for a single dative or accusative 'experiencer' argument, e.g.: *hyngrian* 'feel hunger', *byrstan* 'feel thirst', *calan* 'feel cold', *mistidan* 'fail',...
mistimian 'do amiss', mislimpan 'suffer misfortune', (mis)spowan 'turn out well (badly) (for someone)', misweordan 'turn out badly (for someone)', eglian 'ail', maetan 'dream'.

These form a coherent semantic subset of the general intransitive class in featuring typically affected, nonvolitional human participants; their resemblance to the Kashaya predicates which fail to code any Actor argument (e.g., t'onu 'get tired', sinam? 'drown', qa?adi:du 'dream') is obvious.

Beside the 'normal' nominative-accusative formal transitive pattern, which Allen acknowledges 'was always used with verbs inherently high in transitivity (called primary transitive verbs by Andrews (1985))' (25), a sizeable number of OE verbs deviating by various semantic criteria from prototypical transitivity also deviate from the 'normal' morphological pattern. Among 'quirky' two-place predicates, we have, arguably, two large subgroups. One includes verbs subcategorizing for one nominative-marked argument and a second non-accusative argument whose subsequent fate is to become 'reanalyzed' as an ordinary object or prepositional object. Examples include helpan 'help', hieran 'obey', and andwyrdan 'answer', all potentially dative-taking.

The other 'quirky' transitive subgroup includes those verbs frequently referred to (along with the dative- and accusative-taking intransitives described above) as 'impersonal', in that they lack any nominative argument or at least have been argued to do

Many of these could also appear in a transitive valence, sometimes with causative semantics.

In many cases, these predicates already optionally featured 'normal' transitive valences in Old English.

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so in their typical valence. With these verbs, an 'experiencer' of some sort is coded with the dative or accusative case, and an argument instantiating a 'content' or 'stimulus' of some sort is coded with the genitive, with a preposition, or in an infinitival or tensed that-clause. Examples include lystan 'feel desire for something', seaman 'feel shame about something', and byncan 'seem'.

In addition, some analysts have applied the term 'impersonal' to 'experiencer' verbs, or valences, which do select a nominative argument, but with that argument failing to code the human experiencer; verbs at least optionally appearing in this valence include lician 'cause pleasure' and (with predicate adjectives) byncan 'seem':

(1) ...and him gelicade hire þeawas
    and him-DAT pleased her virtues-NOM
    '...and her virtues pleased him' (Chron D (Classen-Harm) 1067.1.35)

The example shows that the nominative codes a stimulus while the dative codes an experiencer. One reason these verbs (or, more properly speaking, verbs in this valence) are often categorized separately from the 'dative object' verbs of the type helpan 'help' is that the dative experiencer verbs routinely became reanalyzed in Middle English such that their dative—not nominative—argument came to function as subject.

The class of 'experiencer' verbs—or, in some cases, that of 'impersonal' verbs intersecting with or included in the 'experiencer' class—has received a great deal of attention in the literature, by a variety of authors who have attempted to explain the reanalysis of their non-nominative arguments into subjects. A synopsis of Fischer & van
der Leek's (1983) article on the topic will serve as an introduction both to the predicate-class and to Allen's rather different interpretation of the facts pertaining to this class.

2.1.1 Fischer & van der Leek's (1983) analysis of OE 'impersonal' verbs

Fischer & van der Leek (1983) (F&L) present the argument that the OE 'impersonal' construction, rather than meeting its demise in an ambiguity-resolving reanalysis into a personal construction due to case syncretism (Jespersen 1927, Lightfoot 1981), in fact simply ceased to exist, with ModE reflexes of OE impersonal verbs actually preserving existing OE personal functions of those verbs. In other words, the verbs usually referred to as 'impersonal' had, already in Old English, personal functions or valences alongside their impersonal ones, and it is these personal functions which have been carried on. This analysis, then, stands in opposition to those of 'Jespersen and others, that "impersonal" verbs had one meaning in OE and another, the converse, meaning in NE' (337).

Among the verbs referred to as 'impersonal' are the following 'most common impersonal verbs in Old English*: behofian 'need', eglian 'ail', gebryan* 'happen', hreowan 'lament', hyngrian 'hunger', lician* 'please', gedafenian* 'fit', gelimpan* 'happen'.

The verbs marked with (*) are the only ones that, by F&L's investigation, are unattested in a 'personal' valence in Old English.

According to Allen (1986), lician really only had one valence, in which the experiencer was dative-marked and the cause was nominative. The only examples in which lician
lystan 'delight', longian 'long', maetan 'dream', reccan 'concern', sceamian 'shame',
swefnian 'dream', tweogan 'doubt', (a)breotan 'tire', byncan* 'seem', and byrstan 'thirst'

(347). These form a semantic group in that they all involve an 'experiencer' and what F&L
refer to as a 'cause' (i.e., a stimulus) in their valence; they form a formal group in that they
lack a nominative argument, in their typical valence at any rate:

(2) CaseRole: DAT/ACC    GEN/ACC/PP

SemRole : EXP         CAUSE

Examples are as follows:

(3) him gelicade hire þeawas
   him-DAT pleased-SG their virtues-ACC-PL
   ~'to him there was pleasing/pleasure b/c of their virtues'

(4) þæt hi þæs metes ne recð
   that they-ACC-PL the-GEN food-GEN not care-SG
   ~'that for them there is no care about the food'

However, F&L show that the so-called impersonal verbs are best thought of as having a
basic impersonal ('subjectless,' i.e. nominative-less) valence or typically participating in
an impersonal construction, but also not uncommonly, even in Old English, participating
in one of two 'personal' constructions, e.g.:

(5) A) þæt þu Gode licie
    that you-NOM God-DAT please

displays an 'impersonal' (nominative-less) or 'experiencer-subject' valence (F&L's types
(i) and (iii); see below), according to her, represent slavish glosses of Latin, and are
therefore best disregarded. However, the fact that these other valences were used at all,
even if just in overly literal translations, presumably indicates that personal uses of
impersonal verbs were both possible and intelligible.
'that you please God'

tha mec thin wea...gehreaw
when me-ACC your woe-NOM grieved
'when your woe grieved me'

B) on the ic wel licade\textsuperscript{10}
\hspace{1em} in that I-NOM well pleased
\hspace{1em} ~'in whom I was well pleased'

F&L refer to these as 'cause-subject' and 'experiencer-subject' constructions respectively, where the 'cause' or 'experiencer' is mapped onto a nominative ('subject') case; we have, then, the following three possibilities:

(6) (i) IMPERSONAL DAT/ACC GEN/ACC/PP EXP CAUSE

(ii) CAUSE-SUBJ DAT/ACC NOM EXP CAUSE

(iii) EXP-SUBJ NOM GEN/PP EXP CAUSE

Thus, the supposed 'reanalysis' of impersonal verbs into personal ones never occurred; rather, mapping-schema (i) fell out of the language as part of the general loss of lexical case (or the 'semantic' use of case) in English\textsuperscript{11}. Actually, according to F&L, the

\textsuperscript{10}

But see fn. 9 above. Also, note that this is F&L's translation. Allen points out that 'be' must be the personal pronoun, rather than the indeclinable relative marker because this marker always "stranded" a preposition when relativizing its object (Allen 1986:387); thus, 'in thee I was well pleased' would be the proper translation.

\textsuperscript{11}

F&L, working within a GB framework, assume that a formal syntactic or typological change is involved here whereby structural case takes over from lexical case in English as

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evidence is that the impersonal coding pattern for verbs of a given semantic type was still active or productive in Middle English, given the fact that the French loan please (which in effect replaced the native cweman) 'adapted itself to the ME impersonal system.'

F&L argue that this change occurs due to a gradual alteration of the case-marking system, or the mapping from semantics to surface case. The use of case to mark formally 'quirky' patterns is lost due to the erosion of case markers themselves (although PP-DO alternatives still exist for this function, cf. I struck him with the stick vs. I struck at him with the stick, I beat it with the stick vs. I beat the stick against it; this is the distinction Fillmore (1968, 1977) refers to as correlated with core vs. peripheral coding). In GB terms, then, this amounts to a loss of lexical case marking, with structurally-assigned case marking therefore taking over formerly lexically-case-marked NPs.

The question, then, is what (if any) functional correlates the lexical vs. structural case-marking opposition had. F&L somewhat tentatively propose an analysis of the various valence options as corresponding to different degrees of semantic transitivity in Hopper & Thompson’s (1980) sense, with the different valences therefore offering the formal means for representing different conceptualizations of, roughly speaking, the same objective content.

The analysis follows in part from Plank’s (1981:20) treatment of the opposition illustrated as follows:

a whole. While they do indicate that there may be some interesting correlations between case-marking and semantics in the various constructions participated in by the OE 'impersonals', any correlation of case with semantics is in no way essential to their analysis.
The formal opposition here between dative and accusative is matched, according to Plank, by a semantic opposition of affectedness: in (10), but not (9), the object is presented as affected by the action of the subject of folgian.12

F&L’s proposal for the semantic opposition among the three valence patterns at issue, then, is as follows:

Constructions (i) and (ii) differ mainly in the degree of ‘affectedness of Object’: in (ii) there are two direct participants; there is a nominative case, the cause, and an objective case, the experiencer, so that a direct transfer can take place. In (i) the nominative case is missing; there is therefore no direct transfer, which entails that the object is less affected by the ‘action' expressed in the verb. The difference

This is essentially the same semantic opposition argued by Hawkins (1986:25) to be signalled by the accusative/dative alternation in Modern German. Consider the following, which Hawkins analyzes as differing in the degree of 'control' the subject exerts over the object:

Ich winkte ihm. Ich rief ihm zu.
I waved him-DAT I called him-DAT to
'I waved to him' 'I called to him'

vs.

Ich winkte ihn heran. Ich rief ihn.
I waved him-ACC hither I called him-ACC
'I waved him hither' 'I called him'

Also, consider the opposition between folgen 'follow'--dative-taking--and verfolgen 'pursue/persecute'--accusative-taking.
between (i) and (iii) is one of volitionality. In (iii) the animate experiencer is nominative subject and therefore the initiator of the 'action', fully involved in what the verb expresses, whereas in (i) the experiencer, bearing dative or accusative case, is only passively related to what is expressed in the verb. (350-51)

Given this, F&L appear to endorse a view that case-marking lost its semantic function of, e.g., differentiating volitionally-involved participants from non-volitionally-involved ones. (In this instance, adjectival forms—cf. be hungry, angry, thirsty, ailing—have taken over this function with some predicates in Modern English.) While the loss of 'subjectless' clauses or predicates does not necessarily follow from this—after all, they could presumably persist as a purely formal phenomenon, and indeed are argued to have done so for several centuries—it does follow on the assumption that nominative was always a relatively unmarked or underspecified case; in other words, rather than viewing a nominative-marked NP or a 'subject' in this sense as a requirement of any ModE verb, we can view it as a requirement only by default, given the lack of motivation for coding the argument with a non-nominative case.

2.1.2 Allen's (1995) analysis of late OE dative experiencers as 'subjects'

Allen has two significant points of disagreement with F&L. First, she takes issue with the assumption that any OE verb which appears in an 'impersonal' construction could also appear in a 'personal' one, in other words with the interpretation of the nonoccurrence of several of these verbs in a 'personal' construction as an accidental gap. By her analysis, then, individual predicates were lexically marked for a given valence or set of valences, rather than one 'impersonal' valence being marked and the personal valence occurring, as
it were, productively or predictably.

Second, she differs from F&L in interpreting the non-nominative experiencer in the 'cause-subject' (type ii) construction as (at least sometimes) the 'subject' rather than, as in F&L, the 'object'; in addition, she analyzes the dative experiencer in the 'impersonal' (type i) construction as a 'subject', rather than one of two 'objects' in a 'subject'-less valence pattern.

Finally (but less crucially), she finds no persuasive evidence for the existence of dative-accusative and accusative-accusative case patterns assumed by F&L and others to have existed in Old English. The following, then, represents the full inventory of 'experiencer' valences deviating from the typical nominative-accusative OE transitive pattern. Included in the list are 'personal' valences in the sense of subcategorizing for a nominative NP (Types I and II), and one propositional-argument-taking valence which instantiates no 'quirkiness' at all (the 'Personal' type); the list also includes both '2-NP' valences and valences with one NP and a second propositional argument:

<table>
<thead>
<tr>
<th>Type(^{13})</th>
<th>Valence</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-NP Types:</td>
<td></td>
</tr>
<tr>
<td>I (F&amp;L's 'cause-subject')</td>
<td>Dative Exp.--Nominative Theme(^{14})</td>
</tr>
</tbody>
</table>

\(^{13}\)The labels used by Allen are adopted from Elmer (1981); they will be explained below.

\(^{14}\)Allen uses the 'Theme' label for a broad range of semantic roles, including not just 'theme' in Fried's sense (moving participants in a motion-oriented schema) but also 'stimulus' and 'content', the relevant roles here.
II (F&L's 'experiencer-subject') Nominative Exp.—Genitive Theme

N (F&L's 'impersonal') Dative/Acc. Exp.—Gen./PP Theme

*Propositional* argument Types:

S Dative/Acc. Exp.—Inf./that-clause

*Personal'* Nom. Exp.—Inf./that-clause

Hit 'it' Hit—Dat.Exp.—Inf./that-clause

DEM That—Dat.Exp.—Inf./that-clause

Examples of the 2-NP Types:

Type I: ...and him gelicade hire þeawas
and him-DAT pleased her virtues-NOM (cf. 1)

Type II: and ic þæs næfre ne sceamige
and I-NOM this-GEN never not shame-lSG (cf. 10)

Type N: þæt hi þæs metes ne recð
that they-ACC-PL the-GEN food-GEN not care-SG (cf. 4)

Table 1: Allen's inventory of OE 'experiencer' valences

Inclusion of the 'personal' valences with the 'impersonal' ones reflects the fact that each of
the 'nominative experiencer' valences (Types II and 'Personal') alternates for at least some
predicates with the most clearly 'impersonal' types N and S; Type I, too, alternates for at
least a few verbs with Types II and N. These different valence patterns, then, represent
different, perhaps semantically-motivated, argument-coding patterns for a semantically
similar pool of 'experiencer' predicates. We now proceed to a brief description of each of
the types in the list.

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Type I verbs have a dative-marked experiencer and a nominative-marked stimulus, and are therefore superficially identical to 'dative-object' verbs such as helpan 'help'. However, Allen points out that, even if we disregard their subsequently divergent fates, there is evidence already in Old English that the dative experiencer argument of a Type I verb has different behavioral properties—by Allen's assumptions, 'subject' properties—from that of a dative-object verb; these properties are a greater tendency for the dative argument of a Type I verb to precede the nominative argument, and the ability of a Type I dative experiencer argument, but not a dative object argument, to control coordinate subject deletion. These points will be discussed in greater detail below; for now, the following serves to illustrate the class:

(9) ...aet be wel licode þæra gewrita andgit
    that you-DAT well liked the-GEN writings-GEN meaning
    '...that you liked the content of the writings'

(ÆLett 6 (Wulfgeat) 4)
    (Allen p. 109)

Allen's full list of OE verbs which participate in this valence, with the number of examples instantiating this valence in her database, is as follows:

Verbs in the Type I valence:

<table>
<thead>
<tr>
<th>Verb</th>
<th>Gloss</th>
<th>No. of examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>eglian</td>
<td>to bother/ail</td>
<td>17</td>
</tr>
<tr>
<td>hreowan</td>
<td>to cause/feel pity/regret</td>
<td>9</td>
</tr>
</tbody>
</table>

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gehreowan  to cause/feel pity/regret  3
gelician  to cause/feel pleasure  27
labian  to cause/feel loathing  1
lician  to cause/feel pleasure  102
losian  to be lost/lose  29
mislician  to cause/feel displeasure  14
ofhreowan  to cause/feel pity  4
oflician  to cause/feel displeasure  2
ofbyncan  to cause/feel regret  9
byncan  to seem/think  106

Type II verbs feature a 'personal' valence both in the sense of having a nominative argument and in assigning this case to the experiencer; the other argument is a 'Theme' (i.e., stimulus or content; cf. fn 13) marked in the genitive or prepositionally. An example is as follows:

(10) and ic hæs næfre ne sceamige
    and I-NOM this-GEN never not shame-1SG
    'and I am never ashamed of that' (Ps 24.1) (Allen p. 72)

The list of verbs participating in this pattern closely matches those found in the 'impersonal' Type N pattern, but Allen points out five exceptions: behofian 'need', reccan 'care', giernan 'yearn' and wilnian 'desire' are attested only in the 'personal' Type II, and lystan 'desire' is found frequently in Type N but offers no clear evidence of participation.
in Type II. The fact that *reccan* is attested, by her count, 22 times in the Type II pattern means that it is highly unlikely that nonoccurrence in the Type N pattern is accidental with this verb at least; this applies in reverse to *lystan* as well.

Verbs in the Type II valence:\(^5\):

<table>
<thead>
<tr>
<th>Verb</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>behofian</td>
<td>to need</td>
</tr>
<tr>
<td>reccan</td>
<td>to care</td>
</tr>
<tr>
<td>giernan</td>
<td>to yearn</td>
</tr>
<tr>
<td>wilnian</td>
<td>to desire</td>
</tr>
</tbody>
</table>

plus Type N verbs except *lystan*

Type N verbs, representing the most strictly 'impersonal' pattern, feature an experiencer in the dative or accusative case, and a 'Theme' marked with the genitive or prepositionally; Type N, then, is just like Type II except for non-nominative marking on the experiencer argument. Examples, and a list of verbs participating in this pattern, are as follows:

(11) and...us nu wīlatað wið ðysne leohṭan mete
and us-ACC/DAT now nauseates with this light food
'And there is nausea in us now on account of this light food'
or: 'And we are now nauseated with this light food'

(Ælc.P.XX.313)

Apart from *reccan*, Allen provides no figures for the number of attested examples of the other verbs in this valence.
(12) oððæt him wlatode þære gewilnunge until-that him-DAT nauseated the-GEN desire-GEN 'until there was nausea in him for the desire' or: 'until he was sick of the desire'
ÆHom 21 89
(Allen p. 70)

(13) and þæs us ne scamað na and that-GEN us-ACC/DAT not shames not 'and there is no shame in us about that' or: 'and we were not ashamed of that'
(Wulfstan: Whitelock, 1967:91)
(Fischer & van der Leek 1983:349)

The first two examples illustrate the alternation of a single predicate (wlatian) with either a genitive or a prepositionally-marked 'Theme' argument; the third illustrates sceamian with a genitive 'Theme'. In all three, the experiencer receives dative or accusative marking, and there is no nominative argument.

Verbs in the Type N valence:

<table>
<thead>
<tr>
<th>Verb</th>
<th>Gloss</th>
<th>No. of examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>langian</td>
<td>to cause/feel longing for something</td>
<td>3</td>
</tr>
<tr>
<td>lystan</td>
<td>to cause/feel desire for something</td>
<td>43</td>
</tr>
<tr>
<td>ofhreowan</td>
<td>to cause/feel pity for something</td>
<td>5</td>
</tr>
<tr>
<td>ofbypncan</td>
<td>to cause/feel regret for something</td>
<td>5</td>
</tr>
<tr>
<td>sceamian</td>
<td>to cause/feel shame about something</td>
<td>20</td>
</tr>
<tr>
<td>(ge)spowan</td>
<td>to cause/experience success at something</td>
<td>5</td>
</tr>
</tbody>
</table>
A second subtype of 'impersonal' experiencer verbs involves a propositional rather
than nominal 'Theme' argument; the most common pattern involves a dative or accusative
experiencer and an infinitival or tensed that-clause, which Allen follows Elmer (1981) in
calling Type S:

(14) þonne þam menn ne lyst on his life nan god don
    when the-DAT man-DAT not wishes in his life no good do
    'When the man does not wish to do any good in his life'
    (ÆlS (Memory of Saints) 297)
    (Allen p. 86)

Old English also exhibited evidence of a 'personal' propositional type, with the
experiencer in the nominative case:

(15) Ne tweoge ic naht, þæt gode weras wæron on þysum lande
    not doubt I not that good men were in this land
    'I do not doubt at all, that there were good men in this land'
    (GDPref I(C) 7.12)
    (Allen p. 87)

Finally, Allen treats as separate types those labelled hit and DEM on the table,
which are in effect Type S examples with a 'formal subject' hit 'it' or the demonstrative
þæt 'that':

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Of these, Type S is far and away the most common, with virtually all the 2NP impersonals appearing in this pattern as well. A more precise implicational statement is as follows: appearance in the Type S pattern presupposes appearance in one of the 2NP impersonal patterns, either Type N (non-nominative experiencer and genitive/PP Theme') or Type I (dative experiencer and nominative Theme'); conversely, appearance in either of the latter patterns implies appearance in the Type S propositional pattern. The only 2NP predicates that fail to appear here are those that display no evidence at all for non-nominative coding of the experiencer, i.e those such as reccan 'care' occurring exclusively in the Type II pattern.

The only predicate appearing with any frequency in the 'personal' pattern is tweonian 'doubt', which occurs eight times here in Allen's prose survey versus 19 times in the impersonal propositional Type S. Overall, however, this type is extremely rare among the potentially 'impersonal' dative-experiencer predicates, occurring just 11 times out of a
total 491 attestations of potentially impersonal propositional types. Types hit and DEM are equally rare, each occurring only nine times in Allen's count, versus 459 times for Type S.16.

In other words, the linear precedence of subject over object cannot be reduced to the precedence of 'given' over 'new' or 'light' before 'heavy', with a tendential correlation of nominatives with 'given' or 'light' explaining the apparent subject-object order. Rather, Allen argues that (at least for the late OE of Ælfric) the facts can only be explained if we assume a primary conventionalization of subject-object order, with discourse-pragmatic factors only exerting secondary effect.

Based on an examination of the late-OE homilies of Ælfric (Godden ms), Allen finds that, while animacy and topicality (the latter as indicated by pronominal coding) do play some role in the relative order of subject and object, those factors are clearly secondary to 'grammatical role' as indicated by case (nominative=subject, non-nominative=object). For example, among main clauses involving a nominal non-human subject and pronominal human object, the object precedes the subject in only 30% of cases. This is admittedly more than when a nominal subject is human and a pronominal object is not (14%), but at the same time factors of animacy and topicality fail to outweigh those of grammatical role as expressed by case. The fact that human nominal objects do precede human pronominal subjects in 18% of cases clearly does indicate that

Appearance of hit is, however, common when the experiencer is unexpressed—a fact which Allen will use to argue for the 'subject' status of dative experiencers (see next section).

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more factors must be at play than just grammatical role as indicated by case, topicality as indicated by pronominal encoding, and animacy; but it does appear true that of these three factors, nominative/non-nominative status is most important.

Of course, it is not true that some sort of 'animacy target' and topicality are the only discourse-related factors relevant to constituent order in Old English; as is well known, fronting could (and still can in Modern English) serve emphatic and contrastive functions in Old English:

(18) Ealle þring he foresceawæ and wat, and ealra þeoda
    All things he foresees and knows and all-GEN people-GEN
gereord he can
    speech he knows
    'All things he foresees and knows, and the speech of all people he understands'
    (ÆCHom 1.456.26)

Allen also acknowledges 'the fronting of a new topic introduced as an object':

(19) Tyn beboda awrat se ælmihtiga on ðam twam tabelum
    The Almighty wrote ten commandments on the two tablets
    'The Almighty wrote ten commandments on the two tablets'
    (Ælc.G.XII.255)
    (Allen 1995:42)

By her analysis, however, such factors are most satisfyingly invoked as explanations of why particular examples deviate from a basic SO word order which, as mentioned, cannot be reduced to independently-required pragmatic or semantic factors. In her words:

Thus the facts appear to be accounted for best by assuming a basic constituent order from which deviations had a particular meaning. Although it seems plausible to assume that the basic order is based historically on the fact that subjects are usually the most important argument to the speaker, it appears that by
late Old English at least it is impossible to explain constituent order without
reference to grammatical relations. We can best explain the exceptions to SO
order by saying that the basic order was SO, but certain factors could cause O to
precede S. (42)

Allen shows that the non-nominative experiencers in Types I, N, and S are similar
to 'ordinary subjects' with respect to certain characteristics of behavior, specifically
ordering relative to the other argument and control of CSD. In addition, these arguments
are shown to be much more likely to be animate and 'light' in 'weight' than other dative
arguments, and to pattern in complementary distribution with 'formal' subjects such as hit
'it' in a manner pointing to the subject status of the dative experiencer arguments
themselves.

First, the analysis of the weight and animacy of the experiencer arguments—
essentially, whether they appear as personal pronoun or something else—is presented not
as a direct comment on the relational status of the arguments, but as a contribution 'to the
discussion of why the Experiencer arguments should have been "reanalyzed" as subjects
in ME' (99). By Allen's count, 'the Experiencer was a pronoun [in Type I] in more than 60
per cent of the examples, and in Type N and S the figures are over 80 per cent' (100).
While this fails to differentiate dative experiencers from the identically case-marked
object of dative-object verbs, it does show that there is no factual support, in Old English
at least, for the frequent claim that dative experiencers were 'reanalyzed' as subjects
because of the typically nominal status (and hence ambiguous case) of those arguments
(as argued by van der Gaaf 1904:142). With respect to the 'weight' of the nominative
theme of the Type I verbs, there is clear evidence of a distinction from dative experiencer:
in Ælfric, the theme is pronominal in only 32% of examples; in this respect, too, the
nominative theme of dative object verbs patterns like that of dative experiencer verbs.

Dative experiencer and dative object verbs do, however, differ markedly in the
animacy features of their nominative argument. While the nominative argument of dative
object verbs is overwhelmingly human (82% of cases), that of dative experiencer verbs is
overwhelmingly non-human (90% of cases). To Allen, 'this difference, along with others,
justifies treating the Type I verbs as a recognizable class in OE.... It also seems likely that
the fact that the Experiencer was typically more animate than the Theme played a role in
the eventual subjecthood of most of the Experiencers of these verbs' (104). The semantic
distinction between the nominative theme arguments of these two verb classes, then,
provides insight into the semantic underpinnings of the emerging 'subject' (as distinct
from 'nominative') category; it also indicates that any explanation of the reanalysis of non-
nominatives into subjects which fails to make reference to semantic characteristics of the
reanalyzed arguments, together with the features of other arguments in the verbs' valence,
is liable to be inadequate.  

The two behavioral 'tests' considered by Allen for identifying the relational status
of Types I, N, and S verbs are linear order and control of CSD. With Type N verbs (those
featuring a dative/accusative experiencer and genitive/PP theme), the experiencer
precedes the theme in 96 out of 103 cases, and precedes the verb in 99 cases. With Type I
(dative experiencer-nominative theme) verbs, the dative experiencer precedes the

For example, Demske-Neumann's proposal for the reanalysis of fronted objects as
subjects in the 'tough' cointantiation construction; see Chapter 10.
nominative theme in about half (19 out of 40) of cases, compared with 13% dative-
ominative order with the dative object verbs. Note, however, that this covers all
types of verbs, not just dative object verbs. Since, as we have just seen, the nominative theme of
dative object verbs is much more likely to be animate than that of Type I verbs, the
infrequent linear precedence of the latter could be attributable to animacy.

Allen therefore performs a second count which controls for this factor and weight
by including just pronominal datives and non-human nominal nominatives. In this count,
13 of 23 dative object verbs feature nominative-dative order, while just 3 of 17 Type I
verbs feature nominative-dative order. Thus, even though the nominative theme of Type I
verbs is fronted, ceteris paribus, more frequently than the genitive of PP theme of Type N
verbs (and, by Allen's assumptions, therefore has more frequent 'subject' status), these
nominative theme arguments lose out to dative experiencer arguments for linear
precedence (and, therefore, subject status) with greater frequency than can be accounted
for simply with reference to factors of animacy and weight.

An important point here for the understanding of the diachronic development of
the Type I 'impersonals' is that it is specifically the least ambiguous dative experiencer
nominals which most frequently win out over the nominative theme in linear precedence-
that is, a dative experiencer is most likely to occur first when it is a pronoun and the
nominative theme is a noun. This shows, once again, that morphological ambiguity is an
insufficient motivation for the reanalysis of dative experiencers into subjects in Middle
English, since at no point would those arguments have been ambiguous when coded
pronominally.
At the same time, Allen points out that the nominative theme always (in 48 out of 48 cases) takes linear precedence over the dative experiencer when both arguments are personal pronouns. This indicates that the supposedly potentially 'subject'-like status of the dative experiencer can't be independent of factors of weight and animacy or some other factors correlating with personal pronoun status. If nominative case is to be viewed as correlating to a high degree with subject status, and if linear order is viewed as also correlating, other things being equal, with subject status, then we could say (again, given Allen's assumptions) that a preposed nominative theme in this construction is always a subject.

Evidence that this last point is correct comes from the next behavioral test of subjecthood applied by Allen, that of control of CSD\(^{18}\). First, two competing hypotheses about the nature of the controller of coordinate subject deletion (CSD) in Ælfric's dialect are considered and rejected. One is that a subject is deletable if its referent is highly thematic. If thematicity is understood in terms of persistence (Givon 1989), then the problem is that 'there are numerous examples of persistent objects which do not control CSD ... [and] there are rather ephemeral subjects which do not control omission of the pronoun' (55). If thematicity is understood in terms of prior establishment as a theme of discourse, 'this idea won't work because there is no lack of examples in which a newly introduced theme controls CSD in the next conjunct' (55).

\[\]

Note that all the data about the interaction of dative experiencer arguments and CSD come from the late OE works of Ælfric; it therefore remains an open question whether dative experiencers exhibited 'subject'-like behavior in earlier manuscripts with respect to this 'test'.

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The second hypothesis is that it is the preposed or first NP of the first conjunct which controls CSD of the subject in the second. However, in '13 examples [from Ælfric's Catholic Homilies] in which such a postposed subject was coreferential with the (understood) subject of the following conjunct, the 'postposed subject controlled omission of the pronoun' in 8 (56). The counterexamples from Ælfric and others to the 'matching subject hypothesis' are frequently ones 'in which it would be particularly easy for the author or scribe to forget that the subject of the coordinated clause was not in fact the grammatical subject of the first conjunct' (57). What this turns out to mean is that exceptions tend to involve referents treated as centrally thematic in the discourse, even though they do not appear as subject in the clause immediately preceding the conjunct with the omitted subject. An example is as follows:

(20) He befран ða hwam ða gebytu gemynete wæron
he asked then whom the buildings designed were

swa mærlice getimbrode. Hir mæs gesæz þæt
so gloriously constructed him was said that

hi wæron gemynete anum sutere on
they were designed a-DAT shoemaker-DAT in

roman byrig and hine eac namode
Rome burg and him-ACC also named-SG

He asked then for whom the buildings, so gloriously constructed, were designed. He was told that they were designed for a shoemaker of Rome, and (they) also named him'

(Ælc.G.XXI.122)

She never gives the details as to these 'others'.
Allen's tentative conclusion, then, is that 'the thematicity of an NP still played a greater role in OE syntax than in Modern English,[and] that discourse factors could sometimes interfere with what had become a grammatically controlled process' (58).

Given Allen's findings, it is clear that, even for reference-related processes such as CSD, an adequate syntactic description of Ælfric's late Old English cannot simply make reference to thematicity or topicality. In other words, the nominative case role or whatever underlies it semantically or pragmatically is conventionalized as the controller and controller of CSD to a degree which clearly goes beyond the tendency of that argument to represent the most topical or topicworthy participant.

It turns out that, with Type I verbs, whichever argument comes first—dative experiencer or nominative theme—controls CSD. This is quite remarkable given that, with ordinary transitive verbs and with passives of ditransitives, control of CSD is dependent only on nominative status, regardless of linear order. It is therefore only with this subset of verbs that linear order is a sufficient indicator of the potential controller of CSD, and, by Allen's assumptions, of subject status. Conversely, it is only with this subset that linear non-precedence rules out subject status.

With Types S and N, meanwhile, the accusative/dative experiencer controls CSD approximately 50% of the time—that is, the coreferential nominative of a conjoined clause

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20 This isn't to say that CSD is completely independent of the linear order of the potential controller with ordinary transitives, but just that linear precedence of a nominative isn't necessary for deletion of the subject of a conjoined clause.
is equally likely to be deleted or not. When we recall that such deletion is extremely rare when coordinate deletion is controlled by a non-nominative argument of other verb classes, we see that, once again, the dative experiencer argument is acting more like a nominative than a non-nominative—by Allen's assumptions, more like a 'subject' than an 'object'.

Finally, Allen offers an analysis of the distribution across the valence types of 'formal subjects' such as hit 'it' in support of the view of dative experiencers as subjects in Old English. First, she offers an argument for the status of hit as a true subject, as opposed to a relationally empty element participating in the avoidance of violations of positional constraints, by citing examples in which the use of hit could not possibly be interpreted as contributing in any way to the maintenance of such constraints; among others, she cites examples, including ones with 'weather' verbs, where use of hit results in a violation of V-2. Also, with verbs which take sentential complements without an experiencer, formal subjects are more highly favored. According to Allen, 'these facts are most easily accounted for by assuming that at the OE stage, there was already a strong impetus towards having a subject in a tensed sentence' (117-18).

The fact that 'Type N verbs...consistently fail to appear with a formal subject' is interpreted by Allen to mean that the dative experiencer argument of such verbs must already be playing the role of subject. In other words, examples such as the following, with the Type N verb ofhreowan 'rue', are unattested:

\[
(21) \quad \text{*hit } \text{ofhreoed him pære daede}
\]
\[
\quad \text{it rues } \text{him of.the deed}
\]
Further support for the interpretation of dative experiencer as subject is argued to derive from the behavior of Types I and N verbs when they are used with a sentential complement in place of a nominal theme.

With the verbs which are limited to either Type N alone or to Types N and II in the 2NP construction, only [the 'impersonal'] Type S is found. But with verbs like offend [‘regret’], which occur in Type I (either exclusively or in addition to the other 2NP types) Type hit is possible:

(75) Lareow, ne ofpingð hit ðe
    teacher not regrets it you-DAT if
    ic þus wer geceose?
    I thus man choose
    Teacher, doesn't it upset you if I choose a husband in this way?'

These facts are readily explained by assuming that the Experiencer of the verbs in the Type N construction was the subject of the construction, despite the case marking and lack of verbal agreement. (p. 118)

This argument, however, has more obvious weaknesses than the others. The facts Allen adduces here in support of the subject status of dative experiencers equally well support a view of hit as a pro-form for subject or subject-like arguments in a manner independent of the subject status of dative experiencers. In her example (75), then, hit simply codes the independently-licensed nominative theme of the verb; there is no reason not to view hit as coreferential with the rightward-appearing 'if'-clause, with the question of whether that clause is 'really' the subject being, I think, irrelevant: the important point is that that clause bears the same semantic relationship to the verb that a nominative-marked nominal theme would. While the exclusive rightward appearance of such complements is sometimes interpreted as ruling out their 'subject' status, this positional
distribution in fact has no bearing on the semantic or relational status of the constituent, since appearance in canonical subject position would be ruled out independently.

With the verb-types in which hit is ruled out, this is simply because there is no available nominative argument-slot available in the valence. With Type N verbs, this is because no such slot is ever available. With Type II (with the experiencer coded in the nominative and the theme coded in the genitive or as a prepositional phrase), the experiencer already occupies the nominative slot.

In sum, then, what Allen shows is that many non-nominative tokens—in particular, dative/accusative experiencers—have behavioral properties in common with nominatives, and that they in this sense may have the grammatical function of 'subject'.

What she does not do is to motivate the non-nominative coding associated with these arguments, or to explain the significance of dative as opposed to nominative case with arguments which by her criteria have equal 'subject' status. Also, she argues that genitives are never 'subjects', but does not explain this with reference to the nature of genitives or the nature of subjects. In an approach which views grammatical functions in terms of formal features and nothing else, this makes sense. Thus, as Allen herself states

"Although note (p. 149): [with lician.] dative case was at first retained to signal the non-agentivity of the Experiencer'.

"At the same time, given the LFG conception of SUBJ and OBJ as 'unrestricted' in the sense that any semantic role may map onto them, it is puzzling that genitives never become reanalyzed as subjects; this fact, I will argue, can only be explained with reference to the semantics of OE genitives together with the semantic underpinnings of the emerging 'subject' category.
quite clearly, is 'concerned with structural possibilities' only; 'the question of possible
meaning differences does not concern [her]' (139).

Allen does, however, stray occasionally into non-structural territory. While the
LFG formalism in principle allows for a mapping of any argument onto a SUBJ function
simply by manipulation of arbitrary \( r, o \) feature-values, Allen does consider it likely that
the mapping is in fact responsive in some fashion to semantic factors—-that it is not, in
other words, an arbitrary matter which verbs were (for example) Dative Object verbs and
which were Dative Subject verbs.

She offers as an illustration of the sorts of semantic factors of relevance to this
distinction the pair lician and (ge)cweman\(^2\), both translatable as 'please' or 'give pleasure
to'. The verbs differ in their subsequent fates, however, in that the dative experiencer of
lician was to become reanalyzed as subject (cf. like), while, with (ge)cweman, the dative
experiencer never developed nominative marking, 'although it lasted past the late 14th
century, by which time all the Type I verbs [except for 'ail'] had appeared at least
occasionally with a nominative Experiencer' (145). By her diachronic criterion, Allen
would categorize (ge)cweman as a Dative Object verb, and lician as a Type I Dative
Experiencer (Dative Subject) verb. The ME reanalysis is foreshadowed in late Old
English by the potential 'subject'-like behavior of the Dative Experiencer of lician when it

\(^2\) Allen explains that she includes data for the ge-prefixed version of the verb because of
the paucity of data (only 8 examples) for unprefixed cweman in a 2NP construction.
'Because of the strong possibility that the ge- prefix contributes to the shade of meaning of
the verb', however, she does keep figures for the two versions separate in her
presentation.
occurs in a preposed position (i.e. before the nominative): 

\[(22)\]  
\[
\text{ac gode } ne \text{ licode na heora geleafleast,} \\
\text{but God-DAT not liked not their faithlessness-NOM} \\
\text{ne heora ceorung, ac asende him to fyr} \\
\text{nor their grumbling-NOM but sent them to fire} \\
\text{'but God did not like their unbelief or their grumbling, but sent fire to them'} \\
\hspace{1cm} (\text{\AEHom 21 68}) \hspace{1cm} (\text{Allen p. 114})
\]

First, the most striking difference of relevance to a semantic distinction between the two verbs lies in the animacy of their stimulus argument: 'In contrast with the 81 non-human NPs in this role with lician (79 per cent), we find only one 2NP example of (ge)cweman in which the [stimulus] is non-human' (145-6). Allen interprets this as an

\[
\text{Of four occurrences of lician in the first conjunct of a sequence of conjoined clauses the second of which features a nominative argument coreferential with the preposed dative argument of lician, one (the one cited here) triggers deletion of the second clause's nominative as opposed to occurrence of that second clause's argument as a pronoun. In three examples with nominative-dative order of the arguments of lician in the first conjunct, the second conjunct's coreferential nominative argument is never deleted.}
\]

This is arguably a slight misrepresentation, since it excludes examples in which a contextually recoverable experiencer is omitted; in one such example (cited in fn. 54, p. 146), a non-human stimulus appears. On the other hand, if we do restrict ourselves to examples in which two NPs are overtly expressed, she possibly understates her case, since in the only explicitly 2NP example of (ge)cweman in her collection in which the stimulus is non-human, that stimulus is still obviously metonymically human:

\[
\text{Witodlice } \text{u gecwemdon } \text{u word his earum} \\
\text{truly then pleased-PL the words-NOM-PL his ears} \\
\text{'Truly, the words then pleased his ears'} \\
\hspace{1cm} (\text{GD 2(H) 13.129.14}) \\
\hspace{1cm} (\text{Allen p. 146})
\]

The association of the nominative argument-slot of (ge)cweman with animacy is made
indication that the stimulus 'was normally seen as volitional' with (ge)cweman, but not with lician. While animacy obviously fails to entail volitionality (consider the features associated with an 'experiencer' role), an examination of individual examples supports the hypothesis that with (ge)cweman, the emotion is usually seen as something which the [stimulus] intended the Experiencer to feel' (146)—an interpretation with which, she claims, 'all the 2NP examples of this verb are consistent' (146).

Allen concludes, then, that the two identically case-marking verbs differed in the semantics associated with the nominative argument. Perhaps because of the fact that the nominative fails invariably to code an animate referent with (ge)cweman, and perhaps also because of the fact that many of the examples are merely 'consistent' with an intentional reading of that argument, Allen elects not to integrate these features into the verb's semantics, which she could do straightforwardly by assigning an 'agent' role to the nominative argument. Rather, she chooses the following, somewhat more abstract, option:

[I]t is quite reasonable to assume that the much greater typical animacy of the [stimulus] with cweman stemmed from the fact that when this verb was used, the [stimulus] was portrayed as bearing the responsibility for the emotion. In other words, the [stimulus] played a higher semantic role than that of Theme; we can refer to it as a 'Cause'.

(p. 147)

even more plausible when we note that the continuation of this passage, not cited by Allen, involves the predication of lician of an inanimate nominative argument which lacks any of the sort of metonymic association with a human exhibited by ha word:

...& pa stowa gelicodon his eagum
    the places-NOM-PL pleased-PL his eyes
'...and the places pleased his eyes'

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With the invocation of 'responsibility', however, we are straying outside the domain of the semantic features of the verb or its arguments. This, at least, is the most reasonable conclusion to be drawn from Allen's further explanation of the supposedly semantic difference between lician and (ge)cweman:

To sum up, we can say that with (ge)cweman, the responsibility of the [stimulus] was built into the semantics of the verb; the emotion was being portrayed as something which resulted because of something about the [stimulus], either actions (in the case of animate [stimuli]) or characteristics. With lician, the verbal semantics were simply compatible with responsibility on the part of the [stimulus]; the focus was not on characteristics of the [stimulus] which caused the emotion, but rather on the reaction of the Experiencer. The choice between the verbs was essentially a choice about what to emphasize.

The hypothesis that (ge)cweman is in a sense about the [stimulus], while lician is about the Experiencer, is supported by the facts concerning the 'weight' of the arguments of these verbs.... It appears that (ge)cweman was more likely to be used when the [stimulus] was the more topical NP, while lician was more likely when it was the Experiencer that was more topical. (p. 147)

While it may be true that some notion of 'responsibility' is relevant to the 'subject'-like behavior of some OE datives, or to the mapping of these arguments onto the emerging subject function, there are a number of problems with invoking this notion as an explanation of this behavior or mapping. Most obviously, 'responsibility' lacks the a priori clarity of, say, 'animacy' or 'intentionality'. Further, Allen's just-cited detailed explication of the meaning of 'responsibility' indicates that it subsumes a number of other notions which, admittedly, may cluster or correlate to some degree, but which are in principle separate.

First, the reference to the relevance of 'actions' indicates an agency-oriented
grounding. The reference to 'characteristics' implies the relevance of a logical, sentence-level predicational relationship, reflecting the traditional notion of subject as that which the rest of the sentence (the 'predicate') is about, or the notion of subject as 'theme' in Kuno's (1976) sense. Finally, the reference to the relative 'weight' of the two verbs' arguments points to a more discourse-oriented conception of subject as that which the discourse is about—i.e., to a (discourse) topic-oriented conception of subject. Given, then, that 'responsibility' conflates a variety of factors corresponding to various traditional conceptions of 'subjecthood' ('semantic' subject, 'psychological' subject, and 'discourse' subject respectively), the attribution of the subject-like behavior of a given argument to this factor is no more explanatory than it would be to attribute this behavior to the fact that the argument is 'felt to be a subject'.

In addition, the last of these factors—discourse-oriented topicality—is arguably not an independent causal influence on the choice of arguments for the nominative slot and, thus, the mapping of the nominative argument onto the subject function. Rather, this supposedly causal factor presumably follows from independent semantic factors which give rise to the animacy of the nominative argument and, thus, the discourse-topicality of that argument. In other words, discourse-topicality is properly viewed not as a semantic characteristic of a verb's argument, or of the verb via that argument, but as a tendential characteristic resulting from independent semantic factors.

We must, then, reject Allen's invocation of 'responsibility' in her explanation of the unequally 'subject'-like behavior of the nominative arguments of lician and (ge)cweman. Rather, we will simply identify the distinction in terms of the selection of an
animate nominative in one case ((ge)cweman) but not the other (lician), and leave the verb-specific semantic determinant of this selection unspecified\textsuperscript{26}. It should be mentioned that there is more evidence than that adduced here by Allen that something in the semantics of the predicate (ge)cweman places restrictions on the nature of the stimulus, even if it is not clear that these restrictions necessarily include intentionality. This evidence lies in the full range of valences in which this predicate and lician may participate. While it is true that different valences correspond to different conceptualizations and that one valence should therefore not be used as evidence of the sort of conceptualization coded in another, restrictions on participation in certain valences nevertheless can provide insight into the semantics of a predicate thus excluded. With respect to our two 'please' predicates, it is significant that only lician, but not (ge)cweman, may participate in the impersonal propositional Type S valence, in which the experiencer is coded in the dative and the stimulus is coded as an infinitival or that-clause. The apparent inability of (ge)cweman to participate in this valence indicates, then, that something about its semantics prohibits its acceptance of an abstract, propositional stimulus. Whether or not we view [intention] or even [animate] as necessarily associated with the selectional restrictions of (ge)cweman, then, there is no doubt that it selects stimuli higher in referentiality (in Hopper & Thompson's (1980) terms, higher in 'individuation') than does lician.

\textsuperscript{26} Recall that there are in fact no empirical difficulties with saying that (ge)cweman selected an animate nominative argument in the 2NP valence, given that the one supposed counterexample is in fact not a counterexample at all. 328
For present purposes, then, we will accept that the animacy of the two verbs' stimulus arguments represents a semantic distinction which may explain the fact that one of them, but not the other, potentially exhibits 'subject'-like behavior in Old English and becomes reanalyzed as an indisputable subject in Middle English. It is, of course, not animacy in isolation which accounts for the reanalysis of one argument into the subject, since the experiencer in both verbs' valences is necessarily animate—even more invariably so than the stimulus of (ge)cweman. With the experiencer argument, however, [animacy+] is accompanied by [intention-], that is, part of the semantics of the verb is that the necessarily animate locus of the experience denoted by the predicate is nonintentional; in this respect, it differs from certain other obligatorily 'experiencer' predicates such as 'see' and 'hear'. This applies, naturally, not just to lician but to (ge)cweman as well, meaning that lack of intentionality is insufficient to explain non-subject coding. It is, then, the paradigmatic combination of [animate+], [intention+] in syntagmatic opposition to an [animate+], [intention-] feature-bundle which appears to be responsible for mapping onto a conventional 'subject' role, or, perhaps, simply the syntagmatic opposition of [intention+] with [intention-].

It is in fact unclear whether [intention] should be marked positively, or simply left unspecified for value, in the feature-bundle corresponding to the nominative stimulus of (ge)cweman. Even if the value were unspecified, however, it would be the only one of the two arguments in the valence of the verb which fails to conflict with the prototypically positive value of this feature in the agent-based transitive actor feature-bundle. Considering, too, that a positive value for [intention] is only prototypically, not invariably, associated with the transitive schema's actor argument, it may well be accurate to say that a positive value for this feature is just as strongly associated with the stimulus argument of (ge)cweman as it is with the actor argument in the transitive schema.

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As we shall see, the transitivity schema features a prototypically [intention+] (=OE nominative, ModE subject) argument in opposition to a necessarily [intention-] (=OE accusative, ModE object) argument, so the relational alignment of arguments for (ge)cweman appears to follow from its arguments' values for this feature. With lician, on the other hand, the OE dative experiencer argument, necessarily [intention-], stands in opposition to an argument also at least strongly correlated with a negative [intention] value, meaning that this feature fails to motivate formal modelling of the stimulus argument on the transitive agent. The mapping of the dative experiencer onto subject appears, rather, to respond to the matching positive animacy value of this argument and the transitive agent. Thus, different parameters are of relevance in motivating the mapping of the arguments onto the emerging subject function. While it is by no means the case that it was inevitable that lician develop the mapping it ended up doing—after all, either argument could function as 'subject' in Old English by Allen's criteria, and the nominative argument marginally outranked the dative argument for access to agent-modelled coding (unmarked for intentionality as opposed to negative)—the animacy feature does provide a clear motivation for the mapping which eventually won out.

Given that animacy is the most important feature for the 'topicworthiness' of an argument, it makes sense that this feature should emerge as more important for mapping onto the emerging subject category—which represents, roughly speaking, a conflation of the 'agent' category at the core of the OE nominative with the positionally-coded 'topic' category—than it was for the OE nominative category. Given this, we can also make a simple, readily falsifiable prediction: it would never be the case that an OE nominative
argument necessarily positively-marked for animacy would lose out to another argument in mapping onto subject.

It will be noted that reference is made here to the assimilation of OE predicates featuring a non-transitive valence to an increasingly dominant transitive valence in Middle English and Modern English. Does this mean that the non-transitive schema motivating non-transitive case marking (i.e., case-marking other than nominative-accusative) somehow changes as we move from one language period to another? The answer is both yes and no. As we shall see in our discussion of Fried, the schema motivating the 'deviant' case-marking associated with experiencer predicates such as lician and (ge)weman is the Motion schema, with the experiencer conceptualized in terms of the goal of that schema. In her system, this is represented in a variant on the Motion schema, which she calls M-Experience. What happens in the ME period, then, is a decreasing importance of the Motion schema as a conceptual base for 'experiencer' situation-types. While the Motion schema itself naturally retains its existence in the language, and still underlies the formal instantiation of motion-events, the M-Experience schema is marginalized as the Transitivity schema is increasingly used in the conceptualization of 'experience'-events. While it is not true that no 'experiencer' situation-types are modelled on or conceptualized in terms of the Motion schema in Modern English (cf. it appears/comes to me28), it is certainly conceivable that the M-

These two examples are actually different in nature. The use of come involves the metaphorical extension of a basically motion predicate into an 'experience' domain, while appear is a primarily visual-experience (and secondarily cognitive-experience) predicate which displays evidence, in the use of the primarily spatial predicate to, of
Experience schema could at least temporarily cease to exist in English, or in some language, in that there might cease to be any overt evidence for the modelling of 'experiencer' situation-types on the Motion schema. In this sense, schemas—or, at least, some schemas—are conceivably language-specific.

We then arrive at the question whether the internal composition of any of the schemas involved in the diachronic change described here may be claimed to have changed. In the introduction, I indicated that we may understand at least some of the changes involved in the ascendance of the ModE-type subject category in terms of the ascendance of the semantic parameter of animacy. Would it be right, then, to say that the [animacy] feature in the feature-bundle associated with the agent in the Transitivity schema is somehow re-ranked relative to other features?

If we recall that the dative marking on the experiencer argument in Old English signals a characteristic combination of animacy with nonintentionality or affectedness, we may understand that what is lost in the neutralization of this dative argument with the transitive nominative argument (lician) or the transitive accusative argument ((ge)cweman) is the signalling of precisely this combination. Animacy, then, is not a guarantee for mapping onto the nominative case in Old English, although—lacking a competing animate argument in the same valence—it is sufficient for mapping onto the emerging 'subject' function. Of course, this doesn't mean that an animate argument may be mapped onto the 'subject' function independently of the characteristic animacy requirements of the predicate, or that a given predicate will have fluid valence sensitive to conceptualization in terms of the Motion schema.
the animacy of its arguments; rather, this fluidity is found in the developing 'passive' construction, which becomes increasingly important for structuring information, partly in response to animacy.

To the extent, then, that the characteristically animate OE dative experiencer arguments become mapped onto the more syncretic subject category formally modelled on the transitive agent, we may say that animacy becomes increasingly important in connection with the Transitivity schema in that this feature emerges as increasingly sufficient for mapping onto transitive subject. On the other hand, animacy becomes less important in connection with transitivity in the sense that a number of arguments which in Old English could not map onto the nominative slot in a nominative-accusative (formally transitive) valence may map onto this slot in Modern English—consider, for example, ModE 'temporal setting' subjects as in Last year saw falling prices all over the world's markets. It is, indeed, generally accepted that languages which express semantic roles relatively 'transparently' through morphological case, and which utilize constituent order for pragmatic purposes, resist subsuming non-agents under the transitive agent-centered category to a greater degree than those languages, like Modern English, which largely conflate agency with topicality (Faarlund 1988). This apparent conflict may be understood in terms of a dual role of animacy: on the one hand, animacy correlates with agency, but on the other with topicality. The former explains the decreasing role of this feature in mapping onto subject, while the latter motivates its increasing role.

2.1.3 Allen's LFG analysis of 'quirky' case in Old English: summary and criticism
We have seen, then, that given the central thesis that case syncretism and word order change can by no means be viewed as the cause of the reanalysis of 'impersonal' into 'personal' verbs (or the reanalysis of dative 'objects' into 'subjects')—and given that the arguments which in Middle English became reanalyzed as 'subjects' were already behaving like 'subjects' in Old English—a model which allows for the separate treatment of structural/ morphological and behavioral facts seems appropriate.

However, beyond the purely notational derivation of grammatical functions from the primitives [objective] and [restricted], LFG avoids the treatment of such constructs as anything but irreducible arbitrary variables. Thus, in the context of the theory, behavioral generalizations are made about 'subjects' on the basis of 'indisputable' representatives of the category: 'NPs which refer to the Agents of transitive verbs in simple, underived sentences or the actor of an intransitive verb' (p. 3, fn. 3). For example, such NPs control CSD. Note that it is assumed that a 'subject' category is justified here despite the explicitly semantic, grammatical-function-independent definition of what is presented as an indisputably prototypical member of the category. Then, whenever we have nominals which deviate from this 'indisputable' membership in certain respects—e.g., non-agentive experiencers which feature case marking deviating from that associated with 'indisputable' members—but which at least optionally, and at least with respect to some behavioral characteristic, share the behavioral characteristics associated with the 'indisputable' members, then we may identify them as 'subjects' too. When this 'subject'-like behavior is viewed in the context of certain historical developments—specifically, that of the reanalysis of morphologically deviant behavioral subjects into nominals which
are subject-like not only behaviorally (and not just with respect to a limited subset of available tests) but also morphologically and by all available criteria—then Allen’s argument may indeed seem convincing that the reason these apparent non-subjects become reanalyzed is because they were in fact subjects all along: ‘the appearance of nominative Experiencers with particular verbs does not indicate a change of grammatical relation of those Experiencers, but rather a change in which cases are assigned to arguments’ (4).

The problem, however, is that it is simply assumed that some irreducible, invariant ‘subject’ category exists at any point in a language or among all languages equally. Is this in fact true? And even if it is true, then how do we know which arguments are members? The answer to the last is, of course, that the chosen behavioral tests will tell us29. But what if different tests conflict? In such a case, LFG is in a worse position than RelG; in the latter, conflicting tests for subject status may in principle be attributed to different levels or strata at which a given argument may function as subject. Such a solution is not, however, available to LFG.

In Allen’s study, the problem of conflicting behavioral tests is minimal, given that she relies on only two: control of CSD and linear order. While even these two phenomena fail to converge in all cases, this is untroubling to her given the implication these tests are interpreted to have for subject status: while CSD is interpreted as a sufficient test for

"Given the assumption of the primitive and arbitrary nature of grammatical relations, it is in fact puzzling that there would be any cross-linguistic agreement in the behavioral tests which pick out subjects.

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subjecthood, linear order is sensitive to subjecthood among several other factors. Even with CSD, though, it is a legitimate question whether this test is really pointing to some irreducible 'subject' primitive or rather to a category based on a prototype characterizable in independent terms. As we shall see, such an alternative view is indeed plausible, and Allen herself implies such an interpretation repeatedly. It represents a qualified failure of her analysis, I think, that she neglects to develop such an implication into a consistent and explicit treatment of the facts.

The treatment would, however, be at least descriptively adequate if not for one further factor. Like the RelG model, LFG assumes certain behavioral tests to point to the unambiguous relational status of a given argument. In the diachronic development of, say, a given predicate's non-subject argument into a subject, there is no reason for tests to disagree on whether this argument is or isn't a subject, unless independent factors interfere with the test's application. Such independent factors could be structural (say, the ECP or some such principle interfering with the mapping of certain arguments onto subject) or semantic. However, any structural constraint would have to be independently motivated, and any semantic constraint would vitiate the conception of grammatical functions as arbitrary primitives. In a language such as Icelandic, where, according to Van Valin, 'all of the [subject] tests pick out the same NP' (1991:146), no problem arises in the application of the tests directing the LFG grammatical-function-mapping analysis. However, in Old English, where rules of equi and reflexivization fail to agree with that of CSD in picking out a given argument as 'subject', LFG encounters the same difficulty as RelG; this difficulty results from a common erroneous assumption of the nature of
grammatical functions as arbitrary variables. Consider the following:

(23) gif hig gode willan rihtlice cweman
    if they God-DAT will-PL rightly please
    'If they wish to please God properly' (HomU 40(Nap 50)66
    (Allen p. 146)

In this example, the target or controllee of equi is the 'Theme' (stimulus) argument of cweman, which would receive nominative coding if expressed. This is perfectly consistent with the general fact of the control of nominatives in this construction, and is therefore unremarkable. What happens, though, when the verb under the scope of the modal has, by Allen's analysis, a dative 'subject'? Consider the following:

(24) ...ge noldon gode lician on godum ingehyde
    you-NOM not-would-PL God-DAT please in good understanding
    'You would not please God with good understanding'
    (ÆCHom II, 44 332.160)
    (Allen p. 146-7)

In such cases, only an embedded nominative, or an argument capable of appearing as such, is ever co-construed with the matrix clause's nominative. What we have here, then, is a divergence in the results of two different 'subject' tests. This naturally undermines the legitimacy of Allen's argument for the 'subject' status of certain non-nominative arguments based on the evidence of the test of CSD.

The question raised here, then, is whether the entities identified in such an approach are really in fact 'the same' from construction to construction, let alone from language to language. Note that the very presuppositions of an approach such as
Chomsky's—that we are all, as humans, born with certain structural possibilities in place—determines an interpretation of the data of specific languages in terms of these possibilities. The same applies, I would argue, to an approach such as the LFG model Allen endorses. The model itself presupposes that there are categories of grammatical function which are 'the same' from language to language or from one historical period of a language to another. It is this very presupposition which I argue to be wrong, or at least misleading.

Consider how this presupposition affects our interpretation of the facts of OE CSD. Instead of concluding that dative experiencers are functioning as 'subjects', we conclude that there is some respect in which dative experiencers are perceived as similar enough to nominatives to be categorized with them, at least with respect to control of CSD. If we drop our presupposition that such syntactic processes are primarily sensitive to some irreducible 'subject' status rather than to some functionally- or semantically-centered category, then the nominative-like behavior of dative experiencers becomes interpretable as evidence for some functional or semantic commonality between these argument-types and those coded as nominatives. These commonalities, then, are ones which emerge as sufficient to license membership in an emerging 'subject' category distinct from the OE 'nominative' category.

An important perspective offered here is that the mere fact of a category being complex—irreducible to a single or single set of necessary-and-sufficient membership criteria—does not make it arbitrary. Thus, the irreducibility of a given internally-relevant category—say, a category picked out by a certain morphological or syntactic process or set
of processes—to a single independently-required factor (agency, topicality, etc.) does not mean that the category can't be insightfully described in such terms. In the case of the English nominative, we may offer a semantically-based description (in terms of the semantic-role hierarchy, and arguably in terms of an agent prototype) which becomes decreasingly adequate as we move through Middle English. To the extent that animacy increasingly wins out over agency or 'source' status as criterial for membership in a 'subject' category (and this means both in beating out other arguments for this categorization and in being treated like historically central nominatives/subjects with respect to behavioral tests, in transitive and intransitive valences alike), we may identify the change in terms of re-rankings of semantic parameters already internally relevant, but differently ranked, in Old English. To the extent that passive increasingly serves to promote topical arguments to subject, and to the extent that more strictly role-sensitive OE syntactic processes come to require the input of such 'derived' subjects irrespective of role, we may say that the 'subject' category becomes more reference-oriented than it was in Old English—or that apparently role-sensitive syntactic and morphological processes become less role- and more reference-sensitive. In sum, a number of apparently independent factors act in apparent conspiracy in the emergence of a 'privileged' category which is more complex in its functional/semantic underpinnings than was the nominative-marked category in Old English; this conspiracy contributes to the development of an 'opaque' language type in Plank's or Hawkins' terms. This does not, however, mean that the emerging 'subject' category is arbitrary (again, complexity doesn't equal arbitrariness any more than an absence of necessary and sufficient conditions for category membership.
indicates an absence of the category itself), and this perspective on the development of subjecthood is at the very least difficult to reconcile with a view of subject status being an invariable primitive across languages and diachronic stages of a language.

This brings us naturally to an explanation of a turn of phrase objectionable to some but, given certain assumptions, in fact quite coherent. This turn of phrase is that encountered in references to the 'emergence of subjecthood'. Given that Old English already had subjects, what could this possibly mean? What it means is that a study of the development of English syntax and morphology points to the mapping of a relatively large body of behaviorally- and morphologically-relevant abstract structural entities at time-point A onto a relatively small number of such entities at time-point B. What we identify as 'subject' in Modern English (the initial nominal in unmarked order, that nominal which takes 'subject' case marking when coded pronominally, that nominal which controls and is targeted by CSD, that nominal which controls agreement, etc.) corresponds in a number of respects to a number of separate constructs in Old English. Most obviously, it is impossible to claim that the initial nominal in unmarked order is that which controls agreement except in the case of valences which feature only a nominative or only a nominative and an accusative argument. This necessitates the subsetting of some 'subject' properties (e.g., control of agreement) as in fact irrelevant to subject status or at least imperfectly matched with such status.

Even given these conditions, the claim can only be defended if we stipulate that all else, in particular the 'weight' and animacy of the arguments, remains equal. Note that even given the validity of Allen's point that word order can't be reduced to these...
grammatical-function-independent factors, it remains true that a much broader range of factors exerted a strong effect on OE word order than is the case in Modern English; recall, too, that what is meant by grammatical function is, for the most part, nominative (=subject), accusative (=object), dative/genitive (=oblique). In sum, this means that word order, cross-linguistically a relatively reference-oriented phenomenon, is more independent in Old English of the essentially role-oriented category of nominative than it is of the 'subject' category in Modern English; essentially, the different kinds of parameter (role and reference) are more extensively neutralized in a single subject category than they were in Old English.

In the case of a syntactic process which in Modern English may be identified as keying exclusively on subjects, that of functioning as the controllee of CSD, we find that the OE nominative category fails to map exclusively onto this pivot function. Again, then, we find evidence for a divergence between nominative and syntactic pivot in Old English where there is no such divergence in Modern English between subject and pivot.

Let us sum up. The ModE 'subject' category is not only more semantically heterogeneous than the OE nominative category, but it is also more central and indispensible with respect to a variety of syntactic processes or behavioral 'tests', and it is more obligatory both as input to these processes (hence the broader domain of passive) and in the sense that verbs with no nominative in their valence in Old English correspond invariably to subject-taking verbs in Modern English. Of course, it could be objected that we are comparing apples and oranges here: ModE 'subject' does not equal OE 'nominative' in any sense. But that is precisely the point. ModE subject subsumes far
more than does OE nominative. Old English had no single such heterogeneous, and
syntactically central, category. It is the development of such a category—a heavily
neutralizing category with no simple correspondence to any given functional or semantic
correlate—which is being referred to here in terms of the development of subjecthood.

3 Allen's dative 'subjects' as analyzed by RRG

The RRG explanation of the quirky case marking of verbs such as 'please' or
'hunger' (cf. Chapter 3) makes reference to a discrepancy between the number of
arguments in the verb's LS and the number of MRs in the verb's valence. If a two-
argument verb such as 'please' is stative in having no activity predicate in its LS, then (by
the default principles) its sole MR is an Undergoer; if the two arguments are 'theme' and
'experiencer', then theme outranks experiencer for Undergoer status, resulting in
nominative coding; the experiencer then appears in the default dative case of non-MR
core arguments.

With quirky two-argument statives, then, we note that the hierarchy of
accessibility to the morphosyntactically 'privileged' nominative category is reversed from
that found with 'normal' two-argument predicates. If, then, these predicates are reanalyzed
into 'normal' transitives—meaning that they lose their discrepancy between argument
number and MR number—we would expect the formerly dative argument to become
reanalyzed as nominative—to become, i.e., the subject. This is exactly what happens with
lician (=ModE 'like').

In the case of cweman, however, there is, in the relevant respect, no change at all:
the OE nominative 'theme' argument retains its pivot status over the 'experiencer' argument, and the experiencer simply loses its distinctive (dative) marking. Given the above-presented analysis of the 'theme' of *cweman* being in fact higher on the Actor hierarchy than the 'theme' of *lician* or even the experiencer with which it stands in syntagmatic opposition in the valence of the verb, the question is why this (animate, frequently volitional) argument outranks the experiencer in Old English for MR (and hence Undergoer) status. This is, in fact, the general question for OE 'dative object' verbs (*helsen*, *andswarian*, etc.).

A solution presents itself in the division of predicates into 'activity' and 'stativity' classes. If *cweman* is an activity predicate, then we would predict its more Actor-like argument to map onto the one available MR, with that MR being Actor. Is there, then, evidence for an Aktionsart distinction between *cweman* and *lician*?

Indeed, there is: we may assume that the intentionality attributed to *cweman* in Allen's analysis (motivating a 'cause' semantic role as opposed to a 'theme' role for the stimulus) is interpretable in terms of an Accomplishment LS for *cweman* but not for *lician*. The distinction between *lician*-type and *cweman*-type predicates, by this analysis, is essentially one between intransitives with (*cweman*) and without (*lician*) an activity predicate in their valence. The identical case marking of the two verbs' argument arrays, then, masks a fundamental semantic difference between the two, which becomes overt in the two predicates' divergent fates as we move into Middle English.

30 Recall that the crucial characteristic of the Accomplishment class of predicates is a CAUSE semantic prime in the LS.
Assuming a parallel between Icelandic and Old English (cf. Van Valin 1991, discussed in Chapter 3), the pivot selection process in Old English should work as follows. The highest-ranking argument, regardless of MR status, is mapped onto pivot. Thus, with lician, again assuming experiencer and Van Valin's theme, or other systems' stimulus, status, the dative experiencer should function as pivot. Agreement, meanwhile, picks out the highest-ranking MR as trigger.

As we have seen, however, Old English is more restricted than Icelandic in mapping non-nominatives (by Van Valin's assumptions, non-MR arguments) onto pivot. Even if we restrict ourselves to CSD, pivot selection only sometimes picks out the dative experiencer with Type I (dative experiencer—nominative theme) verbs. In general, whichever argument comes first—dative or nominative—seems to be preferentially selected for this function 31. Thus, unless fronted position correlates with a higher semantic role, the prediction that the highest-ranking argument maps onto pivot function fails to work.

One relevant consideration here is that, given differences among syntactic processes with respect to the reference-role parameter, we may reasonably expect different sorts of consideration to be relevant to pivot selection in different constructions. In particular, given the relatively reference-oriented nature of control of CSD—a reference-tracking process at a hierarchically intermediate level of structure—we may expect factors other than semantic role to determine the selection of this process's pivot.

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By Allen's data, a postposed dative experiencer never control CSD; a preposed dative experiencer does so in 60% of cases; a preposed theme does so in one out of three cases.
Our provisional conclusion, then, is that a purely semantic-role-oriented characterization of CSD pivot selection is inadequate precisely because of the relatively reference-oriented nature of this syntactic process. After all, CSD involves the deletion of an NP which must be interpreted as topical by virtue of its perseverance as a participant across at least two clauses. The problem here, however, is that no simple reference-related characterization of CSD controller presents itself. For example, we cannot simply say that the more topicworthy or topical NP controls the process, or that the initial NP controls it. With the nominative NP of most verbs, the fact of nominative coding (responsive, with most verbs, in a straightforward manner to the semantic role hierarchy: the highest-ranking argument, which is usually the most agent-like) appears sufficient to control the process independently of linear order\(^3\). Based just on this, we might hypothesize that a sufficiently topical or topicworthy nominative may control CSD, assuming that some measure of topicality or topicworthiness might be found for this. A suggestion that this may be correct is the fact that preposed nominatives control CSD more often than postposed nominatives (cf., e.g., Table 2-6, p. 53 for data concerning ditransitives). With nominatives of Type I (experiencer-theme) verbs, however, there are no examples of dative-nominative with a following conjoined clause with a nominative coreferential with the first clause's nominative, so we can't test whether such nominative status is sufficient to license CSD with these verbs. Of the three examples with nominative-dative, one features deletion.

\(^n\)

For example, there are postposed nominative NPs of ditransitives which control CSD (Table 2-6, p. 53).
There is thus at least no counterevidence to the claim that a nominative potentially controls CSD, with topicality or topicworthiness then figuring in the likelihood of deletion in any particular instance. However, we are then left with the dative experiencer NPs of Type I and Type II verbs, which potentially control deletion when preposed. While this doesn't affect the validity of the claim that nominative status is sufficient for CSD pivot status, it does mean that nominative status is not necessary for this function.3

It will be recalled, though, that dative experiencers, which are the only non-nominatives with the potential to control CSD, outrank the nominative theme by the semantic role hierarchy; it is only by virtue of specification of the argument corresponding to the nominative NP as the only MR in the verb's valence that that NP, as the highest-ranking MR, is selected as the NP for agreement trigger function. The problem then becomes why it is that 'theme' NPs in Type I valences have the potential to control CSD.

The nominative theme NPs in Type I valences are counterexamples to the generalization that the highest-ranking argument is picked out for nominative coding. By the RRG analysis, a one-MR stative predicate will map the lowest-ranking (highest-ranking from the perspective of the Undergoer end of the hierarchy) argument onto MR, and thence onto nominative case. Nominative case is, in this manner, not very meaningful in isolation. It neutralizes various semantic roles in the hierarchy, and it is not even predictably high-ranking or low-ranking relative to another argument in the valence, independent of (the arbitrary stipulation of) MR status.

At least, it is not necessary in general, although with most verbs—standard nominative-accusative transitives and dative-object and genitive-object verbs—it is.
CSD pivot status, then, appears to be formulable as follows. First, to the extent that the nominative argument is always a potential pivot, we may say that the pivot is picked out in the same MR-status-mediated manner as nominative case is picked out. Thus, it is not possible simply to say (as it is in Icelandic) that the highest-ranking argument is pivot. Second, when a dative experiencer is picked out as pivot, what appears to be happening is that the highest-ranking argument is optionally being chosen over the highest-ranking MR. Moreover, it is only when this highest-ranking argument is preposed that it may usurp the CSD pivot function. The selection of highest-ranking argument over highest-ranking MR is thus sensitive to a topicality condition, or to whatever determines or correlates with preposed position.

The sensitivity of CSD pivot selection to a topicality condition should in fact not surprise us, given that topicality influences pivot selection even among 'indisputable subjects', i.e. nominatives. That is, even though CSD control by postposed nominatives appears to have been possible, it was more common among preposed nominatives. For example, with passives of three-place verbs, when the preposed nominative of the first clause was coreferential with a following coordinate clause's nominative, deletion occurred in 11 out of 15 cases, as opposed to only four out of seven cases when the first clause's nominative follows the dative (p. 53).34

The evidence of Type I verbs is, in a way, even more striking. First, recall that

It would be useful to have figures for CSD with basic (nominative-accusative) transitives: how frequently does a postposed nominative trigger deletion of a coordinated coreferential nominative, as opposed to coding with a pronoun?
Type I verbs feature a (necessarily human) dative experiencer and a frequently inanimate nominative 'theme'. (Allen's count (p. 103) for all OE prose works is that the nominative NP of Type I verbs is human in only 57/323, or 18% of cases.) This very fact means that the verb's two arguments instantiate an asymmetry of topicworthiness such that it is extremely unlikely that the nominative will beat out the dative for the status of more topical participant. Indeed, by the evidence of pronominal coding, the experiencer of a Type I verb is much more likely to represent a referent of recent prior mention (198/323 pronominal dative experiencer NPs vs. 104/323 pronominal nominative 'theme' NPs; cf. p. 100). Even more strikingly, while Allen finds 22 examples in Ælfric in which a dative NP of a Type I verb is coreferential with a coordinated nominative, she only finds three examples with nominative-nominative coreference; this indicates the rarity of a Type I nominative persisting as theme of discourse, at this level of structure at least.

The best way, then, to understand OE control of CSD is as follows. In the vast majority of cases—with 'non-quirky' standard (nominative-accusative) transitives, as well as dative or genitive object verbs—nominative case encodes the more topicworthy argument. Thus, even though CSD is a relatively reference-oriented process, it makes sense that the nominative argument should be conventionalized as controller of deletion. The evidence that this status is a conventionalized one is that the mere greater topicworthiness of a particular accusative argument is not sufficient to permit it to act as pivot in the process. The only verb classes for which a non-nominative may control

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It is actually still necessary to determine the general topicworthiness of dative object verbs, since cweman may not be typical.
deletion are either ones lacking any nominative\textsuperscript{36} (Types N, II, S) or ones in which the

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Can ‘quirky’ intransitives control deletion? The evidence seems to be that such structures are severely disfavored. We have many examples of deletion in coordinate structures when the controller and controllee match in their case, e.g.:

\textbf{Hwæþer ða welegan nu næfre ne hingrige ne ne}
whether the rich-ACC-PL now never not hunger-SUBJ-SG not not

\textbf{þyrste, ne ne cale? (Bo 26.60.10)}
thirst-SUBJ-SG not not be.cold-SUBJ-SG

‘Can a rich man never feel hunger, nor feel thirst, nor feel cold?’

Here, ‘the rich’ must be accusative, since the subjunctive forms of the impersonal verbs which follow are singular and therefore cannot be interpreted as agreeing with a nominative subject. Since both the verbs following hingrian ‘hunger’ are impersonal with singular agreement, accusatives are deleted across the board. In the next example, hingrian is used personally, and its deleted argument is controlled by the preceding nominative plural:

\textbf{welige wædlodon & hingrydodon secynde soplice drihtyn}
wealthy-NOM-PL begged-PL & hungered-PL seeking truly lord

‘The wealthy begged and hungered, truly seeking the Lord’
(PsGLC (Wildhagen) 33.11)

In examples featuring a mix of nominative and non-nominative ‘subjects’, all the examples with hingrian listed in the Toronto concordance fail to involve deletion of a non-initial argument. (These examples involve such a mix by the evidence of a preposed overtly non-nominative argument followed by unambiguously ‘personal’ verbs or by the evidence of verbal agreement.)

\textbf{Se Hælynd for on restedsge ofer æcyras; soplice hys leorning-cnihtas}
the savior went on Sabbath over fields truly his disciples-PL

\textbf{hingryde & hig ongunnun pluccian ða ear & etan}
hungered-SG and they began-PL to.pick the ears and to.eat

‘The savior went through the fields on the Sabbath; his disciples hungered and they began to pluck ears of grain and to eat’
(Mt (WSCp) 12.1)

\textbf{ða weligan wædlodon & him hingrode...}
the wealthy begged & they-DAT hungered-SG

‘The wealthy begged and they were hungry’
(PsGLI (Lindeloef) 33.11) [compare Wildhagen ex. above]
nominative is typically less topicworthy than the non-nominative (Type I). This last class, then, is exceptional in displaying a degree of transparency (sensitivity to topical status) absent in the more conventionalized control of CSD with the majority of verbs.

Having presented an analysis from a functionally-oriented RRG perspective of some of the facts analyzed by Allen in LFG terms, may now pause to evaluate its intuitive appeal. First, we may consider it to reflect positively on the RRG model that the disparate synchronic behavior and diachronic development of 'dative subject' and 'dative object' verbs is so neatly representable. The RRG notations and mechanisms suggest an interpretation of the difference between cweman and lician as lying in the nature of their Aktionsart status, which is linked to the semantic role of the stimulus argument. Recall that with statives, a lower-ranking argument will preferentially map onto the MR function, while with nonstatives the hierarchy is reversed. Thus, the lower-ranking argument is a MR with lician, while the higher-ranking argument is a MR with cweman. This results in a superficially identical case-role array, despite the semantic differences between the two verb-types. Thus far, this is what corresponds to Allen's distinction between 'dative object' and (Type I) 'dative subject' verbs, but in the RRG analysis no mention is made of 'subject' and 'object'; also, nothing in the RRG model requires that one process's pivot be the same as another's, while an LFG acknowledgement of the mapping onto 'subject' function to vary from construction to construction is ruled out.

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**hyre hingrap symle & heo wanspedig ys**
she-DAT hungers always & she-NOM poor is
'She always hungers and she is poor' (LibSc 25.12)

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The semantic difference between the two verb-types correlates in turn with a more frequent topicality or greater topicworthiness of the dative argument relative to the stimulus/theme argument in the Type I valence, since it is with these verbs that the stimulus will tend more strongly toward low referentiality (in Hopper & Thompson's terms, low 'individuation'), moving it toward what is usually referred to as 'content' status. This, together with the cross-linguistic reference-orientation of CSD, motivates the differential behavior of Type I and 'dative object' arguments. This also motivates the reanalysis of the Type I datives into subject, given the increasing reference-orientation of the latter relative to the OE nominative.

The RRG analysis also allows us to view the diachronic changes in case marking and behavior in terms of a realignment of MR number and argument number—or in terms of a loss of discrepancy between the two. Given that MR number is the locus in RRG of transitivity value, what this means is that a variety of 'intransitive' OE two-argument predicates become integrated into a transitive valence.

This prompts us to consider the sense in which predicates such as cweman, lician, or helpan are intransitive. Obviously, they are not intransitive in the sense of having only one referential argument in their valence. This is the sense in which 'cry' is intransitive, but not helpan or lician. Similarly, hyngrian is not atransitive in the sense in which rain is—having no referential participant. Rather, the unusual thing about 'intransitive'

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The reference-orientation of the process is verified in Kashaya by the fact that it is pivotless in that language: any argument, regardless of semantic role or MR, may be omitted.
predicates like cweman is that they have two referential participants coded as arguments but deviate in their case marking from the most common pattern for two-argument predicates.

Implicitly, there are two senses of transitivity involved here. One is a conception of transitivity simply in terms of the number of referential arguments, and the other is in the more complex sense of Hopper & Thompson's transitivity prototype. Predicates such as cweman or lician are 'intransitive' in the latter sense only: there are two referential arguments, but one or the other, or the predication as a whole, deviates in some way from the semantics of the transitivity prototype. The 'quirky' patterns, then, signal this semantic deviation relatively transparently: the argument which is definitionally animate is also definitionally nonintentional. While this alone would make it an unacceptable candidate for the patient (accusative) slot in the transitive valence, the argument with which it stands in syntagmatic opposition is, in the case of the Type I verbs, also typically nonintentional and frequently inanimate, and is thus a poor candidate for modeling on the transitive agent.

The problem here is that the significance of case marking, or of MR number, is at least strongly implied to lie simply in its nonconformance to the transitive prototype. And yet, as we have seen, the cases or case arrays associated with that prototype—especially the nominative—are underspecified semantically. Why is it that such a restricted subset of transitively 'deviant' verbs should be marked for such deviance?

The answer is that the 'deviant' OE case marking is not simply marking deviation from transitivity. Rather, it is marking adherence to a different semantics inadequately
characterized as simply 'intransitive'. Thus, the difference between a Type N (dative-genitive/PP) and Type I (dative-nominative) predicates is not simply in their deviation from transitivity, but in a semantic contrast coded by the genitive-nominative opposition. It is to the content of this contrast, and the content of 'quirky' OE case marking in general, that we now turn.

4. The semantic grounding of transitive and non-transitive patterns in Old English

At this juncture, a brief retrospective and prospective pause is in order. The trouble, it will be recalled, with the RRG analysis of 'quirky' case in Icelandic is that transitivity and MR status are reduced to purely stipulative, idiosyncratic variables. The question is never raised why these particular predicates, language-internally let alone cross-linguistically, should participate in 'deviant' coding. In addition, even if the analysis were to adhere to a semantically-grounded conception of MR status and transitivity, the strong implication is that the only role case marking could have in a language would be to signal transitivity or a deviation from transitivity. We might legitimately ask ourselves whether transitivity is indeed so important a concept that it alone motivates case marking to the exclusion of all else.

Here, I will argue that a predicate's transitivity value may be understood as being motivated by other aspects of a predicate's semantics—in other words, that there is more to 'quirky' marking than simply a signal of deviation from expected transitivity value. RRG,

The same applies to other applications of the same model to other languages, e.g. Michaelis (1993) for Latin.
then, offers an alternative formalism to LFG for representing the facts of OE case marking and behavior, and the patterns represented in the formalism have, in turn, functional correlates. Thus, while transitivity is retained as a lexical stipulation in the sense that it is viewed as part of the predicate's lexical representation (in plain terms, part of its meaning), it is nevertheless best viewed as non-arbitrary in the sense that it correlates with other aspects of that lexical representation.

The account below offers a unified treatment of the OE case system—with special attention paid to that most prominent 'quirky' OE case, the dative—in the sense that it integrates a number of approaches only marginally compatible as heretofore presented. In particular, I reconcile Van Valin's misguidedy arbitrary view of the relevance of transitivity to 'quirky' case marking and transitivity-independent semantic with analyses such as those of Fried and Anderson (1971) which offer accounts of the (supposedly universal) semantic underpinnings of 'case' in a somewhat more abstract, Fillmorean sense than that typically intended in analyses of a particular language's case system. In addition, I draw selectively on insights provided by Plank's abstractionist overview of dative as coding reduced 'opposedness' to the nominative relative to accusative and Allen's somewhat more detailed semantically-sensitive but still essentially formal understanding of case in Old English (an understanding which rests on an ill-advised conception of GRs as typology-independent, essentially immutable constructs). I will argue that there is no conflict between approaches (such as Plank's and, in a more general domain, such as Hopper and Thompson's) which reduce a seemingly broad range of semantic phenomena to degrees of transitivity, and those such as Anderson's, Fried's, and
Allen's which analyze case, or specific cases, in terms of semantic parameters which
make no reference to transitivity.

In fact, the two approaches are compatible in a very simple way: while cases and
case arrays do encode a detailed identifiable semantics, case arrays which deviate from
the nominative-accusative configuration associated with prototypical transitivity will
naturally also deviate from the latter semantic gestalt in some manner. This doesn't mean
that the 'function' of, say, dative or genitive case is to 'signal' deviation from transitivity—
such a function would be much too vague and underdetermined to be very useful. Rather,
the many functions of such cases may be generalized in terms of deviations from
transitivity by virtue of the fact that formally non-transitive coding will almost by
necessity deviate semantically from transitivity in some way as well. The typological shift
represented by the development from an OE-type into a ModE-type case system, then,
may be understood largely in terms of the ascendance of a transitive schema, for the most
part at the expense of more clearly motion-based metaphorical conceptualization.

4.1 The 'localistic' analysis of Anderson (1971)

The starting-point for our discussion of semantic approaches to the OE case
system will be the semantically-oriented analysis of the underpinnings of case presented
in Anderson (1971). Anderson, like Fried, emphasizes non-transitive, motion/location
('local') parameters at the expense of transitivity-oriented ones, and in fact takes this
perspective to an even greater extreme than Fried does. His 'localist program' thus offers a
clear illustration of a compelling idea—that a wide array of case relationships in many
languages involve essentially spatial conceptualization—pushed so far that it ultimately serves to support a perspective it explicitly opposes—that of the importance of a non-spatial, transitive conceptualization.

Just as Van Valin's approach is somewhat one-sided, then, in reducing a wide variety of 'quirky' case marking to the single factor of 'unexpected' transitivity value, the approach of Anderson is extreme as well in likewise reducing a multiplicity of formal structures to a small number of categories (in his system, 'locative' ones) and thus in claiming that all human conceptualization of the sort expressed in case marking is essentially 'locational'. What his approach invites us to do is to relate all uses of any given case in any given language to some basic 'locational' sense: if we are presented with a broad range of uses of a given case, we are invited to identify some single, concrete, spatial sense as the basic sense from which all other senses are metaphorical extensions. What this offers, then, is a fairly straightforward way (in theory, at least) of unifying a superficially disparate array of meanings associated with a given case under a single semantic label—and thus to preserve an understanding of that case as semantically

39 This is actually an overstatement, since Anderson does attribute some aspects of casual expression to considerations of 'information structure', in addition to what he refers to as the locationally-oriented 'experiential' or 'cognitive' structure (p. 204). If we perform the traditional segregation of information structure into 'pragmatics' then we may represent his view as being that all casual semantics is 'locational', even though case marking may serve other, pragmatic, functions in addition. A better view is that transitivity represents an independent semantic variable, with 'information structure' interacting with this. Consider Fillmore's (1977) point that the strangeness of I hit the stick against the man is due to the (pragmatic) strangeness of placing the stick, in his terms, 'in perspective' in preference to the man. This shows that pragmatic factors will influence our choice of assignment to slots in the Transitivity schema (i.e., they interact), but one cannot be reduced to the other.

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coherent as opposed to merely 'formal'.

A more reasonable application of both the notion of 'localist' case semantics and that of transitivity would be to view one given formal case marking array in a given language as instantiating a pattern based on prototypical (semantic) transitivity, and then to view formal deviations from this pattern as exponents of deviations from this semantic prototype. Given the complexity of the transitivity prototype, formal deviations might correlate with deviations in terms of any of a number of specific semantic parameters. Given, too, that the transitivity prototype is non-localistic (both as a gestalt and in terms of specific semantic parameters), an interpretation of case patterns in terms of adherence to or deviation from transitive semantics fails to give any prominence to a localistic perspective—even though the particular case markers used in the deviant patterns might still be understandable in terms of a basic localistic semantics.

I will develop the argument that it is best to view transitive and localistic analyses of case marking patterns as complementary rather than truly competitive. The insight provided by Croft's and Langacker's 'action chain' model of clause structure is that the head of the chain may be understood both as the agentive performer of an action and as a (literal or metaphorical) spatial source of the action. Cross-linguistic evidence pointing

* Consider, too, Fried's (1995) representation of the linked nature of separate 'Movement' and 'Transitivity' schemas. On the other hand, Fried does appear ultimately to favor a primary role for 'Movement', but the arguments for this are rather shaky: one, that movement is more concrete (directly and literally visible) and hence more 'basic' than transitivity, and two, that the extra participant in the Movement schema relative to the Transitivity schema (namely, the Theme) means that, if one schema were conceptualized in terms of the other, then Transitivity must be conceptualized in terms of Movement but not vice-versa. The second point relies on a possibly incorrect assumption, and the first

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to the fact of their relatedness in human conceptualization fails to force us to reduce one
category to the terms of the other, as some abstract principle of 'economy' might dictate.
The 'quirky' use of dative may in a particular instance be explicable both in terms of a
devation from some aspect of the semantic prototype and in terms of a conceptualization
in terms of the semantics of a competing conceptualization formulable independently of
the semantics of transitivity, which may or may not involve localistic semantics in some
more or less direct sense.

A productive approach, then, to the issue of the semantic significance of case
marking patterns in Old English would be to view 'quirky' two-argument valences both in
terms of deviation from a transitive prototype and in terms of adherence to a competing
positively contentful pattern or patterns. That is, when confronted with an 'unexpected'
pattern deviating from a nominative-accusative valence, it is important to ask not just
why the situation-type instantiated in the pattern is represented with non-transitive
coding, but also what specific non-transitive semantics is represented therein and why
that particular case array is utilized to code that specific semantics. This latter
consideration will naturally prompt the identification of schemas in Fried's sense which
instantiate conceptualizations in competition with transitivity and which are linked to
certain language-specific formal exponents (i.e., case arrays). The advantage of this
approach will be clear when it is extended to one-argument patterns, which are more
obviously by their nature insufficiently explicable with reference to transitivity or with

ignores the fact that even the notions of 'source' and 'goal' rely on abstractions away from
directly visible facts.

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reference to deviations from specific parameter-values associated with either the Actor/agent or Undergoer/patient argument of the transitive schema.

Subsequent chapters will develop the argument that diachronic changes in English valence patterns may be understood in terms of the increasing neutralization in the core syntax of the language of role-related semantic factors which in Old English reflected themselves not only in distinctive coding but—despite Allen (1995)—in distinctive behavior as well in a number of respects. The ascendance of a formal transitive pattern in English may be understood at least partly in connection with the increasing conflation of the agent-centered nominative with primary topic and the increasing conflation of accusative with secondary topic, with role-related factors becoming increasingly neutralized in the emerging subject and object categories.

An initially promising application of Anderson's approach is to the various 'quirky' datives in Old English, which represent classes of argument-types for which Anderson most explicitly develops his 'locative' analysis. Note that dative is more often assigned to the 'concrete' (as opposed to 'grammatical') subset of IE cases than are the other cases still extant in Old English, namely nominative, accusative, and genitive (Kurylowicz 1964:179). The cases most commonly identified as 'concrete' are ablative, locative, and instrumental, but these are for the most part lost as formal categories in Germanic, with all three being subsumed under a formal dative and, to a lesser degree, a formal genitive category. I will now summarize the salient points of Anderson's localist perspective, and the support he adduces for it, and then proceed to a criticism of some rather more ambitious and less well-supported aspects of the localist program.
The general claim is that a wide variety of verbs lacking any literal spatial semantics, including ones which subcategorize in many languages for what are identified as 'dative' arguments, may be understood as locatives in some abstract sense. For the most part, these comprise verbs which feature a clear deviation from the prototypical 'transitive' semantics (with one agentive participant and one overtly affected one) associated with such predicates as, say, 'crush' or 'hit'. A cross-linguistically important sub-class of these abstract locatives is represented by 'affective' verbs or 'Empfindungsverben' such as 'understand', 'need', 'hate', 'love', and 'like' (Anderson 1971:102).

The evidence for a locative semantics of such verbs is as follows. First, they share a feature of stativity with concrete locatives; compare:

(25) *Many people are knowing that.

*The column is being (located) on the hill.

Second, many languages mark these 'Empfindungsverben' distinctly from 'Tatverben' with what is classified as a dative inflection, e.g., Georgian and Old English; this dative inflection otherwise has a language-internal signification of an overtly spatial semantics (e.g., to mark locative settings in Old English; but see below). Third, even in languages like Modern English which have largely accommodated these 'affective' verbs to a formal transitive pattern otherwise associated with 'Tatverben', paraphrases are available which express a locative conceptualization overtly, cf. It is known to me.

Verbs of 'transfer' such as 'give', 'get', or 'owe' are analyzed in terms of locative
semantics associated with the goal and ablative semantics associated with the source; the
transferred item (or 'theme' in some systems) is rather confusingly referred to as
'nominative', which in Anderson's system is simply a cover term for a variety of
Undergoer-like cases. A verb such as 'help' or 'thank', then, is interpretable in terms of an
extension of the treatment of transfer verbs: 'Such classes appear to be in general similar
to those containing give and the like, except that in their case the underlying nominative
phrase is deleted, and its lexical content is 'carried' superficially by the verb' (142). A verb
such as 'help', then, involves a metaphorical transfer with the transferred item simply
incorporated into the verb itself, as may be seen by the paraphrase to give help to.

In this manner, Anderson subsumes a considerable array of casual relationships
under a locative rubric, involving a large number of metaphorical extensions from
basically spatial 'locative' and 'ablative' cases. These 'local' cases are thus distinct from the
'non-local' ones of nominative and ergative. The latter two have, in one sense, a rough
correspondence to RRG's Undergoer and Actor respectively, except that in RRG the bias
is towards subsumption of as many case relationships as possible, including 'local' ones,
under agent- and patient-centered categories, whereas in Anderson's approach the bias is
reversed. Indeed, Anderson goes so far as to propose a tentative reduction of all case
relationships, including 'even the notion of transitivity, involving the "most syntactic",
"least concrete" of relations', to a locative semantics.

The argument for this last proposal is as follows. First, 'a parallelism between
ergative and ablative is reflected within various languages in the fact that the two
categories can be represented superficially in the same way: consider ... fram and of in
Old English...' (173). Second, we have intuitive evidence: 'Erg and abl are "sources"--abl commonly spatial (or temporal); erg causal with causatives, and in general "the source of the action". Nom and loc in the presence of erg and abl (respectively) indicate "goals" (of an "action" or "movement")' (174).

Further evidence for the identity of ergative and ablative at some level is the fact that 'abl will not appear in the same clause as erg', which thus justifies 'regarding erg as being equal to abl in the absence of [the feature] loc' (175). Apparent counterexamples are provided by clauses featuring verbs which combine agentivity with (manner of) action, e.g.:

(26) John walked from here to there.

John rolled the ball from here to there.

Anderson regards these as involving a biclausal structure at an abstract level, with the ergative in the higher clause and the locative in the lower; hence, abl and erg are not in the same clause except superficially.

In this way, the transitive relationship is relegated to a relatively unimportant status, with the participants in this relationship, ergative (agent) and nominative (patient), viewed simply as subtypes of ablative and locative respectively, or perhaps as the latter types accommodated to a certain contour as dictated by considerations of 'information structure' rather than 'cognitive structure' (204).

It is at this point, however, that we may feel Anderson to have pushed his 'localist'
program too far. We may recall that other models, including Croft's (1991) force-dynamic causal-chain model of directed events, also account for a connection between agentivity and source status, and patienthood and goal. In fact, Croft (1991:271) considers the 'privileged' status of the subject and object categories to derive from their correspondence to the endpoints (and, thus, particularly salient sub-parts) of the causal chain. However, this is certainly not to say that all events conceptualizable in terms of directed motion have equal status, independently of such considerations as the presence of an agentive participant. As with many of Anderson's arguments, while we may be inclined to accept, e.g., the use of OE fram or ModE by as pointing to some perceived commonality between agents and sources (or at least some spatial notion), this does not mean that one is legitimately reducible to the other—especially since, in this particular case, the overtly spatial preposition is used to code the agent in a marked structure, not the normal, unmarked one. In addition, we must somehow retain the ability to make typological distinctions among those languages in which non-spatial, transitivity-oriented parameters hold sway in the overt morphology and syntax, and those in which spatial parameters are relatively dominant.

Our conclusion, then, is that it is best to at the very least preserve the distinction

"Of particular relevance here is the fact that the basic transitive structure may place agent-oriented restrictions on the 'source' of the effect which are absent in the passive structure—cf. Foster's (1979) observation of the infelicity of inanimate subjects of verbs such as kill in the active, but not the passive, structure in Ozark English; hence (in Ozark English):

Uncle Harry was killed by a heart attack.

but

*A heart attack killed Uncle Harry.
between 'local' and 'non-local' casual semantics—a distinction Jackendoff (1987) respects in his separation of 'thematic' (movement-oriented) and 'action' (agency-oriented) tiers. By this view, transitivity-oriented parameters (agency, telicity, etc.) are just as basic to human conceptualization as location-oriented ones, and may have different formal exponents or patterns associated with them. Thus, it is significant that a kind of argument repeatedly invoked by Anderson for the covert casual status of a given nominal involves paraphrase—e.g., of a structure which has no overt local semantics in terms of one which expresses such semantics overtly. All this really demonstrates is that a category of one type (say, 'agent' or 'causation') is conceptualizable in terms of some other category-type (say, 'source' or 'transfer'). On the assumption, however, that different formal patterns correlate with different semantics (i.e., that overt formal patterns have somewhat greater significance than simply serving to mask Anderson's covert ones) the formal translation alters the very semantics which serves to distinguish one pattern form another. In other words, translation from a pattern with no overtly spatial semantics associated with it to one in which such semantics is transparently encoded proves nothing more than that a spatial conceptualization is compatible with a non-spatial one.42

Thus, consider the following pair:

The movie sickened me.
I felt sick from the movie.

This pair illustrates that a cause may be conceptualized as a source, or vice-versa. However, consider further well-known pairs such as the following:

The virus killed my father.
My father died from the virus.
4.2 The schema-based approach of Fried (1995)

We continue our analysis of the OE case system with a critical review of the schema-based approach to case marking presented in Fried (1995). Fried's approach is clearly motivated by the typological nature of the languages providing the bulk of the data for her study. Both Czech and Kannada are languages with well-articulated case morphology, in which a relatively large number of verbs are associated with case configurations deviating from what would be identified as nominative/accusative, and in which these cases and case configurations have relatively clear semantic correlates. Given this, it is understandable that she would object to models that interpret case patterns deviating from nominative/accusative simply in terms of deviation from 'proto-agent'/proto-patient' semantics (Dowty), or simply in terms of deviation from semantic

The crash killed my mother.
My mother died from the crash.

George Bush killed my father.
*My father died from George Bush.

??Neglect kills 30 thousand Canadian babies annually.
30 thousand Canadian babies annually die from neglect.

Although we find fairly widespread interparaphrasability between the transitive and the intransitive pattern, there are principled limitations stemming from the transitive structure's preferential selection of agentive causes, while the intransitive structure with from preferentially selects nonagentive causes. The more transparently 'spatial' version is used for the latter cause-type, since causation, while compatible with ablative semantics, is not particularly relevant to it. The transitive structure, by contrast, is one to which agentivity is relevant, and the meaning characteristically associated with the transitive nominative cannot be reduced to ablative semantics.

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transitivity. In other words, such analyses imply that the only semantic significance of 'deviant' case marking lies in its 'non-transitivity', rather than in some more positive and independently contentful instantiation of non-transitive semantics. The schemas she sets up, then, represent precisely the inventory of linguistically significant semantic configurations which she finds to be lacking in analyses such as Dowty (1991) and Van Valin (1991).

In the present in investigation, I will accept the schemas described by Fried as universally valid semantic representations. By necessity, such a simple system will need to be adjusted on a language-by-language basis, but this will usually involve the identification of internally important subschema variants of the presented schemas rather than requiring substantial changes in the schemas themselves. Once we accept that the schema inventory is universal, we may view language-specific differences in terms of the kind and extent of empirical evidence offered by a given language for the semantic categories in the inventory. With regard to Old English and Modern English, what we find is that many 'experiencer' event-types which in Old English receive transparently Motion-schema-related coding, and which in addition exhibit Transitivity-deviant behavior in at least many respects, become subsumed under the Transitivity umbrella, both in coding and behavior, in Modern English. In simple terms, the conceptualization represented by the Transitivity-oriented schemas becomes more dominant and pervasive in routine coding patterns at the expense of that represented by Motion/Location. This is, then, one way of looking at what is lost with the loss of oblique cases, and their 'quirky' subset, as we move from Old English to Modern English.
In this way, the supplementation of an RRG analysis with a schema-oriented analysis will allow us to view 'deviant' case marking not only in terms of deviation from transitivity but also in a more contentful way in terms of the positive coding of non-transitive semantics. In addition, the adherence to a Hopper & Thompson-oriented semantically-grounded conception of transitivity will allow us to view formal deviations from transitive patterns in motivated semantic terms, rather than simply in idiosyncratic terms as in Van Valin (1991). Thus, the perspectives offered by all three analyses are not only compatible, but constructively complementary.

### 4.2.1 The basic schemas: Motion/Location, Transitivity, Action and Befalling

A valuable insight in Fried's approach is that semantic roles are most meaningfully attributed not to argument slots in a verb's valence, but rather to participant slots in an independent schema, with any given verb being potentially compatible with more than one schema. The four schemas identified as 'basic', with their associated roles, are as follows:

<table>
<thead>
<tr>
<th>Basic Schema</th>
<th>Proto-roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Motion/Location</td>
<td>THEME, SOURCE, GOAL, LOCATION</td>
</tr>
<tr>
<td>b. Action</td>
<td>INITIATOR</td>
</tr>
<tr>
<td>c. Befalling</td>
<td>PATIENT</td>
</tr>
<tr>
<td>d. Transitivity</td>
<td>INITIATOR, PATIENT (67)</td>
</tr>
</tbody>
</table>
The one-participant schema she calls the Action schema involves a single INITIATOR with the following feature matrix:

Action Schema:

<table>
<thead>
<tr>
<th>INITIATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>control+</td>
</tr>
<tr>
<td>change-</td>
</tr>
<tr>
<td>animacy+</td>
</tr>
<tr>
<td>intention ]</td>
</tr>
</tbody>
</table>

A different one-participant schema, called Befalling, has a single PATIENT role with the following features:

Befalling Schema:

<table>
<thead>
<tr>
<th>PATIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>control-</td>
</tr>
<tr>
<td>change[]</td>
</tr>
<tr>
<td>animacy[]</td>
</tr>
<tr>
<td>intention-</td>
</tr>
</tbody>
</table>

Some intransitive predicates (say, blush) are arguably inherently restricted to one of the two intransitive schemas only. Others (say, cough and laugh) may participate in either
schema. This responds to and simultaneously captures the insight that it is somewhat misguided to attempt to attribute SRs, or their component features such as [control], directly to the verb itself. The verb's argument-slot will have certain features which may motivate its compatibility with a given predicate-position in a given schema, but this compatibility needn't be unique. We thus avoid the vexing question of whether the argument of laugh (or Kashaya malaya? 'fall') is or isn't volitional. Rather, as a participant in the Action schema it is volitional, while as a participant in the Befalling schema it is not; a 'laugher' is thus only necessarily volitional or not as a participant in a given schema, not independently.

Of the four 'basic' schemas, three (Motion/Location, Action, and Befalling) are called 'primary'. The Transitivity schema is claimed to have a derivative or secondary status in being characterizable in terms of 'a characteristic combination of action and befalling' (67). The imputation of a derived or secondary status to the Transitivity schema is something we shall have cause to criticize. For the moment, we may simply note that the view of Transitivity as somehow conceptually less basic than either Action or Befalling is at odds with independent claims for the Gestalt status of transitivity in, e.g., Hopper and Thompson (1980), and with such evidence as the fact that languages are much more likely to sacrifice or forgo distinct coding for the different kinds of intransitive arguments (resulting in accusative or ergative morphological patterns) than they are to sacrifice distinct coding for the two arguments of a semantically transitive event-type. The issue here is not whether Transitivity may be understood in terms of a
combination of the other two schemas. After all, all the schemas are characterizable in
terms of combinations of more specific features, but they are also argued to represent
'privileged' arrays which cannot simply be reduced to their component parts: they are
'cognitively coherent subsets that can be thought of as particular generalized co-
occurrences of these concepts', and 'are not just random collections, but represent regular
patterns of events' (67). As mentioned already, Fried's disinclination to view the
Transitivity schema as central is probably motivated by the typological nature of her
languages of study, leading to a certain reluctance to grant the sort of centrality to this
schema which more naturally suggests itself in 'opaque' languages, such as Modern English, where a canonical formal transitive pattern is clearly more dominant. The
validity of her orientation thus hinges on the invalidity of the more widespread view of a
transitive prototype having a universal conceptually basic status in a manner which can't
be reduced to the cumulative contribution of its component parts. I will argue that this

More specifically, whether the participant-slots may be understood as represented in
terms of the intransitive schemas. Prototypical transitivity (as well, arguably, as
prototypical Action and Befalling) also features aspectual parameters not represented
here.

A certain internal inconsistency is therefore suggested by the unique flagging of the
Transitivity schema (in contradistinction to the other schemas) in terms of 'prototypical'
feature-values:

Prototypical ('causative') transitivity:

<table>
<thead>
<tr>
<th>INITIATOR</th>
<th>PATIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>[control+]</td>
<td>[control-]</td>
</tr>
<tr>
<td>[change-]</td>
<td>[change+]</td>
</tr>
<tr>
<td>[animacy+]</td>
<td>[animacy[]]</td>
</tr>
</tbody>
</table>
bias (as in the approach of Anderson (1971)) is in fact somewhat undesirable in parallel manner to the pro-transitivity bias of Van Valin.

The basic schemas, then—leaving aside for the moment the issue of the relative primacy of Transitivity and the intransitive non-motion schemas—may be viewed as cognitive reference points in terms of which other event-types are conceptualized. There are essentially two ways in which this may occur. First, an intuitively and empirically distinct event-type may be conceptualized in terms of one of the basic event-types, as evidenced e.g. by use of the same case-marking array for both. For example, 'experiencer' predicates in a language may select case markers identical to those independently used for

\[ \text{[intention[]]} \quad \text{[intention-]} \]

The very acknowledgement of a prototype for the Transitivity schema is somewhat at odds with the independent characterization of that schema as derived; a prototype, after all, is intended to have a conceptual status irreducible to its component features.

An Indo-European-based confirmation of the 'basic' status of these schemas—or, at least, of Motion/Location and Transitivity—is that almost all the seven non-vocative IE cases are associated with argument-slots in them, if we assume that instrumental case can be related to the Transitivity schema in its non-locative sense or to the Motion schema in its locative sense. One possible exception is genitive, which is analyzed (Kurylowicz 1964:185) as having a diachronically prior adnominal status and being recruited into the adverbal case inventory to mark various low-referential argument-types deviating from prototypical values associated with other cases, especially accusative—e.g. to mark 'content' arguments and other relatively unaffected referents in situation-types bearing some resemblance to those coded transitively. On the other hand, the many Transitivity-deviant uses of the genitive may well be derived from the adnominal use via a basic Motion-oriented 'source' meaning. A second possible exception is dative, which has a locative source (and is thus relatable to the Motion/Location schema) but becomes reanalyzed to varying degrees as a marker of a special metaphorical locative semantics, and/or of a transitivity-deviant combination of animacy and nonvolitionality (i.e., 'experiencer' status or affectedness). (Cf. Kurylowicz 1964:179 ff., and the discussion below.)
prototypical Transitive (or Action and Befalling) situation-types, or prototypically Motion/Location situation-types, or both. Second, some additional schemas have a derived status in importing case-marking associated with (or sharing other morphological or behavioral characteristics with) more than one other schema. Examples of such 'complex' schemas are those associated with three-part 'transfer' predicates (give etc.) in both monotransitive and ditransitive valences. We now turn to a discussion of these other, non-basic, schemas.

4.2.2 The semantic nature of schemas, and their usefulness in capturing cross-linguistic generalizations and typological distinctions

The evidence just mentioned for the conceptualization of one event-type (say, some 'experimenter' event-type) in terms of another (say, Transitivity or Motion) is that of case marking, but there are other kinds of test that may provide evidence of the relatedness of two event-types, or of distinctions within one event-type. These other tests are for the most part behavioral, and—as we have already seen—this behavioral evidence may point to competing categorizations of predications into event-schemas, both with respect to the evidence provided by morphology and that provided by other behavioral tests. This fact considerably complicates the task of associating a predicate—or even a particular valence of a predicate—with any particular schema in any particular language. The inventory of schemas, then, is intended to represent a universal semantics underlying the particular facts of any particular language. It may be a cross-linguistically robust fact that languages distinguish different kinds of intransitive non-motion event-types (unaccusatives and unergatives), but we would not want to integrate into our universal
schema-inventory facts which are demonstrably non-universal—such as how these differences are expressed.

While the evidence for these various schemas is empirical, then, the schemas themselves are semantic constructs, not formal ones; they represent categorizations and categorical distinctions that languages will tend to draw, although the nature of the evidence for these groupings and distinctions—and thus, e.g., whether a particular grouping or distinction is made in the case marking system—is language-specific. Despite the schematic and universal nature of these semantic constructs, however, a description of the schema inventory does help us, in a very simple and natural way, to make certain typological distinctions of particular interest to us in the present investigation.

A language may be viewed as 'transparent' if its morphology (and perhaps 'core' syntax) is responsive to or reflective of these schemas in a relatively iconic manner. Thus, if (by one or more of the usual sorts of unaccusativity tests) two verbs translatable as 'fall' in two given languages are shown to form a group with transitive patients, and two verbs translatable as 'run' are similarly shown to be grouped with agents, greater morphological transparency would be achieved with respect to these verbs by the language that avails itself of two different case markers for the two verbs' arguments.

'Fall' in English is grouped with transitive patients by a shared [-control] parameter both intuitively (we know it to be so by virtue of knowing what the verb means) and empirically (by the 'what happened to X was-' test, cf. Jackendoff 1987). The fact that it fails to be distinguished morphologically (in its case marking or verb agreement) or syntactically (by equi, conjunction, or other 'tests') from 'Action' verbs such
as run may be taken as evidence for the 'opacity' of English and for the projection of the sorts of neutralizations contributing to this opacity into certain core syntactic domains as well.

Of course, assertions about a language's 'opacity' based on a single verb, or a single semantic class of verbs, are of doubtful validity. It is always possible that the language singles out a subclass of the cross-linguistic 'Befalling' class for distinctive morphological or behavioral treatment. Thus, in Pomo, animate participants in a Befalling schema are singled out for special treatment. If one simply looked at verbs such as 'melt', one would draw the conclusion that there is no difference from Modern English with respect to the opacity of the morphological and syntactic systems in the treatment of Befalling-class predicates. What this means, according to the assumption of universal schema validity, is not that Pomo has a different Befalling schema from Modern English, but that its morphology and a number of syntactic processes are responsive to a distinction drawn at lower taxonomic level, i.e. at a level at which a distinction is drawn between animate and inanimate arguments in two subtypes of the Befalling schema. This shows, then, that the schemas represent semantic distinctions that have universal validity but nevertheless have language-specific expression; it is in the area of language-specific expression, then, that we find typological differences.

With this in mind, let us consider one potentially confusing aspect of the schema analysis, but one which may nevertheless be exploited to illuminate certain cross-linguistic differences of interest to us. This has to do with the importation of labels such as INITIATOR from basic schemas into non-basic ones such as experience schemas. For
example, consider the following inventory of Prototypical-Transitivity-deviant schemas which are nevertheless given Transitivity-derived labels of INITIATOR and PATIENT; these schemas correspond to listen or look and fear and feel respectively:

<table>
<thead>
<tr>
<th>Controlled Experience: INITIATOR</th>
<th>PATIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>[control+]</td>
<td>[control-]</td>
</tr>
<tr>
<td>[change-]</td>
<td>[change-]</td>
</tr>
<tr>
<td>[animacy+]</td>
<td>[animacy[]]</td>
</tr>
<tr>
<td>[intention[]]</td>
<td>[intention-]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spontaneous Experience: INITIATOR</th>
<th>PATIENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>[control-]</td>
<td>[control-]</td>
</tr>
<tr>
<td>[change-]</td>
<td>[change-]</td>
</tr>
<tr>
<td>[animacy+]</td>
<td>[animacy[]]</td>
</tr>
<tr>
<td>[intention-]</td>
<td>[intention-] (74)</td>
</tr>
</tbody>
</table>

The feature-values for INITIATOR held constant across the two schemas are those for [change] (negative) and [animacy] (positive). In a 'subtle variation on the spontaneous experience schema', however (meant to represent the semantics associated with such predicates as suffer and undergo), the initiator is unmarked for animacy; the same applies to what Fried calls Stative Transitivity. This leaves a negative value for [change] as the only constant feature-value for the INITIATOR role across all the schemas:
suffer, undergo: INITIATOR PATIENT

[control-] [control-]
[change-] [change-]
[animacy[]] [animacy-]
[intention-] [intention-] (75)

Stative Transitivity (hold, surround, contain):

INITIATOR PATIENT
[control+] [control-]
[change-] [change[]]
[animacy[]] [animacy[]]
[intention[]] [intention-]

The only way we could characterize the role of INITIATOR schema-independently, then, would be to identify it as a necessarily non-changing participant. This characterization would be questionably useful in isolating just INITIATORS since, for example, certain PATIENTS (e.g., that in the semantically non-prototypical transitive 'suffer' schema just illustrated) are also necessarily non-changing.

The Controlled Experience schema—and, more particularly, the identification of its two arguments as INITIATOR and PATIENT—is intended to represent the fact that certain experiencer event-types exhibit some empirical commonality with Transitivity-oriented
situation-types; by the assumptions here, this means that experiencer event-types may be conceptualized in terms of Transitivity. The erection of different experiencer schemas here—spontaneous and controlled—is motivated by empirical differences we find in general between experiencer event-types differentiated by a [control] parameter-value:

(27) I regarded him carefully.

*I feared him carefully.

What these schemas share in English, however, is certain obvious formal and behavioral commonalities with basic transitive predicates—for example, passive applies to the stimulus of fear as well as the patient of hit. The INITIATOR and PATIENT labels used here, then, highlight the empirical and conceptual commonalities between certain experiencer verbs and certain non-experiencer transitives. At the same time, the identification of different schemas for experiencers related to prototypical transitives, and different schemas among the general 'experiencer' subgroup, is prompted by the sorts of behavioral distinctions which manifest themselves, in English, by relatively subtle tests such as those employed by Jackendoff and Dowty. Since these tests have no theoretical limit (as observed in Dowty (1991)), the number of schema subtypes may in principle be expanded ad infinitum⁴⁶.

Presumably because, while some languages treat two-participant stative predications as transitive by coding or behavior or both, others differentiate them—in other words, there are intuitive and, more importantly, linguistically significant differences between them in many languages. But again, there are linguistically significant differences within schemas:
It is thus important to note here that the use of labels, while claimed to be intended 'only as convenient abbreviations for matrices of specific parameter-value pairs' (69), are in fact somewhat more than this. They actually presuppose the association of a given event-type with one or the other of the basic schemas (here, Transitivity) in a taxonomic-tree-type relationship. This does not mean that any given 'experiencer' predicate in any given language will manifest itself as a subtype of Transitivity, with the experiencer lining up with other INITIATORS and the stimulus lining up with other PATIENTS. What it does mean is that languages will tend to assign at least some experiencer predicates to a formal and/or behavioral Transitivity class. For the schema inventory to be universal in the strongest sense, it also means that any given language will have at least some experiencer predicates that are grouped with prototypical transitives.

Even given a cross-linguistically valid identification, in case marking and/or behavior, of semantically 'experiencer' predicates with prototypical transitives, it would be wrong to imagine ourselves to have attained an adequate representation of these facts by the identification of just these schemas. In addition to experiencer semantics conceptualized in terms of Transitivity, we have ample cross-linguistic evidence for the conceptualization of experiencer semantics in terms of the Motion/Location schema. As we shall discuss in some detail below, this schema is especially prominent in Old English, at least to the extent that we are willing to take the dative marking of experiencers as

\[
\begin{align*}
&I\text{ saw him for five seconds.} \\
&?I\text{ recognized him for five seconds.}
\end{align*}
\]

This calls into question, then, the nature of schemas as representations of 'privileged' co-occurrences of parameter-values.
evidence of the relevance of the conceptualization of the relevant predicates in terms of Motion/Location event-types. Recalling once again our working assumption of the schema inventory as universal, we would presumably want to adduce evidence in Modern English as well for the existence of this schema—i.e., for the possibility of conceptualizing 'experiencer' semantics in terms of Motion/Location.

In fact, there is such evidence in the mapping of experiencers to prepositional objects with such predicates as appear and seem. In addition, it is possible—even if somewhat marked—to represent certain historically dative-experiencer predicates or their lexical replacements with the experiencer represented as a goal: cf. it came to me in a dream. While this does not necessarily bear on the semantics of the verb dream in a strict sense, the use of a transparently movement-oriented predicate in a paraphrase with the experiencer coded as goal is evidence for a certain semantic distinction from other transitive predicates, where we cannot conceivably supply a paraphrase with the initiator coded as goal: *The broken vase came to me in an act of hitting.

The difference between Old English and Modern English, then, is not so much in the existence of Motion-based versus Transitivity-based experiencer schemas, but in the expression of these schemas in the two languages. Old English has a distinctive case marking, which is at the very least historically Motion-based, for a distinctive coding of animate metaphorical goals, i.e. experiencers. Modern English not only lacks such a distinction in the case system per se, but the special status marked in Old English by dative case is only partially retained in Modern English in the diachronic mapping of experiencers onto prepositional objects in certain verb valences. Increasingly in English,
the [+animacy] parameter-value is sufficient for alignment with the initiator, i.e. the
transitive agent argument—in the absence of another animate participant in the same
valence. To the extent that OE arguments with a distinctively non-transitive-oriented
coding are mapped diachronically onto formally transitive-oriented (agent or patient)
arguments, we may say that the transitive schema becomes more dominant.

In many ways, then, schemas allow us to view certain cross-linguistic differences
in addition to the similarities outlined above. In any given language, any given schema
will formally instantiate itself in any of a number of different ways. For example, locative
settings ([location+, directed-] in the GOAL role in Fried's Motion schema) map onto both
dative-marked and prepositionally-governed arguments in Old English, and onto the latter
but not the former in Modern English, plus, marginally, subjects. In Modern English, the
difference between INITIATOR and PATIENT in the Action and Befalling schemas
respectively is signalled relatively indirectly, in particular via compatibility with agent-
sensitive adverbial phrases, while in Kashaya and, to some extent, Old English, the
distinction is overtly signalled in the case marking.

This applies equally to differences between Old English and Modern English and
to differences between Old English and Kashaya. Recall that Kashaya, like Old English,
exhibits a morphological and concomitant syntactic distinction among different kinds of
intransitive predicates. In many instances, the Kashaya intransitives taking patient-like
case marking are translational equivalents of or at least semantically similar to dative
experencer predicates in Old English:
Kashaya:  

muhkuna: 'feel embarrassed'  
sceamian 'feel embarrassed'  
Ta:du 'feel (cold, good, etc.)'  
calan 'feel cold'  
Ts'ununu 'shiver'  
etc.

The Kashaya 'quirky' predicates differ from their OE counterparts, however, in a number of important respects. First, the Kashaya predicates form a distinct class in their transitivity value in the simple syntactic sense of the number of arguments they have in their valence; with the exception of a few double-Undergoer-taking verbs ('dream', 'remember', 'like'), these Kashaya predicates are intransitive. Second, while many of the Kashaya predicates have a cognitive component matching that of the OE experiencer predicates, this component is far less frequently present in the former than in the latter:

Kashaya:

to iphe hiTa  
1SG-UND fart  
'T farted'

to malaya?  
1SG-UND slip  
'T slipped'

mukito čoyi?  
3SG-UND die  
'He died'

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These two points of distinction converge on the identification of the Kashaya class of Undergoer-taking predicates with Fried's Befalling schema, while the OE predicates are identified with the experiencer schema(s). Since the Befalling schema is a one-participant schema, the syntactically intransitive nature of these predicates follows, while the availability of a position corresponding to a stimulus in the experiencer schemas motivates the availability of a corresponding argument for the 'quirky' OE predicates

Recall, too, that the crucial semantic feature distinguishing Undergoer-taking from Actor-taking intransitives in Kashaya is [control] or [volition]—i.e., clearly Transitivity-related parameters; with the OE dative-taking intransitivies, on the other hand, the dative case has been argued to be an exponent of conceptualization of the participant as an animate, nonvolitional goal. This, then, permits us to retain a universal association of the Action/Befalling schemas with the Transitivity schema, rather than considering Action/Befalling to be underspecified in the sense of being underdetermined for conceptualization in terms of Transitivity or Motion. Despite their superficial resemblance, then, with respect to their semantically similar class of intransitives selecting patient-marked arguments, Kashaya and Old English differ in the semantic schemas of relevance to this class. The Action/Befalling schemas, while still relevant to OE (and, by our working assumption, universally) will simply manifest themselves differently in Old English: some nominative-marked OE intransitives will display

It is an open question whether the alternation of accusative marking with dative marking with such predicates as hyngrian points to a Transitivity-motivated distinction (i.e., an Action/Befalling-relevant distinction) as opposed to a Motion/Location-motivated distinction.
unaccusativity effects (e.g., the selection of the 'be' auxiliary for 'fall' but 'have' for 'kill') rather than manifesting Transitivity-relevant semantic parameters in any distinctive argument coding.

In this way, the distinction between an active-stative system and a 'transparent' accusative system turns out to reflect distinctions in the language-specific mappings of invariant schemas onto language-specific morphology and syntax. There are, however, thornier issues having to do with possible language-specific differences in the content of a given schema. For example, while the supposedly universal Action schema is indicated to have a positive specification for the [control] parameter of the INITIATOR role, contrasting with a negative value for PATIENT in the Befalling schema, we may expect this to be a language-specific matter: Kashaya has a marked minority class of intransitive arguments specified for [control-], in opposition to a larger class of intransitive arguments with a neutral value for this feature. Lakhota, meanwhile, has a large 'stative' class, with a positive value for 'performance/effect/instigation' on the 'active'-class members, as analyzed by Mithun (1991b).

Also, as already discussed, even in closely related languages of a single system-type such as Kashaya, Northern, and Central Pomo, the semantics corresponding to a given case or case opposition (active, stative, or active-stative) may differ in subtle yet.

The cross-linguistic variation here may in fact be less than we might guess to be the case, however. Dixon (1979:83) notes that 'languages with a closed class of stative verbs generally have an open class of active intransitive verbs. The reverse, however, may not hold...': Clearly, a detailed cross-linguistic survey is required.
substantive ways. We may find the same phenomenon, of course, within the Germanic and other Indo-European languages, with, e.g., 'animacy' frequently emerging or receding as a parameter of relevance to a given case distinction, e.g. in the emergence of a 'dative' out of 'locative', or in the replacement of instrumental or dative by the spatial preposition with. While the same general set of parameters recurs in language after language (and in a given linguistic genealogy) it is not correct to say that their particular paths of co-occurrence and the set of oppositions they participate in fail to change. Thus, languages vary not simply in their assignment of particular predicates (to the extent that we can say that predicates are indeed 'the same' from language to language) to particular schemas, but in the internal specification of the schemas themselves.

This is, too, the lesson from 'unaccusativity mismatches': many parameters (including aspectual ones which are probably inadequately represented by the one aspectually-related parameter in Fried's system, that of [change]) are of potential relevance to unaccusativity effects. Which particular effect (and therefore which particular configuration of parameter-value pairs) is important enough to motivate the identification of a schema, or the identification of a given level in a taxonomic hierarchy of schemas as being of crucial language-internal importance? There is no easy answer. Rather, there are numerous qualified answers. A given schema is reflected in one language's morphology (case marking), while another, several others, or a combination of

Recall the discussion in the previous chapter of certain subtle differences between different Pomo languages with respect to the semantic parameter of relevance to the morphological Actor/Undergoer distinction: [intention] or [volition] in Kashaya, [control] in Northern Pomo.
others may be expressed behaviorally. We could identify a schema as being of central importance if it is important to 'central' processes in a language. A 'central' process may be case marking, given that, intuitively, case marking is more 'central' than the rather indirect sorts of behavioral tests represented by adverbial modification. On the other hand, the tradition that downplays the importance of morphology relative to syntax (cf. especially S. Anderson 1976) would presumably relegate the evidence provided by case marking to a relatively unimportant role in identifying language-internally major schemas. In fact, that tradition may even deny any synchronic validity to the patterns represented by case marking, and therefore to the schemas corresponding to those patterns. In sum, the same questions that vexed us in the context of RRG return to haunt us here. There is, in fact, no unique universal determinant or set of determinants of the Action/Befalling opposition.

A final problem we encounter in the application of Fried's schemas is that, while parameters such as [animacy] and [loc] or [goal], that is both 'transitivity'-oriented and 'localist' parameters, are easily represented, it is unclear what to do with the extensions of a given 'spatial' case to a domain that is spatial metaphorically rather than literally. A given use of a given case—say, the dative used with Empfindungsverben—may be best analyzed in terms of a synchronic semantics of nonvolitionality combined with animacy—transitivity-related parameters under a 'semantic' understanding of transitivity—even though the motivation for the extension of dative into such a use may well have been, as Anderson argues, a metaphorical conceptualization of the animate experiencer as goal. In Fried's system, it is easy enough to represent a dative-marked experiencer in terms of both
localistic and non-localistic parameters— [+animate], [-volitional], [+goal]— but these parameters are arguably involved at different levels of conceptualization or, if we are to agree with Kurylowicz (see next section), best segregated into diachronic and synchronic spheres. How, in other words, do we use this system to represent the fact that the 'goal' here is a metaphorical rather than a spatial one, or that a spatial conceptualization motivated a use which is synchronically restricted to literal nonvolitional animate entities? It simply must be accepted that the conceptualization of some situation-types in terms of some schemas— 'experience' in terms of Motion, e.g.—is motivated not so much by semantic features represented in parameters and their value-settings, but by metaphorical links which the parameters themselves fail to motivate or capture.

In sum, then, what we are left with is an inventory of schemas of general cross-linguistic validity, with very general parameter specifications. To recap the previous subsection, we may conceptualize the schemas of any given language (or perhaps, given certain caveats, of language in general) in terms of an inventory of atomic units (the semantic parameters) arranged and rearranged in a variety of different configurations (the schemas themselves and their component parameter-bundles corresponding to different participants in them). Links between cross-schema parameter-bundles (i.e. the degree of closeness of the relationship between clusters representing individual participants in schemas) are determined by shared parameter-value pairings, with some caveats once

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30 Fried does mention a metaphorical 'tier', without however explaining what role this would have or how precisely it would bear on the issue at hand.
again being necessary here because of the different dimension along which metaphorical links exist.

On a language-specific basis, we can point to specific instantiations of these general schemas as being of relevance to particular internal processes, both morphological and behavioral. Language-specifically, which particular schemas or schema-instantiations are of greatest importance will presumably depend on our view of the 'importance' of case marking relative to behavioral processes such as conjunction reduction, equi, reflexivization, passivization, and so on. The numerous methodological, conceptual, and empirical problems identified in connection with Fried's approach are counterbalanced, however, by the clarity with which the schema-based approach to languages' case systems and behavioral processes allows us to identify certain cross-linguistic or typological differences: that between languages such as Old English which are 'Motion-dominant' in their conceptualization of non-basic (non-Motion, non-Transitivity) situation-types and those languages such as Modern English which are 'Transitivity-dominant'. As should also be clear by now, one may differentiate the morphology and core syntax of different historical stages of English with reference to the kind of evidence for the conceptualization of experiencer schemas in terms Transitivity, on the one hand, and Motion/Location, on the other.

Let us take one last look at the basic Transitivity and Motion schemas, together with two 'experiencer' schemas relating to them:

---

Location differs from Motion in the absence of a positively-marked [directed] parameter, and in the absence of a SOURCE role.
PROTOTYPICAL
TRANSITIVITY
INITIATOR PATIENT
MOTION
THEME GOAL SOURCE
[control+] [control-] [motion+] [loc+] [source+]
[change-] [change+] [directed+]
[animacy+] [animacy[]] [control[]]
[intention[]][intention-] [change-]
[animacy[]] [animacy[]] [animacy[]]

M-Experience: THEME GOAL
[motion+] [location+]
[control-] [directed]
[change-]
[animacy[]] [animacy+]
[intention-] [intention-]

Spontaneous Experience: INITIATOR PATIENT
[control-] [control-]
[change-] [change-]
[animacy+] [animacy[]]
[intention-] [intention-]

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We see that the ModE modelling of the experiencer on the transitive INITIATOR (cf. notice, hear, fear, feel) must be motivated by the positive setting on the animacy parameter, while the modelling of the stimulus on the second transitive participant-slot amounts to a recognition of that participant as an unaffected ([change-]) patient.

In Old English, we do have evidence for an analogous conceptualization, corresponding to or expressed in the optional Nominative-Accusative coding of predicates such as lician 'like'. However, we also find as a prominent valence for 'experiencer' predicates the Dative-Nominative marking discussed above (Allen's Type I). This leads to the identification of a separate experiencer schema modelled on Motion rather than Transitivity: Fried calls this M-Experience (as opposed to T-Experience), but it is not motivated by parameter-value settings in the same straightforward sense as transitivity-based experiencer conceptualization. Note in particular that there are no parameter-values shared by the experiencer and the goal, and—even more striking—there is only a single parameter ([animacy]) of relevance to both. The link, then, is a metaphorical one inadequately captured with reference to semantic parameters of the sort used here.

We will discuss in greater detail the possibility that the connection between dative experiencer and the goal/location from the Motion schema is somewhat attenuated to the point that dative case, when used to mark experiencers, may be viewed as having attained a certain independence from the locative schemas. Thus, dative in this function may be viewed as having been 'reanalyzed' as marking [-volitional, +animate] semantics rather than any sort of goal or location semantics. Such a reanalysis would, in ways I will argue
below, implicitly strengthen the relationship between the dative experiencer and the
Transitivity schema.

One last feature of Fried's schema-based approach to case will serve to introduce
an additional perspective on the 'transparency/opacity' parameter, namely that by which
'opacity' involves reference-oriented or information-structure-influenced neutralization of
role-related semantics. As mentioned before, Fried develops a subsystem of what she
calls complex schemas, representable in terms of a combination of other schemas. The
three-part 'give'-class predicates instantiate such a complex pattern, combining the
parameters associated with the transitive patient with those associated with the Motion
schema's THEME:

\[
\text{PATIENT} + \text{THEME} \rightarrow \text{PATIENT-THEME}
\]

\[
\begin{align*}
\text{[motion+]} & \quad \text{[motion+]} \\
\text{[control-]} & \quad \text{[control[]]} \quad \text{[control-]} \\
\text{[change[]]} & \quad \text{[change-]} \quad \text{[change-]}
\end{align*}
\]

A priori, it might be thought that some of the schemas here are complex—in particular, as
already mentioned, Fried views Transitivity as a combination of intransitive Action and
Befalling. However, the kind of schema-complexity intended here involves a combination
of parts of Transitivity- or Action/Befalling-oriented semantics (associated by Jackendoff
with his Action tier) and Motion/Location-oriented semantics (associated with the
Thematic tier).

The reader will note that the PATIENT's [change] parameter-value diverges from the
positive setting associated with the PATIENT in the prototypical transitivity schema. No
explanation is given for this, but it should be noted that one of the assumptions Fried
(The Motion schema’s GOAL participant is then contributed to this derived schema independently of any combination with the parameters of any Transitivity-related participant.)

While the coding (accusative marking) and behavior (at least with respect to passive) of the PATIENT-THEME is clearly in conformance with the transitive PATIENT in Old English, evidence of the relevance of a Motion schema to the conceptualization of this argument derives most clearly from its collocation with an overtly motion-oriented makes is that no fused parameter-bundles will ever involve a clash of values (p. 90). Given this, an alignment of prototypical PATIENT and THEME would create obvious problems. Consider, though, that the only patients with other than positive settings for the [change] parameter are those in the stative transtivity and experiencer schemas, which are obviously not of relevance here. Also, some 'give'-class predicates listed by Fried do seem to impose a positive [change] value on their patient argument, e.g. translate. Third, metaphorical extensions of these predicate-types, in which a change of state is conceptualized as a change of location, obviously have a positive value for [change]; consider, e.g., I sent him into a panic, or I beat him into submission. Next, it is quite possible that these last examples should be represented distinctly from transfer verbs such as give, as evidenced by the lack of participation of send and give in the relevant sense in the ditransitive construction. (After all, there appears to be a difference between verbs or verb-schemas involving pure transfer of an object and ones involving some kind of more intrinsic change in addition to or instead of literal transfer.) The most obvious reason for this last fact is that the 'goals' don't represent recipients, a fact which also serves to separate the problematic translate from the unproblematic 'give'-class examples. This last fact, however, raises a further problem for the treatment of the schema underlying such predicates as give and sell in terms of combinations of Transitivity and Motion schemas: namely, the 'goal' of the transfer is (frequently) not simply a goal, but a specific metaphorical extension of a 'goal' role, namely a recipient. The salience of this particular metaphorical status of this role cannot be explained simply in terms of a combination of these other schemas.
GOAL participant, which is contributed to this derived schema relatively directly, independently of any combination with the parameters of any Transitivity-related participant:54

(30) Gif ge cunnun, þa þe yfele sind, syllan þa godnyss
    if you can that that evil are give the-ACC goodness-ACC
eowrum bearnum
    your-DAT children-DAT
    'If you can, you who are evil, give goodness to your children'
    (ÆCHom i.252.21)

Finally, the question is whether the Motion schema’s SOURCE participant contributes to the derived schema by adding its [source] parameter to the transitive INITIATOR’s bundle. Fried argues that it does, as evidenced by the impossibility of adding another transparent SOURCE argument:

(31) *I sold the car from my mother to the neighbor. (p. 91)

Of course, this presupposes that the very notion of [source] is compatible with the predicate, an assumption which one may probably assume to be valid given the presence of a GOAL argument55—after all, we would not consider the infelicity of *I struck the tree

54

"But see previous footnote.

55

On the other hand, secondary predicates of result (I beat him black and blue) arguably include a GOAL argument in the nonverbal predicate, but are incompatible with a SOURCE argument (*...from healthy, *...from an attractive state, etc.); intuitively, however, it is
from my mother (in the relevant sense) to demonstrate the alignment of the INITIATOR with a SOURCE. Intuitively, it does seem plausible that some senses of some transfer predicates involve alignment of agent and SOURCE or (with 'take'-class predicates) an alignment of agent and GOAL. On the other hand, other predicates (e.g., translate, transfer) fail to involve such alignment, and some of the other predicates that do involve this mapping (send, take) feature a valence option lacking such alignment.

The ModE ditransitive construction presumably also involves schema layering, with the transitive PATIENT aligned or fused with the GOAL (or SOURCE, in the case of 'deprive'-class predicates), the INITIATOR combined with the SOURCE (or GOAL), and the extra argument (the unaccusative THEME) added in unadulterated form from the Motion schema.

As we shall see in more detail in subsequent chapters, in Old English, on the other hand, there is no option for 'promoting' a GOAL/recipient to PATIENT status, as would be indicated by the coding of this argument in the accusative case; as in ModG, rather, the Dative exponent of GOAL/recipient is retained even under passivization. Our interpretation of this is that this diachronic difference points to a broader domain not simply of formal transitivity in Modern English relative to Old English, but of the interpretation in terms of the Transitivity semantic schema of arguments which in Old English were more frequently coded in a transparently non-transitive manner. In addition, the integration of formerly Dative-marked arguments into the formal pattern associated clearly unacceptable to view this as evidence of the alignment of the INITIATOR here with a SOURCE.

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with the Transitivity schema\textsuperscript{6} points to the increasing sufficiency of animacy in
determining coding as an increasingly primary-topic-oriented \textsc{Initiator} category and (of
particular relevance here) an increasingly secondary-topic-oriented \textsc{Patient} category,
representing an accrual to the transitive coding pattern of semantics previously associated
with cases participating in non-transitive schemas—in particular, the [animate+],
[intention-] semantics associated with the OE Dative.

In other words, the development of the ditransitive construction is one aspect of
the increasing opacity of English in the sense of the increasing subsumption of formerly
non-transitive-oriented argument coding and behavior under the transitive pattern. At the
same time, the correlation of the ditransitive \textsc{Patient-Goal} with greater affectedness and
success of transfer shows that this increasing opacity should not be viewed in terms of a
loss of semantic motivation of overt structure; the issue is rather the degree to which
Transitivity-oriented parameters may determine such coding at the expense of Motion-
oriented ones.

Old English does also provide an alternative double-accusative valence for a small
subset of metaphorical 'transfer' verbs, notably \textit{learan} 'teach' and \textit{biddan} 'request' (cf.
\textcite{Mitchell 1985:452}). However, unlike the ModE ditransitive, there is no evidence
whatsoever that this alternative valence is exploited for the purpose of information

\textsuperscript{6}

Note that this does not mean that Transitivity (i.e., semantic transitivity) changes in the
sense of shifting its semantic core. Rather, it retains this core, and what changes is its
range, i.e. the degree to which non-prototypically-transitive situation-types may be
subsumed under the transitive category as evidenced by formal and behavioral grouping
with prototypically transitive situation-types.

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structure. In particular, as with ModG *lehren* 'teach', neither the accusative personal object nor the accusative theme is ever 'promoted' to nominative via passivization. (This is discussed in greater detail in Chapter 10.)

Other verbs of double rection\(^7\) represent different mappings to surface case from that displayed by the 'transfer'-class verbs. One subclass, involving the clearest contrast with the 'transfer' predicates, features an association of the animate object with accusative case and the inanimate object with dative or genitive. However, this occurs with a different semantic class of verbs, and there is no evidence of information-structure-determined manipulation of case in a semantics-independent manner. Examples of this class are *bysgian* 'occupy, trouble s.o. (acc.) for s.t. (gen.)', *beceorfan* 'deprive s.o. (acc.) of s.t. (dat.) by cutting', *oncunnan* 'accuse s.o. (acc.) of s.t. (gen.)'. These display a patient-like semantics associated with the human participant, with the dative or genitive coding the 'content' of the action. While it would be wrong to claim that some independent, inherent verbal semantics determines that the human participant be coded with the accusative, one may nevertheless view this coding pattern as reflecting a conceptualization of the animate participant as a patient rather than as a goal or recipient. The specific conceptualization—Transitivity-oriented or Motion-oriented—is conventionalized, and may in this sense, but this sense only, be viewed as part of the idiosyncratic verbal semantics.

\(^7\) The term 'double rection', adopted from Mitchell, seems less confusing than 'ditransitive', given that the latter has a more specific meaning in the context of Modern English. We might equally use the term 'three-place'.

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The use of the genitive with these verbs of double reaction may be understood as conveying a semantics of low affectedness, with strong correlates of low referentiality and, in particular, low animacy. This use, while presumably ultimately derived from a spatial, ablative-like partitive sense (see next section), may be viewed as sufficiently deviant from a spatial base that it is questionable whether a view of this argument as synchronically imported from a Motion-oriented schema would be plausible. Even with verbs of consumption (étan 'eat', drincan 'drink', brucan 'enjoy, use', habban 'have', etc.), in which accusative and genitive alternate productively with an arguable patient-like versus partitive distinction in at least many instances (again, see next section), the genitive, while certainly understandable in terms of a basic locative semantics, nevertheless may be viewed in the context of the Transitivity schema simply in terms of a Transitivity-deviant semantics of low affectedness.

The use of the dative with a similarly 'content'-like semantics derives by a different path from a locative semantics elsewhere associated with that case, but not via a specifically 'animate goal', i.e. recipient, sense. As with the genitive, however, this use of the dative must be viewed as having a somewhat tenuous connection with a locative base. We proceed to an analysis of this and other uses of the dative in the next section.

4.3 An integrated analysis of the OE cases: the dative

We commence our integrated analysis of OE case with the most prominent 'quirky' OE case, the dative.

Some of the assumptions made in the following analysis of the dative and other
OE case categories are: (1) the task of coding an unlimited range of meaning with limited means necessarily requires one formal structure to be used for functions which are, at least in principle, various; (2) the use of a given form, centrally associated with a given function, for a function distinct from this central one will be motivated by some perceived similarity of the new function to the central function or some function related to the central function; (3) despite (2), the process of extension of a form from one function to another will be subject to a kind of local, not global, constraint such that a given extended function needn't be directly related to all other functions associated with the formal category, and all the functions certainly needn't share some single abstract semantic 'feature' in order for the category to be claimed to be semantically contentful; (4) in addition, the perceived similarity between two adjacent functions needn't be of the same nature as that between one of the functions and a further adjacent function.

In the synchronic array of the OE dative, what we encounter is a range of meanings motivated multiply. This multiple motivation, resulting in part from the multiple diachronic sources of the OE (and, more generally, Germanic) dative, as well as from the general fact that the meaning of a grammatical marker in a closed system derives partly from the meanings of other markers with which it alternates, renders it unfeasible to identify any truly satisfying (that is, sufficient) meta-meaning for all of the dative marker's functions. It is the difficulty of formulating such a common semantics which has prompted some analysts to deny the semantic coherence of the dative case, and to view the dative case as a simply formal category--by which might be meant that the verb fails to assign formal features which would result in the expression of the assignee as
nominative or accusative. The appeal, to some, of such an approach lies precisely in its shortcoming to others: its avoidance of the entire issue of the dative's meaning.

As we will discuss at some length, one respect in which an analysis of the OE dative case as semantically coherent is a somewhat more challenging task than an analogous analysis of, say, a language's 'middle' marker (Kemmer 1988) is that, as Holland (1993:22) reminds us, the OE dative, like the Germanic dative as a whole, 'conflates as many as four IE cases': instrumental, ablative, locative, and dative. One thing this means is that this one OE case combines a complex semantics more distinctly represented at an earlier stage. Also, if one were to represent the domain of the OE dative in radial-category terms, this would probably be best done with multiple radial categories (e.g., an animate-locative-based one—the dative in the historically strictest sense—as well as ones representing a previously more distinctly represented locative, ablative, and instrumental semantics) which intersect each other. As we shall see, this considerably complicates the picture. A further complication related to this is that any one sub-part of the entire complex category may be relatively closely allied to the semantics coded by a different category in the language's case inventory, and may therefore become subsumed under another case; this would result in a 'hole' somewhere in the map, a supposedly unattested kind of development in the diachronic spread of a language's 'middle' marker as analyzed by Kemmer. However, a tentative representation of the

Naturally, we should avoid the assumption that the proto-language displayed some sort of ideal isomorphism between form and function in its case system; however, it is probably fair to assume that the proto-language's richer case system exhibited better isomorphism than the essentially four-case system exhibited in Old English.
The functions of the OE dative

When the dative marks a single object of an OE verb, the most commonly identified semantics associated with this dative object is that of 'recipient'. In fact, Kurylowicz's explanation (190-5) of the 'semantic split' between a primary locative and a secondary 'dative' meaning assumes the animacy of the figurative location or goal to play a crucial role in this differentiation. In other words, by this analysis, this split emerges as a morphologization or re-morphologization of a previously phonologically or morphologically conditioned allomorphy to convey the semantic distinction between locative and 'dative' (in effect, coding animate arguments as a location or goal). The combination of goal-like meaning with animacy is, indeed, what is meant by the term recipient, and this meaning is so clearly present with so many OE dative objects that Visser (p. 280) goes so far as to say that 'the translations "to thank", "to forgive", and "to help", given in various dictionaries for bancan, forgiefan, and helpan are misleading and may cause many a student to misinterpret the Old English idiom'. In addition to these most typically two-part predicates, the dative is also frequently used in 'double rection' in syntagmatic opposition to an accusative or (less frequently) genitive. The dominant pattern uses the dative to code the animate goal:

(32) Hwilc faeder wile syllan his cilde stan
which father will give his child-DAT stone-ACC
'Which father will give his child a stone" (ÆCHom i.250.7)

The wide range of these animate goals (i.e., recipients) marked by the OE dative differ from typical nominatives and accusatives in a number of respects. They differ from nominatives in being characteristically non-agentive. They differ from accusatives in being characteristically human. We may, then, identify a large subset of OE dative-marked nouns as embodying a combination of low agentivity and high animacy which is characteristic of neither the nominative nor the accusative—although perhaps less in conflict than the latter than the former given that the accusative, while not characteristically highly animate, more readily accommodates animate referents than the nominative accommodates nonvolitional referents, especially when a volitional and animate argument is already present. This last fact is the most obvious explanation for the frequent alternations between dative and accusative object marking for many OE two-place and even three-place verbs (e.g., læran 'teach', for-gríndan 'destroy, crush s.o.'; cf. Mitchell 1985:455 ff.).

Thus far, we have identified two important categories of meaning associated with the OE dative. One, most closely related to a literal spatial sense, involves a literal or metaphorical transfer, with the dative marking the recipient or its opposite (referred to by Quirk and Wrenn as 'the indirect (personal) object with transitive verbs' (64)), and an accusative-marked object coding the theme or transferred thing. The transparently spatial semantics associated with dative case is arguably demonstrated by the frequent use, from late Old English on, of the preposition to with the dative-marked argument—showing that
verbs such as gefan 'give', cweban 'say', and sprecan 'speak' were conceptualized in terms of transfer despite the by this time attenuated association of dative case with spatial semantics. The semantics of this class requires an animate recipient or deprivee.

In addition, we have the dative coding the sole object of a verb lacking any accusative object argument.

(33) þa twa þing he sceal þam folce don, and eac these two things he shall the-DAT people-DAT do and also mid his agenum ðrum gehelpan with his own other-DAT help 'These two things he shall do for the people, and also help others with his own' (ÆChorn i.240.12)

(Other such verbs include deman 'judge', begnian 'serve', oleccan 'flatter', and gelyfan 'believe'.) Probably at least in part due to the transparently transfer-oriented semantics of the dative when used with the double-object verbs (and hence to the transparently 'goal'- or, less frequently, 'source'-like semantics of the dative), these verbs are also frequently analyzed as featuring metaphorical transfer. Indeed, some of them come to augment the OE dative marking with a transparently spatial preposition in reflexes or lexical replacements, e.g. ætwindan 'escape (from)'. Most, however, simply end up with the dative object reanalyzed simply as an object on par with historically accusative-marked arguments: cf. helpan 'help', gelyfan 'believe', beowian 'serve'\(^9\). In other words, while the

A complicating factor is that many verbs which have a direct object in Modern English went through a period during which 'certain writers kept the indirect object character of the complement clearly alive by putting the proposition to before the object ('herkneth to me", "ye beleuen (= believe) not to him"...' (Visser p. 281). This obviously weakens the value of ModE prepositional phrases for providing insight into the spatial
dative as a marker of nonvolitional animacy merges with accusative or (with 'impersonal' predicates to be discussed in a moment) nominative case in the emerging object and subject categories respectively, the dative as a more literal locative marker (including a marker of an animate goal or location) is far less likely to do so.

The varied fates of OE dative-marked arguments, then, may be interpreted as evidence that, with many verbs, dative case was associated not so much with a spatial (metaphorically goal- or source-like) semantics as with the combination of animacy and nonvolitionality discussed above. We may, however, identify both spatial semantics and a semantics of nonvolitional animacy as being associated with OE dative case in general. Both kinds of semantics converge on the dative-marked recipient of three-place transfer verbs (gefan 'give', aleogan 'deny', alyfan 'allow', becweban 'bequeath', oðbrigan 'deprive', etc.) and this sub-class may therefore be viewed as pivotal. A primary semantics of nonvolitional animacy is arguably associated with many two-place verbs to the exclusion of metaphorical spatial semantics, which would explain the failure of most such verbs to acquire propositionally-marked object arguments in late Old English or Middle

cceptualization of OE datives.

A common dative case for the human non-agentive participant in acts of both giving and taking may point to some relatively abstract semantics shared by both. If we adhere to a 'localist' perspective, this shared semantics would be the animate landmark relative to which the movement of the theme occurs. In non-localistic terms, we might make reference to the person with respect to whom the act occurs. In the latter case, this use has an obvious commonality with the so-called 'ethical dative' (to be discussed in a moment), a fact which motivates Mitchell's (568) use of the term 'dative of interest' to subsume not just dative-marked recipients and deprivees alike, but the uses otherwise called 'ethical' as well.
English. Examples are *etwitan* 'reproach', *arian* 'honor', *beorgan* 'save', *bregdan* 'pull', *derian* 'harm'. Is there evidence for an association of OE dative with spatial semantics independently of a semantics of nonvolitional animacy? Certainly, dative may serve to mark locative-setting adjuncts, as in the following examples:

(34) *æfter rime fif Moyses boca, þam seo godcunde æ awritten is*  
    after number five Moses's books that-DAT the-NOM sacred law written is  
    'after five of Moses's books, in which the sacred law is written'  
    (Bede 26.27)

(35) *hu ic earmearig iscealdne sæ/ winter wunade*  
    how I wretched ice-cold-ACC sea-ACC winter-ACC dwelt  
    wraæccan lastum  
    wanderer-GEN tracks-DAT  
    'How I the wretched one dwelt in the ice-cold sea in the winter in the tracks of a wanderer'  
    (Sea 14)

(36) *forþæm þeah he sie anum gehered, þonne biþ he oþrum unhered*  
    because he be one-DAT praised therefore is he other-DAT unpraised  
    'Because he is praised in one place, he is not praised someplace else'  
    (Beo 68.21)

(See Mitchell.1985:592-3.) Dative may also mark temporal-setting adjuncts, such as in *hwilum* 'at times'. However, it is not clear that it is always spatial semantics which crucially triggers dative case here, as opposed to adjunct status. Certain verbs categorized by Visser as ones involving 'approaching, adhering, touching or the opposite'  

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¹  
But see fn. 59.

²  
At the same time, a link between adjuncts and locative semantics may be speculated to have motivated the use of dative case as a 'default' oblique case (cf. van Riemsdijk 1983, Kemenade 1987:82).
(p. 281)—i.e., involving a transparently spatial semantics but lacking a semantics of recipiency or deprivation—appear indifferent to the animacy of the marked argument; thus:

(37) seo fæmne ... genealæhte þam cafertime
    the woman approached the-DAT hall-DAT
    'The woman approached the hall'
    (Ælfred, Bede (Smith) 536,36)

(38) ætetfeolh þu binum fæstenum
    remain you your-DAT fortress
    'Remain in your fortress'
    (Ælfred, Bede (Miller) 599,41)

To an extent greater than with the other dative uses, however, datives of purely spatial goal or location seem to have undergone prepositional replacement even before Middle English. Thus, Quirk and Wrenn (1957:66) state (and Mitchell 1985:593 to some extent concurs) that 'even in OE, place is rarely indicated by the dative without the proposition', although such examples as Beowulf's wicum wunian 'to live in the dwelling' do exist.

A further function, or cluster of functions, of the dative is in the 'impersonal' constructions discussed above. Recall that these constructions may be subdivided into several groups. First, we have one-argument-taking predicates such as hyngrian 'feel hunger', hyrstan 'feel thirst', calan 'feel cold', eglian 'feel sick', and maeten 'dream'. The single argument associated with this group characteristically alternates between dative and accusative marking, with both these case-forms most transparently receiving motivation from the non-agentive semantics common to all these predicates. These non-nominative arguments generally fail to undergo reanalysis as prepositional phrases (cf.
Visser 29-36), which may be interpreted as an indication that any 'locative' motivation for their dative form must have been severely attenuated in Old English; this conclusion might also be drawn from the dative marker's frequent alternation with accusative.

It is also plausible, however, that such reanalysis would have been hindered by the absence of any clearly conceptualizable 'source' or 'theme' to serve as nominative in a valence including a prepositional phrase. Thus, given the development of the obligatory status of a nominative subject, the single clearly-conceptualizable participant in the state of affairs corresponding to the verbal state--i.e., the experiencer--would have to map onto the nominative subject form barring the invocation of an existential or locative subject or the nominalization of the state itself. More typically, the ModE option is to avail itself of an adjectival form of the verb, together with a stative be or feel:

(39) I'm hungry.
    I feel thirsty.
    I'm chilly.

Such stative constructions are 'locative' in Anderson's analysis only by the relatively indirect sort of evidence referred to above. In fact, when transparently locative constructions are used for these states, it is not the experiencer which is most productively coded as location or goal, but the state itself:

In the limited instances where a referential source or theme is expressed as the ModE subject, however, no preposition is used for the experiencer; cf. the admittedly idiomatic use of ail in, say, good for what ails you and the possibility of examples like This weather chills me (to the bone).
I saw it in a dream.
I'll stay by you {in/through} hunger or satiation.

In addition, the state may be conceptualized as a source, but without any obvious evidence for a 'goal' status of the experiencer:

I did it out of hunger.
He's ailing from too much liquor last night.

All in all, there is virtually no evidence for a locative status of the experiencer of such verbs in the post-Old English development of them or their lexical replacements (such as suffer). The OE dative marking on these verbs' arguments, then, would most straightforwardly receive a synchronic interpretation not in terms of any locative or goal semantics, but once again in terms of a combination of animacy and nonvolitionality, along with a strong implication of affectedness absent in such dative-taking personal verbs as gelyfan 'believe' and andswarian 'answer'.

Yet a further function of the OE dative is that of coding an animate entity affected by an event or action—a function frequently coded by other languages' 'middle' marker. Examples cited by Visser include the following:

He wore swa swipe astrod, þæt gim feollon teoras
he became so very moved that him-DAT fell tears
'The became so very moved, that his tears fell' (Ælfric, Gen. 43,30)

Me þæs wen næfre forbirstep in breostum
me-DAT this hope never breaks in breast
'This hope never dies in my breast'

(Phoenix 567)
This function is explained by Kuryłowicz as a figurative extension of the locative origin of the dative: 'Persons are both physical objects and centres of a sphere of competence or interest' (190-1)⁴. Be that as it may, the dative in this function fails to display the sort of overt evidence of spatial conceptualization supplied by more concretely locative uses—in particular, the OE 'ethical' dative for the most part fails to undergo reanalysis as a prepositional phrase (cf., however, the 'ethical' use of on in examples such as My car died on me.) At the same time, unlike certain other figurative applications of the dative in Old English, the 'ethical' dative fails to undergo reanalysis as an ordinary direct object. Rather, like the 'experiencer' arguments of other impersonal verbs, these tend to be coded as ordinary subjects in Modern English in a causative valence of the verb, cf. the OE him bræcon alle he limes example vs. ModE he broke all his limbs), or as possessives (cf. the translations above). Along with other datives of impersonal verbs, these are perhaps best viewed as characteristically nonvolitional and animate, possibly with an added feature of affectedness (about which more in a moment).

A use of the dative closely related to this 'ethical' use is that exemplified in pa him Hreibgar gewat...ut of healle 'then H. went (himself) out of the hall' (Beowulf 662; cf. Visser p. 323). The cognitive affinity of these two uses is apparent from the widespread employment of a reflexive-based 'middle' marker to code both functions (Kemmer 1988).

The use of dative for both non-movement locative and goal semantics is presumably so well-established as to be considered 'original', mediated by the metonymic link which accounts for goal-locative syncretism on an ongoing basis: cf. where are you'/where are you going' (Kuryłowicz 189-90).
A formal affinity in addition to the shared dative inflection is the fact that with both this use of the dative and the 'ethical' use involve intransitive verbs that use typically employed with just a nominative argument, without any object (either 'direct' or 'indirect') at all. A formal difference, however, is that the use here but not the 'ethical' use involves coreference between the dative-marked argument and a subject; formally, then, this use but not the 'ethical' use resembles a middle in Old English. The point of this use—apparently otiose from a crude propositional semantic perspective—is precisely what is most commonly attributed to middle uses in general, that of 'subject-affectedness'. Even more clearly than with all the other dative uses so far discussed, then, animacy is a prerequisite here, and this (rather than the adjunct status of the nominal) may explain the choice of dative over accusative.

Finally, one of the apparently most difficult functions of the OE dative to reconcile with a monolithic, reductionist 'localist' analysis is that referred to as 'instrumental':

(44) & þæs of Eastron wrohtæ Ælfred cyning lytle werede
& thus at Easter built A. king small-DAT force-DAT
geweorc æt Æþelinga ige
work-ACC at A.

'& thus at Easter King Alfred built a fortress at Athelney with a small force'
(Anglo-Saxon Chronicle an. 878)

(Cf. also the listings under bredan 'weave' in Bosworth-Toller: handum brugdon 'wove by hand', mundum brugdon, given as 'grip[p]ed or drew with hands'; Mitchell (578) also
provides numerous examples of the 'dative/instrumental of means', including *fotum ic fere* 'I travel by foot' (Rid 12.1). The interpretation of such examples in spatial terms of some sort is not a problem. Instrumental semantics, after all, is commonly held to be a 'grammaticalized' analog of a spatial 'by way of' relationship (Kurylowicz pp. 189 ff.). The problem, rather, is identifying this spatial relationship with that otherwise attributed to the OE dative, namely literal or metaphorical 'location at' or 'movement to'.

This kind of non-equivalence between the 'instrumental' dative and the 'possessive', 'locative', and 'temporal' datives should certainly not surprise us given the above-mentioned fact of the historical origin of some functions of the OE dative in an earlier distinct instrumental case form. Thus, while a spatial basis may still underlie the OE 'instrumental' dative as long as the PIE instrumental case itself had a spatial semantic foundation, the particular spatial semantics would most naturally be expected to differ from whatever spatial semantics is identified in those uses of the dative which correspond to earlier datives rather than instrumentals. This amounts to assuming that PIE instrumental and dative cases themselves coded non-identical spatially-based semantics, which must obviously be true. Again, then, we are reminded of the particular dangers associated with a highly abstract, reductive semantic analysis of a case-form which corresponds diachronically to multiple case-forms and therefore multiple associated semantics.

The question which remains, then, is why the dative and not some other case assumed the burden of coding the semantics previously associated with the instrumental case. Perhaps the clearest semantic connection is between the locative sense associated
with the dative form and the comitative subsense of the instrumental, given that the
comitative semantics appears to represent an isolation of a locative feature inferable from
a more primary 'by means of' instrumental meaning; as Kuryłowicz (p. 196) explains, the
isolation of this locative semantic feature in the comitative sub-sense (sometimes called
the 'dative of participation') occurs with animate nouns in particular.

As already discussed, in the replacement of oblique morphological case by
prepositions in the history of English, the prepositions, which tend strongly to represent a
more 'concrete' spatiotemporal semantics than the case markers at the stage of
replacement, tend to replace relatively concretely spatial sub-senses of the case markers
before proceeding (if at all) to replace the relatively attenuated, 'grammaticalized' sub-
senses. By the evidence provided by prepositional replacement, the OE dative coding of
historically instrumental relations must then be analyzed in terms of synchronically
spatial semantics. Consider for example the early replacement of the passive 'dative of
agency', derived from an original instrumental case, by prepositions; 'altogether there are
but spare remnants in Wulfila, the Beowulf and the Eddic poems of the prepositionless
[dative] form of agency which, judging by the testimony of the related Indo-European
languages, must have been characteristic of the older stages of the Germanic dialects'
(Green 1914:515). While there is somewhat more extensive evidence for dative
expression of other sub-senses of the historical instrumental, this coding must as a whole

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Mitchell in fact takes issue with the claim of the existence of any good evidence at all for
an OE dative coding of the 'instrument of agency', as opposed to an instrument of means
or manner.
be considered relatively labile, and in any case has given way fairly exceptionlessly to
prepositional expression by the time we reach Modern English; this is why, as Quirk and
Wrenn (1957:66) point out, this use of the dative 'is among the most difficult for present-
day English speakers to understand'.

If the early prepositional replacement of instrumental senses of the dative is
evidence of a synchronically valid spatial conceptualization of this case in this function,
however, note that this spatial conceptualization must be different from that involved
with other uses of the dative. In particular, the ultimate ascendance of the preposition
with as the unchallengedly dominant instrumental preposition serves to mark off the
instrumental semantic domain quite clearly from the rest of the OE dative map. Of further
interest is Kurylowicz's argument (p. 196) that this preposition appears to have proceeded
from a comitative sub-sense (used with animate nouns) to a more 'purely' instrumental
sub-sense (with inanimates), thus 'initiating the formation of a special instrumental case'
only via a sub-sense (the comitative) which is non-central relative to the instrumental
category itself. Note in addition that Anderson's spatial semantic core of instrumental
semantics ('by way of') never becomes 'renewed' with this preposition. All of this may
point to some sort of reanalysis or reorientation of the semantic instrumental category,
such that the comitative sense takes on a central status; given that the comitative is the

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It is of relevance here that the most 'basic' instrumental sense extending from a 'by way of'
semantics, that of literal inanimate instrument, is hardly ever expressed with dative case
alone; as Mitchell (574) states: 'But Wulfing's list contains no examples of the [dative]
case-form alone in what one might think would be its most common [instrumental]
function—the expression of the material external instrument'.
sub-sense intersecting with the dative category, this may indicate that the relatively complete subsumption of instrumental functions under the dative form effected or reinforced a re-conceptualization of the semantic underpinnings of a certain range of uses of the instrumental category. All in all, we see how complicated the locative basis of the OE dative/instrumental is, and how inadequate it would be simply to assert that the instrumental semantics coded by the OE dative is to be analyzed 'localistically' in terms of the cross-linguistic 'by way of' semantic core of instrumental semantics.

As mentioned already, an obvious candidate for the representation of the facts of the semantic range coded by dative marking in Old English is the sort of complex category representation utilized by Kemmer in her analysis of the middle voice—i.e., a radial category of some kind. For any given formal case, all we need to do is identify a historically primary sense, and then motivate movement into new domains via extensions of various sorts, including metaphor and metonymy. The link between the comitative and strictly instrumental use of instrumental case, then, would be metonymic, while the link between a literal goal and the 'goal' of an Empfindungsverb would be metaphorical.

As we have seen, there are difficulties for this approach posed by the fact of the historical

The complexity of this situation may be matched by the confusing status of what does remain of a separate inflectional instrumental case in Old English, which turns out on closer inspection to represent a formal amalgamation, in different paradigms (e.g. the strong adjectival declension, the masculine and neuter of o-stem nouns, etc.), of historically separate cases, including ablative, instrumental, and locative (Anderson 1958). Even just among the pronouns and articles, the 'various forms bespeak thoroughly mixed origins' (ibid. p. 24). Why the adjectival declension should avail itself of material drawn from an earlier ablative, while some nouns continue earlier locatives and others earlier instrumentals, is an open question, but we may at least infer from this that instrumental semantics is not as conceptually unified as we might otherwise imagine.
complexity of the dative case. All the same, I will now offer a somewhat tentative overview, based on Kurylowicz, of how such a category may have unfolded diachronically. This summary will also serve to reinforce the point that what we find in the OE dative is a variety of spatial uses as well as a variety of uses which, while overtly non-spatial, might be analyzed as deriving from basic spatial senses historically. Both the complexity of this derivation and the fact of extensive prepositional replacement of datives featuring literal spatial senses render problematic a view of all functions of the OE dative as synchronically spatial.

First, we have the 'locative', in particular goal-like, sense of the dative used in particular with recipients and other predominantly animate nouns; as explained, it is precisely the feature of animacy which Kurylowicz considers to condition the pre-historical division of a presumably original PIE locative into the historical dative and locative. The 'possessive' use of the dative is presumably best grouped here, especially given the ancientness of this use (cf. the Vedic examples cited by Kurylowicz, p. 191).

Second, we have the dative of literal spatial or (via the ubiquitous space-time metaphor) temporal location irrespective of animacy. As explained, this most basically spatial group of dative senses is the one most extensively replaced by prepositions in Old English, with many of the handiest examples (e.g. hwilum 'at times') representing rather frozen and presumably rather idiosyncratic uses from a synchronic perspective. Although this subgroup includes the most basic spatial functions of the case, the literal spatial/temporal uses are, by Kurylowicz's argument, more innovative than the frequently more obviously metaphorical animate 'locative' or animate 'goal' senses first described.
and represent an extension of the dative case into a previously locative-marked domain.

The historical order of developments already points to a complexity greater than what we might expect a priori: these first two senses of the dative share a common locative semantics, but the most basic locative sense is not historically primary as far as the dative form goes. Rather, the historically primary use of the dative is for a metaphorically extended locative use, and the most basic, literal locative semantics is only subsumed by the dative form at a later point, with the syncretism of the locative and dative cases in a single dative form. Moreover, the replacement of the basic spatiotemporal locative sense of the dative with prepositions plausibly weakens the spatial basis of the case synchronically, given that any evidence for a spatial source-domain function of the dative is thereby largely expunged.

The instrumental use of the dative is yet another extended function which cannot be derived in a simple manner from a basic locative semantics. An original IE instrumental case with an extended comitative/sociative function became replaced by the dative case because of the various kinds of locative semantics already coded by the dative and the locative semantics present in a comitative function. From here, we have the opportunity for a spread of the dative form into an independent, albeit intersecting, complex category: that corresponding to the historical instrumental case (although not all the way to the presumed locative base of this category). By Old English, then, the dative has replaced the instrumental case almost completely.

The 'ablative' use of the dative once again represents the accretion to the dative's domain of a function historically associated with a separate case, which is of course that
of the ablative. While the use of an otherwise sometimes goal-marking case to mark a source may seem bizarre, these ablative and goal functions share the spatial semantics referred to above of 'landmark relative to which a theme is moved', or a non-spatial semantics of 'animate participant relative to which an event occurs', the latter of which is closely allied to the 'ethical' dative sense.

Competition between the dative and other cases—in particular, accusative and genitive—for the semantic domain of the receding cases of instrumental and ablative accounts for the frequent apparently free variation in Old English among these cases. The semantic affinity between the instrumental and the accusative—marking manipulated objects 'passively' involved in the verbal action—is obvious, and provides a more direct link between these two cases than that provided by the comitative to instrumental and dative. We also have competition between accusative and dative to mark 'goal' semantics; recall that a widespread 'secondary' function of the accusative in Indo-European is that of direction, while we have also identified this semantics with the OE dative. Given that the accusative of goal is so well established in Indo-European, it is possible that the dative of goal represents a relatively innovative, or at least conceptually secondary, use perhaps motivated by the lively goal-locative metonymy mentioned above. The fact of the continuing opposition in Old English between a goal semantics associated with accusative and a static locative semantics associated with dative is manifest in the semantically coherent selection by prepositions of accusative over dative marking only when movement is involved; these prepositions are fore 'before', geond 'throughout', in 'into', ofer 'beyond', on 'into, against', ongean 'towards', burh 'through', wiph 'against,
towards, along', and *ymbe* 'around'. This is still lively in ModG. Most OE prepositions, however, have conventionalized dative selection to the exclusion of accusative, regardless of a semantics of movement (Quirk and Wrenn p. 68). The link between ablative and genitive in a clearly partitive use of the latter is well discussed; cf. Kurylowicz pp. 187 ff.

The complexity of the ensuing case system is, then, a result of the fact that so many different semantic parameters may be at play in the reanalyses and syncretisms identifiable in the evolution of the system as a whole.

### 4.4 Overview of the OE case system: accusative, dative, and genitive

Finally, I would like to present an overview of the other (non-nominative) OE cases complementing the dative in the OE system.

In his analysis of the IE case system, Kurylowicz portrays the accusative as a case with a primary syntactic function of 'direct object' and several secondary semantic functions. In his characterization of the 'direct object' function as syntactic, he naturally makes the traditional assumption that an absence of any invariably present semantic

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*The instrumental does have some vestigial existence (although this 'fifth case' of Old English fails to represent a straightforward continuation of the historical instrumental; see below), but it would be wrong to view the widespread conflation of instrumental and dative in the nominal paradigms to be merely formal, or purely superficial, in the way that we would presumably view the neutralization of distinct nominative and accusative marking in the plural nominal paradigms. As Mitchell (566) points out, 'in OE the dative is used in lieu of the instrumental where the latter does not exist and often interchanges with it even where it does'. This indicates that the extensive dative/instrumental syncretism is not simply a matter of a superficial partial neutralization of two categories kept 'psychologically' distinct in the grammar.*
feature among all syntactically transitive uses, or among all verbs which govern a direct object, renders the direct object or transitive relation semantically void: 'There is no common meaning or semantic common denominator to all transitive verbs except that they are just transitive, i.e. govern the acc. of the direct object' (181). This view is, of course, a somewhat different one from that developed in a prototype treatment of transitivity as in Hopper and Thompson (1980), by which the lack of a 'semantic common denominator' is no bar to a semantic analysis of the transitive relationship; in addition, as we shall see in a moment, the genitive and dative cases which stand in paradigmatic opposition to the accusative may themselves be viewed as having a common denominator of low semantic transitivity.

The secondary semantic functions associated by Kurylowicz with the Indo-European accusative are that of direction (goal), that of 'content' (e.g. 'fight a fight'), those of temporal and spatial extension ('live three years'; 'walk five miles'), and that of 'relation' ('wise in counsel'). The accusative in these secondary functions competes more directly than in the primary transitive function with the dative and genitive in Indo-European and in Old English in particular, resulting in what appears to be a good deal of free variation between those cases.

The genitive, in Old English as in Indo-European in general, may be broadly divided into what Kurylowicz calls adnominal and adverbal classes. In the former class of uses, the genitive-marked noun contracts a relationship with another noun. Examples are the possessive use, the so-called subjective and objective uses ('the running of the bulls', 'the slaughtering of the bulls'), as well as 'descriptive', 'origin', and partitive functions.
(maeræ lifes man 'a man of glorious life', ides scyldinga 'lady of the Scyldings', sum hund
scipa 'a hundred ships'; Quirk and Wrenn p. 62). In adverbial uses the genitive marks a
relationship between the inflected nominal and the governing verb, with this relationship
being either one of an argument to its governing verb or adverbial. Adverbial uses include
locative- and temporal-setting ones such as dages ond nihtes 'by day and night', while
genitive-marked arguments include those of bruca 'enjoy', bedælan 'deprive (of)', and
several dozen others, frequently with transparently partitive meaning.

Kurylowicz views this broad class of adverbial (as opposed to adnominal) uses in
terms of a reduced derivation, 'both from the descriptive and from the historical point of
view', from adnominal uses. 'The historical origin', he explains, 'is sometimes transparent,
e.g. in verbs like Skt. (Vedic) s'ru governing the acc. of a noun "word", "noise", etc., and
a gen. of a substantive denoting the source of the noise i.e. the person or the object
emitting the sound' (185). To the extent that a semantics of 'source' is arguably still
conceptualized in connection with the genitive-marked argument, one may say that this
basic sense is still retained. In other instances, the 'source' semantics is opaque; by this
path, then, IE genitives of 'goal' and 'contents' arise from the elision of an accusative
(which, as we have seen, may independently signal these relationships) and the shift of
the relevant relationship to the genitive itself.

Of course, this development is obviously not best understood as some sort of
simple and superficial metonymic transfer (i.e. from one to another adjacent element
merely by virtue of their collocation) independently of the meaning of the genitive, or for
that matter of the accusative. The function of the accusative as marking 'goal' or 'contents'
is itself secondary to the primary function of marking the patient in a semantically transitive relationship; this fact helps account for the lability of the accusative-bearing noun in this use, when another nominal is present to assume the role of signalling the relevant relationship. The shift of the semantic relationship to the genitive is thus facilitated by the fact that this relationship is removed from semantic transitivity to begin with. In addition, the genitive already had a partitive ('-contents') semantics in the adnominal use. In fact, as Kurylowicz points out, 'in the majority of instances the adverbal gen. goes back to the partitive use of the adnominal gen. This is the reason why the gen. object is frequently defined as an object "only partly affected by the verbal action"' (187).

The adnominal partitive use, which combines a 'source' semantics with low affectedness, may thus be seen to underlie a basic partitive adverbal genitive function, whether or not we invoke Kurylowicz's elision-based account of the development of an adverbal out of an adnominal use. From this spatially-oriented semantics, synchronically transparent in a large number of OE verbs of 'enjoying', eating, drinking, and so on, an extension into other domains of low transitivity are relatively straightforward. Thus, the 'content' semantics associated with some genitives may rest on a generalization from partitive-derived uses, with a deviation from patient-like semantics uniting both. With many verbs, e.g. bidan '(a)wait', we may posit a correlation between semantic peripherality and syntactic peripherality, such that there may have been a certain tendency to omit the argument coded genitively. Certainly, in some cases the ModE reflexes or replacements of these verbs are formally intransitive with optional prepositional phrase
adjuncts (although the prepositional phrase in 'to wait for X' has a less peripheral status than that in 'to wait in the dark', cf. 'In the dark, we waited for Godot' vs. "?For Godot, we waited in the dark"). However, Visser probably draws too clear a distinction when he claims that 'it is essential to bear in mind that the verbs in these constructions are intransitive, and that the practice in dictionaries and glossaries of giving e.g. "to enjoy life", "to await judgment" as translations of "lifes brucan" and "domes bidan" is misleading, since it gives the impression that in these combinations brucan and bidan were transitive verbs' (355). While we would be inclined to agree with him that "with regard to", "with respect to", "concerning" would not inaptly describe the relation, and while we would endorse his approval of Curme's (1931:110) proposal that (with this subset of uses of the genitive, at least) 'the central idea of this case is in a sphere', we must keep in mind that many OE predicates (including brucan and bidan) with this use of the genitive may alternatively take an accusative-marked object. We would then have to accept that these all represent predicates with two subcategorization options, one with one and one with two arguments. This would place these 'content' genitives in the domain of the other adverbial uses, despite the fact that the semantics here diverges from the 'setting' semantics independently associated with adverbial genitive uses. The overall problem is that Visser's distinction does little beyond capturing the semantically peripheral nature of the genitive argument by identifying it as a non-argument. This is analogous to 'explaining' the dative marking on the argument of hungarian 'be hungry' by denying its argument status, or by translating it as 'it hungers with respect to me'. Such an explanation amounts to a denial that non-accusatives and non-nominatives can really be arguments, as
opposed to simply acknowledging them to be arguments coding their own semantics distinct from that associated with the transitive prototype.

To sum up our comments on the genitive, this case extends from a metaphorically motion-based semantics to a transitivity-oriented semantics in paradigmatic opposition to the accusative, with the genitive-marked object featuring a 'content' semantics of low referentiality and low affectedness, in opposition to the high referentiality and direct affectedness prototypically marked by the accusative. This does not mean, apart from the class of predicates denoting 'eating, drinking, consuming, and using' (Visser 356) (where the partitive meaning is clearly available), that the object of an otherwise transitive (nominative-accusative) verb could be freely marked with the genitive so as to convey a semantics of low transitivity—say, incomplete affectedness, low concreteness or animacy, etc. Also, because of the various accusative uses (especially 'content') deviating from prototypical transitivity, the genitive may alternate with the accusative with some verbs with no apparent semantic difference (cf. spyrian 'ask for s.t.' (acc/gen), neosan 'find out s.t.' (acc/gen)).

We see, then, that it is useful to view the genitive not simply in terms of a cluster of adnominally-derived semantic categories, but also in terms of a cluster of adverbal uses united by a common semantic denominator of low transitivity. Moreover, this view

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The accusative-genitive alternation with these verbs is quite widespread. At the same time, it is fair to acknowledge that a corresponding transitivity-related semantic distinction is not always clear. Mitchell quotes Grimm's comment that 'der Acc. drückt reine, sichere Wirkungen aus, der Gen. gehemmte, modifizierte', but then goes on to question the robustness or transparency of this distinction in all cases (p. 563).
presupposes an analysis of the formal expression of the transitive relationship—the nominative-accusative case array—as itself 'transitive' in something more than the purely syntactic, semantically void sense endorsed by Kurylowicz. This is a crucial aspect of the explanation why it is accusatives of 'direction' and 'contents'—which represent non-central, secondary functions of the accusative relative to the central transitive function—which form such important subgroups, in Old English and Indo-European in general, of the source of reduced genitive collocations following elision of the accusative and metonymic shift of the accusative's semantics to the genitive. While 'low transitivity' is not sufficient to describe the functions of the genitive, it is a feature that unites these functions.

We thus find, once again, that an analysis of case relationships in terms of both transitive and non-transitive semantics entails no contradiction. This is precisely the sort of view endorsed by Holland (1993) in his analysis of the semantic grounding of a subset of the ON dative. For this subset, Holland identifies a common semantic feature of the relevant verbs of 'impart[ing] some motion to, or control[ling] the motion of, their dative objects' (26). This correlates with a transitivizing or detransitivizing effect, depending on the transitivity value of the participating verb when used without the dative object: 'intransitive verbs in this construction are transitivized or causativized, while transitive verbs are partially detransitivized, in order to fit the same semantic pattern' (26).

With respect to this last observation about correlations of the dative case with transitivity, the ON dative as analyzed by Holland resembles the 'middle' marker as analyzed by Kemmer (1988). Since the middle marker represents a form originating with
a reflexive function, it serves as an overt signal of transitivity in the sense that it most frequently marks the object of a transitive verb. Also, having developed one of the reflexive-extended 'middle' functions, the middle marker may occur with otherwise intransitive verbs (cf. the Latin deponents, modern Romance verbs such as Spanish irse 'leave' and cagarse 'shit', and OE gewitan 'depart': gewat him ham 'went home' (Beowulf 1601)), in which case it may often be analyzed as increasing the transitivity of the verb by one or another parameter (e.g., punctuality or volitionality). At the same time, the reduced conceptual distinguishability of this middle marker from the subject relative to the core reflexive marker (i.e., the decreased referentiality of the middle's referent relative to the reflexive's referent) means that the formally and conceptually reduced middle (i.e., reduced reflexive) is associated with reduced transitivity relative to a basic transitive (including core reflexive) function. The association of the middle marker with a diminution or augmentation of transitivity depends, then, on the independent transitivity value of the verb collocated with it.

We may thus, for datives and middle markers alike, identify a transitivity-related semantics. However, an increase or reduction of transitivity is only one aspect (and, in Holland's analysis of the ON dative, an almost incidental aspect) of the semantic contribution of these formal elements. What Holland identifies as the primary semantics

It is at this point that we may identify the middle pattern to have acquired the status of a construction in the sense identified by Holland for the ON dative: a given semantic profile or cluster of semantic functions may be identified with the verb-plus-middle collocation, while it is not feasible to identify the collocation in terms of some additive or 'transformational' operation of the middle marker on the semantics of the verb.

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of the analyzed ON dative object construction is more specific than transitivity diminution or augmentation, but is at the same time perfectly consistent with a characterization of the construction in terms of transitivity.

5 Summary

In this chapter, I have presented a view of the OE case system as occupying an intermediate position on a 'transparency/opacity' continuum in the following respects. The four reasonably well-articulated OE case categories may be viewed as participating in valence patterns relating to one from a set of several semantic schemas, which in turn relate to two schemas of Motion and Transitivity. Transitive nominative-accusative valences obviously relate to the Transitivity schema, and nominative-taking intransitives may be viewed as instantiating a casual neutralization of semantics associated with either the INITIATOR or the PATIENT position of the Transitivity schema; certain other patterns (with valences of one or more arguments) are more plausibly related, more or less directly, to variants of a set of Motion/Location schemas. The most important caveat to this latter claim is that a variety of dative-marked arguments in the valence of 'experiencer' predicates, as well as genitives interpretable in terms of 'low affectedness', might be argued to have a synchronic semantics removed from an ultimately motivating locative source; this in itself, however, fails to represent a neutralization of the Motion/Transitivity opposition or a shifting of the burden of morphologically- and syntactically-significant conceptualization from a Motion to a Transitivity schema. In addition, as in Kashaya, a reduced degree of 'opacity' relative to Modern English may be
seen to be reflected in the preservation of overt case distinctions under reference- or information-structure-motivated manipulations. This point, presented as a largely unsubstantiated claim thus far, will be substantiated and developed in the next several chapters.

Given that the OE cases comprise a small closed set, the significance of the categories in this set are best viewed both in terms of the semantic schemas to which they most directly relate and in terms of other schemas corresponding to case options not chosen by in a given schema. Thus, the dative may be viewed independently of the Transitivity schema—that is, as instantiating an argument position associated with a different schema—as well as in terms of the Transitivity schema—that is, in terms of deviations from the values associated with parameters underlying argument-positions in a valence relating to that schema.

This also means that semantic developments in a semantically non-transitive case—the genitive or dative—may be viewed both in terms of a non-transitive (historically Motion-oriented) schema as well as in terms of the Transitivity schema. That is, while it would be inadequate to characterize either of the basic non-transitive cases simply as coding low semantic transitivity, it nevertheless seems reasonable to claim that certain extensions from the basic Motion-oriented semantics of the complex categories underlying the two cases may, in effect, be reanalyzed in such a manner. In other words, it may be reasonable to view some functions of, say, the genitive in terms of a Transitivity-schema-contextualized option in paradigmatic opposition to the accusative to signal the low transitivity associated with, as Kuryłowicz puts it, objects 'only partly affected by the

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verbal action'.

A claim at least implicitly made in this survey is that the very complexity of the OE case categories may have contributed to the shifting of the burden of coding and behavior to the Transitivity schema from other competing schemas. In other words, given a replacement already underway in Old English of casual 'core' spatial semantics by prepositional marking (analogous, as mentioned, to the replacement of 'core' direct reflexives with new formal material once an extended 'middle' category has become sufficiently extended), one might argue that the locative semantic basis for genitives and datives is sufficiently attenuated that the categories lose their semantic mooring. Given that the locative semantics associated with non-transitive cases is precisely the locus of alternative, non-Transitivity-oriented, conceptualization represented by these cases, any attenuation of such semantics in effect pushes the semantics coded by these cases toward the Transitivity umbrella.

At the same time, it would be wrong to characterize the OE case system in terms of some sort of purely conventional, arbitrary coding of formal rather than semantic categories. This is the main reason Van Valin's treatment of 'quirky' case is argued to be misguided. Any reasonable analysis of case marking in Old English must acknowledge that the system at issue is both motivated and conventional, but not arbitrary. The conventional character of the system means, among other things, that in a role-sensitive process such as reflexivization or agreement marking, one cannot do away with the intermediate level of morphological marking and refer simply to semantics. Given, however, that even in an extremely 'transparent' language such as Kashaya it is impossible
to identify the semantics upon which case categories are based without making reference
to the internal evidence of the case marking itself, it is hard to interpret this as an
indictment of the view of OE case as semantically motivated.

In syntactic processes such as CSD, we do get deviations from reference to
morphological case categories, e.g. some fronted datives behave like nominatives. This
kind of phenomenon is precisely the sort of thing that invites the identification of a
neutralization of role-oriented and reference-oriented mechanisms and conceptualization-
-i.e., the identification of cross-linguistically valid, theory-neutral 'subject' and 'object'
categories. Given, though, that this neutralization is gradual and construction-specific, it
is undesirable to view the implicated categories in terms of single, stable 'subject' and
'object' functions. The LFG view would be that these categories are always there, and it is
simply the mapping of other categories onto these functions that changes diachronically.
If we look at it this way, then we must still accept that the range of categories neutralized
onto these 'functional' categories is far less broad in Old English than in Modern English.
In this respect, then, the domain and importance of subjecthood and objecthood increase
as we move towards Modern English.
Chapter 6: The opacity/transparency parameter, word order, and the instantiation of grammatical relations in English: The GB perspective

1 Introduction

In the last chapter, I presented a detailed, semantically-oriented analysis of the OE case system, substantiated the claim for the 'transparent' status of the OE case system relative to that of Modern English, and criticized the perspective that grammatical relations receive equal instantiation in Old English and Modern English alike. In this chapter, I consider an analysis of the diachronic change in the English case system as described in formal, GB-based accounts, in particular Kemenade (1987).

GB and GB-based analyses are of particular interest to us here because that theory's treatment of GRs is, in some respects at least, very much in line with the view I have developed and opposed to the LFG view criticized above. After all, the GRs subject and object are often claimed to have no theoretical import at all in the structurally-oriented GB model. As we saw in our discussion of Williams and Baker in Chapter 2, this does not mean that the sorts of phenomena frequently referred to as subject/object asymmetries are ignored or unaccounted for in the model; rather, those asymmetries are reduced to structural asymmetries of hierarchy or precedence (usually the former), together with structurally-based constraints and principles applying to movement of constituents from those positions or to associations between those constituents and other constituents or positions—rather than to any functional correlates of the nominals occurring in those positions. This means, among other things, that we may avoid the question Allen addresses in such an unsatisfying way: namely, which constituent 'really' is the subject (or
object) in any given clause, or in the language as a whole.

In addition, consider the fact that GB appears to offer a number of useful mechanisms for formulating some of the insights expressed above in our (thus far largely informal and theory-neutral) account of GRs in English, Kashaya, and universally. First, the GB account of the structural/oblique case opposition appears to parallel what we have been referring to as 'opaque' versus 'transparent', or 'reference-dominated' versus 'role-dominated' case marking or case-marking systems. Also, the multistratal GB model has certain suggestive applications to a depiction of the sorts of differences I have been arguing for in the instantiation of GRs in Old and Modern English. Specifically, if, as I have argued, the change in configurationality between the two historical stages may be viewed in terms of an increasing conflation of semantic-transitivity-based nominative and accusative categories with discourse-pragmatically-based categories of primary and secondary topic, then we might formulate this in terms of two different systems for mapping D-structure arguments onto S-structure argument positions. In other words, perhaps the structural/typological difference between Old and Modern English may be understood in terms of a greater degree of conventionalized association in Modern English between agents or highest-ranking arguments and a structural-tree position more properly viewed as some sort of 'topic' position in Old English than as a 'subject' position. In this way, the emergence of a relatively semantically neutral 'subject' category may be understood in terms of the development of precisely this sort of conventionalized association, whatever formal or functional motivation we might invoke to account for it.

In this chapter, then, I will discuss all these points in some detail. We begin with
the GB view of the opposition between structural and oblique case.

2 Oblique vs. structural case

A distinction of fundamental importance in the GB account of case is that between 'oblique' (or, more commonly, 'inherent'—they mean the same thing but I will use Kemenade's term here) and 'structural' case. By way of introducing ourselves to these two different kinds of case, let's consider the following general case-marking rules outlined by Kemenade:

i. NP is nominative if governed by AGR
ii. NP is objective if governed by V or P
iii. NP is marked oblique as determined by properties of its [-N] governor.

(Kemenade 1987:67)

"[S]tructural case," she explains, 'is assigned blindly under [i] and [ii]; it is a structural property of a formal configuration and it is dissociated from theta-role. Oblique case is presumably closely linked to theta-role (cf. Chomsky (1981))' (p. 67). A predominance of structural case is characteristic of (morphologically) 'opaque' case systems, such as that of ModE; the crucial point is that there is an obvious dissociation of structural case and theta-role, as most easily seen in passive and 'raising' constructions. This may be understood in either of two ways: there is a many-to-one mapping between case and theta-role, and/or a single available case and single theta-role may be assigned to two different

A notorious problem here, of course, is that of determining which theta-roles, or for that matter which cases, are relevant language-internally; more about this below.
NPs. Passive involves the assignment of theta-role (but not case) to a D-structure object by the verb, while case (but not theta-role) is assigned to the derived subject (=D-structure object) by INFL; raising-to-object structures, meanwhile, would involve 'exceptional' case marking of the notional embedded subject by the matrix verb, while theta-role is assigned to that NP by the embedded verb. A useful generalization here is that theta-role assignment does not change under transformations or syntactic permutations (which would violate the theta criterion), while at least some kinds of case may apparently be so altered; whatever 'kind' of case-marking, then, that applies to passive subjects or 'raised' objects is a property of a 'superficial' structural configuration.

Given this understanding of morphological opacity and structural case, Kemenade considers all ModE case marking to be structural (dissociated from theta-role and simply associated with 'surface' structural configurations); nominative case in OE, meanwhile, is analyzed as structural, as may be seen by the fact of the many-to-one mapping of theta-role to that case (agent, patient in passives, experiencer, etc.). According to this account, we may assume that the base rules obligatorily generate a subject position, according to the Extended Projection Principle of Chomsky (1982)\(^2\). The subject position does not obligatorily have a theta-role; where it does not, it is base-generated empty and an element that has some independent theta-role may move there and receive nominative case under (i). Nominative case marking can operate independently because AGR is not a theta-marker and thus does not affect the thematic specifications of whatever element happens

\(^2\)

Actually, this principle is no longer needed given more recent developments in X' theory (Haegeman 1994:255 ff.).
to occupy the subject position.

OE objective case (instantiated as accusative), meanwhile, is also considered 'structural' since, although 'the dissociation between theta-role and case is less clear for objective case than it is for nominative case ... there are environments in Old English when there is [such] a dissociation' (69). As an example, Kemenade provides the following:

(1) Se ealdormon (nom) sceal lætan hiene selfne (acc) gelicne
   the ruler shall let himself equal
   his hieremonnum (CP,106,8)
   his subjects

Under a 'raising' analysis of this example, accusative case and theta-role may be dissociated in Old English, and objective (accusative) case is therefore structural.

At this point several comments are in order. First, it seems that the kind of approach to case and theta-role endorsed by Kemenade almost by nature would fail to capture certain indisputable differences between Old and Modern English or among languages in general. While the basic criterion for determination of a given instance of case assignment as 'structural' or not is whether there is any dissociation of case from theta-role, it is by no means an a priori valid assumption that any languages exist that exhibit some sort of maximal isomorphism between the two realms. Consider the questions which such an assumption would raise. Do we measure all languages by the yardstick provided by some real or hypothetical 'ideally' transparent language--some language, presumably, with an extremely rich and well-articulated morphological case system? Are all (other) languages then to be viewed as exhibiting syncretism of at least
some of those case distinctions? If so, then are any cases in any language really to be viewed as other than structural? This is precisely the sort of problem that arises if we use criteria other than language-internal ones to determine the semantic or formal categories that have internal validity in any given language.

The overall question, then, is not so meaningfully whether a given case exhibits isomorphism with some theta-role (or, indeed, whether a given language as a whole is 'transparent' or 'opaque'), but rather the degree to or ways in which theta-role and case are dissociated. Even this is problematic, since it presupposes some valid way of identifying theta-roles independent of coding; in some instances, this may be feasible with recourse to behavioral tests (some involving paraphrasing) but this can be extremely arduous even with living languages, and practically impossible with dead ones. What we are left with, then, is an analysis of the 'transparency' of given cases in given languages (and, as a sum of the individual cases, of the language as a whole) based on some intuitive or cross-linguistic conception of the sorts of semantic categories or partitions assigned by theta-roles, or some intuitive understanding of the semantic coherence of a given formal (case) marker in a given language. Again, though, what we end up with is degrees of transparency or opacity, not simple assignment to one category or the other.

Second, quite apart from the question of the degree of transparency/opacity of a given case by the sorts of criteria just described, there is an important distinction to be maintained between manipulation of case with (predictable) semantic effect and manipulation of case as a means of coding alternative presentations of information structure. For example, the German accusative/dative alternation reflective of movement
vs. location (e.g., 'into' vs. 'in')\textsuperscript{3} is of a quite different nature from case alternations
reflective of topicality or topicworthiness. There are real differences between languages—
differences ignored or obscured in Kemenade's approach—in the ways in which or degrees
to which case manipulation may proceed in response to considerations of information
structure independently of semantics. In Old English, Kemenade's cited example
notwithstanding, there is far less evidence of 'raising-to-object' structures than in Modern
English; I shall substantiate this claim in Chapter 10. In addition, there is far less evidence
in Old English for a role of passive in feeding structures such as raising and equi; the flip
side of this is that equi (in Old English and other relatively role-dominated languages such
as Kashaya) fails to target nominative (or 'active') 'subjects' as exclusively as in Modern
English. Pointing out (or claiming) that a supposed passive structure such as the following

(2) \textit{Hit} (nom) is awritten on Paules bocom ðæt... (CP,214,22; Kemenade 1987:68)
\textit{it} is written in Paul's books that

encodes a 'patient' with nominative case ignores the fact of this difference between OE and
ModE in the function of passive. This perspective on passivization in Old English will be
supported in the next chapter.

This brings us to a final point of comment on Kemenade's account of OE case as
sketched thus far. Recall that the Extended Projection Principle, invoked here as part of an
explanation of the dissociation of the nominative/subject position from theta-role, plays a
crucial part in a transformational account of passive since it provides for an empty 'subject'

\textsuperscript{3}

Or the Kashaya 'active/stative' alternation with verbs such as 'fall.'
position despite a D-structure absence of any argument in that position, and then ensures a landing site for the D-structure object which must move by virtue of a need to receive case. Of course, none of this is very appealing if we view 'passive' as an alternative lexical predication-type, but we might say that the EPP does have a counterbalancing appeal given the obvious kind of obligatory status of the 'subject' in ModE. Quite simply, while the obligatory generation of a subject position doesn't in itself force any lexical instantiation of that position, it does at least seem to lend itself to an explanation of the obligatoriness of subjects.

The problem, of course, is that 'subjects' in the most obvious sense—nominative arguments—were by no means obligatory in Old English, as shown most clearly by the existence of dative-taking intransitives, accusative-genitive or dative-genitive 'transitives,' and so on through the list of all the various kinds of valence that have been called 'impersonal.' What the application of the EPP to Old English leads us to, then, is the assumption of a 'subject' position in all cases, for all predicates, whether or not it is filled or whether or not there is any substantive, theory-neutral evidence for it. If, on the other hand, we dispense with this unmotivated extension of a principle which is ad hoc even in Modern English, then we lack a crucial structural precondition for a 'syntactic' treatment of passivization, leading to yet another, albeit relatively roundabout, reason for abandoning a view of OE passive as a syntactic phenomenon.

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4 The same point holds if we replace the relatively ad-hoc EPP with the more general provisions of X' theory, which offers (or imposes, depending on your point of view) a supposedly UG-provided parallelism among all the levels or layers of phrasal structure.
This in fact leads us to entirely satisfactory conclusions: the reason the 'object' appears in 'subject' position is not because the passive morphology has 'robbed' the verb of its ability to assign case, but because the verb is intransitive; it is, after all, surely no coincidence that independently intransitive predicates (BE and BECOME) are enlisted to head the passive predicational complex. The theta-role borne by the subject is then assigned directly to that position, which is unproblematic once we abandon the assumption that that role is assigned elsewhere (which would in turn prevent a view of the subject position in a passive structure as receiving a theta-role, by the theta-criterion). The semantic relatedness between actives and passives is then simply explained in terms of the shared stem of their predicate (by whatever version our theory provides of what in Chomsky (1970) are called 'redundancy rules'). Passive, then, straightforwardly involves a relationship between a thematically contentful subject and an intransitive predicate coding a state resulting from a transitive-type action or an action involving the subject as a nonvolitional patient-like participant.

We return now to Kemenade's presentation with a consideration of her discussion of OE oblique case. Recall that oblique case is distinguished from structural case in being

Note further that a non-transformational treatment of passive would do away with a type of movement which is anomalous even within GB theory, namely NP-movement. As it is, the only thing that requires the existence of NP-movement (with the exception of a tiny class of independently movement-problematic phenomena such as 'middles' and 'tough movement') is passivization, making us wonder, even in theory-internal terms, whether it is really parsimonious to have an entire 'species' of movement for a single construction. Of course, this ignores a possibly valid distinction between 'lexical' and 'syntactic' passivization, but if we were to retain a 'movement' analysis of the latter only, then the particular type of movement involved may be more marked and language-specific than the usual discussions of NP-movement imply.
tightly associated with semantics: 'oblique case is determined by theta-role, and therefore it is assigned at D-structure, where theta-marking also takes place; because it is linked to theta-marking the effects of oblique case cannot be neutralized' (72). While syntactic (abstract) case in general is assigned by the class of governors designatable as 'non-distinct from [-N]' (INFL, verbs, prepositions, and 'transitive' adjectives, i.e. adjectives that subcategorize for an accusative, genitive, or dative argument), structural case is assigned only by the first two and oblique case by all but INFL. (This may be understood in terms of INFL never assigning theta-role.) Given the identification of some tokens of case-marking as oblique, the task then becomes to identify as precisely as possible the semantic correlates of each case when used obliquely. Since all nominative (always assigned by INFL) and some tokens of accusative case exhaust the possibilities of structural case-marking, the cases at issue for this task are dative, genitive, and (some) accusative.

What we end up with, then, is the following GB formulation of what might in other contexts be referred to as the morphological 'transparency/opacity' parameter:

The D-structure/S-structure distinction between oblique and structural case is a very important one in that it determines whether or not elements that so receive case are available for movement to other argument positions. As observed above, the effects of structural objective case can be neutralized, for instance by passive morphology, whereas the effects of oblique case cannot be neutralized. One might say that, because oblique case is so closely linked to grammatical function, it is subject to the Projection Principle: it remains constant throughout the derivation. (Kemenade 1987:86)

Languages differ, then, in both the instantiation of oblique case (whether it exists at all) and the distribution of oblique case across the variety of case assigners (i.e. how well
elaborated or extensive the instantiation of oblique case is in the language); these factors then correlate inversely with the degree to which neutralization of case-associated semantic distinctions may occur. Of course, if a language only has structural case, then by the assumptions presented thus far there is really no semantics to neutralize, since case and semantics fail to correlate in exclusively structurally case-marking languages in the first place. However, if we consider that in a transformational analysis a derived structure involving NP-movement relative to a D-structure the moved NP originates in a position where it receives a theta-role, an indication of 'transparency' would simply be that that NP retains inflectional marking associated with that movement site, while 'opacity' would involve inflectional marking associated with the landing site; the former is oblique case marking, the latter structural.

The distinction between the two kinds of case marking is crucial for a precise formulation of OE passivization. Thus far, we have made reference to the GB account of passive whereby the NP moves from its D-structure position in order to receive case, given that the passive morphology has robbed the verb of its ability to assign case. While this may suffice for ModE, it is not quite precise enough for OE. Recall that, in OE, it is assumed that structural case is assigned by INFL and V only, while oblique case is assigned by V, Adj., and P. The effect of the passive morphology is to neutralize the [-N] feature in the verb's [+V, -N] matrix, making it non-distinct from an adjective. This means that the verb can no longer assign structural case, although its ability to assign oblique case is unaffected. This in turn accounts for the appearance of 'notional' structural direct objects as nominative subjects of passives, and the non-appearance of oblique objects of
any sort in the subject (as opposed to, say, topical pre-subject) position.

3 The directionality of case and theta-role assignment and syntactic change

3.1 Preliminary: Word order in Old English

Kemenade agrees with Lightfoot (1976, 1977), Canale (1978), Koopman (1984), and others in analyzing the 'underlying' word order of Old English as SOV. In this respect, she argues, Old English is more similar to its West Germanic nieces Dutch and German, at least as analyzed by Koster (1975). The general idea is that, despite the 'superficial' variety of major-constituent word orders exemplified in Old English, the following facts point to an abstract verb-final order which may be reorganized by a number of processes: embedded clauses are verb-final, and in main clauses the finite verb is often in second-constituent position but any 'second verb form' is in final position. Such facts, explains Kemenade, 'suggest that the basic position for the verb is VP-final, and that in V2 sentences for the same reason the finite verb is preposed to second constituent position' (19-20).

Of course, there are two major problems with this. First, both patterns (verb-final in embedded clauses, V2 in main clauses) are richly counterexemplified; second, the facts just mentioned are equally consistent with an analysis of Old English as 'basically' verb-second with derived verb-final order in subordinate clauses as opposed to verb-final with derived V2 in main clauses.

Kemenade thus goes on to present a somewhat more detailed (and abstract)
argument for the SOV status of Old English based on an analogous analysis of Dutch in Koster (1975) and extension to Old English by Koopman (1984). The first piece of evidence Kemenade cites from Koster that Dutch is SOV has to do with the Dutch rule of particle shift. She points out that, while the English version of this rule is extremely simple (optionally moving the particle over the first NP to the right of the verb), the Dutch version appears 'vastly more complicated.' It applies obligatorily in main clauses but never in subordinate clauses, and involves movement over all (not just one) object NPs following the verb, but only optionally over any object PP. Kemenade considers this to represent an undue burden on the language learner: s/he would have to have access to the knowledge that non-shifted examples are ungrammatical, the optionality of movement over object PPs would likely lead to the incorrect inference that movement over NPs is optional, etc. However, quoting Koster,

all problems in formulating the rule of Particle Movement for Dutch arise from the assumption that Dutch is an SVO (or VSO) language, so that direct objects, indirect objects and prepositional objects follow the verb. We can simplify the grammar of Dutch considerably by making the following assumptions:
  a. Dutch is an SOV language
  b. Dutch has no rule of Particle Movement at all
  c. The obligatory root transformation of Verb Placement leaves the particle behind (in the original position of the V). (Koster 1975:118)

Thus, the principle of economy of description leads us to a somewhat counterintuitive but elegant analysis of an underlying SOV word order with any discrepancy between the position of the particle and the verb resulting not from particle shift but from movement

More precisely, any deviation from \([PRT]V\), e.g. opbelde 'called up', since an example
of the verb; the position of the particle, then, invariably represents the 'underlying' position of the verb. Indeed, the analysis is bolstered by a complete distributional equivalence between ordinary verbs (without particles) in subordinate clauses and particles in root Ss' (28).

This argument for the SOV status of Dutch transfers with some degree of parallelism to the facts of Old English. The main problem seems to be that V+Particle fail to cooccur as invariably as in Dutch, although they still cooccur in the clear majority of cases (approximately 95% in the Hiltunen sample cited by Kemenade); this requires the postulation of 'some minor rule that optionally moves particles to the right of the verb' (32). Also, the particle may appear immediately before the main verb in V2 clauses. In general terms, however, Old English seems similar to Dutch in exhibiting at least a rough distributional equivalence between verbs in subordinate clauses and particles in main clauses, meaning that the same sort of 'economy' argument that applies to Dutch in support of SOV order applies, to some extent at least, to Old English as well.

One difference between Dutch and Old English is that, if we indeed accept an SOV analysis for both, there is evidently greater freedom in the latter of extraposition of elements to the right of the verb in such clauses: not just S+PP, but also NP, manner adverbs, predicate adjectives and even particles. By various analyses, the extraposition of heavy elements (or perhaps more accurately, heavy NP shift) occurred in both main and subordinate clauses in Old English 'from the earliest times' (Kemenade 1987:40).

___________

like hij belde op would represent movement of the verb to a position in front of the particle even though they are still adjacent.

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Kemenade suggests that 'the phenomenon of extraposition started off in early Old English as the postposing of heavy constituents, light NPs, adverbials' (41)\(^7\).

A second difference is that in Old English, unlike in Dutch or German, verb fronting appears quite compatible with the appearance of an overt complementizer in a subordinate clause. Thus, consider the following:

(5) pa wende se here þæt his fultumes se mæste dæl then thought the-NOM army that his aid-GEN the-NOM greatest part wære on þam scipum, and þæt hie mehten faran was-SUBJ on the ships and that they might go unbefohtene þær hie woldon. (ASChron. (Parker ms) an. 911) unchallenged where where they wanted 'Then the army thought that the greatest part of his support was in the ships, and that they might proceed unchallenged wherever they wished'

(6) ...is awritten...þæt Cristes menniscnys weard gefremmed is written that Christ's humanity was achieved þurh þone Halgan Willan (ÆCHom I 284,31) through the holy will '(It) is written that Christ's humanity was achieved through the Holy Spirit'

\(^7\) Based on work on Modern German, we might expect the following hierarchies to have been relevant (with the '>' sign meaning that the constituents on the left are more likely than those on the right to be extraposed, extraciated, or 'leaked' to what would be called the Nachfeld in a 'topological' model):

\[\begin{array}{ll}
3\text{-place predicate constituent} & > 2\text{-place} > 1\text{-place} \\
\text{heavy} & > \text{light} \\
\text{oblique} & > \text{d.o.} > \text{subject} \\
\text{non-strictly-subcategorized constituent} & > \text{strictly-subcategorized constituent} \\
(adjunct) & > \text{argument}
\end{array}\]

\[(\text{Hawkins 1986:143 ff.})\]

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Now some shallow-thinking man will inquire how God can be everywhere at once.

Again, we believe that the Holy Spirit is the spirit of both the father and of the son.

Also all of God's congregation acknowledges that Christ was produced from the pure virgin Mary.

There are at least two interpretations we may apply to such examples. One is that the failure of the finite verb to appear in final position results not from verb fronting but from the movement of other constituents to the right of the finite verb. By this analysis, endorsed by Kemenade, the above examples feature PP-extraposition, verb raising, and verb projection raising. Kemenade points out that embedded V2 clauses must in any case be explained differently from main V2 clauses, given that 'the first constituent preceding the finite verb is always the subject' (20). Although she provides no explanation, in theory-internal or any other terms, why this should be the case with embedded clauses with non-
final verb position derived by extraposition of non-verbal constituents, the point would remain valid that the limitation of the initial argument to subject would mean that the 'phenomenon [of apparent V2 in subordinate clauses] differs... from that of V2 in main clauses' (20).

It appears, however, that this distributional statement is false. In her study of the relational status of dative experiencer arguments in Old English, Allen (1995) (cf. Chapter 5) cites examples of both experiencer and non-experiencer datives in initial position in subordinate clauses with a fronted verb:

(10) þu miht ongitan... þætte ælcum men ma deriæh
you can understand that each-DAT man-DAT more harm

his modes unþeawas-NOM
his mind's vices

'you can understand that the vices of his mind harm each man more'
(Bo.38.116.30; Allen 1995:47)

(11) ...þæt þe wel licode þæra gewrita andgiti
that you-DAT well pleased the-GEN writings-GEN meaning-NOM
'that you well liked the writings' meaning'
(ÆL6(ÆElfeat)4; Allen 1995:109)

Thus, while it may still be true that nominatives are more common in this position, there is apparently no firm proscription against such examples.

The other conclusion we might draw from apparent V2 clauses embedded under an overt complementizer is that such clauses may indeed involve verb fronting rather than the rightward-movement of nonverbal constituents relative to the verb. In this case, something
other than movement to COMP must be responsible for verb movement in at least some
cases, and that there must be other landing sites besides COMP for the moved verb. We
will return to these points in a moment in a discussion of Pintzuk's (1992) response to
Kemenade.

Given an SOV analysis of Old English, the question to be answered is why the
finite verb moves to second position in main clauses. Kemenade endorses an argument
presented by den Besten (1977) for Dutch and German that the 'complementary
distribution between the position of the finite V in V2 clauses and the position of the base­
generated complementizer in that-sentences' indicates that the landing site in a V2 clause is
COMP (p. 46), which then explains why 'presence of a base-generated complementizer
prevents fronting of the verb' (47)⁸. Kemenade points out (p. 47) that the distribution is
actually not strictly complementary, as the following German data show:

(12) Er sagte dass er ihn gesehen hat
    He said that he him seen has
    Er sagte er hat ihn gesehen
    He said he has seen him

In other words, the complementizer precedes the S while the finite verb in a
complementizer-less subordinate clause follows the subject; this necessitates a further
assumption that 'the first constituent in V2 sentences is in pre-S position' (47). The INFL

⁸

This same pattern of complementary distribution is taken in a 'topological' model to
indicate that either element may figure in the so-called 'linke Klammer'; one may consider
either the finite verb or the complementizer to mark the onset of the clause (Grewendorf
node in German, Dutch, and Old English, then, is posited to precede the S under COMP, rather than being immediately dominated by S as in Modern English. This further entails that the initial constituent in all V2 (main) clauses 'are not found in the structural subject position, but are topicalized like object or adverbial first constituents' (47). We thus end up with roughly the following structural representation of the OE V2 main clause:

(13)

\[
S' \quad \text{COMP} \quad S \quad \text{INFL} \quad NP \quad VP
\]

\[
\text{on twam hæfde God pæs' gegodod mannes sawle}
\]

The reason the finite verb moves to the V2 position (=COMP) in main clauses, then, is that 'INFL in COMP has to be lexicalized', either by the complementizer or the verb. This prompts the question of how INFL and the finite verb are supposed to coincide in verb-final structures, or more precisely: if the complementizer is a lexicalization of INFL, then what is the relationship between INFL and the finite inflection on the verb in cases where the verb doesn't move to INFL? Evidence that INFL is associated with COMP even in cases where an overt complementizer is present comes from the cliticization of weak
pronominal elements to both that-complementizers (as also attested in other Germanic
dialects, e.g. Bavarian) and inflected verbs in V2 clauses in Dutch:

(14) Dat-ie gisteren Jan het boek heeft gegeven.
    that-he yesterday John the book has given
    'That he gave John the book yesterday' (Kemenade 1987:50)

On the assumption that clitics 'absorb the relevant case features of their governing
head,...this would indicate that the position of dat/finite V [in these examples] contains
nominative case-marking properties' (50), and, more generally, that AGR—generated
under INFL—is associated with the COMP position even when a complementizer is
present there. This argues against an analysis of the COMP position of INFL being a
derived one occurring just in the absence of a complementizer.

The obvious question at this point is how, in an embedded clause with a
complementizer (which would therefore satisfy the lexicalization requirements of INFL
and obviate the need for the verb to move to that position) the non-fronted V becomes
associated with or 'picks up' AGR. This is, clearly, a problem. An INFL 'lowering' analysis
is problematic because it would be invoked just in those cases where the presence of INFL
under COMP is not needed to explain V-movement, and because lowering in general
presents serious problems for the binding of the resulting traces. Also, considering the
structure in (13), INFL is required to be adjacent to the subject NP for the assignment of
NOM case, while it would at the same time be required to be moved to the clause-final
position of the V. Strangely, Kemenade fails to address the issue at all. What we are left
with, then, is an invocation of the role of INFL as a trigger for 'move V' just in those cases
where the V is moved, but a complete disregard of the relationship between INFL and V in all other cases.

By the argument presented thus far, one structural difference between OE and ModE has to do with whether INFL is base-generated inside or outside of S; the contrast may be illustrated as follows:

(15)

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<table>
<thead>
<tr>
<th>OE</th>
<th>ModE</th>
</tr>
</thead>
<tbody>
<tr>
<td>S'</td>
<td>S'</td>
</tr>
<tr>
<td>COMP S</td>
<td>COMP S</td>
</tr>
<tr>
<td>INFL NP VP</td>
<td>NP INFL VP</td>
</tr>
<tr>
<td>AGR</td>
<td></td>
</tr>
</tbody>
</table>
```

Under the analysis of INFL as head of the clause in ModE, the position of INFL inside

Note that the structural representations provided here, and the comments in this and the following paragraph, are based on Kemenade's (1987) analysis; a somewhat different view of the details of the relevant structures and, therefore, the relevant structural positions in the contrast between Old and Modern English will be presented below in connection with Pintzuk's (1992) and, especially, Kiparsky's (1995) accounts.

This analysis, which has by no means been a matter of universal agreement within GB, is based largely on the somewhat shaky assumption that the 'type' of clause is best understood in terms of a 'finite' versus 'infinitival' or [+/- tensed] parameter, in which case INFL, like other heads, determines the 'type' of the phrasal category (Haegeman 108 ff.).
or outside the clause corresponds in turn to the role of INFL or V as the head of S. The OE configuration, as mentioned, entails that the first-constituent position be pre-COMP, i.e. that the first constituent occupy whatever landing site is occupied by the topic; this initial, clause-external position might be expected to be occupied by the nominative NP in direct proportion to the topical status of the NP, although status as 'semantic' subject (nominative argument) and status as topical first constituent are clearly distinguishable and frequently fail to coincide.

In Modern English, by contrast, an unmarked SVO clause involves no movement at all of the VP-external ('subject') argument. There is a peripheral TOP position, just as in Old English, but movement to this position tends to have a much more marked, specifically contrastive, status than movement to TOP in Old English or any other V2 language such as German. The clause-internal subject position in Modern English essentially conflates the clause-external TOP position of Old English with the more semantically-oriented NOM content associated with the OE position of the immediately S-dominated NP, conflating a predicational (subject-of-predicate) and thematic (in the sense of theta-role) entity. This structural analysis, then, permits a fairly perspicuous representation of the functional phenomenon of the post-OE development of the neutralization of Topic and Agent in a grammaticalized 'subject' relation. In fact, it may be that at least some of the sorts of subject-object behavioral asymmetries taken to provide evidence for the role of 'external argument' ('subject' NP position outside of VP) are dependent on a ModE-like neutralization of Topic and Agent properties in this position; this is, essentially, the position of Bhat (1991) and Van Valin (1993).
The usefulness of the structural contrast developed by Kemenade for Old English and Modern English may well remain valid even given certain important revisions of Kemenade's analysis in Pintzuk (1992). As mentioned above, it may be viewed as a serious problem for Kemenade that the V2 pattern appears to occur so freely in Old English in subordinate clauses with an overt complementizer. Kemenade's explanation, as mentioned, for the 'obliteration' of SOV in such cases is that various rightward-movement processes alter the position of the verb relative to other constituents—without, however, entailing any movement of the verb itself. This analysis would require that even extremely 'light' elements, including particles, pronominal objects, and monosyllabic adverbs, would invariably have to be viewed as extraposed when they follow the finite verb in a subordinate clause.

If, on the other hand, we accept that at least some instances of superficially V2 structure in subordinate clauses result from movement of the verb itself, then we must at the very least identify a landing site for the fronted verb diverging from the COMP node argued to be involved in Dutch and German.

It is largely the facts of V2 in subordinate clauses which prompt Pintzuk's analysis of Old English as featuring a non-final landing site for finite verbs in subordinate as well as main clauses. Since COMP is ruled out in most cases given the presence of a base-generated complementizer under that node, Pintzuk proposes that the landing site be an INFL node under IP (=S) rather than directly under COMP:
As mentioned above, one problem for the INFL-under-COMP treatment of languages such as Dutch and German is that it remains a puzzle under such an analysis how the verb would 'pick up' INFL in verb-final structures. The puzzle would not be solved, recall, even by resorting to the ad-hoc proposal that INFL is not under COMP just in those cases where the verb doesn't move, since Kemenade invokes the presence of an INFL node under COMP in cases involving an overt complementizer to explain the cliticization of the subject to the complementizer in Dutch.

Pintzuk solves the problem by endorsing a 'double base hypothesis' (Santorini 1991, for Yiddish) for INFL—that Old English featured both INFL-initial and INFL-final IP, in both main and subordinate clauses. In the case of verb-final clauses, then, the verb

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The evidence she presents for INFL-final phrase structure in main clauses features a clause-final inflected verb preceded by heavy constituents, with the relative weight of the verbal and nonverbal constituents ruling out any derivation by movement of either constituent-type relative to the other:
moves (string-vacuously) to an INFL node to its right rather than its left. The proposed structure is as follows:

(17)

Recall that Kemenade's proposal is that it is precisely the proliferation of rightward-movement processes obscuring the V-final structure of Old English which results in a reanalysis of such clauses from OV to VO. Pintzuk's more sociolinguistically-influenced model simply posits the change to have taken place by the gradual increase of an INFL-medial structure at the expense of an INFL-final one. Empirically, we would be hard-pressed to choose between an analysis whereby overtly V2 clauses result from movement of the verb and one whereby the same surface strings result from rightward movement of other constituents. Presumably, it is this very ambiguity which would have prompted the

him þær se gionga cyning þæs oferfæreldes forwieman mehte
him there the young king the crossing prevent could
'the young king could prevent him from crossing there'
(Or.44.19-20; Pintzuk 1992:9)
reanalysis Kemenade refers to anyway.

Evidence which may favor Pintzuk's account include such data as the following:

(18)  
Hu he sīpode up (ÆLS 18.291; Pintzuk 1992:6)  
how he went up  
'how he went up'

(19)  
þæt he wearp þæt sweord onweg (Bede 38.20; Pintzuk 1992:6)  
that he threw the sword away  
'so that he threw away the sword'

(20)  
þæt martinus come þæt into þære byrig (ÆLS 31.490-1; Pintzuk 1992:7)  
that M. came then into the town  
'that Martin then came into the town'

The first two examples supposedly involve particles; given that 'in Old English subordinate clauses that are unambiguously INFL-final, particles always precede the main verb' (Pintzuk 1992:6), these examples must involve verb fronting rather than extraposition of the particle. The third example shows a post-verbal adverb, which like particles and pronominal objects is claimed to 'invariably precede the main verb in subordinate clauses that are unambiguously INFL-final' (6).

Of course, the crucial aspect of this claim is that unambiguous INFL-final structure precludes rightward-movement of the particle or other 'light' constituent. If (18) is not to be interpreted as such a structure, we must ask ourselves what would qualify as unambiguously INFL-final. In addition, Pintzuk claims that 'in subordinate clauses with the inflected main verb in medial position... particles appear post-verbally 36 times out of 134 potential instances (26.9%). Since particles do not postpose, I conclude that these 36 clauses must be instances of INFL-medial phrase structure...' (6). ['P]ronominal objects
and monosyllabic adverbs', on the other hand, 'appear post-verbally seven times out of 123 potential instances (5.7%)'. This discrepancy shows that particles appear to the right of the verb more readily than do monosyllabic adverbs and pronominal objects; without identifying why this should be so, we cannot rule out a rightward-movement analysis of such elements. This problem is compounded by the fact that the kind of example which by Pintzuk's and others' accounts would least likely represent rightward-movement of nonverbal material is not provided; such a hypothetical example would feature pronominal material to the right of the verb rather than 'heavy' material:

(21) *pæt he wearp hit onweg (compare 19)
    *pæt martinus come þa þær (compare 18)

Absent such examples, we can only conclude that Pintzuk's case is somewhat less convincing than it conceivably might be.

In general, then, we find that the abstract analyses proposed by both Pintzuk and Kemenade for at least many of the structures at issue either cannot be evaluated empirically or can only be so evaluated by extremely indirect, and sometimes highly tenuous, logic. We may legitimately ask ourselves to what extent the theory itself, and all the apparatus it brings to the task of interpreting the data, really helps in the determination of the correct analysis. In addition to what has already been discussed, I cite one last set of data, intended by Pintzuk to represent clear evidence for a minority COMP landing site for finite verbs:
On the assumption that the nominative (we and hi respectively) appears under (Spec, IP), then INFL is ruled out as a landing site for the finite verb given that INFL can only be embedded to the right of (Spec, IP). Assuming further that (Spec, CP) and (Spec, IP) are ruled out as landing sites for the verb, then the only available position seems to be COMP. This may be illustrated as follows:

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12 This follows from the fact that 'the structure preservation constraint restricts movement by imposing that heads [e.g., the verbal head of VP] move to head positions [e.g., COMP but not Spec]' (Haegeman 1994:591).
This only works as unambiguous evidence for the movement of the finite verb to COMP, however, given all the assumptions mentioned. If we remove, for example, the assumption that the subject must appear under (Spec, IP), then the following is a possible abstract analysis:

(25)
The obvious objection to this would be that such an analysis would predict the possibility of the appearance of some constituent other than the finite verb, including the subject or other argument, between the wh-phrase and inflected verb. However, such an illicit string could be ruled out simply by positing that (in this case) a wh-phrase triggers V2. If we wish to capture this schematically, we could do so just as easily with a topological representation by positing a sequence of slots and stipulating that the wh-phrase appear in the second-position ('focus') slot and that the finite verb appear in the next slot. The point is, there is nothing that the more elaborate theoretical apparatus of GB adds by way of explanation of the appearance of the finite verb under COMP or of the appearance of the finite verb adjacent to the wh-phrase: the position of constituents under specific nodes in the tree representation is only arrived at by a process of elimination, not by any motivated association between a given constituent and a given node. The structural tree, then, does little more than provide landing sites for constituents, without however motivating the movement of constituents to or appearance at those sites.

This last point is apparent when we reconsider the problems associated with den Besten's (1977) proposal (endorsed by Kemenade) that the finite verb moves to COMP to lexicalize INFL: how does the finite verb then lexicalize INFL when it remains in final position, and what, indeed, are we to make of the appearance of INFL under COMP anyway? If INFL as a functional head moves to COMP by head-to-head movement (a

13

The 'focus' slot ((Spec, CP) in the GB representation) would not be the first position given the possibility of adjoining a further Spec node to the left of the 'focus' node; this absolutely initial Spec node would dominate topical material preceding wh-phrases, which (as Kiparsky 1995 points out) was indeed possible in Old English.
possibility provided for in the theory), then this still leaves us with the puzzle of how final verbs 'pick up' the moved functional head. The fact that the GB literature offers over half a dozen fundamentally different accounts for the obligatoriness of V-to-COMP movement in Germanic (cf. S. Anderson 1993, Vikner 1990) shows that no account handles the facts in a satisfying way without engendering more problems than it solves. Pintzuk herself sidesteps the issue by stating simply 'that the trigger for verb movement to COMP is an operator in Spec (CP)' (12), which is however nothing more than an observational statement of the fact that some fronted elements cooccur with fronted verbs. Kiparsky (1995) likewise avoids offering any theory-internal motivation for V-to-COMP movement beyond the claim that certain fronted elements (wh-phrases, NEG-phrases, certain adverbs) move to the position of Spec (CP), which by definition embeds a COMP head, and which is thus available as a landing site for any phrasal head including a verb; there is nothing about lexical realization or occupation of the (Spec, CP) position which would explain why it should act as a trigger for movement of the verb to an adjacent position.

We see, then, that this particular structural representation, or the theory in which it is embedded, in fact not only fails to offer any more than a simpler, linear topological model, or the 'layered' RRG or Dik's functional-grammar model incorporating both facts of linearity and facts of hierarchy, but may well in fact be inferior in prompting internally-motivated 'explanations' (e.g., the INFL-under-COMP analysis) which raise more questions than they answer. Rather than illuminating the relevant facts, then, the abstract structural analysis ends up cluttering them.

Before we move on, a few further words must be said about current GB-based or
GB-extended structural representations of the sorts of differences discussed here between Old and Modern English. Recent proposals have argued that the subject position is best regarded as universally generated in VP, with the superficially VP-external position resulting from movement to an NP position generated under S (=IP) (e.g. Sportiche 1988, using quantifier-float data from French); this analysis has been adopted by the so-called Minimalist Program (Chomsky 1992). On the face of it, this proposal would have extensive repercussions for many of the claims presented in the context of GB theory about subjects or subject-related phenomena. For example, the very notion of 'subject' as a shorthand for the NP immediately dominated by S would have to be abandoned, as would the notion of 'external argument' as that argument generated outside the VP. However, it turns out that, for our purposes, such changes are ones of detail and terminology rather than of substance.

Note, first, that the essential structural asymmetry embodied in the 'old' analysis is still preserved in the new, with only minor revisions required in the specific nodes or categories to be referred to in statements about this asymmetry. For example, 'external argument' would simply become defined as the argument realized outside V', rather than outside of VP, as may be seen in the 'new' D-structure representation of 'Mary doesn't like ice cream':
or, more accurately:

(27)

In this representation, all the thematic information is contained in the VP, so the VP is
more clearly the 'semantic core' of the clause than under the VP-external-subject
representation; this motivates a conception of V as a 'thematic head' of the clause, or of
the clause being an 'extended projection' of V, while INFL (or, more precisely, AGR)
is still viewed as the 'functional head' of the clause (Haegeman 1993:611 ff.). A typological difference may still remain valid between the sorts of languages for which, say, INFL seems to be the relevant head of the clause and those whose clauses are headed by V, but such differences wouldn't be expressed in terms of phrase structure or D-structure; rather, they would be expressed in terms of derived structure.

At the level of representation at which all arguments appear with the verb under what is identified here as the VP node, it is possible that languages fail to differ. In particular, if it is indeed true (as claimed by Baker 1988, cf. Chapter 2) that agents universally fail to incorporate morphologically in the way that other semantic roles do, a somewhat intuitive structural representation of this asymmetry may be found in the base-generation of agents under (Spec, VP) rather than under V' as a sister to the verb. Perhaps, then, some semantically-based morphological 'subject-object' asymmetries may be identified with this level of representation. (Of course, this does not mean that such effects are 'structural' rather than semantic unless we choose to endorse the axiomatic assumption embodied in the model that such semantic facts are structural in nature; note that the Minimalism model represents a movement back to Generative Semantics in this respect.) Language-specific differences, such as the case associated with a given argument (with nominative case assigned by INFL and therefore requiring movement of the relevant argument to the INFL node), the degree to which a given argument corresponds to a given discourse-pragmatic role (or the mapping of role-related onto reference-related categories or any kind or degree of neutralization of the two category-types), etc., might be representable in terms of the interaction of arguments with nodes higher on the
tree.

Note once again, however, that these higher-level interactions would be ones for which there is direct linear evidence or, most abstractly, evidence from 'control' relationships, obligatory sharing or non-sharing of arguments, etc., which in a model such as RRG are taken as evidence for hierarchical asymmetries. It is therefore not at all clear that the apparatus of a structure such as (25) really offers more than a simpler representation would do. Be that as it may, let us remain with the present model for a moment to see what insight we might gain into structural differences between Old and Modern English in the correspondence of 'subject' to nodes higher on the syntactic tree than either the (Spec, VP) or (Spec, V') where these arguments are base-generated.

3.2 The structural contrast between OE and ModE 'subjects'

Beyond the admittedly somewhat vague references provided thus far to differences between Old and Modern English in the 'derived' structural tree positions to which nominatives correspond, what more specific information might we provide about these positions? Kiparsky’s (1995) observations about structural differences between Old English and modern Germanic V2 languages (in particular German) may serve as a starting point in this discussion.

Kiparsky develops the theme begun by Pintzuk that similarities in verb-second phenomena between Old English and modern V2 languages such as Dutch and German are more apparent than real. In particular, he argues that the much more strictly V2 behavior of German results from the conflation of what had been two separate positions in
Germanic, namely an absolute-initial adjoined topic position under (Spec, CP) and a focus position under a (Spec, CP) node immediately to the right of the topic position:

(28) Older Germanic (including Old English):

(29) Modern German:

One thing that this is intended to represent is the fact that German is less permissive than
Old English in the allowance of adjoined material before preverbal topical or focal material, which contributes to the more strictly V2 character of the former: 'the CP adjunction position (the German "Vorvorfeld") has been relegated to a more marginal role in [the] syntax [of modern Germanic verb-second languages]' (144).

Kiparsky proceeds to set up a virtually axiomatic association between V2 in Old English and the presence of a COMP node, and hence CP clausal structure, as opposed the presence of a COMP-less IP. That is, wherever we find V2 effects, the assumption is made that these follow from the position of the initial constituent under (Spec, CP) and the movement of the finite verb to COMP under C14; whenever V2 effects fail to occur, this is either because COMP is already occupied or because the relevant clausal structure lacks a COMP node—that is, the clause is an IP rather than a CP. Any main-clause element that obligatorily triggers V2—most clearly, wh-phrases, and (more controvertially) initial ne and ba—does so because it obligatorily appears under the focal (non-adjoined) (Spec, CP) node, which thereby entails the existence of a COMP head-of-CP, which in turn ensures the existence of a landing site for a fronted verb15. Other elements which optionally trigger V2 (bonne, nu, her, etc.) do so because a COMP node (and, thus, the presence of CP) is optional under fronting of elements other than wh-phrases; we may

14
Kiparsky still makes allowance for apparent V2 effects resulting from mechanisms other than movement of the verb to COMP, including via stylistic rules which move nonverbal constituents to the right of the verb.

15
As already discussed, Kiparsky has no opinion of his own as to why this movement should be obligatory given the landing site.
conceptualize this in terms of all main-clause fronted XPs optionally appearing under the same node as that which is obligatorily occupied by wh-phrases, as long as no wh-phrase is present. Wherever a fronted constituent fails to trigger V2, this is because that constituent is adjoined to IP, not CP\(^6\) (cf. Kiparsky's example (12b), p. 145):

\[(30)\]

\[
\text{Spec} \quad \text{swelcum Dryhten cidde... monnum such men the Lord reproached}
\]

Even in embedded clauses, an embedded topic may be adjoined to the left of IP (cf. Kiparsky's example (12c), p. 145):

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\(^{16}\) Kiparsky in fact abstains from offering any details about the structure to which such topics adjoin, beyond acknowledging Pintzuk's (1992) double-base proposal for INFL, and acknowledging the existence of a number of stylistic movement rules as identified by Kemenade (1987). In this and other representations, I will simply assume an INFL-medial IP to be the relevant structure, given that this assumption fails to bear on the central point.
Kiparsky argues further that vestigial V2 in Modern English may be explained by the appearance of only a subset of preposable constituents in the focus position which, by the above account, triggers movement of the verb to COMP. Thus, wh-phrases and adverbial phrases with negative polarity (never, seldom, not in a million years, etc.) trigger V2 (i.e., subject-AUX inversion), but fronted topics do not (*Tomorrow will we go to the beach). Additional evidence for the continued existence in ModE of two Spec positions before COMP is the possibility of the appearance of a topicalized constituent before a wh-phrase:

(32) Tomorrow, where shall we go? (Kiparsky 1995:143)

Unfortunately, however, the appearance of a fronted element in the focal, non-adjoined (Spec, CP) position fails automatically to trigger inversion of the verb, thus
undermining the explanatory role of this position (such as it is) as a V2 trigger. By Kiparsky's own account, the following is ruled out because the movement of the contrastive *beans to its proper focal position is blocked by the wh-phrase appearing under the same node:

(33) *Beans who needs?

In order to salvage the example, beans must be treated as an adjoined topic with a resumptive pronoun in object position:

(34) Beans, who needs them?

This clearly entails (and Kiparsky 1995:143 verifies) that beans is in focal (Spec, CP) position in the following:

(35) Beans I like.

However, no V2 occurs:

(36) *Beans do I like.

This shows that the fact of appearing under the focal (Spec, CP) node does not serve as an
adequate predictor of V2 in Modern English. It also suggests that the reason for verb-second position in, say, there-initial and other locative-initial clauses may be quite independent of the reason for this same verb order in wh-questions or clauses introduced by a negative adverb.

If, however, we accept Kiparsky’s overall argument, then the following seems secure. First, the topical preverbal position in main CP clauses appears to impose few restrictions on the nature of the constituent which appears there, and it certainly fails to impose a ‘subject’ restriction on any preposed argument. In this respect, the preverbal adjoined-topic (Spec, CP) position is not unlike its Modern English counterpart. It is true, on the other hand, that in Modern English subjects differ from non-subjects in their ability to occur as the only argument before the verb, while this was certainly not the case in Old English.

By Kiparsky’s account, this follows simply from the fact that Old English accepted into its V2-triggering focal (Spec, CP) position virtually any constituent, while Modern English restricts appearance in this position to negative polarity items, including wh-phrases, and, marginally, a few other constituent-types such as locatives17, and virtually

17 Of course, locatives should not simply be conflated with other V2 triggers given that they appear uniquely capable of triggering inversion with main verbs as opposed to auxiliaries; this applies to locatives such as in the room as well as ‘existential’ locatives such as there:

There entered a herd of African elephants led by their Nubian handler.

Most ModE V2 triggers only trigger inversion of the subject with an auxiliary:

Charged with first-degree sexual misconduct, the most serious sexual assault charge in Michigan, are Donald Thomas of Chicago and Sherman Williams of

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never allows NP arguments there at all, regardless of their relational status; when NPs do appear there, they do so as negative polarity items, as in *No animal would I ever subject to such torment*, and exhibit no relational restrictions. By this account, then, we will fail to identify a contrast of the relevant sort in either topical or focal (Spec, CP) position. In other words, it is not the case that Modern English restricts occupation of focal (Spec, CP) to 'subjects'; rather, NP arguments (except wh-phrases and negative NPs) are excluded altogether. If, then, we are indeed to identify a difference between Old and Modern English in the mapping of highest-ranking arguments, or perhaps nominatives, onto a given structural position, this is certainly not the only position to examine.

Lest this point fail to be perfectly clear, let us pause a moment before moving on. Given what I have thus far alluded to in Kiparsky's treatment of Old and Modern English verb position, the possibility of OE OVS, and the impossibility of the same order in Modern English, may be understood with reference to the following representations:

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Detroit, both 18. (SF Chronicle 11/23/96)

So were you.

Red was the sunset as we drank our sazeracs.
If the non-adjoined (Spec, CP) node in Old English is, like the analogous position in Modern German, more liberal than its ModE counterpart in accepting XPs of all kinds, then this means that a far greater number of clauses will be CP, as opposed to IP, in Old English than in Modern English. This in turn means that COMP will be present in a far greater number of main clauses in Old English than in Modern English, with the verb moving there by V2 far more frequently. By this account, the symmetry Old English displays with respect to the acceptance of both subjects and objects as the single argument before the second-position finite verb has nothing to do with any greater asymmetry imposed by the (Spec, CP) node in Modern English; rather, it simply has to do with different tree structures being involved in otherwise comparable clauses.

Note, however, that the descriptive contrast of interest here—Old English, but not Modern English, may have a single object argument before the verb—would fail to find an adequate structural representation if, in the ModE tree structure in (37b), the (Spec, CP) node were capable of housing any argument-type. Therefore, if we are to accept the
structure in (37b) as an appropriate representation of the ModE clause, we must assume (Spec, IP) to house subjects to the exclusion of objects. This asymmetry is represented quite straightforwardly in the somewhat less up-to-date structural depiction of the English clause, with the (Spec, IP) position in (37b) represented as a VP-external NP position housing base-generated subjects and subjects derived by movement from the lower, object NP position just in case no base-generated subject is present:

(38)

The VP-external NP position is, then, invariably associated with subjects, and the postverbal, VP-internal NP position could not possibly house a subject since movement to this position from the base-generated subject position would entail an illicit binding of the resulting trace.¹⁸

¹⁸ Note that the smaller number of nodes capable of housing an NP in the simpler ModE representation reflects the greater 'configurationality' of Modern English, that is the limited...
What this means, then, is that Kiparsky’s analysis appears to entail a view of (Spec, IP) being perhaps the most specific locus of the structural contrast at issue. We shall see that, under other analyses proceeding from somewhat different assumptions and drawing somewhat different conclusions from Kiparsky, the locus of the OE/ModE contrast is shifted even more strongly to (Spec, CP). In the next section, we present in greater detail the points just made about the limited role of (Spec, CP) in differentiating OE-type mapping patterns from relational to discourse categories.

3.2.1 V2 ‘triggers’ and the nature of (Spec, CP)

The task of arriving at any conclusion at all about the nature of the interaction of (Spec, CP) with semantically-defined or casually-defined argument types (agents, nominatives, etc.) is surprisingly complicated, due to the difficulty of even determining when a given argument does or doesn’t occupy (Spec, CP) as opposed to a lower (Spec, IP) or even (Spec, VP) position. One reason for this difficulty is the lack of any real functional association between any of those nodes and the constituents they house, or the lack of any functional motivation for the movement of a given constituent-type to a given position at S-structure. Any such motivation, it seems, is restricted to the D-structure level. Any apparent such association at S-structure results simply from a rather indirect word-order possibilities of the modern language. In the use of the more extended tree structure for the depiction of the ModE clause, some principle must be invoked to prevent certain movements permitted in Old English, e.g. the movement of the object to (Spec, IP) and of the verb to INFL, with the subject remaining under (Spec, VP). The usual candidate for this sort of restriction is the Empty Category Principle, a highly questionable mechanism about which we shall have more to say below.
occasional preservation of motivated positions at D-structure after being affected by movement processes which exist and operate completely independently of functional considerations. Thus, the well-known iconic organization of affixes relative to lexical roots (cf. Bybee 1985, Baker 1987) simply reflects the blind, step-wise combination of elements which have at least a strong universal tendency to appear in a certain order in the D-structure tree. Any motivation in the order of affixes and such factors as 'relevance' (Bybee's term) of the affixes to the root, then, result from D-structure position, not from any more superficial or overt level of processes or representation.

The presuppositions of this model are reflected in the absence of any functional motivation for the positioning of any given element under any given node, including (Spec, CP). This means that it is impossible to know, for example, whether a given constituent used in a given function is located under (Spec, CP) except by recourse to the sort of linear-based process of elimination referred to above. What this means in the present case is that there are only two situations in which we may be sure that a given initial, non-wh, NP constituent is under (Spec, CP) as opposed to a lower node. One is when an NP constituent precedes an obligatory V2 trigger, in which case—given the assumption that the wh-phrase itself is positioned under 'focal' (Spec, CP), it is assumed that the initial NP is positioned under an adjoined 'topic' (Spec, CP) node. The other situation is when an NP precedes another constituent which we may independently determine to occupy COMP, which (failing cliticization or adjunction to COMP) would result in (Spec, CP) being the only possible node for the initial NP. We turn first to the situation involving pre-wh-phrase constituents.

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According to Kemenade (1987), there appear to have been three elements which served as obligatory V2 triggers in OE main clauses: wh-phrases, initial ba 'there', and initial ne 'not'. An example from Modern English of an NP adjoined to the left of a wh-phrase is the following (Kiparsky's (1995) example 8 (d), p. 144):

(39) Beans, who needs them?

Old English is, like Modern English, quite free in the adjunction of such topical constituents before the wh-phrase. Examples cited by Mitchell (1985 v.i:685) include the following:

(40) 
\[
\text{æs} \quad \text{Godes } \text{þegnas...hwider } \text{gescyt } \text{þonne } \text{heora}
\]
these God's servants whither divides then their

\[\text{endebyrdnesse (ÆCHom i.346.3)}\]
order

'These servants of God...whither is their order assigned?'

(41) 
\[
\text{se} \quad \text{beydda wisdom and } \text{se} \quad \text{bedigloda goldhord, } \text{hwilc fremu is the hidden wisdom and the secret gold-hoard what profit is}
\]

\[\text{ænigum on abrum } \text{þæra? (ÆHom 9.44)}\]
any-DAT in either of them

'The hidden wisdom and the secret gold-hoard, what profit is there to anyone in

Of course, this wording is a little misleading since Kemenade considers V2 to have been obligatory in all OE main clauses, with secondary effects, including cliticization and stylistic movements, obscuring this in some instances. A more accurate way to phrase this from her perspective would be to say that wh-phrases, initial ne, and initial ba must all be immediately followed by the finite verb in main clauses.
either of them?'

(42) þæt þwyre mod ... hwæt déþ hit buton swilce hit lecge stan the perverse mind what does it except as it lay stone ofer stane? (ÆCHom i.410.21) over stone 'The perverse mind ... what does it (do), but as though it lay stone over stone?'

As these examples show, the adjoined (Spec, CP) position in OE main clauses fails to impose any relational or case restriction on any argument which appears there. Of course, given the appositional nature of the structure, the preposed constituent is not an argument as such, but a topic coreferential to an argument; there is, note, no 'gap' in the clause to which the preposed nominal corresponds. This means that the nominal is always in the nominative case. Its coreferential argument, however, may represent any relation or case. In all these respects, the OE preverbal adjoined-topic (Spec, CP) position is parallel to its ModE counterpart, and it is therefore presumably not this position to which we should look in attempting to pinpoint the locus of the typological difference at issue.

In principle, it should be possible to use parallel criteria with examples involving a negative operator to identify a fronted NP as being in the topical adjoined (Spec, CP) position. However, things are not so simple. While an initial ne or n- (naes 'not-was', naefde 'not-had', etc.) appears as predictable as an initial wh-phrase in triggering V2 in main clauses20, this may have more to do with a strong preference for positioning the negative

20

It is a curious fact that, despite the frequent claim for a 'relic' V2-trigger status for negative adverbs such as never in Modern English, negative adverbs in Old English were
element immediately before the verb than with V2 as such; as Mitchell (1985 v.1:661) states: 'The OE verb is most commonly negated by the adverb ne immediately preceding it, no matter what the order of the other elements'. The fact that ne precedes the finite verb in subordinate clauses as well as main ones indicates that we would do better to view a verb with a procliticized ne as a typical main-clause-initial constituent (or to view verb-initial order as typical when the verb is under the scope of the negative operator) than to view the ne as 'triggering' V2:

The fact of ne procliticizing to the finite verb in Old English, regardless of the position of the latter, accounts for the large number of no-longer-extant NEG+verb collocations, e.g. næs 'not-was', nebbab 'not-has', nah 'not-have', nearon 'not-are'. These have, of course, been replaced in Modern English by auxiliaries with enclitic (or, by Zwicky and Pullum's (1983) analysis, suffixal) -n't. While the post-auxiliary position of the Modern English negative morpheme is easily represented by positing that the negative morpheme under (Spec, NEGP) adjoins to the immediately preceding auxiliary under AGR, it is not immediately clear how movement of the negative morpheme to a lower, c-commanded sentence-final position in Old English would be handled.

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not reliable V2 triggers. Consider the following examples cited by Mitchell (1985, v.1:671):

for pas synfulle men gecyrdon to cwiðnesse
for never sinful men turned to lamentation

þære soþan dædbote giff... (GD 257.5)
of. the. true penitence if

'For sinful men never turned to lamentation of true penitence if...'

Næfre ic maran geseah eorla ofer eorþan (Beo 247)
never I greater-ACC saw chiefs-GEN over earth

'I never on this earth saw a greater chief'

næfre hit æt hilde ne swac manna ængum (Beo 1460)
never it at battle not deceived men-GEN any-DAT

'It never failed any man in battle'

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21

The fact of ne procliticizing to the finite verb in Old English, regardless of the position of the latter, accounts for the large number of no-longer-extant NEG+verb collocations, e.g. næs 'not-was', nebbab 'not-has', nah 'not-have', nearon 'not-are'. These have, of course, been replaced in Modern English by auxiliaries with enclitic (or, by Zwicky and Pullum's (1983) analysis, suffixal) -n't. While the post-auxiliary position of the Modern English negative morpheme is easily represented by positing that the negative morpheme under (Spec, NEGP) adjoins to the immediately preceding auxiliary under AGR, it is not immediately clear how movement of the negative morpheme to a lower, c-commanded sentence-final position in Old English would be handled.

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In any case, while we do find a certain parallelism with wh-phrases in that any NP-type may appear appositionally before ne plus finite verb, we may, as already argued, consider this to represent a historically invariant and rather uninteresting fact with no bearing on any typological difference between Old and Modern English. Of possibly greater interest is the fact that, in main clauses, ne appears to have accepted one argument before it:

(44) He ne wandode na æt þam wigplegan (Mald 268)
    he NEG fear NEG at the battle-play
    'He didn't tremble at the battle'

(45) He nolde beon cyning (CP 33.19)
    he NEG-wanted to be king
    'He didn't want to be king'

(46) Se Halga Gast ne sprycþ na, swa swa se Hælend cwæþ (ÆHom 7.207)
    the holy spirit NEG speaks NEG as the savior speaks
    'The Holy Spirit does not speak as the savior speaks'

On the assumption that ne, like wh-phrases, invariably occurs in focal (Spec, CP), we might conjecture the clause-initial argument in these examples to occupy the adjoined, topical (Spec, CP) position. However, the initial NPs here are clearly not topics in the sense used with pre-wh-phrase NPs, that is left-dislocated nominals corresponding to a 'resumptive' pronoun which is the actual argument of the verb. Also, if these were equivalent to pre-wh-phrase nominals, we would expect them to represent a full array of

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case- or relation-types, while in fact, according to Mitchell, only nominative arguments occur here.²²

Finally, and perhaps most crucially, occurrence of ne and wh-phrases under the same focus (Spec, CP) node would by the usual assumptions result in a complementary distribution of the two. This is, however, not at all what we find:

(47) Hwa unlæredra ne wundrap þæs roderes færeldes (Bo 125.31)
who unlearned NEG wonders the-GEN firmament-GEN travel-GEN
'What unlearned (one) does not wonder about the course of the firmament'

Ne also co-occurs with the imperative 'operator' and with þa:

(48) ne hrepa þu þæs treowes wæstm (ÆCHom i.14.1)
NEG touch-IMP you the-GEN tree-GEN fruit
'Do not touch the fruit of the tree'

(49) þa nolde seo burhwaru abugan (ASChron 1013)
then NEG-wanted the population submit'
'Then the population would not submit'

If, on the other hand, we are to view ne as simply cliticized to the verb wherever the latter happens to appear, other problems present themselves. First, we have to explain the main-clause initial-position preference of the verb when it is under negative scope

²²

It is true that 'topics' in the familiar sense do occur before ne, but direct accusative or dative arguments apparently do not:

On þissum geare næs nan færeld to Rome (ASCHron 889)
in this year not-was no journey to Rome
'In this year there was no journey to Rome'
relative to when it is not. Second, we still have to explain the apparently exclusive occurrence of nominative arguments in preverbal position when the ne-plus-finite-verb collocation is not absolutely initial.

All in all, the usual sort of explanation (cf. Kiparsky 1995, Eythorsson 1996) for the V2-trigger status of the negative operator in Old English, by virtue of appearance in a focal (Spec, CP) position which somehow forces movement of the finite verb to COMP, encounters serious difficulties. While it is true that initial ne (but not initial NEG, cf. footnote 21) in main clauses is a reliable V2 trigger, other facts adduced here indicate that this cannot be for the same reason that an initial wh-phrase is. In particular, it is probably untenable to view them both as occupying the same position, or to view ne as even consistently occupying an initial focal position at all.

What this means in connection with pre-wh position as a diagnostic for occupation of (Spec, CP) is that we simply don't know what to do about examples such as [he ne wandode]. We cannot interpret such examples as meaning that focal (Spec, CP) is restricted to nominative arguments, since there are too many reasons for rejecting (Spec, CP) as the relevant node in the first place. An analysis of ne as cliticizing to the finite verb under COMP would leave (Spec, CP) free to be occupied by any number of constituents, including NPs. However, this would leave unexplained the fact that the typical case is for nothing at all to precede ne, that is, the fact that ne is the initial constituent far more often than an affirmative finite verb is sentence-initial. Additional problems arise if we assume that some correlation should exist between (derived) position and function. In other words, if elements under non-adjointed (Spec, CP) are indeed to be interpreted as sharing with
wh-phrases a focal function, it is somewhat bizarre that NPs preceding ne seem to be limited to nominative subjects, with a strong preference for pronouns (cf. Mitchell 1985 v.1:661 f.).

Our only way out would be to view ne as occupying either of two positions in main clauses: (Spec, CP), or cliticized to a finite verb under COMP. If the former is the typical case, then this would represent a sort of explanation for the ne+verb collocation being so commonly sentence-initial. It would also have a certain intuitive plausibility (although this would presumably lack any value in the GB model), given that the question operator and NEG operator would, as logical operators, be reasonably viewed as occupying the same position in the structural representation. When, on the other hand, either a wh-phrase or a (true, non-appositional) argument occurs to the left of ne, we would interpret ne as cliticized to the finite verb under COMP and the wh-phrase or other nominal as dominated by (Spec, CP). Once again, though, the problem with this analysis is that it would be a bizarre fact that non-wh nominals in this position are limited to nominatives, with a strong preference for pronouns, both in view of the supposed function associated with this position and since wh-phrases show no such restriction.

The third and final obligatory V2 trigger singled out by Kemenade (1987) is initial ba 'then'. This appears to be a valid generalization, although perhaps not as exceptionless as Kemenade claims. Clauses with initial ba, like those with initial bonne and wh-phrases, do exhibit V2 behavior when matrix and V-final behavior when subordinate. The following shows a V-final subordinate clause preceding a V2 matrix clause:

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When Ulfcytel perceived that, then he sent (word) to..." (ASChron 1004 (Laud))

The following illustrates the correlation of subordinate ('when') bonne with verb-final order:

(51) bonne þu nacodne geseo, scryd hine... (ÆCHom i.180.6)
    when you naked-ACC see clothe him
    'When you see someone naked, clothe him...'

bonne, it is true, is not absolutely exceptionless in this pattern; the following involves an indisputable main clause with V-final order:

(52) gyf bonne Frysna hwylc frecnen spræce
    if then Frisians-GEN any dangerous-GEN speech-GEN
    þæs mordor-hetes myndgiend were, bonne hit sweordes
    this murder-hate-GEN mindful were then it sword-GEN
    ecg sepan scolde (Beo 1104-6)
    edge settle should

    'If then by any dangerous speech any Frisians should call to mind this deadly feud, then the edge of the sword should settle it'

Adverbs such as þær 'there', her 'here', and nu 'now', which fail to participate in a protasis-apodosis opposition, seem to be considerably freer in their word order.

When both þa and a 'topic' precede the rest of the clause, however, this entire initial collocation may be followed by a verb-initial sequence or by a verb-medial sequence, in effect obeying the usual pattern of initial þa or of an initial topic:
(53) þa to scs Andreas mæssan forþferde se cyng Edmund then to St.-GEN Andrew-GEN mass departed the king E. 'Then on St. Andrew's mass king Edmund departed' (ASChron 1016)

(54) þa æfter middan wintra hi namon þa ænne upgang then after middle-DAT winter-GEN they took then a pass 'Then after mid-winter they took a pass' (ASChron 1009)

Given that verb-medial order occurs following initial þa only when the latter is collocated with fronted adverbial material of this nature, such examples as (53-4) may be viewed as representing principled exceptions to her rule.

In addition to these three elements singled out as obligatory V2 triggers, a host of other matrix clause types permit, but do not require, V2. These clause types, along with the examples provided by Pintzuk (1992:11-12), are as follows:

**direct questions:**

(55) hwi sceole we opres mannes niman (ÆLS 24.188) why should we another man's take 'Why should we take those of another man?'

**verb-initial declarative clauses:**

(56) hæfdon hi hiora onfangen (ChronA 86.28-9 (894)) had they them sponsored 'They had sponsored them'

**verb-initial imperative clauses:**

(57) beo þu on ofeste (Beo 386) be you in haste 'Be quick'
clauses with adverbs in initial position:

(58) þonne magon ge þær eardungstowe habban (Bede 28.15)
then may you there dwelling-place have
'...then you may have a dwelling-place there'

(59) nu cwæþ ic on minum mode þæt... (ÆLS 24.94)
now said I in my mind that
'Now I said in my mind that...'

As with bonne, however, there are exceptions to the V2-triggering behavior of initial
adverbs in general; examples with nu which fail to involve V2 are as follows:

(60) nu ge ondrædæþ eow deoflu (ÆCHom i.64.26)
now you dread RFLX devils
'Now you dread devils'

(61) nu todæg se æðela cempa Stephanus,... sigefæst to heofenum ferde
now today the noble warrior S. victorious to heaven went
'Now today the noble warrior Stephanun went victorious to heaven'

To this list of V2 triggers, Kiparsky adds verb-initial conditionals and concessives; the
following are examples from Mitchell (1985 v.ii:728 ff.):

(62) Wære þu on wædle, sealdest me wilna geniht (Soul i.144)
be-SUBJ/PAST you in need give me wish-GEN abundance
'If you were in need, give me an abundance of desires'

(63) forþan þe we sceolon, wylle we nelle we, arisan on ende
because we shall will we not will we arise at end

hyssere worulde (ÆCHom i.532.6)
this-GEN world-GEN
'...because we shall, willy-nilly, arise at the end of this world'
By the assumptions of both Kiparsky and Pintzuk, 'the trigger for verb movement to COMP is an operator in (Spec, CP), which is lexically realized by the wh-phrase in [+wh] direct questions or by a clause-initial adverb, but not lexically realized in other cases of verb movement to COMP' (Pintzuk 1992:12). We would therefore have to view occupation of (Spec, CP) as optional in the case of initial adverbs in general, while overtly verb-initial clauses, including not only questions, conditionals, and imperatives, but also verb-initial declarative clauses resulting from 'narrative inversion' (Eythorsson 1996), would be considered to feature an abstract, phonologically null operator in that position.

This last maneuver, of course, would represent nothing more than an unfalsifiable trick to subsume V2 and verb-first patterns under the same formal mechanism. In addition, it allows for the identification in structural terms the fact that certain word orders are associated with certain functions. Let us consider for a moment exactly how this works.

Kiparsky's account of verb-first order in conditional and concessive clauses is as follows:

In subordinate clauses, the obligatory C[OMP] position is usually filled by a lexical complementizer, blocking V-to-C[OMP] movement. Subordinate clauses lacking a lexical complementizer must, in consequence of the above considerations, undergo V-to-C[OMP] movement; this yields the obligatory verb-first pattern seen in bare concessive and conditional clauses.... (Kiparsky 1995:142)

Subordinate clauses, then, are assumed to occur obligatorily under CP. Consider, then, an adverb such as bonne, which, as mentioned, has a strong correlation of V-final structure with a 'when' reading, and V2 structure with a 'then' reading. Given Kiparsky's assumption about the structure of subordinate clauses, this yields the following representation:
This ensures that, in the 'when' reading of bonne, the verb is blocked from movement to COMP and any XPs, including NP arguments, are blocked from movement to (Spec, CP); in the 'then' reading, the COMP position is available for movement of the finite verb into second position. If there were no operator under (Spec, CP) in the subordinate clause, movement to that position would fail to be blocked, which would result in a violation of verb-first order. This representation, then, allows for the depiction of the correlation of 'subordinate' function with verb-first order, and of 'main-clause' function with verb-second order, in structural terms by the integration of a functional operator into the tree representation.

Of course, as mentioned, there is absolutely no way to falsify the claim that the presence of a phonetically null element under (Spec, CP) triggers verb-first order. The closest we could come to disproving the claim would be to point out two things: first, that these abstract operators fail to block movement of ne (cf. [nelle]), and second, that
subordinate clauses with base-generated complementizers in general disallow movement of XPs before COMP, with no operator being proposed in those cases to block that movement. The first point is weak given the equivocal position status of *ne*, as already discussed. As for the second point, if verb-initial declarative order is attributed to the presence of an abstract 'discourse operator' in (Spec, CP) (cf. Eythorsson 1996), then nothing would prevent the positing of an 'operator' whenever one is needed for the purpose of explaining verb-initial order. Once again, then, we are reminded of the fact that the sort of structural representation of overt data found here presupposes the axiomatic claim that all facts of distribution and cooccurrence are structural in nature. As such, many of the analyses presented in the model are in principle removed from an empirically falsifiable domain.

The overall point which I think bears making here is that it is, in fact, highly implausible that the sort of structural analysis presented by Kiparsky represents a correct treatment of the facts. It is, as mentioned, an unfalsifiable claim that all the verb-initial and verb-second patterns are to be reduced to a single structural explanation. To accept this, we would have to accept that not only 'operators' of the logical sort (NEG, QUESTION), but also adverbial elements such as *ba* and *bonne*, all occupy one and the same 'focal' (Spec, CP) position and all trigger verb movement simply because of this shared position. However, beyond the fact that the position of these diverse elements under (Spec, CP) entails the provision of a following COMP node, there is no clear theory-internal explanation for the obligatoriness of this movement given the availability of COMP. In addition, as already pointed out, the ModE facts adduced above undermine a purely
structural account of V2 phenomena.

The second diagnostic mentioned above for occupation of (Spec, CP) is the independent identification of the occupation of the position to the immediate right by a non-initial constituent. Given that the relevant node in such a case is COMP, the relevant second-position constituent is a base-generated complementizer or some other element which has moved to COMP from some other D-structure position. Since movement to (Spec, CP) is apparently ruled out when a base-generated complementizer is present under COMP,23 the structures of interest to us are main clauses with some non-base-generated constituent under the COMP node. By most accounts, this means V2 structures with a V2 trigger under (Spec, CP) and a finite verb under COMP. The problem is, however, that it is by no means a simple matter to determine when a verb is in second position by way of

23 This proscription would presumably be considered to follow from the Empty Category Principle, assuming that the trace would fail to be properly governed if it were separated from its binding NP by the complementizer. This is the usual explanation for the ungrammaticality of a ModE example such as *Who do you think that saw Bill. As usual with this principle, however, such a solution would fail to satisfy. First of all, an object could move directly from its base position to (Spec, CP) without violation of subjacency, with the trace being governed by a local predicate. Second, Old English has plenty of apparent ECP violations, and we would have to be sure that our explanation wouldn't rule these out. For example, Allen (1980) cites the following:

Ac ic wolde witan hu þe þuhte þæm monnum þe wit
but I wanted to know how you seemed about the men that we ær cwædon þæt unc þuhte þæt wæron wildiðor gelicran
earlier said that we seemed that were beasts-DAT more-like þonne monnu. (Bo XXVIII.5:122.13)
than men-DAT
lit.: 'But I wanted to know how it seemed to you about the men that we said before that seemed to us that were more like wild beasts than men'
V2 (that is, when it is in COMP by virtue of a V2 trigger in (Spec, CP)) and when it is in second position by virtue of only one constituent happening to appear before it.

The reason for this indeterminacy is, of course, that, independently of wh-phrases—which we have taken to appear exceptionlessly under (Spec, CP) in main clauses—and perhaps clauses beginning with ha or ne, we don’t know whether a constituent appears in (Spec, CP) unless we have identified this position by a process of elimination by identifying a following constituent as being in COMP; the only way we can identify a following constituent as being in COMP, however, is by identifying the initial constituent as being in (Spec, CP). The essential problem here, then, is that it is rarely possible to be sure that a given initial element is serving as a V2 trigger and when that element is simply in (Spec, IP) or even (Spec, VP) with the finite verb remaining under INFL or even V.

Obviously, the same indeterminacy will pose a problem when we attempt to identify the case-role or relational correlates in Old English of the next available argument position in the syntactic tree, namely (Spec, IP).

### 3.2.2 The nature of (Spec, IP) in Old and Modern English

Assuming, as just discussed, that OE V2 could be viewed as triggered by movement of any of a wide range of constituents to focal (Spec, CP), while Modern English only permits this with a small subset of this range and always excludes NPs, we might argue for the following representation when the first constituent in a V2 structure is the nominative:
(65) He gesceop gesceafta (ÆCHom i.10.5)
he created creatures
'He created creatures'

This would represent a derived structure completely parallel to one with V2 resulting
from a fronted object, with the sole exception that the nominative and non-nominative
arguments are reversed:

(66) ſam ungeleaffullum mannum com Crist to hryre (ÆCHom i.144.24)
the-DAT unbelieving men-DAT came Christ to destruction
'Christ came for the destruction of unbelieving men'
By this analysis, nominative case would presumably have to be viewed as assigned within the VP node, rather than to (Spec, IP) by the adjacent INFL. The intuitive significance of such an analysis would be that OE nominative case is more strongly associated with theta-role assignment than its ModE counterpart, assuming the standard analysis of nominative case assigned in Modern English under (Spec, IP); I have argued in the previous chapter that there is indeed a certain appeal to such a distinction, although it would be misleading to represent the facts in stark binary terms. On the other hand, if we are to hold the more common view of OE nominative being simply 'syntactic' rather than 'oblique', then the appeal of this analysis is reduced.

One way of representing an asymmetry between nominative and other cases would then be to represent the accusative in (37) as remaining under a lower node in the tree, viz:

(67)

\[
\begin{array}{c}
\text{CP} \\
\text{Spec} \\
\text{C} \\
\text{Spec} \\
\text{IP} \\
\text{I} \\
\text{Spec} \\
\text{VP} \\
\text{V'} \\
\text{He} \\
gesceop \\
gesceafa \\
\end{array}
\]
If, on the other hand, (66) is viewed as exhibiting verb-second order not by virtue of V2 (movement to COMP, by Kiparsky's account) but simply by virtue of movement of the verb to a lower INFL position, then we get the following:

(68)

\[
\text{Spec} \quad \text{C} \quad \text{Spec} \quad \text{I} \quad \text{VP} \\
\text{He(i)} \quad \text{gesceop(j)} \quad \text{gescehta(k)} \quad t(i) \quad t(k),t(j). \\
\]

While this representation allows for an illustration of nominative and non-nominative (or subject and object) in asymmetrical terms, the problem is that it is, at this point, little more than an unsubstantiated claim that the two examples at issue in fact differ structurally along the lines suggested.

Let us, then, consider an example which might prove more decisive:

(69) ða bugon to þam cyninge of þam here xlv scipa (ASChron 1012) then yielded to the king of the army xlv ships-NOM 'Then forty-five ships yielded to the king of the army'
By the usual assumptions, the verb-second position here is properly viewed as derived by V2\(^{24}\), giving us the following abstract structural analysis by Kiparsky's account:

Here, the prepositional-phrase argument of the verb precedes the nominative, indicating by the simplest analysis that (Spec, IP) has no exclusive association with nominative arguments. On the other hand, it would always be possible to propose an extraposition of the nominative to the right of a prepositional phrase which remains under the V' node, meaning that (Spec, IP) remains unoccupied. We will return to this point below.

A different set of evidence appearing to point to a subject-object asymmetry with respect to occupation of (Spec, IP) is that cited by Kemenade against a V2 analysis of embedded clauses:

\[\text{(70)}\]

\[
\begin{array}{c}
\text{CP} \\
\text{Spec} \\
\text{C} \\
\text{IP} \\
\text{Spec} \\
\text{T} \\
\text{VP} \\
\text{V'}
\end{array}
\]

\[
\begin{array}{c}
\text{pa} \\
\text{bugon to bæm} \\
\text{cyninge} \\
\text{xlv scipax}
\end{array}
\]

Note that \textit{pa} 'then' is one of the adverbials which may be followed by a pronominal nominative, while this is never the case with initial nominals. This provides an argument for considering \textit{pa} to at least potentially occupy focal (Spec, CP) and trigger V2; see below.
and said that we should perish if
'and said that we should perish by death if...' (AHTh, I, 16; Kemenade 1987:20)

Recall that Kemenade's claim is that 'this phenomenon differs essentially...from that of V2 in main clauses: here, the first constituent preceding the finite verb is always the subject' (Kemenade 1987:20). Why should this be so? Let us represent the example at hand with the standard CP structural tree:
Perhaps, then, only nominatives may move to (Spec, IP) in embedded clauses. In cases with two NPs before a three-place 'transfer' verb in such clauses, then, we would (by Kiparsky's analysis) simply assume adjunction of the preverbal non-nominative:

(73) & bæd hæt him mon brohte pone triumphan ongean (Oros. 126.1)
& ordered that him one brought the victory to
'and ordered them to bring victory to him'

Movement of a non-subject to (Spec, IP) would only be permitted, then, by adjunction, and the subject would still be the only argument permitted under the lower, non-adjoined (Spec, IP) node.

By Kemenade's apparent assumption that such examples would involve verb-projection raising, we would derive a representation such as the following:
Either way, we end up with a restriction on overtly V2 embedded structures to instances where the constituent preceding the verb is a subject; by this representation, then, only subjects may occupy (Spec, IP) in such examples.

As discussed above, however, the restriction Kemenade mentions is not as strong as she claims. In fact, recall, we find the following in addition to examples such as those she cites:

(10) þu miht ongitan... þætte ælcum men ma deriaþ
    you can understand that each-DAT man-DAT more harm
    his modes unþeawas-NOM
    his mind's vices

    'you can understand that the vices of his mind harm each man more'
    (Bo.38.116.30; Allen 1995:47)

(11) ...þæt þe wel licode þæra gewrita andgít
    that you-DAT well pleased the-GEN writings-GEN meaning-NOM

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'that you well liked the writings' meaning'  

(ÆLett(Wilfgeat)4; Allen 1995:109)

The most straightforward analysis of such examples would be as follows:

(75)

This means that overtly verb-second embedded structures are not restricted to ones involving a preverbal nominative. By Kemenade's account, this would not bear on the nature of (Spec, IP)—since she would presumably still assume the verb-second order to result from verb projection raising to the right of a finite verb which remains under VP—but it would nevertheless mean that extraposition resulting in superficial verb-second order would not be limited to non-nominatives. By a somewhat more straightforward analysis, we would say that a variety of argument-types, including but not limited to nominative 'subjects', are permitted under (Spec, IP), in contradistinction to Modern English, which does limit this position to subjects. Either way, a suspected OE subject-object asymmetry
is eliminated.

It still remains the case, however, that nominatives are far more common in embedded preverbal position than non-nominatives; this is, after all, the reason for Kemenade's (strictly speaking incorrect) generalization in the first place. This means that, regardless of the details of our abstract analysis, nominatives have preferential preverbal position in non-verb-final embedded clauses. While this may not reflect the same degree of obligatoriness in the association of a given grammatical relation to a given structural position as we find in Modern English, the pattern which has become fixed in Modern English is already clearly visible as a strong tendency in Old English. We may add this, then, to the other respects cited by Allen (1995) in which 'subjects'—nominatives and dative experiencers—exhibit preferential early position relative to non-nominatives to an extent which is not explainable purely in terms of topicality or 'weight'.

By Pintzuk's analysis, recall that COMP is not identified as a landing site for the finite verb except when V2 is triggered in main clauses by one of a relatively small number of elements; obligatory V2 is apparently associated with wh-phrases, and this effect is often attributed to initial ne 'not' and ba 'then' as well; certain other 'adverbs', meanwhile, such as bonne 'then' and nu 'now', trigger V2 to varying degrees. The identification of COMP as the landing site for the finite verb in these structures in effect ensures that

Recall that Allen considers facts of word order to point to a commonality between nominatives and dative experiencers which she identifies as a shared relational (subject) status. Of the two examples cited here, one is a non-experiencer dative argument—by her assumptions, an 'object'—and the other is a dative experiencer which she would identify as a 'subject'. It would be interesting to see whether the latter pattern more frequently with nominatives in embedded non-verb-final structures than with non-nominative 'objects'.

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nothing intervene between the V2 trigger and the finite verb:

(76)

With most of the V2 triggers identified by Pintzuk, V2 is optional; this would presumably be explained by saying that the verb fails to move to COMP because (for some unexplained reason) INFL fails to appear there:

Kiparsky would presumably explain the optionality of V2 with adverbs such as nu with reference to the optionality of appearance of the adverb under the focus (Spec, CP) node or under an adjoined (Spec, IP) node. This would presumably entail the identification of both nu and todæg under adjoined topic (Spec, IP) nodes (or under a single adjoined topic node) in a verb-final example such as the following:

nu todæg se æþela cempa Stephanus,...sigefæst to heofenum ferde
now today the noble champion S. triumphant to heaven went
'Now today the noble champion Stephanus went triumphant to heaven' (ÆCHom i.56.30)

In an example such as the following, ba might be analyzed as positioned under an adjoined-topic (Spec, CP) node, with to scs Andreas mæssan identified as the V2 trigger under focal (Spec, CP):

ba to scs Andreas mæssan forþferde se cyng Eadmund (ASCHron 1016)
then to St. Andrew's mass departed the king E.
In other cases, the landing site for the finite verb is assumed to be INF under IP, not

"Then on St. Andrew's mass King Edmund departed"

On the other hand, an example such as the following would presumably require that we interpret both *pa* and the following temporal adverbial phrase as positioned under adjoined (Spec, IP):

*pa* after middan wintra hi namon *pa* ænne upgang (ASCHron 1009)
then after middle winter-GEN they took then a pass-ACC
'Then, after mid-winter, they took a pass'

This shows once again that, with the exception of wh-phrases, there appears to be no reliable semantic or functional association with the focal V2 trigger position, which results in an underdetermination of the 'correct' analysis in many such cases.

It is uncertain whether the reflexive pronoun is better analyzed as occurring under the same node with the verb, although the fact that it may occur in a variety of positions relative to the verb may indicate that it is best to represent it in the example at hand as occurring under V'; this would not, however, affect the present point in any way.
under COMP. This assumption removes the need to posit an extraposition analysis for all instances of non-final V in embedded clauses (as does Kemenade). Given this, (Spec, IP) is taken to be the standard position for initial NPs of all kinds, both in main and in embedded clauses. By this analysis, then, (Spec, IP) would be a nominal landing site (Pintzuk herself refers to it as the site for 'topics') exhibiting little selectivity with respect to the relational or case category of the nominal which moves there.

If this is accepted, then it should be true that verbs which move to COMP because of a V2 trigger may be followed by any argument-type, including objects. This turns out indeed to be the case:

(78) ða bearn him on mod his gebroþra gemynd (ÆCHom i.332.27)
then bore him-DAT in mind his brothers' memory-NOM
'then the memory of his brothers entered his mind' 

(79) ða æteowode him Drihten Crist (ÆCHom i.74.12)
then appeared him-DAT Lord Christ-NOM
'then the Lord Christ appeared to him'

(80)

\[
\text{CP} \quad \text{Spec} \quad \text{C} \quad \text{IP} \quad \text{Spec} \quad \text{I} \quad \text{VP} \quad \text{V} \\
\text{ða bearn him} \quad \text{his gebroþra} \quad \text{gemynd}
\]
Once again, then, we have evidence that the (Spec, IP) node in Old English fails to correspond so exclusively to a 'subject' relation as does its ModE structural counterpart.

Recall that, in connection with a parallel example above, we pointed out that it would always be possible to consider such a surface word order to result from extraposition of the nominative argument to the right of a dative argument which remains under V', rather than moving to (Spec, IP). While this is in principle true, there would in fact be no theory-independent motivation for treating these examples differently from ones involving a nominative immediately following the verb.

Finally, let us consider one final argument presented by Pintzuk for the asymmetrical behavior of 'subject' and 'object' arguments. Specifically, pronominal subjects have a stronger tendency to appear in a fronted position than either full-NP subjects or pronominal objects:

(81)  eow sceolon deor abitan (ÆLS 24.35; Pintzuk 1992:10)
      you-ACC shall beasts-NOM devour
      'Beasts shall devour you'

(82)  ælca yfel he maeg don (WHom 4.62; Pintzuk 1992:11)
      each evil he can do
      'He can do each evil'

We should not, of course, misunderstand this to indicate a greater subject-object asymmetry than the facts would warrant. It is also true, for example, that non-nominative pronouns have a tendency to appear before the verb in main clauses:
On the other hand, OVS order is indeed by all accounts (cf. Allen 1995:44) impossible when \( S \) is a pronoun\(^{28}\). A nominative pronoun never follows a verb which follows any 'topic' constituent other than one of the V2 triggers identified here\(^{29}\). By Pintzuk's account, this is because 'subject pronouns that are not topics are obligatorily syntactic clitics, which attach to either the left or the right periphery of the topic'\(^{30}\) (Pintzuk 1992:11). The only condition under which a nominative pronoun may appear

\(^{28}\)The only exceptions to this involve the pronominal head of a relative clause:

\[
\text{mycel yfel deþ seþe leas writ (ÆCHom i.8.12)}
\]
\[
\text{much evil does he-NOM who false writes}
\]
\[
\text{'Much evil he does who writes false'}
\]

\(^{29}\)Note that dative experiencers fail to pattern like nominatives in this respect:

\[
\text{For swylcum bebodum wearþ me geþuht that... (ÆCHom i.6.33)}
\]
\[
\text{from such commands became me-DAT seemed that}
\]
\[
\text{'From such commands it seemed to me that...'}
\]

If dative experiencers are indeed to be accepted as 'subjects', as argued by Allen (1995), then we would have to view the proscription to hold against postverbal nominatives, not subjects. In any case, this may be viewed as a test serving to distinguish dative experiencers from nominatives in Old English, despite Allen's argument that they share the same relational status.

\(^{30}\)By 'topic' is simply meant whatever argument is by her analysis under (Spec, IP).
after the inflected verb is when the verb is embedded under any one from the set of V2 triggers mentioned above:

(85)  hwi sceole we opres mannes niman (ÆLS 24.188; Pintzuk 1992:11)
why should we another man's take
'Why should we take those of another man?'

In this case, the subject pronoun is assumed to cliticize to the left-periphery of a (Spec, IP) 'topic' embedded under a COMP-dominated fronted verb:
Under V2, object pronouns as well typically appear immediately following the finite verb:

(87) باط sticode him mon خا eagan ut (Oros. 90.14; Kemenade 1987: 113)
then stuck him someone the eyes out
'then his eyes were gouged out'

Kemenade acknowledges this parallelism between subject and object pronouns in Old English as follows: '[I]t seems to be a unique property of personal pronouns that they can move out of VP. Very strikingly, when they do so, they appear on exactly those positions where subject pronouns can occur...; when in V2 clauses the first constituent is a wh-element, negative element or خا, to the immediate right of finite V' (Kemenade 1987:113).

However, the immediate post-verbal position of object pronouns is by no means invariant; consider the following:

(88) باط gemette ֎ئيژelwulf ealdorman hie on Engla felda (ASChron 871)
then met A. elderman them at Englefield
'Then elderman ֎ئيژelwulf met them at Englefield'

We may, then, summarize the behavior of nominative and non-nominative pronouns under V2 as follows. First, a nominative pronoun always follows the finite verb immediately, while a full NP subject need not (cf. (87)). Second, it is not uncommon for a non-nominative pronoun to follow the finite verb immediately, but it may only do so in the absence of a nominative pronoun ([sticode, bearn]). Third, a non-nominative pronoun may still be 'outranked' by a full NP nominative ((88)).

What this means is that, despite the lack of any exclusive association of (Spec, IP)
with subjects or subject pronouns to the exclusion of objects or object pronouns, this
position does preferentially house subjects to an extent that cannot be explained with
reference to any tendency for nominative constituents to be more topical. This reminds us
of Kemenade’s parallel findings described above in connection with non-verb-final
embedded clauses, and of Allen’s findings about the preferential linear precedence of OE
subjects over objects in general.

Eythorsson (1996) takes the same facts about the distribution of nominative
pronouns to present a similar argument against the ability of ‘topics’ to trigger V2, that is
movement of the finite verb to COMP. His analysis likewise entails that (Spec, IP) be
viewed as a landing site for all kinds of arguments, including nominative subjects.
Consider the following example, structurally parallel to (82):

(89) On þa ea hi tugon up hiora scipu (ASChron 892)
on the river they took up their ships
‘They took their ships up the river’

Given that nominative pronouns never follow the verb except after the small set of
potential V2 triggers just mentioned, Eythorsson (1996:7) concludes that ‘topicalization
does not trigger verb movement in Old English’. Recall that Kiparsky’s analysis is that
‘topics’ could optionally trigger V2, a fact which would by his analysis be represented by
the topic optionally appearing in focal (Spec, CP) or in an adjoined (Spec, IP) position (in
his terms, by ‘topicalization by adjunction to S’). The optionality of occurrence of topics
under (Spec, CP) would entail the possibility of post-verbal arguments of all kinds.
including nominatives; barring any independent prohibition of postverbal pronouns should then be able to appear postverbally. Given that they apparently cannot, we must ensure that, in all clauses except those featuring one of the V2 triggers, a preverbal landing site is always available for nominative pronouns. Since such a landing site would be excluded if the finite verb is under COMP following a (Spec, CP) topic, we must assume that initial topics invariably fail to trigger V2. This means that even in cases where a finite verb is in second position following an initial NP, verb-second position results not from V2 strictly speaking, but simply from the fact that no NP happens to have been moved between the initial NP and the verb; this entails the following analysis for examples (65) and (66), discussed above:

(90)

```
IP
  Spec
    I'
      VP
        Spec
          V'
            NP
              V

He gesceop gesceafa
```
What we end up with, then, is an analysis by which (Spec, IP) hosts initial NPs regardless of case or relation, with the finite verb following simply by virtue of the absence of any adjoined NP preceding the one under (Spec, IP).

Of course, it is hard to know how far to go in generalizing from the behavior of subject pronouns. After all, even if we assume that the relevant structure is IP, nothing about the structure itself would rule out a postverbal pronominal subject:

(91)
This means that, no matter what conclusions we draw from the linear order of subject pronouns about the tree structures in which they appear, some additional mechanism must be invoked to rule out the appearance of subject pronouns after the verb. Pintzuk accomplishes this with her stipulation that 'subject pronouns that are not topics are obligatorily syntactic clitics, which attach to either the left or right periphery of the topic' (11); this results in preverbal position when a topic appears before the verb, and postverbal position when a topic appears after it. Of course, we should not take too seriously the reference to cliticization to 'topics' here, since the use of this word has nothing to do with its usual sense of discourse topic. The proper stipulation is that nominative pronouns may not appear after the verb except in one of the special verb-fronting contexts she singles out.

3.2.3 Word order and the position of arguments under (Spec, CP) and (Spec, IP) in Old English: Summary

In sum, we have seen that a variety of arguments based on several kinds of evidence point to a less exclusive association in Old English of the (Spec, IP) node with 'subjects'—i.e., nominatives—than is by all standard accounts the case in Modern English. By the intuitive interpretation outlined above, what this means is that Old English displays a less conventionalized association between arguments of a certain semantic or casual type—the highest-ranking or agent-centered argument category, or nominatives—with a given derived structural position—a higher, perhaps topicality-oriented (Spec, IP) node to
which arguments base-generated elsewhere may move.

At the same time, we have seen that, in certain structures (embedded clauses with non-final finite verb and in V2 clauses), there is at the very least a strong tendency for subjects to appear before objects. This coheres with Allen's (1995) observation that nominatives do display linear precedence in Old English to a greater degree than would be predicted simply by analyses which attribute OE word order to considerations of topicality or 'weight'. As mentioned above, the pattern which has become fixed in Modern English is already visible as a tendency in Old English. A tendency and a fixed pattern are, however, two different things, and we should not wish to confuse one with the other.

It is, I think, important to acknowledge that the specific subject-object asymmetries we do find already in Old English are not motivated in any way by the theory underlying the structural representations we have been working with in this chapter. Those representations merely provide positions which may or may not be occupied by elements of a certain constituent-type—without, however (in the particular instances discussed) ruling out or motivating the selection of one case or relational category in distinction to others. When structurally-based theory-internal motivations are provided for the association of certain elements with certain positions, these accounts typically break down (cf. the discussion of Kiparsky above). Of course, if we view the model as providing a neutral universal matrix against which language-specific differences may be descriptively stipulated, this may not be such a bad thing. We would still be free, then, to move beyond the domain of GB per se in attributing functional significance to certain overt positions, or to understand the conventionalization of the association of a given argument-type with a
given structural position in terms of the conflation of a given role-oriented category with a
given reference-oriented category—the conflation of 'agent' with 'topic', e.g.

A somewhat more vexing problem we have encountered is that, because of the fact
that the overt data underdetermine the correspondence of any given element to any given
position, it is strictly speaking impossible to be sure where a given constituent appears in
the structural representation. This follows from the general lack of any motivated
connection between a given position and a given function in S-structure, and from the fact
that numerous positions are frequently available for any given element and, with the
mechanism of adjunction, numerous elements may occupy any given position. Even the
concrete facts of simple linear order fail us, then, in the task of assigning constituents to
nodes by the process-of-elimination method discussed above. While this is not meant as an
indictment, it does remind us of the question posed earlier whether the impressive formal
apparatus of the GB theory truly, as frequently claimed, forces or helps us to be more
precise than a relatively descriptive approach about the structural possibilities represented
in a language. Our conclusion from the facts and proposed analyses reviewed in this
section is that it probably does not.

3.3 The directionality of case and theta-role assignment

We have seen that the structural representations offered by GB theory and the
constraints imposed on the appearance of constituents under particular nodes in these
representations fail to shed more light on the structural/typological configurationality
contrast we find between Modern English and Old English than we would obtain from a

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relatively atheoretical descriptive approach. The same applies, I will argue here, to an additional formal mechanism invoked by Kemenade to explain certain cross-linguistic, and diachronic English-language, contrasts. This additional mechanism is the reanalysis of the parameter-value of case and theta-role assignment from one direction to another: left to right, or vice-versa.

According to recent GB views on phrase structure, in marked contrast to early TG views, D-structure configurations are determined not by highly detailed, language-specific and phrasal-type-specific rewrite rules, but by the extremely general provisions of X' theory and by language-specific and phrasal-type-specific directionality constraints on theta-marking and case-marking. Whatever the evidence for particular D-structures (for example, for the 'underlying' verb-final status of Old English), the constituent-orders argued to be present there are not attributed to phrase structure rules per se, but rather to the direction in which governing heads assign theta-role and (oblique) case.

As we have seen in connection with the account of passive, one explanation for 'superficial' word orders deviating from orders argued to be 'underlying' is that the source and directionality of structural case assignment may differ from those involved with oblique case and theta-role assignment. One explanation which may be provided for syntactic change, then, is that stylistic permutations may so obscure the D-structure locus of theta-role and case assignment that directionality is reanalyzed (in line with Lightfoot's 'transparency principle'); another explanation might be that deviation between theta-role marking by different heads or between case marking by different heads or between oblique and syntactic case may lead to reanalysis in order to restore the supposedly universally
unmarked cross-categorial parallelism in the direction of case and theta-role marking. Kemenade invokes both sorts of explanation in her account of syntactic changes between Old and Modern English, and in the present section I will convey the most important aspects of her argument.

As she frequently does, Kemenade adopts an account of case and theta-role assignment in Dutch for her analysis of Old English; the account at issue here is that of Koopman (1984). By Koopman's analysis of Dutch, 'verbal elements' (by which are apparently meant verbs and adjectives) assign theta-role from right to left, 'nominal elements' (by which are apparently meant nouns and prepositions) assign theta-role from left to right, and case is assigned from left to right. As just explained, the evidence for the directionality of theta-role assignment derives from whatever evidence is adduced for the D-structure positions of NPs relative to their governing heads; what Koopman's statements about theta-role assignment therefore reduce to, or derive from, is a claim that Dutch has underlying O-V, N-Gen, and P-NP order, and that those adjectives which select nominal arguments appear underlingly to the right of those arguments. To the extent that the case for these underlying head-modifier relationships is valid, the claims about direction of theta-role assignment are valid, given the assumed association between D-structure and theta-roles.

The claim about case assignment is much more problematic. If we consider nominative case (a structurally-assigned case, by all accounts) to be assigned by the head of IP, then it is fairly clear that at least this structural case must be assigned from left to right; this would be equally true under the subject-under-VP hypothesis or the more
'traditional' analysis assumed by Kemenade:

(92)

If we assume V to be the relevant case-assigner for structural accusative case, on the other hand, there appears to be a discrepancy in the directionality of assignment of structural subject and object case. If we are to maintain a single generalization for the directionality of structural case assignment, then, one option might be to consider something other than the verb to assign accusative case to objects. For Dutch, Koopman cites the following:
(93) ...dat Marie [dat boek aan Jan aangeraden heeft]  
VP  
'that Mary recommended that book to John'  

(94) omdat Marie ['t gisteren aan Jan gegeven heeft]  
VP  
'because Mary gave it to John yesterday'  

In examples such as these, if we assume that the direct object NP originates to the left of the verb, 'something' is moving that NP to the left periphery of the VP; 'on the assumption that NP complements appear adjacent to their case-marker this suggests that somehow there is a case-marking position in the left of VP...' (Kemenade p. 91). The problem is, there doesn't seem to be any relevant case-assigning element there; Koopman's solution, according to Kemenade, is to propose that 'the case marker in the left periphery of the V consists of the case features of the verb, which have moved to the left periphery of VP as forced by the left-right directionality of case marking' (91-2). In this way, the directionality of objective case assignment by the verb is brought into line with subjective case assignment by INFL, which is independently argued to appear outside the S node, under COMP, just as in German or Old English.

For better or worse, Kemenade extends this account to Old English, with the justification that Dutch and Old English are structurally parallel in a number of respects and that certain facts of Old English indicate a VP-left-peripheral position for some covert structural case assigner as well. Unlike Koopman's account of Dutch, however, Kemenade does maintain the assumption that OE oblique case assignment is directionally consistent with theta-role assignment; indeed, given the understanding of the theta-role-determined
nature of oblique case, this is virtually axiomatic. Thus, left-to-right case assignment is claimed to be a characteristic specifically (although not exclusively) of OE structural case (assigned by INFL and V), resulting in the following directionality constraints for theta-role, oblique case, and structural case assignment:

(95) a. i. Elements non-distinct from [-N] assign theta-role to the left.
   ii. [-V] elements assign theta-role to the right.
   b. i. Elements non-distinct from [-N] assign oblique case to the left.
   ii. [-V] elements assign oblique case to the right.
   c. Structural case is assigned from left to right.

(Kemenade 1987:92)

As already discussed, this amounts (or reduces) to a claim that, in D-structure, the complements of verbs and adjectives appear to their left and complements of nouns and prepositions appear to their right, while, barring any subsequent stylistic movement operations, any structurally case-marked (nominative or structurally accusative marked) NP will appear 'on the surface' to the right of the relevant case assigner.

For the last claim, we have already seen the argument that INFL appears to the left of the nominative subject in Old English, unlike in Modern English. The question, then, becomes what evidence there is to substantiate the possibly theoretically-motivated claim that all OE structural case is assigned from left to right. The answer turns out to be very similar to that provided to substantiate the claim of left-to-right case directionality in Dutch, and at least as problematic. Kemenade points out that, in sentences with an accusative as well as oblique object, once we separate out the confounding effects of unequal (pro)nominal status, the (structurally case-marked) accusative nominal precedes.
the oblique in the VP about 75-80% of the time, according to studies of selected texts (Kemenade 1987:93). While this fails on the face of it to substantiate a claim of left-to-right structural case assignment, it does succeed under a certain assumption: namely, that structural accusative case is not really assigned by the verb or from the overt position of the verb, but by some other (covert) element on the left periphery of the VP. She cites as further evidence data showing clitic objects in the left periphery of VP, e.g.:

(96) ṣæt he us rume wununge on heofenan rice forgife (AHTH 1,36)
that he us spacious dwelling in heaven's kingdom give (p. 94)

On the assumption, cited elsewhere, that clitics attach to a case-marking head which absorbs their case features, this would provide further evidence for the presence of some covert structural case marker on the left periphery of VP.

3.4 The loss of oblique case and the status of prepositions

The loss of the oblique (inherent)/structural case distinction, and thus the loss of oblique case, is explained by Kemenade in terms of the loss of case morphology (i.e., overt morphological case marking), which is attributed to a phonological impetus of vowel reduction in final syllables due to stress loss in that position. The explanation is actually insufficient to show that accusative precedes oblique, since this is perfectly compatible with a view of structural case being assigned right-to-left. (The fact of a linearly intervening oblique NP wouldn't matter, since it wouldn't affect the relevant government relationship between the verb and the accusative NP.) What Kemenade should show is that the accusative NP appears to the left of all other material in the VP in the majority of cases.

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not quite so simple as one might suppose, since case syncretism in morphological
inflection alone is not all that was involved. Recall that, by Kemenade's analysis, structural
and oblique case in Old English are not distinguished merely morphologically; indeed,
while nominative is always structural and dative and genitive are always oblique,
accusative could by her analysis be either oblique or structural. On the other hand,
direction of case assignment serves (at an abstract level, at least) invariably to differentiate
oblique verbally-assigned case from structural case in Old English, so that one might
imagine an oblique/structural distinction to be maintained positionally even if
morphological distinctions between direct and oblique objects are lost. Kemenade's
explanation is as follows:

In later OE, the verb assigns theta role and oblique case from right to left.
Structural case is assigned from left to right. This in itself represents a marked
situation. Let us assume, though, that the language environment is such that this
situation can be deduced by the language learner. However, as extraposition [of
object NPs] ... increases in frequency, both structural and oblique objects come to
appear on the right of the VP-final verb. As long as there is a live system of
morphological case, the appropriate distinctions between the various object-cases
can still be made. But in the late 10th C the decline of the morphological case
system sets in, as the result of a phonological process of vowel reduction in
unstressed syllables. This leads to an intolerably marked situation. To make sense
of word order in VP, the language learner abducts a reorientation in the direction
of theta marking. Theta-role comes to be assigned from left to right, in the same
direction as structural case marking, and in the same direction as theta-marking by
N and P. This results in basic VO order in VP. Because there is no longer a
directionality distinction between structural case and oblique case, and because the
morphological case system is in decline, especially in its distinctions between
objective and oblique cases, oblique case is lost.... As a result a number of case
relations that used to be expressed by oblique case come to be expressed by means
of prepositions. (206)

By this analysis, prepositions come to assign structural case rather than oblique

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case, and this case would simply be identified as 'objective'. In fact, given the ModE passivizability of prepositional objects, we would have to ensure that whatever mechanism permits the nominative marking of the notional object in regular passives permits the same marking in prepositional passives. This mechanism is the 'robbing' of the verb's 'ability' to assign case (but not theta-role), resulting in a situation where the only way a case-marked notional object can occur is by movement by subject position to receive nominative (or subjective) case. Presumably, the same mechanism would be responsible for the movement to subject position of prepositional objects. Thus, passive morphology robs not only verbs, but prepositions as well of their ability to assign case. This makes case assignment with prepositions—in ModE—appear to be more a matter of verbal case assignment than prepositional case assignment. With those OE obliques that have prepositional reflexes in Modern English, then, the semantic information conveyed or carried in Old English by oblique case is shifted to prepositions; in this sense, the preposition itself, rather than case marking on the object, is the reflex of OE oblique case, and might therefore be insightfully regarded as an exponent of the verb.

Kemenade's analysis, then, identifies the following proximate and ultimate causes of word-order change in English. The proximate cause is a reanalysis of the directionality of oblique case and theta-role assignment by the verb from leftward to rightward. The ultimate (or, at least, less proximate) cause of this reanalysis is the proliferation of extraposition of object NPs to the right of the verb. To this extent, her analysis is no different from a host of other analyses in both formalist and nonformalist traditions which invoke the extraposition of either 'afterthought' elements or phonologically 'heavy' material.
as a mechanism for the loss of verb-final order for Germanic or for languages in general (cf., e.g., Hyman 1974, Stockwell 1977, Holland 1980).

Kemenade's further explanation for the loss of the oblique/structural distinction refers, first, to the 'markedness' of the OE discrepancy between the directionality of the two kinds of case assignment, and second, to the 'intolerable markedness' of an oblique/structural distinction insufficiently signalled either by position or by morphology once phonologically-induced erosion of morphological case has proceeded far enough. This, then, motivates the replacement of direct oblique case by prepositional marking.

The main problem with this account of the motivation for the loss of oblique case in English is that the validity of the causal mechanism it invokes depends on rather tenuous reasoning in the first place. The claim for the left-to-right directionality of structural case assignment, while reasonable enough for nominative case, is overtly counterexemplified for accusative, and is only salvaged for the latter by reference to a phonologically null structural case marker on the left periphery of VP. The only evidence for this marker is the tendency of pronouns to appear further to the left than one might expect given their proposed D-structure position—which only counts as evidence of a left-peripheral structural case assigner assuming that other factors (topicworthiness, topicality, or emerging relational order rankings) fail to motivate these S-structure movements and assuming a specific theory of cliticization. Note that this theory apparently allows one to consider the tendential linear precedence of structural accusative objects relative to dative or genitive objects to follow from the attraction exerted by this hypothetical structural case assigner, while at the same time permitting one to attribute the left-peripheral position
of an oblique object NP, as in (96), to this same structural case assigner—despite the fact that this assigner would play no role in the assignment of oblique case to a dative NP.

Given the questionable nature of the claim for uniform left-to-right structural case assignment in Old English, then, the validity of structural case directionality as an analogical source for the reanalysis of the directionality of oblique case is doubtful. Note, too, that structural case marking is cited as a source for the abduction of left-to-right theta-role assignment. However, given that the structural case assigner is not identified as the verb but as a covert VP-left-peripheral element, structural case assignment itself motivates the position of the object to the left of the verb, not to its right. It is therefore implausible to consider structural case assignment, under Kemenade's analysis, to have served as a basis for the reanalysis of theta-role assignment such that the object comes to be base-generated to the right of the verb. Rather, the only legitimate cause of this reanalysis is the increasingly frequent appearance of objects of all kinds to the right of the verb, independently attributed to a gradual de-marking of the rule of object extrapolation\(^2\). Any additional loss of distinction between structural and oblique objects would presumably be more adequately explained by the traditionally-cited impetus of phonologically-induced erosion of the morphological case system, rather than by some more abstract loss of distinction between structural and oblique case-assignment.

\(^2\) It is actually unnecessary to invoke any mechanism of 'reanalysis' in this process, for the following reason. Once we have identified the incremental de-marking of the movement of objects to the right of the verb as being responsible for the decreasingly SOV character of the language, no additional mechanism is required: invariant SVO is simply the endpoint of this development, with the point at which a 'reanalysis' is identified being entirely arbitrary.

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directionality.

4 Summary

All in all, we see that the general problem with Kemenade's account is that the theory-specific mechanisms invoked add little or nothing to the more descriptive accounts available elsewhere in the literature. In this respect, it is similar to the accounts of verb movement proposed by such analysts as Kiparsky, discussed above. While these abstract formalist analyses may appear initially promising, they soon turn out to suffer from internal logical inconsistency and even counterexemplification from the very sorts of facts they are meant to explain. We may consider this to result from an excessive degree of abstraction away from the linguistic data, to the extent that it is the generalizations embodied in the formalist theory which are defended against the recalcitrant facts of linguistic data, rather than the theory being used to illuminate the facts or develop our understanding of them.

I shall substantiate this claim further in the analysis of the diachronic development of 'tough movement' presented below. The tough-movement construction has a notorious history of resisting a neat analysis in terms of transformational-grammar, including GB, constructs, in particular in terms of one or the other of what are assumed to be the two kinds of mechanisms accounting for the movement of nominal elements, wh-movement and NP-movement. I will argue that this difficulty results from a misguided assumption of the discreteness of these two essential movement types, rather than a view of the relationship between overt nominal elements and their governing verbal constituents being more or less similar, in cline-like fashion, to the kind of relationship involved in
passivization or the kind of relationship involved in wh-questions.

If we wish to retain the view of the instantiation of subject and object categories as varying with the degree to which a language's morphology and syntax reflect neutralization of role- and reference-related factors, then it is necessary not only to support the claim that the 'grammatical' cases (primarily nominative and accusative) are in fact less 'grammatical' in OE than in ModE (which is, after all, true almost axiomatically given the greater number of paradigmatically opposed cases in the OE system), but also to substantiate the claim that Old English countenanced fewer of the case neutralizations of the sort that have been referred to in terms of 'raising' operations. In addition, it makes sense that, if we believe in a conspiracy towards the development of 'subject' as an increasingly central category, this category would become increasingly central with respect to previously reference-oriented operations such as coordination and even more clearly role-related ones such as purpose clause constructions. It is to these sorts of interactions of the OE case system with syntactic processes that we now turn.
Chapter 7: The status of passive in Old English

1 Introduction

With this chapter, we commence an investigation of the interaction of case with a variety of syntactic processes in Old English. The evidence will show that Old English is resistant to neutralization of morphologically-marked case distinctions such that the range of operations traditionally understood as mapping an argument from one relational or structural status to another—such as passivization and 'raising'—is considerably narrower than in Modern English.

Given the restriction of passivization in Old English to the promotion of the accusative argument, and given (as explained in Chapter 5) the greater semantic coherence of the OE accusative relative to whatever we might consider to be its ModE reflex or counterpart, the OE passive is by necessity a more 'lexical' process than its ModE counterpart, while the ModE passive is more 'syntactic'. This means that the OE passive is more semantically restricted and (with certain caveats) less productive than passive in Modern English. This last point must be qualified to the extent that there is good evidence that, as an 'adjectival', attributive modification construction-type, the passive form of the verb in Old English may have greater productivity than the ModE passive participle when used attributively.

ModE passive has developed considerably beyond OE passive, however, in its productivity as a relation-changing process involved in the reshuffling of GRs at the level of cross-clausal syntax, as well as at the level of intraclausal syntax to the extent a much
broader range of argument types (including prepositional objects) may be targeted.

This growth in the domain of passive, then, may be viewed as integral to the development of GRs in two ways. One, to the extent that passive mediates semantics and discourse in a manner involving neutralization of the former, it presupposes and/or contributes to the development of GRs in the theory-neutral sense assumed in this dissertation. Second, to the extent that passive is required in the mediation of what have traditionally been viewed as 'basic' syntactic structures and 'derived' ones—that is, both in the mediation of active and passive structures and in the 'feeding' of structures such as raising and conjunction reduction by promoting an argument to pivot function—the growth of passive presupposes and/or contributes to the ascendance of 'subjecthood' in the sense of a reference-oriented, semantics-independent syntactic pivot.

A clear illustration of the contrast between Old and Modern English with respect to passive is provided by ModE constructions which either require or accept the passive but whose OE counterparts are either unattested with the passive or have been argued to feature the passive only as a Latin calque restricted to translated texts. Consider the following:

(1) a. These walls are to be painted by tomorrow morning.

b. Who is to be blamed?

c. They're eager to be promoted.

d. What's still left to be done?

e. This pile of papers is to be gotten rid of.
f. It's not to be missed.

g. These packages are ready to be shipped.

Examples such as these, which are at the very least unexceptional with a passive infinitive in Modern English and are in some cases downright ungrammatical with an active infinitive, are unattested with a passive infinitive in Old English (Fischer 1991, Callaway 1913). In fact, the only use of a passive infinitive at all in Old English is under the scope of a modal (Fischer 1991:143), and in a few, arguably Latin-calqued (Fischer 1991:157) purpose clause of the 'in order' type.

The increasing reliance in English on a subject pivot for constructions such as these and other constructions such as conjunction reduction and control constructions of the 'raising' type is evidence of a typological shift in the language, with passive increasingly serving the function of mediating semantics and syntax such that a non-Actor is promoted to pivot status. The interaction of passive with these other constructions will be investigated primarily in chapters 8-10. In this chapter, we analyze a presumably non-coincidental characteristic of a passive with a limited reference orientation—namely, the restriction of the OE passive to a semantically-proscribed subset of the possible ModE passive promotees.

2 Preliminary: lexical vs. transformational passives

It is a well-known fact that, in numerous obvious respects, ModE passive displays characteristics of an adjectival as well as of a verbal category. Apparently parallel to this
distinction is one in terms of the lexical or syntactic/transformational status of the passive. The arguments for this division are perhaps most clearly presented in Wasow (1977), from which I adapt a few salient points.

First, arguments for the adjectival status of ModE passive include the following:

A) has adjectival distribution:
   A broken/red box sat on the table
   John acted elated/happy
B) participates in adjectival un-prefixation:
   Our products are untouched by human hands
C) may pattern like adjectives with respect to degree modification:
   Your dog looks very frightened
   (cf. John very *(much) respects your family
   John is very (*much) respectful of your family)

Also, some passives have no active counterpart, cf. he was rumored to be.../they rumored him to be...; such cases are more easily reconciled with a lexical analysis given that the output of word formation rules, but not syntactic transformations, have typically been viewed as entered in the lexicon, and therefore at least capable of assuming a status independent of their input-source, with this last fact also accounting for any cases where the passive participle has semantic idiosyncrasy (cf. supposed to be) (Aronoff 1979).

Finally, as Bresnan (1976) has emphasized, the fact of passive feeding un-prefixation appears to present evidence for the lexical status of the former assuming the lexical status of the latter.

On the other hand, there is clear evidence for the syntactic or lexical status of at least some instances of passive in Modern English. Passive may be fed by transformations
independently analyzed as 'syntactic', e.g. dative advancement¹ and subject-to-object raising:

(2) a. I gave a book to John —> 
     A book was given to John

b. I gave John a book —> 
     John was given a book

c. I ordered the chair (to be) removed from the room —> 
     The chair was ordered (to be) removed from the room

Next, data such as the following would be strange under a lexical/adjectival analysis since 'it would be necessary to make the obligatoriness of the NP-complement of given dependent on the selectional features of its subject':

(3) a. The United Fund was given *(\$10)

b. \$10 was given (to the United Fund)

Under a transformational analysis, on the other hand, the examples are derived straightforwardly from their active analogs, 'which can be captured quite straightforwardly with the standard machinery' (341).

Next, passives of nonverbal predicate structures provide qualified distributional evidence of non-adjectival status:

(4) John was elected President
    (*John was obvious President)

But see Oehrle (1975) for arguments against a syntactic dative movement transformation in English.
Further evidence for the legitimacy of a bipartite division of passives, finally, comes from the apparent fact that the two types fail to interact in a manner that would require feeding of the adjectival passive by the verbal:

(5)  *Sue was unsent the letter  
     *John is unknown to be a communist

Similarly, passives categorized as syntactic/verbal by the previous criteria may not appear in a context requiring AP-complements:

(6)  *Teddy already acts elected President

From the above, Wasow derives the conclusion that, while a general division is justified between lexical rules as structure-preserving and syntactic rules as non-structure-preserving, this division is not exceptionless. Put in somewhat less theory-specific terms, what this means is that it seems justified to distinguish lexically-transformed items in terms of phrase structure trees that are unavailable independently of that item, or independently of the transformation. Lexical rules, in other words, avail themselves of independently-existing structures while (syntactic) transformations permute items in or otherwise alter independently-existing structures. It seems, however, that at least some (syntactic) transformations may be structure-preserving; the transformational passive would then be anomalous in precisely this respect.
Finally, Wasow raises the inevitable question of why some transformations should be exceptions to the dissociation of structure-preservation and transformations as opposed to lexical rules, and why, more particularly, there should be two kinds of passive in English. The answer to both, offered briefly and tentatively at the end of the paper, is that 'English once had only lexical passives..., and that it is currently in transition, drifting towards a state in which it will have only transformational passives' (355). While no support is provided for the exclusively lexical status of passive at any stage of English beyond reference to an approving personal communication from Traugott, Wasow offers this as 'a hypothesis that deserves careful investigation' (355-6).

If we pause for a moment and consider the kind of evidence adduced for the syntactic or lexical status of passive, however, we immediately realize that at least many of the relevant tests are inapplicable to Old English. The overall tenor of the 'lexical'/syntactic' division is that the former are more narrowly semantic, tied to or describable in terms of semantic or thematic-role-type distinctions, while processes of the latter sort may operate on what are sometimes viewed as derived structures that deviate from strict semantic characterization. For example, as we have seen, in ModE passive operates on syntactically derived dative-advancement and subject-to-object raising structures, which may be viewed in terms of a mix of information-restructuring (advancement to secondary topic) and more narrowly semantic (conceptualization of the 'raised' NP as a relatively patient-like entity, cf. Borkin 1973) functions. In Old English, however, as we shall see in Chapter 9, there is no clear evidence for a subject-to-object raising (as opposed to equi or control) process. With respect to dative advancement, while
Old English clearly had ditransitives, and it certainly had a variety of options in ordering the two arguments, there were no 'advancement' operations in the sense of changing either argument's case. Let us consider the following:

(7)  
\[ Hwilc \ fæder \ wile \ syllan \ his \ cilde \ stan \ (\AECHom \ i.250.7) \]  
\[ \text{Hvilc father will give his child the stone} \]  

(8)  
\[ Ac \ we \ sceolon \ syllan \ byne \ flæscu \ heofenes \ fugelum \ & \ but \ we \ shall \ give \ your \ meats \ (Nic (A) 230) \]  
\[ eor\ban \ wyld \ deorum \ \text{earth's wild animals-DAT} \]  
\[ \text{But we shall give your meats to heaven's birds and earth's wild animals} \]

Any permutation of word order would fail to correlate with alterations of case: the recipient is dative and the theme is accusative regardless of the information structure reflected in constituent ordering. Therefore, the only possible passive involves the expression of theme as nominative with retention of dative marking on the recipient, as follows:

(9)  
\[ ...\text{baet } \text{pu } \text{wære } \text{geseald } \text{þysum } \text{twam } \text{dyoflum} \]  
\[ (\text{HomM 1 (Healey) 167}) \]  
\[ \text{...that you were sold to these two devils} \]

(10)  
\[ Ic \ secge \ eow \ to \ so\ban \ \text{baet} \ \text{sib } \text{is } \text{forgifen} \ \text{godes} \ \text{gelaþunge} \ (\AELS \ 9.130) \]  
\[ \text{I say you truly that peace is given God's congregation} \]  
\[ \text{I tell you truly that peace is given to God's congregation} \]

To the extent, then, that demonstration of the 'syntactic' status of passive relies on the availability of such independent syntactic processes, the existence of a transformational
OE passive is impossible to prove. By the same token, however, the syntactic status of OE passive is impossible to disprove, since the relevant tests are simply unavailable.

It is important to emphasize that the lexical status of OE passive is never in dispute; by tests of distribution and inflection, the OE past participle used in a passive sense frequently has the unambiguous status of an adjective, most obviously when used attributively but also when used predicatively:

(11) ealle þa gelæredestan men (Alfred, Bede (Miller) 344,20)
    all the most.taught-PL men
    'all the most learned men'

(12) þa bec sint gehatene Soliliquiorum (Solil. 2.14)
    the books are called-PL S.
    'The books are called S.'

The same past-tense verbal forms used in the passive may also be prefixed with un-, which independently attaches to adjectives, cf. ungelæred 'unlearned', ungerinnen 'untouched', ungerad 'unarrayed', alongside unruh 'unrough', unriht 'unright', etc., indicating, again, the status of an adjective by distributional tests. On this point, all

Lieber claims that un- only prefixed to adjectives in OE, which is not true. Alongside prefixation to adjectives, adverbs, and nouns, it occurred with verbs, e.g. unwindan 'unwind' and unlucan 'unlock'. Marchand (1969:204) claims that 'the prefix is generally said to go back to OE and- and ond- which corresponds to G ent-, ultimately identical with OGr anti and L ante, originally "opposite"--an account which Marchand claims, without elaboration, 'cannot be entirely correct'. Old English un- frequently alternates with an- and on-, and the latter two with and- and ond-, e.g. onlucan-unlucan and andswarian-answarian-ondswarian-onswarian 'answer'. It is interesting that, assuming a common etymology for verbal un-, on-, an-, and-, and ond-, it appears that the first variant (un-) had by the earliest documents and increasingly through Old English and into Middle English begun to specialize in 'reversative' meaning, as opposed to the host of other related meanings otherwise contributed by the prefix, in a manner which cannot be
analysts, including those (e.g. Lieber (1979)) who argue for the existence of an OE transformational passive, agree. The disputed point is rather whether passive existed in addition as a 'syntactic', 'transformational', or 'verbal' phenomenon. Towards a resolution of this issue, and to prepare the way for a discussion of Lieber's views and a presentation of my own, I present here the relevant facts of the passive in OE.

3 Passive in Old English: the general facts

The origin and status of the OE periphrastic passive is probably best viewed in the context of the development of various structurally and semantically related periphrastic forms, those with the present participle, with the infinitive, and with the past participle.

explained in terms of regular phonological processes, or simply in terms of the phonological environment provided by the following stem. Specifically, we may make the following claims: wherever we find the un- spelling of the verbal prefix, we also find reversative, as opposed to inchoative, perfective, or separative meaning, and, conversely, wherever we find reversative meaning, the chances are at least very strong that we will find the un- variant exclusively or alongside other spellings; additionally, wherever we find other than reversative semantics we fail to find an un- variant. Thus, we find unlucean and unwindan in Bosworth's Anglo-Saxon dictionary (Bosworth 1838), alongside Marchand's cited onlucean and onwindan, while, say *unswarian is never attested beside andswarian/answrian/ ondswarian/onswarian, *unginnan is never attested beside onginnan 'begin', *ungietan is never attested beside ongietan 'understan', etc. (A stronger prediction, namely that reversative semantics always entails the existence of an un- variant, is not possible since we find no evidence for, e.g., *unniman or *unsecgan alongside onniman 'to take away' and onsecgan 'to contradict' (with the stem secgan 'say').) Marchand's explanation for this is that the verbal prefix 'had come to be felt connected with the negative [adjectival] prefix un-' (205), which, contrary to the intuitions of the modern-day English speaker, is etymologically unrelated (cf. Gr. a(n)-, L. in-). He speculates further: 'It is therefore, I think, on account of this semantic connection that on- [and its variants] did not die out like so many other Old English prefixes, but, on the contrary, became a productive verbal prefix [un-] ' (205).

Note, however, there is no serious question of the forms ungelered etc. involving the verbal prefix, since the meaning would be different enough to be discernible in context.
There is neither time nor space to enter into an extensive review of the analyses of the development of these structures in the secondary literature, but it is worth mentioning that all the paraphrases involving participial forms (i.e., all but that involving the infinitive, which is involved in the development of modal auxiliaries and that of ‘verbal nouns’ into verbal complements, i.e. infinitives, cf. Disterheft (1984)) are generally viewed as arising out of deverbal-adjectival constructions, possibly to some extent under Latin influence; thus, Mitchell (1985: 279) on the development of the present participial form:

Nickel—perceptively, and, I believe, rightly—sees the OE periphrasis as the syntactic blend of three different constructions which ... are often difficult to distinguish. This blend was assisted by several factors—‘the tendency to re-establish the system of aspectual relations, which had broken down in primitive OE’; ‘the general trend in OE to build up a so called analytic form system using free instead of bound forms’; and ‘Latin periphrastic constructions, particularly appositive and absolute participle constructions...’ (Nickel 1967, p. 263). The first construction is the verb ‘to be’ + a predicative adjective. Sweet [1892 and 1898] wrote...: ‘They were no doubt originally formed on the analogy of the combination of the verb ‘to be’ with adjectives, so that such a paraphrase as hie waren blissiende ‘they were rejoicing’ was felt to be intermediate between hie blissodon ‘they rejoiced’ and hie waren blibe ‘they were glad’.’... The next step was the integration of these structures into the verbal system, where they are opposed to simple forms such as blissab’ (Nickel 1967, p. 270). The second construction is the appositive participle seen in he was on temple laerende his discipulas.... The third construction is the verb ‘to be’ + an agent noun in -end.

To most analysts, the fact that the OE passive is an analytic structure which replaced, or was in the process of replacing, a synthetic one which had for all intents and purposes been lost (with the apparently sole surviving vestige in OE being the occasional use of hatte 'is/was called' in a passive sense), plus the clear evidence of its adjectival origin, is evidence enough that the historical progression of the form must have been from...
adjectival to verbal, with our task then being to identify the point in time when the rubicon is crossed. There are at least two ways that one might attempt to go about this task. One would be to categorize uses of participial forms into 'verbal' or 'adjectival' groups on some semantic basis; the other would be to perform this same categorization on formal grounds. In practice, both methods are used but the latter to more satisfying effect. Formally-based categorizations rely on observations of the distribution and coding of the participial forms, or on observations of the extent to which they are integrated into adjectival or verbal paradigms. Semantically-based categorizations most typically rely on judgments of the 'adjectival' or 'verbal' character of the participle, most typically of whether it is best interpreted as 'dynamic' as opposed to 'stative' (Lieber 1979), or 'actional' as opposed to 'statal' (Mustanoja 1960).

Correlating (or so argued) with the latter semantic distinction is the further formal feature of the presence of a prepositional phrase coding the agent or instrument, i.e. what would correspond to a ModE by-phrase. Proponents of the view that inflection is a sufficient differentiator of 'verbal' or 'adjectival' status may claim to find support for this view in their readings of the data, e.g. in the following translation of an Orosius passage by Closs (1964:33) cited by Mitchell (1985:313):

In OE, a variety of prepositions were used for this purpose, including mid 'with', of 'from', and for 'because of', a fact which could be interpreted as an indication of the lack of a fully 'syntactic' status of the OE passive, or the insufficiently grammaticalized status of the construction as a syntactic passive.
(13) þeh þe Romane gefliemed waren, hie waren þeh gebielde mid þæm þæt hie wiston hu hie to þæm elpendon sceoldon

'Although the Romans were put to flight, yet they were encouraged in that they knew how...'

As Mitchell points out, however, there are too many apparent counterexamples for such a correlation to be taken seriously, especially lacking any clear definition of what it would mean for a participial use to be semantically 'verbal' or 'adjectival.'

With the analytic participial passive, the—i.e. beon/wesan + the past participle when used predicatively—it is clear that this structure has an adjectival use (judging by obvious formal criteria) in Old English, and that this use again judging by formal criteria) is lost in the predicative function during the Middle English period (Mustanoja 1960).

The formal criteria most typically invoked here are first, strong adjectival inflection, and second, presence of an agentive by-phrase. With respect to coding, the participle with 'be(come)' patterns just as it does with other intransitive verbs such as cuman, lagan, and standan (cf. Mitchell 1985:748), i.e. when functioning as what might be called a secondary or nonverbal predicate:

(14) ...þæt hæ to woruldlicum gifum gelæpod that he to worldly nuptials summoned

com (ÆCHom ii, 4 30.25)
came

'...that he came summoned to worldly nuptials'

The problem here is strongly reminiscent of that faced when attempting to test Mithun's claim for a correlation between 'SS' marking with conceptualization of the joined clauses as 'one event' and 'DS' marking with conceptualization as 'two events' in the Central Fomo switch-reference system.
(15) ...and læg aþenod ætforan his fotum... (ÆLS (Martin) 1050)
    and lay extended before his feet

(16) ...æt he læg geswogen... (ÆLett 4 (Sigeweard 2) 476)
    that he lay silenced

The frequency with which the participles at issue agree with their nominative subject is
somewhat obscured by the nature of the strong adjectival paradigm, as may be seen at a

glance:

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(536)

Whenever the nominative subject is singular, in other words, a zero-inflected participle
would be indistinguishable from an uninflected one. The theoretically available feminine
-u ending in fact appears only 'sporadically', and only in the earlier prose works, but this
is probably to be attributed more to the general loss of this ending in the strong
decension, perhaps under analogy with the other nominative singular forms, rather than
to a loss of 'adjectival' character (Mitchell 1985:16-17 and 312). In the plural, the strong
paradigm provides non-zero-inflected endings for all genders, although the theoretically available 3-way -e/-u/-a masculine/neuter/feminine distinction is typically levelled to an invariant -e. We do find uninflected participles in a range of texts, but Mitchell, without citing statistics, characterizes these as 'the exception rather than the rule' (17).

As for the other formal criterion, presence of an agentive\(^5\) by-phrase, invocation of this feature is somewhat problematic for at least two reasons. One, it is generally agreed that such phrases were often strongly influenced by the Latin original in translations (cf. Mitchell 1985:313 fn. 191). Two, it fails to hold true that use of such a phrase would invariably correlate with a 'verbal' or an 'actional' reading, as is immediately clear from Modern English examples such as the following:

(17) a. Any food items must remain untouched by human hands.  
b. The rocks are cracked from all the temperature fluctuations.  
c. These trees are contorted \{from/by\} the constant wind.  
d. I'm crushed by your rejection.  
e. He's weighed down \{with/by\} depression.

The following examples illustrate that the presence of a by-phrase (or its equivalent) is no sure indication of an 'actional' reading in Old English:

(18) ...forþon þæs fæder & þære modor godcund mægen beforan wrat  
     for the-GEN father & the-GEN mother divine grace first wrote

\(^5\) This is typically used simply to mean that the P-object corresponds intuitively to the active subject, not that that active counterpart is necessarily 'agentive' in a strict sense.
that by the-GEN parents-GEN worth the-GEN child-GEN worth
ongyten  wære be þyson eallum ọprum mannum (BlickHom 163)
recognized be  by these all other men-DAT

'...because (he) first wrote of the divine grace of the mother and the father, that by
the parents' worth the worth of the child should be recognized by all these other
men'

(19) ne bêp he oncnawen from Gode (Alf.CP 28,14)
not is  he acknowledged by God
'He is not acknowledged by God'
(20) eall þa woruldgod  þa te him fram cyningum & fram weligum
all the worldly goods that to him from kings & from rich
men  þyse worulde gegyfene waeron (Alfred, Bede (Miller) 160, 13)
men  this-GEN world-GEN given were

'all the worldly goods that were given to him by kings and wealthy men'

(21) Judas nu is cwylmed mid deoflum on þæm ecum witum (BlickHom 63,6)
J. now is tortured by devils in the eternal torment
'Judas is now tormented by devils in eternal torment'

These examples are most naturally open to a 'statal' reading, indicating that the presence
of an instrumental or agentive prepositional phrase is no sure sign of an 'actional' or
'verbal' use.

A further possibly confounding variable which must be dealt with in a discussion
of the 'actional' or 'statal' status of the OE passive is the use of auxiliary6, specifically

Of course, referring to these as (necessarily) auxiliaries is getting ahead of the game
diachronically and inaccurate with respect to main-verb use in collocation with
adjectives; I trust the reader will understand the loose reference according to common
practice.
wesan/beon 'be' vs. weorfan 'become.' While it is sometimes assumed or claimed that a stative opposition exists between the two auxiliaries in Old English, or between the verbal/adjectival complexes in which the auxiliaries participate, it nevertheless appears irrefutable that any such opposition, even if reconstructible, is at the least somewhat attenuated by the OE period. As Mitchell (1985) has argued in detail, there are far too many apparent counterexamples to the stativity of wesan/beon for such a 'rule' to be taken seriously, cf. the following examples from Orosius:

(22) æfter þæm gefeahht Regulus wiþ III Pena cyningas on anum
after that fought R. with III P. kings in one

gefeohte... On þæm gefeohte wæs Cartainiensa VII M
battle in the battle was C. VII M

ofslagen...
slain (Or 174 18-21)

'After that R. fought with three P. kings in one battle.... In the battle 7 M (?) Carthaginians were slain...'

(23) æfter þæm Sempronius Craccus se consul for eft mid fierde
after that S. C. the consul again went

angean Hannibal, & gefliemed wearþ, & his heres wæs micel
against H. set.to-flight was his army-GEN was much

wæl geslagen (Or 192 24-6)
slaughter slain

'After that the consul S.C. marched on H. again, and was set to flight, and much slaughter was done to his army'

At the same time, the association of weorfan with 'actional' readings seems to be much stronger, even though Mitchell still rejects this association as a hard-and-fast 'rule'; as
Denison (1993:418) points out, however, Mitchell 'does not provide many convincing counterexamples', and in some texts (cf. Kilpiö's (1989) analysis of passives in Bede and Gregory's Pastoral Care) the association of weorban and actional readings is strict.

The obvious conclusion, then, is that the two OE auxiliaries entered into a non-privative opposition between a marked (weorban) and unmarked (beon/wesan) member, perhaps out of an earlier privative opposition. Given its demise in the ME period (the last use with a past participle cited in the OED is from 1425), any aspectual semantics associated with weorban would in any case have been subsumed under beon/wesan (although the semantic turf abandoned by the former is apparently being re-taken by the ModE innovative get-passive, which is appears from the 18th century on (Denison 1993:420)), and it seems that this transfer was quite gradual and in process throughout the OE period.

The relevance of these facts is at least two-fold. If we draw an association between 'actional' semantics and a 'verbal' or 'transformational' passive, it is really only legitimate to consider this association to hold with passives using the beon/wesan auxiliary; examples using weorban must be excluded from consideration when evaluating the verbal/transformational status of the OE passive. The reason for this is obvious: if there is an 'actional' status associated with weorban passives, it is by no means due to any reanalysis of the participle as a verbal constituent, but rather simply due to the 'actional' nature of the verb weorban itself; such an 'actional' status would be associated with any use of the verb, including uses involving an unambiguously adjectival complement:
(24) Hie ne wendon æfre menn sceolden swæ reccelease
    they not thought that ever men should so negligent

    weorban
    become

    'They didn't think that men would ever become so negligent'
    (Alfred's Preface to Gregory; Mitchell & Robinson 1992:206, lines 44-5)

(25) Leanæ grimme þam þe him woncne weorban lætep
    rewards grimly him-DAT that him-ACC proud become allows
    '(He') rewards grimly him who allows him to become proud'
    (Riddles (M, lines 9-10); Mitchell & Robinson 1992:238)

Instances of weorban + past participle might still be interesting data for our purposes if it could be demonstrated that such participial complements were uninflected with greater frequency than unambiguously adjectival complements, since this could presumably be taken as evidence of a relatively 'verbal' status indicative of a transformational passive. Such detailed analysis, while clearly worth performing, is to my knowledge not represented in the literature.

Despite the limited usefulness of weorban-passives for our purposes, however, it still remains true that wesan/beon examples not infrequently feature 'actional' aspect, and that they are by this criterion at least sometimes 'verbal.' By the diachronic scenario

The solution to the riddle is 'fire'.

Denison (1993:416) implies that no such study exists: 'It would be interesting if it could be shown that participles showed a lower frequency of agreement or an earlier incidence of loss of agreement than central adjectives occurring as predicatives'. A complicating factor in such a study, as he points out, is that phonologically longer constituents would independently be less likely to feature inflection, so presumably 'core adjectives' and participles of equivalent length would have to be used.
outlined above, it is in any case clear that non-stative (in addition to stative) semantics would have to be associable with *wesan/beon* by the time of the demise of *weorpan*, and it is neither intuitively plausible nor in accordance with the available facts that such a shift occurred suddenly or was limited to a later, ME, period. A final complicating factor, it is true, is that, given the general aspectual poverty of Old English (for example, the use of a single past-tense form neutral with respect to durativity) it would certainly not be surprising if *wesan/beon* should be aspectually promiscuous in this respect; a non-stative use of *wesan/beon*, then, would not necessarily point to the emergence of a 'verbal' or 'transformational' passive, any more than would such a use of *weorpan*. Again, detailed work is required comparing the frequency of non-stative uses of the auxiliary in collocation with 'core adjectives' and part participles, ideally from texts representing a diachronic range.

In sum, then, passive in Old English is, by simple tests of distribution and inflection, at least sometimes adjectival, just like its ModE reflex. Assuming an association of stativity with adjectival use, many examples with *wesan/beon* are 'semantically' adjectival as well. If we take absence of (potentially present, given the morphological possibilities offered by the language) inflection to be indicative of a 'verbal' use, then we have some verbal passives in OE, albeit significantly less frequently than adjectival uses. Again, though, detailed work remains to be done which would allow us clearly to differentiate loss of inflectional morphology on the participle from inflectional loss on adjectives in general. Assuming an association of an 'actional' reading with a verbal use of *wesan/beon* + past participle, we do find verbal uses of the OE
passive. It is often, however, difficult to view a particular use of wesan/beon as unambiguously stative or dynamic, and, as mentioned, it is not completely clear whether dynamic uses are necessarily to be attributed to a development of a 'verbal' use of the passive as opposed to independently-existing aspectual ambiguity in the auxiliary itself. Moreover, this semantic criterion fails to coincide consistently with the test of inflection, cf. the following, all cited by Mitchell (1985:330) as exceptions to the 'rule' of the association of wesan/beon with stativity:

(26) þær waeron gehælede þurh þa halgan femnan fela adlige menn
were saved-PL through the holy (?) many noble men
'Many noble men were saved there by the holy (?)' (ÆLS 20.113)

(27) Mid þam þe tobræc þa hlafas, þa waeron hi gemenigfylde
when he broke the loaves then were they multiplied-PL
'When he broke the loaves, they were made numerous' (ÆCHom i.186.30)

(28) þæt halien wearþ þa geopenod and þa lac waeron in gebrohte
the sanctuary was opened gifts were in brought-PL
'The sanctuary was opened and the gifts were brought in' (ApT 36.12)

These data, representing about as good a set of examples as we might find of intuitively non-stative (and therefore verbal) uses of beon/wesan, also feature inflected participles, which we would independently expect to signal an adjectival use. Finally, the simple overt test of appearance with an agentive by-phrase is, as illustrated above, by no means an unambiguous indication of a verbal use. Added to this is the complicating factor that the lack of formal unity of these by-phrases with respect to the preposition functioning in them could in fact be interpreted as an argument against any significant degree of grammaticalization of a productive, transformational/ syntactic, promotional-demotional
passive.

4 Lieber's (1979) analysis of the OE passive

Having reviewed the general facts, then, we may now turn to Lieber's (1979) arguments against the state of affairs suggested by Wasow, namely that Old English, unlike Modern English, had a lexical passive to the exclusion of a transformational passive. Lieber's overall argument is as follows. First, given the above-described criteria for differentiating lexical (adjectival) from transformational (verbal) passives, there is evidence that Old English did indeed possess the latter in addition to the former. While it is true, she argues, that certain changes have occurred with the English passive suggestive of a post-Old English acquisition of transformational status, these changes are in fact best, and most parsimoniously, viewed in terms of independent changes in English during the ME period, in particular the loss of case endings, rather than in terms of any change in the status of passive itself. We now turn to specific points.

Lieber's first argument for the existence of a transformational passive in Old English alongside the lexical passive is that there are OE wesan passives clearly suggestive of a dynamic reading, in particular ones which are 'most naturally interpreted as dynamic because of the locative or directional prepositional phrases' (675), of which she cites three, including the following (her (22)):

(29) þa þis gefeoht neah winwede streame wæs gefohten
    then this battle near W. river was fought
    (Alfred, Bede (Miller), 236, 16)
Two other cited examples are ones from Wæferth's translation of Pope Gregory's Dialogues, where wesan alternates with weorhan in two different manuscripts; the one more clearly suggestive of a dynamic reading is the following (her (26b)):

(30) He hæfde ænne wingeard & se þe sume dæge wæs forslagen
he had one vineyard it that one day was destroyed
& forhergod mid onhreosendum hægle
& devastated by attacking hail

Even though Lieber overstates her case by claiming that a total of five examples are sufficient to 'suggest that it is not true ... that the dynamic reading was more natural or frequent with weorhan passives than with wesan passives' (676), and that 'there is ample evidence that the distinction between wesan/beon and weorban was moribund, if not completely extinct, during most of the OE period' (675), her point is certainly valid: OE wesan/beon passives are by no means exclusively stative, and, 'if we associate the dynamic reading with the verbal passive in any strict way, we must conclude that OE had a verbal passive as well as an adjectival passive' (677).

Lieber's second argument for the existence of an OE transformational passive is, she considers, 'much stronger' since it doesn't rely on the necessity of the association between verbal/ transformational passives and dynamic readings and lexical/adjectival passives and stative readings. This second argument is distributional, and rests on examples such as the following (her (27), (28), and (30)):
Lieber claims that ‘these passives must be analyzed as verbal passives for the same reason that NE sentences like John was considered a fool are analyzed as verbal passives’ (677): the distribution of considered is manifestly not that of an adjective here, cf. *John is obvious a fool. If we recall that, under the usual assumptions of the model she works with, any lexical operations must precede insertion into a syntactic tree generated by the phrase structure rules, the problem here is that such a tree would not be provided, given that,

normally, nonparticipial adjectives cannot be followed directly by an NP ... thus, the extension of the PS rules to generate participial adjectives in this position would be just as much of an undesirable weakening of our theory for OE as for NE. No such weakening results if we derive both the OE and the NE sentences as verbal passives: our phrase structure rules will regularly generate base configurations in which a verb is immediately followed by an NP. (677-8)

This is, then, essentially an argument based on an association of lexical rules with structure-preservation, which reduces to a distributional argument to the extent that the claim is that the participle fails to adhere to the distribution of adjectives in independently-provided phrase structures.
We might, of course, expect that such constructions in Old English would eschew the inflection associated independently (albeit imperfectly) with adjectives, which turns out, however, not to be the case:

(34) On þære ilycan tide wurdon twegen æThelingas afliemde of at the same time were two noblemen fled from Sæþbian, Plenius & Scolopetius wæron hatene (Or. 44.24) S. P. S. were called-PL

'At that same time two noblemen fled from S., (who) were called P. & S.'

Lieber would claim the participle's status would necessarily be verbal here, making the inflection anomalous; she would presumably reconcile this with her analysis by discounting the inflection as a reliable indication of adjectival status anyway—despite the fact that, by all indications, it is absence of inflection which is better viewed as an unreliable indicator of verbal status rather than presence of inflection being an unreliable indication of adjectival status. The adjectival inflection here clearly coincides with a stative reading, independently (including by Lieber herself) associated with lexical passives; such a stative reading is also, as Lightfoot (1979: 100-1) points out, associated with some uses of the construction's ModE reflex (his (45)):

(35) The villain is considered Ratman.

    John is considered a genius.

In fact, all of the relevant OE examples Mitchell cites in his 'Naming Constructions'
section (616 ff.) are stative, e.g.:

(36) nu ic neom wyrpe þæt ic beo þin sunu nemned (Luke (WSCp) 15.19)

now I not-am worthy that I be your son named
'Now I am not worthy to be called your son.'

(37) is þes freolsdæg Godes swutelung gecweden (ÆCHom i.10.22)

is this feast-day God's testament called
'This feast-day is called God's testament'

(38) he wæs gehaten Leohtherend (ÆCHom i.10.22)

he was called Light-bearer
'He was called Light-bearer'

A second objection to Lieber is that, considering the crucial role the OE consider a fool construction plays in her argument for the existence of a transformational passive in Old English, it is clearly a problem that the internal constituent structure of this construction is notoriously poorly understood. In particular, it is not completely clear what constituent status to give the nonverbal-predicate-like NP selected by the verb or participle. Lightfoot (1979:99) points out that 'it may be necessary to permit deverbative adjectives to occur ... in a frame [NP be ___ P NP] ..., where the preposition may be deleted optionally'. The evidence cited by Lightfoot for the PP-analysis of the constituent at issue is the following ME and EModE data (his (40)):

(39) There weren they dubbed to knyhtes echone.

She shall be condemned for a heretic.

We are held as outlaws.

Lovelich, Merlin 25772

Dryden, Spanish Friar (Mermaid) I, ii

Shakespeare, Cymbeline IV, ii, 67

(Lightfoot 1979: 100)
The question then is whether any evidence exists in Old English for such an analysis, and
the answer is affirmative—cf. the following from Mitchell's 'Naming Constructions'
section (p. 619):

(40) in þære stowe þe is genemned æt Searobyrg
in the place that is called at S.

((Chron.A 16.23 (552))

'where æt was later erased', and

(41) Nu ealle pas þing sind mid anum naman genemnode
now all these things are with one name named

(ÆCHom i.276.13)

Such examples are to be found along with active verbal uses selecting a PP, e.g.

(42) to þæm porte þe mon hæt æt Hæþum (Or. 19.22)
to the port that one calls at H.

If the nonverbal-predicate-like uses at issue are indeed best viewed as (synchronically or
diachronically) truncated PPs, then the argument based on structure-preservation or
distribution disappears, since adjectives routinely select or are routinely modified by PPs,
e.g.:

(43) and swa se þe wæs neþor on endebyrdnesse, wearþ fyrmest
and he that was lower in order was first

on prowunge (ÆCHom 1.50.4)
in suffering

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Finally, the entire assumption of the distributionally-based argument valid for Modern English (that you can't get *He is obvious a fool so participles like considered can't be adjectives in such a context) being also valid for Old English is questionable. Old English routinely features NPs modifying adjectives, with hundreds of adjectives such as cub 'known', glæd 'happy', and nytt 'useful' (whose ModE counterparts may occur with prepositional modifiers); while the semantic profile and the inflection (dative or genitive) diverge from those of the complements of participles such as genemned 'called' and gecybb 'proclaimed', the structure-preservation-based argument simply rests on whether an appropriate phrase structure is available, and so by necessity would have to stipulate that independent nominally-modified adjectival structures could not provide the relevant syntactic tree for the nominally-modified participles at issue.

Note, by the way, that the supposed transformational source of the participial construction would feature semantics and morphology deviating from independently-existing (and, phrase-structure-wise, independently-provided) double-object constructions; these active variants would avail themselves of the same phrase structure representations despite the differences, or a special, construction-specific structural representation would be required. The same, then, would (under a non-transformational analysis) be required for the participial uses. If a construction-specific representation is required, other adjective-noun collocations would be prohibited from participating in the construction precisely because of a failure to meet the semantic specification of the construction--thus explaining the alleged independent proscription against adjectives matching the distribution of these participles in the relevant respects.
In sum, then, despite the crucial role of Lieber's analysis of the significance of examples (31-33) for her argument for a transformational passive in Old English, she fails to convince us that the construction at issue would not require a fairly idiosyncratic (i.e. construction-specific) account in any case. This last point is important considering the above-cited motivation behind arguments based on structure-preservation: 'Extending the phrase structure component ... to generate these forms as adjectives would represent an undesirable weakening of any linguistic theory'. Given the fact that it is an unresolved issue precisely what structural representation would most adequately handle the construction at issue, and given that the construction may well require a somewhat idiosyncratic structural representation anyway (along with its construction-specific semantics), her point has little force.

5 An alternative analysis of the OE passive

By way of introducing my own analysis of the passive in Old English, let us remain for a moment with the construction-type cited by Lieber as evidence for the transformational status of OE passive, and investigate what the OE version of this construction irrefutably is not. Up until now, we have joined Lieber in referring to the OE NP-complement-taking construction by way of an apparently similar ModE construction, exemplified by consider John a fool/John was considered a fool. However, beyond a few shared structural features, the predicate involved here and those involved in the OE

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construction ('name', 'call', 'proclaim', etc.) have little in common. Note that, alongside its valence featuring an NP complement with predicational status, i.e. alongside its 'small-clause'-complement valence, consider also has a valence with a more fully clausal complement, i.e. I consider him to be a fool. In this respect, consider is different from both the OE predicates under discussion and ModE predicates such as name and call. There is some evidence that, in fact, the valence featuring a more fully clausal complement involves a 'raising' as opposed to 'equi'-type structure, assuming the acceptability of such examples as the following:

(44) a. I would consider there to have been a host of reasons to analyze the construction along these lines.
   
   b. When the temperature drops below 10 degrees, I consider it to be unwise to go outdoors.
   
   c. I consider it to be irrefutably true that cats are better than dogs.

In each case, assuming that the overt direct object of the verb consider bears no theta-role, the theta-role assigned by that predicate is assigned either to the entire embedded clause or to an infinitival or that-complement within that clause. In this respect, too, consider differs from OE 'name', 'proclaim', etc., as well, as we shall see a bit later on, as all other OE predicates.

Mitchell (1985:351) calls a similar class of nonverbal predicates 'predicative adjuncts,' occurring with such predicates as halgian 'consecrate' and settan 'appoint', e.g. se halga wer Agustinus... waes gehalpod ercebiscop Ongolbeode (Bede 62.26) 'the holy man Augustine... was consecrated archbishop of the English people'. Perhaps a good name for the nonverbal predicates selected by verbs such as 'name' would be 'predicative arguments'.

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At the same time, unlike certain other similar predicates such as believe and find, consider when used in the relevant 'judgment' sense never accepts a that-complement, i.e. a full S':

(45) *I consider that he left. (in the sense of 'I judge it to be true that he left')

As Borkin (1973) has noted for predicates such as believe and find, there are problems with the traditional analysis of the transformational relatedness of the three different verbal complement-taking valences of these predicates, that with a full that-complement and finite embedded verb, that with a 'raised' embedded subject and non-finite embedded verb, and that with a 'raised' embedded subject and adjective or second NP with no verb:

(46) I found that the chair was comfortable.
    I found the chair to be comfortable.
    I found the chair comfortable.

Specifically, the small-clause version entails a personal judgment or subjective determination on the part of the matrix subject, while the S'-complement codes a fact or judgment which exists independently of the matrix subject, and the reduced-clause version falls somewhere in between, cf.:

(47) a. After researching his classmates' letters, I found that Lincoln was unpopular in grammar school.
    b. (?) After researching ..., I found Lincoln to be unpopular in grammar school.
    c. ?? After researching ..., I found Lincoln unpopular in grammar school.

(48) a. I found that the pie was mulberry.
b. *I found the pie mulberry.
c. I found the pie delicious.
d. I found the pie to be delicious.
e. I found that the pie was delicious.
f. I found that Milton was a Canadian.
g. ??I found Milton to be a Canadian.
h. *I found Milton a Canadian.
i. I found Milton a fool.

One interpretation of the inability of consider to occur with a that-complement is that consider, like deem, features subjective judgment as part of its semantics. If this is true, it is puzzling that examples such as (44) are acceptable, featuring as they do what would normally be analyzed as an expletive, semantically-empty direct object pronoun. What we apparently have here, then, is the expletive-object structure used when the 'logical' recipient of the theta-role of consider is an entire proposition and therefore a poor patient by virtue of its inherent abstract semantics, but also when the subcategorization for nothing but a that-complement (sans the dominating and preceding it to be ADJ) would be incompatible with the 'subjective' semantics of the relevant sense of consider.

The reason we would have to qualify a characterization of the structure at issue as having a 'raising' status is that there are still demonstrable semantic restrictions on what may function as the 'raised' NP. For example:

(49) a. I consider my father to have enjoyed life to the fullest.
   b. I consider life to have been enjoyed to the fullest by my father.

In a pair such as this, there is arguably not simply a difference in information structure (i.e. whether my father or life is secondary topic) but also in terms of whether the subject

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is passing judgment on 'my father' or 'life'. Given the almost invariable coincidence of topicality with locus of judgment, I admit, the two factors are hard to separate; assuming the intuition, however, that a comment such as (49b) would be somewhat strange given a context of a discussion about 'life', we may interpret this intuition to stem from the questionable status of (49b) as a subjective judgment about the nature of that topic. The cleft examples under (44), meanwhile, are analyzable as featuring pro-forms which refer to a dominated infinitival or that-complement, rather than being merely semantically empty.

While a careful analysis of the facts of ModE structures typically claimed to have a 'raising' status, then, may lead us to question the degree to which semantics and information structure are in fact dissociated as neatly as is often assumed, it is nevertheless irrefutable that Modern English has far stronger evidence for such a dissociation than Old English. In other words (adopting Hawkins' (1986) term for the relationship between Modern English and German with respect to such structures), the OE raising structures represent a 'proper subset' of their ModE counterparts.

It is important to realize that a rejection of the traditional simplistic binary view of raising is not inconsistent with an approach such as Hawkins' in which raising is one of the structural phenomena use in a typological comparison. In Langacker (1995), which proceeds from an assumption of the meaningfulness of all 'surface' linguistic elements, the traditional view of a neat dissociation of syntax and semantics is argued, I think convincingly, to be false. In particular, the position of the raised NP, traditionally argued to be semantically empty, is argued instead to be just as semantically contentful as in
supposedly more canonical valences, as long as the pervasive nature of active
zone/profile discrepancy is acknowledged. In raising examples such as the following,
involving the appearance as formal subject or object of only a part of the 'logical' subject
or object

(50) I believe John to be happy.
(51) John is likely to succeed.
(52) That baby would have been awful to leave behind.

the position into which the NP is raised is, by the perspective offered by Langacker, really
no less contentful than other non-raising examples involving an active zone/profile
discrepancy:

(53) I smashed him in the hand.
(54) I told him to get his ass out of here.

In (50-52), the profiled participant is 'logically' included in the active zone of the NP
associated with that position. In (53-4), the 'surface' NP includes ((53)), or is included in
((54)), the active zone associated with a position which is theta-role-bearing. The
phenomenon of raising, then, is just one more manifestation of a pervasive linguistic
propensity to deviate from 'logic' in innumerable such metonymic associations.

While I am in almost complete agreement with this perspective, the fact remains
that languages differ in significant and, arguably, typologically predictable ways in the
kind or degree of such active zone/profile discrepancy they will countenance. This applies
not just to structures standardly analyzed as involving raising, but to other 'illogical'

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metonymically-mediated subjects and objects as well, including those of the following sort used by Hawkins (1986:58-9) to illustrate the semantic liberality of the ModE subject relation relative to German:

(55) a. This hotel forbids dogs.
    b. *Dieses Hotel verbietet Hunde.

(56) a. Berkeley is sunny today.
    b. *Berkeley is sonnig heute.

One of the most intriguing things about such cross-linguistic discrepancies is that, even though the pragmatic relationship between, say, a hotel and its management is language-independent, and (55b) is therefore perfectly intelligible to a German speaker, it is nevertheless a decidedly non-native structure. As is the case with metaphorical relationships (Sweetser 1990:56-65), then, the existence of a fully productive or coherent metonymic relationship is not in itself sufficient to license such examples as (55) and (56), independently of other structural/typological facts.

While Langacker, then, successfully argues the continuity of raising phenomena and other expressions of universal metonymically-related conceptualization, we should

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My native-speaker consultant tells me that 'these are the sorts of things a foreigner might say.' The actual facts are, to be sure, somewhat more complex than is indicated here or in Hawkins. For example, it seems that there are differences in acceptability depending on whether a temporal- or locative-setting subject is used, e.g. *Gestern war sonnig in Berkeley vs. ?Berkeley ist sonnig heute (Eve Sweetser, p.c.). A confounding factor is that Berkeley ist sonnig would be acceptable as a predication of a characteristic or permanent state, which clashes with modification with heute. For present purposes, however, all that is important is that we recognize that language varieties, even closely related languages and varieties in a dialect relationship, differ in the particular metonymically-derived instantiations of subject and object they countenance.

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not lose sight of the language-specific nature of these phenomena. This applies as well to
Langacker's view of the universal conceptual underpinnings of 'subject' and 'object'
relations, a view which was discussed in Chapter 2. Recall that Langacker views the
subject and object relations in terms of the conceptualization of participants as clause-
level trajector, or primary figure, and landmark, or secondary figure, respectively,
corresponding closely to what others have called primary and secondary topic. These
relations are, he emphasizes, 'first and foremost matters of prominence, not of any
specific conceptual content (linguistic or otherwise)' (Langacker 1995:24); they are, then,
prototypically associated with primary and secondary topic respectively, but may deviate
from this to such an extent that any 'specific conceptual content' may appear severely
attenuated, even though the deviations may be cognitively mediated in non-arbitrary
ways. However, as we have seen, languages may differ substantially in the degree of
neutralization they countenance of 'specific conceptual content' under a uniform relation
of 'clause level trajector' or 'landmark'; for example, they may differ in the degree to
which semantically non-transitive situation-types are assimilated to a transitive schema or
in the degree to which a variety of conceptually distinct arguments of intransitive
predicates are neutralized under a single 'subject' category. We may understand this in
terms of the degree to which a language involves multiple mappings from conceptual
content to a uniformly-expressed 'most prominent' or 'second-most prominent' figure, or
the degree to which languages permit the association of trajector and landmark with those
participants perceived to be most directly involved, in addition to association with
clausally-coded states of affairs as instantiated in other valences. What is important from
the perspective taken in the present study is that we not confuse a reconciliation of
language-specific aspects of subjecthood or raising patterns and universal patterns of
conceptualization with a denial of cross-linguistic variation in the former.

The facts of present relevance, then, are that Old English, like Old High German
and Gothic (Gamon 1993), has a more restricted set of raising-to-subject predicates than
does ModE, with all available evidence pointing clearly to the incremental development
of these structures out of narrow-scope, non-raising structures; and OE (despite the
occasional claim to the contrary) displays no clear evidence at all for the existence of
raising-to-object structures. In both these respects, the facts of Old English are precisely
what Hawkins would predict given the fact of the richness of OE case morphology
relative to Modern English.

There is, however, a third 'raising' class which runs counter to expectations, and
this is the class involving object-to-subject raising, including so-called tough-movement
along with a variety of other subject-object coinstantiation constructions. For this third
class, the usual pattern is reversed in that the class of ModE structures is a proper subset
of the class of OE structures. As we shall see, this counterexample to Hawkins'
predictions is explainable by invoking a typological parameter omitted from Hawkins'
comparative typology of English and German, and this parameter not only fails to
contradict or complicate the explanation for the other raising patterns, but actually
reinforces it. This parameter is that of configurationality, or more precisely the degree of
instantiation of grammaticalized reference-oriented, role-independent relational
categories of 'subject' and 'object'.
The shrinkage in the class of subject-object coinstantiation constructions, then, is explainable with reference to the ascendance of 'subject' as a pivotal syntactic category, whereby control structures increasingly, and increasingly obligatorily, target that position. This in turn coheres with the increasing role of passivization in manipulating the relational status or structural position of arguments so as to promote them to a position from which they may be targeted, i.e. the increasing role of passivization in 'feeding' other syntactic processes. Given this new 'syntactic' role of passive (which stands in distinction to its relatively restricted 'semantic' role in Old English, and indeed in many languages), there are fewer restrictions on the semantic profile of the input, specifically on the degree of transitivity represented by the passivized clause, and the conformance of the promoted NP to a patient-like semantics; however, while the scope of passive is increased in this manner, passive never loses its core characteristic of instantiating clauses that correspond to a transitive active counterpart. As has been convincingly demonstrated in analyses such as Rice (1987) and Bolinger (1977), passive has never lost its transitive prototype. It is simply that ModE passive countenances a greater degree of deviation from this prototype than Old English.

The evidence for this evolution in the status of passive in the history of English is clear, not only in the wider range of argument-types which may be 'promoted', but also in the host of OE constructions involving deletion or coinstantiation of a non-subject which are only grammatical in Modern English under promotion of the controlled or coinstantiated argument to subject position. These constructions include ones in the subject-object control class as well as conjunction reduction, which involves reference-
related coinstantiation under identity rather than role-related control. All these changes, then, which cumulatively represent a major typological shift in the English language, are ignored or marginalized as epiphenomenal under Lieber's approach.

Recall that, at the beginning of the presentation of her account of passive in Old English, it was mentioned that Lieber views any changes in the domain of passive to result not so much from any change in the rule itself as from independent changes in the English language, in particular changes in the case system. As will be recalled from the discussion of Kemenade's historical analysis of the English case system, the most significant change may be understood in terms of the ascendancy of structural case marking over oblique, meaning that a variety of hitherto inaccessible argument-types become accessible to movement operations to A-positions, in particular to promotion under passivization. Lieber's argument for historical rule stability is that nothing at all has changed in the English passive itself beyond what was independently involved in the loss of lexically-governed oblique case, as a result of which the lexical passive rule came to refer to objective-cased-marked arguments as opposed to accusative-marked ones, and the transformational passive rule of 'move NP' came to result in a greater number of moved NPs receiving structural nominative or subject case in subject position, as explained by Kemenade.

In other words, the English transformational passive rule has always been formulable simply as 'move NP', with nothing more needing to be said beyond independently-required accounts of changes in the case system of English and something along the lines of Kemenade's ECP-related account of the greater accessibility of P-object.
traces to proper government. To this may be added the fact that, to the extent that a demonstration of the ascendancy of a reference-oriented (information-restructuring) passive, as opposed to role-oriented passive of the sort more readily associable with a lexical rule, depends on the independent availability in the language of other role-independent, information-restructuring processes such as raising to object, one could argue that the apparently limited degree to which OE passive was involved in such discourse- rather than semantically-related syntactic manipulation simply follows from the independent absence of other such 'opaque', role-neutralizing structures.

While the logic behind this view is clear enough, at least two objections may be raised to it. First, even if it is indeed possible to relate the changes in the domain of English passive to independent changes in abstract case and, ultimately, phonologically-driven changes in morphological case, the fact remains that the domain of passive does change. While it is impossible to counter Lieber's view of this change as epiphenomenal with respect to the sorts of changes in the domain of passive she (along with other analysts in formulations of what has become a fairly standard view) refers to, i.e. changes in the NP-types which become accessible to passive, quite a different story emerges if we look at the class of OE constructions which either fail to permit or at least fail to require 'feeding' by passivization, but whose ModE counterparts at least such feeding and in some cases require it. The second objection, then, is that her case-oriented perspective fails

The same applies to changes in 'raising' and other independent structures. Indeed, if it is really true that the change in other constructions with which passive interacts can't be viewed in terms of the passive in isolation, then this would support a view of the kinds of changes involved here as being part of an overall typological shift.
utterly to explain the increasing role of passivization in this body of constructions during the history of English.

In the following subsection, I review those facts of OE passivization which suggest a view of the process as semantically restricted relative to the ModE passive, in line with the overall transparency of the language and its comparative resistance to the reshuffling of semantically-significant case relations according to discourse needs. This is, as mentioned, one respect in which OE passive may be regarded as 'lexical' rather than 'syntactic.'

5.1 Historical changes in the domain of the passive

5.1.1 Changes in promotable argument-types

Changes in the argument-types accessible to 'promotion' under passivization are well discussed in the literature (cf. Mitchell 1985) and were reviewed in the section in Chapter 5 on the loss of oblique case marking in English; these changes are for the most part uncontroversial. The basic facts are these: in Old English, 'personal' passive, i.e. that involving the coding of the notional direct object as the nominative subject, occurs only with arguments which receive accusative case in the active verbal valence of the predicate, e.g.:

(57) a. Ic wylle mine æpelo eallum gecyban
    I will my-ACC lineage-ACC all-DAT declare
    'I will declare my lineage to all'
    (The Battle Of Maldon; Mitchell & Robinson 1992: 249 line 216)
These miracles were proclaimed and declared far and wide.'

(58) a. Ond hiera se æþeling gehwecum feoh ond feorh gebead...
    and of-them the nobleman each-DAT property-ACC and life-ACC offered
    'And to each of them the nobleman offered property and life...'  
    (Cynewulf and Cyneheard; Mitchell & Robinson 1992:209-10 lines 19-20)

b. Ond hie cuædon þæt tæt ilce hiera geferum
    and they said that that same-NOM of-them companions-DAT

    geboden waere
    offered be-SUBJ-3sg

    'And they said that the same thing was offered to their comrades' (ibid.; lines 33-4)

While objects other than accusatives (i.e. what have been referred to as obliques) may be topicalized or fronted, or the passive may be formed with verbs which fail to subcategorize for an accusative NP, this fails to entail or coincide with 'promotion' of any NP to nominative, e.g. (from Mitchell 1985:355):

(59) a. We ... magon helpan þam forþfarenum (ÆCHom ii.356.11)
    we may help the-DAT departed-DAT
    'We may help the departed'

b. ...and wæs þa geholpen þam unscyldigum huse
    and was then helped the-DAT innocent-DAT house-DAT
    'And the harmless house was then saved'
    (ÆCHom ii.510.7)

During the ME period, with the increasing weakening of case distinctions already somewhat weakened in Old English, and in particular the neutralization of dative and accusative in a single emerging 'objective' case marked, for the most part, positionally
rather than morphologically, erstwhile dative arguments inaccessible to promotion under passivization in Old English become promotable.

Given that OE accusative-marked objects correspond more faithfully than do their ModE objective counterparts to the 'patient' argument in a semantically transitive schema, in most cases it would be indeterminate whether a semantic characterization of the structural description of OE passive or a structural description simply in terms of the accusative case would be more adequate; certainly, the latter is simpler, less controversial, more faithful to overt facts, and virtually the only characterization ever encountered in the literature (apart from characterizations in terms of 'direct object', typically with the accusative-marked argument assumed to fill this role). There is, however, one class of examples where identically case-marked arguments might be shown to diverge in a manner allowing us to make a claim for the superior adequacy of a semantic characterization; these are instances involving verbs which subcategorize for two accusative-marked objects, differing in their thematic status but not case marking\textsuperscript{1213}. The class here is a small one comprising 'verbs of teaching and similar verbs' (Mitchell

\textsuperscript{*}

This class is reminiscent of the Kashaya double-Undergoer-taking predicates, the two identically-marked arguments of which were shown to have a different behavioral status.

\textsuperscript{*}

Lieber (1979:680) remarks that 'impersonal passives with accusative do exist', which would represent evidence for 'oblique' accusatives governed directly by the verb (assuming she doesn't mean impersonal passives of prepositional-phrase-taking verbs) and for a dissociation of surface case marking from some more covert status in this respect. However, she gives no examples and Mitchell (1985:349 fn.) does 'not remember encountering any of [this] type'. Allen (1995: 138 fn. 47) likewise concludes that 'Lieber's claim must be considered unfounded'.

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1985:349), such as læran 'teach', ascian 'ask', and biddan 'ask/request', plus those verbs featuring accusative-marked 'predicative adjuncts' or 'predicative arguments' (see fn. 9).

According to Mitchell, with the 'teach'-type verbs, 'the personal object of the active verb regularly becomes the subject of the passive verb' (349), e.g.

(60) and he scole gesette, in þære cneohtas & geonge menn tydde & lænde wæron (Bede 208.10) taught were

'lærde væron (Bede 208.10)

And he established a school, in which boys and young men were trained and taught'

In other words, despite the fact of their identical case-marking, only the human experiencer/patient, not the inanimate content/theme, may function as passive 'subject'.

It will be noted, however, that (60), while indeed featuring a promoted accusative recipient, also lacks the accusative content argument for which the active verb læran subcategorizes in one of its valences. Mitchell (1985:349) interprets examples such as (61) in terms of a promoted accusative recipient with the accusative content argument simply omitted—and attributes the absence of parallel examples with an accusative content argument in place to 'either chance or faulty observation'. However, Allen (1995:131), in her own thorough investigation based on a check of all the concordance entries for the relevant verbs, concludes that no such examples exist: 'I have found no recipient passives at all in which both arguments are expressed as NPs'. (60), in fact, fails to provide evidence that either accusative argument in the double-accusative valence
could be promoted under passivization, since we can only fairly interpret this example as featuring a promoted accusative in a monotransitive valence. The most straightforward interpretation of the evidence, then, is that these verbs were not passivizable in their double-accusative valence. Passive fails, in other words, to provide evidence for a difference between the recipient and the content accusative-marked arguments of double-accusative verbs. The apparent difference between these verbs' accusative-marked arguments and other verbs' accusative arguments in their interaction with passive does point to a difference between identically-marked arguments across verbal valences, but this difference is not semantic-role-related.

Mitchell does not mention what happens when the human experiencer/patient is expressed with the dative or a preposition with verbs of this semantic profile, as is optional with laeran and apparently obligatory with taecan 'teach' (i.e., where the necessarily human 'experiencer' is coded as a 'goal' or 'recipient'—the thematic roles are not to be viewed as held constant under these variations, as explained in the chapter on Role and Reference Grammar), but it turns out that under these circumstances only the coding of theme/content as nominative 'subject' is possible:

(61) & mid hwylcere fulfremednesse se dædbeta gebet hæbbe þæt him
     & with what perfection the-NOM penitent prayer have that him-DAT

Allen (1995:129 ff.) notes that speakers of Modern German, which also has a few double-accusative verbs (e.g. lehren 'teach', fragen 'ask'), respond to passivized versions as odd or unacceptable to varying degrees. The native speakers I have consulted concur in this assessment, although a native Swiss German speaker (Basel dialect) found Er wurde etwas gefragt 'He was asked something' acceptable—but not *Das wurde ihn (gestern) gefragt 'That was asked him (yesterday)'.
getæht wæs (Conf. 3.1 11.12)
taught was
'and with what perfection the penitent prayer have that was taught him'

With respect to predicative adjuncts or arguments, we have seen examples in which the object other than the second (predicative) accusative nominal becomes nominative subject, although this entails the marking of the second argument with the nominative as well (although this is frequently non-distinct from accusative marking), cf. Mitchell's example (350):

(62) se halga wer Agustinus... wæs gehalgod ercebishop Ongolpeode
holy man A. was consecrated archbishop English-GEN
'The holy man Augustine was consecrated archbishop of the English'
(Bede 62.26)

On the assumption that, in such examples, the case of the semantic patient is determining the case of the secondary object representing a predication of or characterization of the primary object, we do here have systematic differentiation between two morphologically identical, semantically distinct, NPs, indicating that a semantic characterization of the target of passive may be more adequate than a purely morphological one.

Perhaps the most succinct illustration of the typological change argued here to have occurred between Old English and Modern English is provided by the so-called impersonal passives, which so clearly exemplify the formal separation of two mechanisms no longer as rigidly distinguished in English: that of (reference-related) topicalization and that of (role-related) case marking. While the OE passive, as illustrated
in the preceding paragraphs, does feature the nominative coding of an argument corresponding to an active accusative, no such nominative coding appears on arguments corresponding to datives or genitives in the active; rather, they retain their oblique case marking even if fronted in a superficially passive-like structure, and default third-person singular inflection, rather than inflection agreeing with the number and person of the fronted argument, appears on the verb:

(63) þæm þeowæn is beboden... (CP 201.20) the-DAT servant is commanded

(64) ...þæt him were alyfed ut to farenne (GD(H)156.2) that him-DAT was allowed out to travel

(65) eac us is alefed (BLHom 137.14) also us-DAT is allowed

(66) Him waes gecyjed (Lk. Bos. 8,20) him-DAT was informed

One problem, of course, with defending (or, indeed, attacking) a claim for the exceptionlessness of the operation of the 'promotional' passive on accusatives is that so many oblique-taking OE verbs also have valences in which they may take an accusative direct object. A glance at Mitchell’s list of verbal rections (1985:455 ff.) yields dozens of such alternating verbs, including æþerstan ‘escape from s.o. or s.t. (acc, dat)’, andbidian, bidan ‘wait for s.t. (acc, gen)’, blissian ‘gladden s.o. (acc, dat)’, gebregdan ‘unsheath s.t. (acc, dat, instr)’, to mention just a random few. Much of Mitchell’s section on the impersonal passive is, then, devoted to refutations of supposed counterevidence to this claim, either by providing evidence of the ability of the relevant verb to take an
accusative in the active, or to a demonstration of the possibility of interpreting the passive clause in a sense required by the assumption of a 'base' accusative when the accusative/oblique alternation entails a clear distinction in meaning, or both. Thus, the following example quoted by van der Gaaf (1929)

(67) ...swa ic eom forgifen fram þam ælmihtigan gode... eow to geþingienne

(ÆLS 9.134)

prompts the following interpretation:

In the active form of this construction ic would be me accusative, not dative, and the sense 'God has given me', not 'God has allowed to me.' The comparison is with Matt (WSCp) 27.26 ba forgeaef he hym Barabban ['He then released B. to them'], not with Matt (WSCp) 19.8 Moyses for eower heortan heardnesse lyfde eow eower wif to forlætenne ['It was because your minds were closed that M. gave you permission to divorce your wives']. (Mitchell 1985:352)

In many cases, 'personal' passives of alternating verbs are used in the immediate context of active uses displaying selection of an oblique object, e.g.:

(68) ae hwæþere nan man ne cymþ to Godes rice, buton he sy but yet no man not comes to God's kingdom w/out he be afandod (ÆCHom i.268.8)
tested 'But nevertheless no man comes into God's kingdom without having been tested'

in the immediate context of:

(69) Deofol mot ælces mannes afandigan (line 11)

'devil may each-GEN man-GEN try
'The devil may test every man'
'We must conclude', states Mitchell, 'that [this passive expression is] based on the use of
afandian with the accusative' (p. 354). In fact, such a conclusion is defensible as long as
we have independent evidence that afandian may take the accusative, and indeed we do
find such evidence in the first clause in (68) and elsewhere, cf. the following from
Bosworth-Toller:

(70) þu hit hæfstan afandad be þe selfum (Bt. 31,1)
you it-ACC have tried by yourself
'You have tested/experienced it (acc.) by yourself'

The only exception to the rule Mitchell can find of the exclusive association of
passive nominative with active accusative is the verb (ge)fultumian 'to help s.o. or s.t.'.
Mitchell points out that, although 'no examples [of this verb] with an unambiguous
accusative are cited' in Bosworth-Toller or Grein and Kohler (1912-14), it appears with
some frequency in the personal passive, e.g.:

(71) æfre we wæron gefultumode on ælcum gefeohte
always we-NOM were helped in each battle
(ÆLS 11.84; Mitchell p. 356)

This, then, may be an exception—although given the unavailability of native speakers, it is
impossible to know for sure how to interpret the 'ambiguous' active forms with objects
such as me and us, e.g.:
(72) Hwæt, ic wat, gif ure godo ænige mihte hæfdon, þonne woldan
lo I know if our gods any power had then would

hie me ma fultumian
they me more help

'To, I know that if our gods had any power, then they would help me'
(Bede; Mitchell and Robinson p. 217 lines 19-20)

Mitchell mentions that 'there may well be more such verbs', and it seems to me that it is
not too difficult to unearth at least some evidence for additional candidates for such a
hypothetical list. One would be gecyban 'tell, proclaim, perform'; cf. the following
examples from Bosworth-Toller (383):

(73) Se þæt orleg-weorc þam ebriscan eorle gecyþde (Cd. 94)
he that fatal work the-DAT Hebrew leader announced
'He who announced that fatal work to the Hebrew leader'

(74) þa wearþ hit Constantine gecyd (H.R.3,11)
then was it C-DAT told
'Then it was told to C.'

(75) Him waes gecyþed (Lk. Bos.8,20)
him-DAT was told
'He was told'

(76) Swa hie gecyþde waren (Cd. 195)
so they told were-PL
'As they were informed'

Here, (73) shows the normal active valence whereby the human goal is coded with the
dative, and the inanimate theme in the accusative. (74), then, represents the expected
personal passive with the inanimate theme, not the human goal, in the nominative. (75)
shows the expected impersonal passive with the topicalized dative goal. (76), however, is
precisely what we would not expect: the human goal is 'promoted' to nominative and controls verbal agreement. A review of the scores of entries under the various declensions of this verb in the Toronto microfiche yields not a single active use with the human goal coded in the accusative—but, again, not a single passive use other than that cited in (77) with a promoted human goal. It is hard, then, to know what to make of this single apparently anomalous use.

A second possible candidate, strangely enough, is perhaps the most standard textbook example of the promotion-resistant OE oblique-taking verb, namely helpan. Consider the following examples from the Toronto microfiche:

(77) Ac þær mæg beon syne hraþe geholpen from his lareowe...
    but him-DAT may be very quickly helped by his teacher
    'But he may be very quickly helped by his teacher...'
    (CP 33.225.22)

(78) Leas hors to hæle on genihtsumnysse mægenes his ne byþ gesund
    devoid horse to health in abundance power-GEN his not is sound
    vel ne þip he na geholpen (PsGII (Lindelof) 32.17)¹⁵
    or not is he not helped/preserved

(79) ...efne swylce þær seo nunfæmne ware mid þy lichaman on fyre
    even also there the virgin was with the body in fire
    forbæmmed, of þære wisan mæg beon openlice ongyten, þæt þa ne
    burned of the manner may be openly seen that then not

The cited passage from Psalm 32 is a difficult one. The relevant passage appears in the New Oxford Annotated Bible as 'Be not like a horse or mule, without understanding, which must be curbed with bit and bridle, else it will not keep with you'. Since helpan is indicated in Bosworth-Toller to have a meaning of 'preserve' in some cases, this seems the appropriate translation here; ideally, it should still be confirmed beyond doubt that no active use of helpan ever subcategorizes for an accusative object when used in this sense.

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magon na beon gefultumode & geholpene æfter deape in Tham halgum
may not be helped & helped after death in the holy
stowum... (GDPref and 4(C) 53.340.22)
place
'And there the virgin was burned with her body in the fire, in that way may be
openly seen that (one) may not be helped or assisted after death in the holy
place...'

(77) displays the expected behavior under passivization, given that helpan in the active
selects a dative or genitive object: the 'subject' of the passive predicate retains its dative
marking, and the verb (maeg) bears default third-person singular inflection. (78), however,
shows a nominative passive subject (he). (79) is less straightforward, but is probably best
interpreted as having an unexpressed argument of the conjoined passive predicates (beon)
gefultumode and geholpene, rather than the clause-initial neuter bet being the promoted
subject argument. The requirements of the conjoined predicate (gefultumode) are, as
already discussed, ambiguous, so we are free to assume that the hypothetical unexpressed
argument is dative. We are thus, again, left with a single problematic example of a
'promoted' dative argument, versus six well-behaved impersonal passives of the predicate
in the Toronto microfiche concordance.

As mentioned in Chapter 5, OE prepositional objects, like obliques governed
directly by the verb, fail to promote under passivization. This is most unsurprising with
prepositional phrases which (as the dative case may do) code adjuncts to the verb, since
these also typically fail to passivize in Modern English; an OE example of such an
unpassivizable PP adjunct is as follows:
(80)  gyf hwa wyle nu swa lybban æfter cristes tocyme swa swa men
if who will now so live after Christ’s arrival as men
leofodon ær Moises æ oppè under Moises æ...
lived before Moses’s law or under Moses’s law

'If anyone now wishes to live after Christ’s arrival as men lived before Moses's
law or under Moses’s law...'
(Aelfric’s Preface to Genesis; Mitchell & Robinson 191 lines 21-3)

Prepositional phrases may also, however, code arguments of the verb in alternation with
obliques governed directly by the verb; ascian/acsian, e.g., may code the ‘askee’ with
accusative, dative, or the preposition get, and the content with accusative, genitive, or the
prepositions æfter or be, and biddan ‘ask, pray, beseech’ similarly may code the human
interlocutor with the accusative or with the prepositions get, fram, or of, cf. the following
from Bosworth-Toller:

(81)  Ic bidde þe min Drihten (Gen. 19/18)
I ask you-ACC my lord
(82)  Bide þu fram me (Ps 2,8)
ask you from me
(83)  Ic bad fram Drihtne (Ps 26,7)
I asked from God

In these instances, too, no passivized prepositional objects are attested, despite the
independent acceptability of stranded prepositions under topicalization of personal or ‘R’-
pronouns or under the relativization strategy lacking the relative pronoun; since these
facts were already discussed above, I provide just one more example as illustration:
It may come as a somewhat more surprising fact, however, that no impersonal passives are possible with pied piping\textsuperscript{16}; as Mitchell (1985:358) comments: 'On the analogy of verbs which take only the genitive and/or dative and therefore have the impersonal passive, we might expect to find with these prepositional verbs impersonal passives such as \textit{*ba wæs wib ænne biscope geflihten...}. But I have found no such examples'. Apparent examples of impersonally passivized prepositional verbs are easy to find, but it invariably turns out that the fronted PP is an adjunct and that subcategorized arguments (in the following case, an extraposed \textit{that}-clause and, in one of the conjuncts, the oblique goal \textit{us}) are present:

\begin{equation}
\text{(85) of the sacrament is said and given and made known to us that the haughty then behold the dishonor of death.}
\end{equation}

\text{Note, for what it's worth, that in this respect Old English and Modern German diverge. For example, \textit{Darüber/Darum/Dafür wurde gestritten}, lit. 'Over/about/for that was fought', is good German. With respects to the other facts discussed in connection with the passive, the two languages pattern alike.}
In such cases, the extraposed sentential subject may have a fronted PP (in this example, a wh-phrase with pied piping of the preposition), but that subject is not itself a PP:

(86) In þam wordum þæs halgan weres was gecyfged, in hwylcre
in the words the-GEN holy man-GEN was made.known, in what
heannesse þæs healican mægnes he sæt...
height the-GEN highest greatness-GEN he sat

'In the words of the holy man it was made known, in what height of the loftiest greatness he sat...' (GDPref and 4(C)20.291.5)

Neither kind of impersonal passive of prepositional verbs (i.e., with or without pied piping) would be ruled out by the theta criterion, case theory, or ECP (assuming cliticization of pronouns to their prepositional-governor head prior to movement). We might note that, despite the fact that wh-pronouns resist movement away from the governing P-head even more strongly than personal pronouns, they may nevertheless freely appear in fronted position as long as pied piping has occurred, as in the extraposed sentential subject in (86) and the following:

(87) bonne mon mæg ongietan of hwam hit æresþ com
then one may perceive of whom it first came
'Then one may perceive who it first came from'
(CP 241.16; Mitchell p. 486)

Also, personal pronoun prepositional objects freely appear as fronted relative pronouns in se-strategy relative clause structures as long as pied piping occurs:

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(88) Eode þa to sumum mæssepreostes, from þæm he gewende
went then to a masspriest from whom he thought

þæt him hælu weg ætæawed beon meahte.
that him salvation way shown be might

‘He went then to a masspriest, by whom he thought that the way to
salvation might be shown to him.’ (Bede IV.25 p.350.16; gloss and translation
from Allen 1980:269)

Finally, entire prepositional phrases may be freely fronted, either as scene-setting topical
adjuncts, as in (85), (86), and (89), or as fronted directional arguments, as in (90):

(89) æfter þisum gebede, he abad on þam legere an feawa dagas
after this prayer he waited in the bed a few days
‘After this prayer, he waited several days in bed’
(ÆCHom ii, 516.29)

(90) Him beforan fere fægere leoh
him before goes fair light
‘Fair light travels before him’ (Sat 387; Mitchell 489)

Prepositional objects, or prepositional phrases, only display this kind of recalcitrance,
then, in the passive construction, indicating that the proscription against the participation
of P-objects or PPs in the construction has more to do with specific requirements of the
passive itself than with independent syntactic requirements of the language. We may
reasonably analyze this construction-specific requirement in terms of a functional
characteristic demonstrably still present, albeit in somewhat attenuated form, in the ModE
passive: that of semantic transitivity. Under an analysis of OE oblique- and prepositional
object-taking verbs as deviating from the relatively high transitivity coded by accusative
object-taking verbs, and assuming the relevance of transitivity to the lexical rule relating

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active and passive forms, the OE passive provides evidence that P-objects and PPs are less integrated into a transitive conceptualization than directly-marked obliques, or at least those obliques which may occur fronted in impersonal passives. Of course, this presupposes that impersonal passives are to be viewed as passives (to some degree at least) as opposed to distinct structures resembling 'true' passives only superficially while lacking the criterial promotional component of passive sensu stricto.

One way or another, we have to differentiate the possibility of the appearance of the passive form of the predicate from the possibility of the appearance of a nominative with that form17, i.e. from the neutralization of semantically-significant case marking in what would be viewed as promotion under a transformational analysis18. If we restrict our view of OE passive to those forms which occur attributively, then impersonal passives would indeed not be considered passives. The reason for this is that past participles of

17 Strictly speaking, it is a little more complicated, since we want to differentiate past participial forms used in the periphrastic perfect, e.g. An bes cynges cnhta wes aer afaren to Hierusalem (ECHom ii, 472.18) 'One of the king's men had gone earlier [lit. 'was earlier gone'] to Jerusalem', where the nominative corresponds to an active nominative/subject rather than accusative/object.

18 Allen (1995) shows that fronted dative recipient arguments of passivized ditransitive verbs fail to behave like nominative subjects by the test of permitting the deletion of a coreferential nominative subject in a conjoined clause. However, fronted dative recipient arguments of passivized clausal ditransitives (i.e., where the theme is a clause) do potentially display such 'subject'-like behavior. Thus, the relational status of the fronted argument of an impersonal passive by at least this one behavioral test must be viewed in the context of other argument-types in the active valence of the verb. Since the 'promotion' of an object argument to 'subject' (or the equivalent in monostratal terms) may be considered a characteristic of what we might conceive of as a prototypical passive construction, this means that different impersonal passives may be 'passive' to varying degrees.
transitive verbs used attributively are apparently restricted to verbs that take accusative objects in their active form; that is, we find no such attributively-used passives as *se geholpene man 'the helped man.' The fact remains, however, that we must somehow account, in our lexical rule if that is how we choose to analyze the OE passive, for the lexical form geholpen in a predicational function. In this connection, it should be mentioned that there is good evidence that the attributively-used passive was more productive in Old English than it is in Modern English, at least given the numerous such OE forms which have no ModE equivalent, or which have been lexicalized such that any connection with an active verb is lost or at least extremely opaque, cf. the attributive use of gelæred 'taught' in the following:

(91)  uncup hu longe þær swæ gelærede biscepas sien
      unknown how long there so taught bishops be-SUBJ-3P
      '(It is) unknown how long similarly learned bishops have been there'

—where ModE has retained 'learned' in an attributive use, but in a clearly lexicalized sense divorced from the verb 'to learn' (*'The bishops were learned by their elders/The elders learned the bishops...'). Also, even though Modern English possesses an indisputably transitive use of the verb with a human patient-goal direct object (like OE læran but unlike OE tæcan 'teach'), a predicational passive is good but an attributive passive is not:

(92)  He was taught that...
      He was taught a lesson.
      *the taught man

      It is not true, in other words, that lexical rules are necessarily less productive than
syntactic rules: it may just depend on the diachronic stage at which the lexical rule is viewed. Thus, while there is good evidence in Modern English for the lack of productivity and the semantic idiosyncrasy of (lexical) adjectival passives relative to (verbal) transformational passives, this does not mean that the unambiguously adjectival, attributively-used OE passive is therefore unproductive. In this respect, the status of the attributive OE passive seems to be parallel to that of the adjectival un-prefixation rule, which yielded many more un-prefixixed forms than would be possible today, e.g. unfæger 'unfair, ugly', unriht 'unright, wrong', unfeor 'unfar, close', unmild 'unmild', unmænig 'unmany, few', unsær 'unsone, sound', etc. It would be plausible, then, to view the predicational OE passive as coextensive with the attributive passive where the lexically-related verb takes an accusative object. However, the existence of impersonal predicational passives indicates a somewhat broader semantic or structural description of the former. Indeed, it is surprising that this discrepancy is not noted by Lieber, as it seems to me to be perhaps the best evidence available for an incipient reanalysis of the OE 'adjectival' passive into a 'verbal' passive, at least assuming the independent absence of 'impersonal' adjectives.19

This assumption is, of course, crucial. Modern German has impersonal adjectives, e.g. Mir ist kalt lit. 'to-me is cold'. Most apparently impersonal adjectives I have found in OE turn out on closer inspection to be only apparently so. We have, e.g., Me is on gomum god (PPs 118.103) lit. 'to-me is in the gums good', but a fuller citation reveals a nominative subject: Me is on gomum god and swete bin agen word, ece drihten. 'Your own word is good to me in the gums and sweet, eternal lord'. Visser lists about a dozen OE examples of beon-adjective in his section on impersonal verbs, but most can be ruled out of consideration as truly impersonal adjectives, or are at least equivocal for one reason or another. For example, different forms of leof 'dear, desirable' are listed twice, e.g. þær him leofost was 'where (it) was most agreeable to him' (Battle of Maldon 23), but
At the same time, the evidence provided by prepositional passives—that is, the evidence represented by their absence and therefore apparent infelicity—indicates that the possibility of the passive form of the predicate can't be viewed completely independently of the argument of which it is, for want of a better term, predicated. In other words, note that it would be perfectly possible to derive a passive form of a verb which subcategorizes for a PP, as long as it also subcategorizes for a verbally-governed oblique or accusative object. And yet, even though the passive form of the predicate itself is possible, it must be accompanied by a nominative-coded argument corresponding to the active accusative, or an oblique-coded argument corresponding to an active verbally-governed oblique. In the latter case, to be sure, we would have no way aside from linear position (which, presumably, is a poor test) to know which argument the passive is being predicated of; but the apparent nonexistence of passives where a PP is the only argument could be

leof is often used with an extraposed sentential subject, e.g. Leofre me is bæt... 'it is preferable to me that...' (Gen. 29,19). The immediate context of the Battle of Maldon citation is, he lihte ba mid leodon bær him leofost was: 'he dismounted with (his) people where (it) was most agreeable to him', showing that a case could be made for bær being the subject. Wa 'woe' is also listed several times, e.g. wa bæp bærn be sceal burh slibne niæt saele bescufan 'woe is that (DAT) which shall through slippery deceit destroy souls', but wa seems independently to have the status of a noun, not an adjective, as in wæs gehwæberes wæs 'it was an affliction in both respects' (Mitchell & Robinson 229:25); given the lack of participation of wa in adjectival declension it would probably be best to categorize it as a noun in all cases. Various forms of god 'good' and yfele 'evil' seem to present themselves as better candidates for potentially impersonal adjectives, as in ne wæs hyra enigum by wyrs 'none (DAT) of them was any the (INST) worse' (Riddles 13,5), him wæs sona bet 'he (DAT) was soon better,' and sona him byp sel 'soon he (DAT) was good [i.e., felt better]' (Med. 1.1 (deVriend) 163). Also, note me vs frus tom 'on mode I (DAT) am angry/grieving in spirit', although, again, torn 'anger, grief' has the status of a noun, e.g. ne sceal næfre his torn to rycene beorn of his breostum acyban 'never shall man reveal his grief too quickly from his breast' (The Wanderer; Mitchell and Robinson 275:112-23).
argued to rule out the possibility of the possibility of the PP being the 'subject' in this sense.

The best solution, then, is to take the overt facts at face value: both the form of the predicate and the form of the argument are evidence of participation of those elements in the passive construction. The appearance of the passive form of the predicate together with a nominative argument is an indication of the greatest degree of integration into the construction, followed by the passive form of the predicate together with an oblique argument in the absence of any nominative argument, followed by the non-occurrence of the passive form of the predicate, as with verbs such as gierman 'yearn', which may occur in the active with nothing but a PP object.

6 Conclusion

In this chapter, I have reviewed the facts of the OE passive construction, and presented the argument that passivization is best viewed in Old English as a semantically restricted process representing a lexical alternative to the active verb valence. In contrast to Lieber's (1979) view that 'nothing has changed' in the passive construction between the OE and ModE periods, we have seen that OE passive differs in several ways from its ModE counterpart. The OE passive is more restricted than the ModE passive to the mapping of transitive Undergoer to the single core argument of the passive verb, and shows no evidence of promoting a host of argument types passivizable in Modern English, most notably obliques and prepositional objects. This restriction of OE passive to promotion of (accusative) objects corresponding to a subset of objects promotable in
Modern English coheres with the limited role of OE passive in manipulating argument status for the purpose of manipulation of information structure.

An additional respect in which passivization has changed is that it fails to interact with raising-to-object operations which alter relational status largely independently of role status; this requires a defense of the position that any apparent examples of such interaction in fact fail to involve 'raising' as opposed to 'equi' (alternatively, one could speak of ECM, coinstantiation, and control, but I will use the more traditional terms freely), and in the next chapter I show that no ModE subject-to-object raising predicates exhibit raising behavior in Old English, and in fact that no unequivocal evidence exists for the subject-to-object raising status of any OE predicates. This involves, among other things, a presentation of OE data representing alternatives to raising, or raising plus passive, strategies where Modern English must raise, or raise and passivize.

Next, I proceed to a presentation of a host of further OE constructions exemplifying coinstantiation of non-subject arguments whose ModE translation-equivalents would require those arguments to appear in subject position via passive promotion. These are the various conjunction-reduction and subject-object-coinstantiation constructions. This leads into a detailed analysis of diachronic changes in the predominance of non-subject- as opposed to subject-centric syntactic processes at different stages of the language, supporting a view of the diachronic development of a 'subject'-VP' structure as 'the grammaticalization of the ... topic-comment predicate focus construction' (Van Valin 1993:32).
Chapter 8: The status of 'raising' in Old English

1 Introduction

It was mentioned in Chapter 7 that, for Old English, there is no good evidence for 'raising' as opposed to 'equi' structures, which is precisely what we would expect on the assumption that greater transparency in one respect (say, the inventory of morphological cases available) implies the likelihood of greater transparency in others (say, resistance to participation in operations which manipulate or neutralize case distinctions independently of semantics). In other words, if (as Hawkins (1986) argues) it is indeed legitimate to characterize a language as a whole (rather than just specific constructions in a language) in terms of placement somewhere on a continuum of transparency/opacity, then we would expect that Old English (like Modern German) would if anything display less evidence of the type of opacity that 'raising' structures represent. There is, after all, an intuitive and, in some cases, theoretical understanding of 'raising' structures in terms of (morphological) case-role/semantic-role mismatches, in contrast to an understanding of 'equi' structures in terms of a more 'transparent' mapping between meaning and form. What I would like to do now is substantiate a claim for the transparency of Old English relative to Modern English in this respect. First of all, though, some methodological preliminaries are in order.

There is an approach to linguistic analysis by which languages, and specific structures in languages, are considered to be insightfully characterized in binary terms, as for example representing one or another structural type (V-O vs. O-V, configurational vs.
non-configurational, analytic vs. synthetic, etc.); in a model such as GB, each of these
dimensions may be viewed as admitting of either one of two mutually exclusive
'parameter settings', e.g. head-modifier vs. modifier-head. This sort of approach is at the
very least strongly implied by Lieber's analysis, where it is assumed that a given example
of a passive participle is meaningfully categorized as either lexical or transformational,
and, more significantly and controversially, it is assumed that even a single piece of
evidence for the transformational status of a given use of the passive in Old English is
evidence that, in her words, 'nothing has changed' between Old and Modern English. This
same sort of approach is taken by those who consider the the slightest bit of evidence of
the usual kind for the existence of a VP node or a subject-object asymmetry in a given
language to mean that these categories are fundamental and pervasive throughout all
clausal constructions in the language and, by implication, throughout all languages.

It is, I trust, amply evident that this is not the sort of approach taken in the present
study. This is not to say that the presuppositions of the categorial approach have no
validity—as always, there are valid intuitions there which should not be ignored. A valid
intuition of the categorization of languages according to structural 'types' is that certain
structural characteristics will imply (to varying degrees of strength) certain other
characteristics. Whatever the explanation for these interdependencies, they are
demonstrably real, and it does mean that it is often legitimate (with certain implicit
caveats) to categorize a language as 'head-marking' or 'dependent-marking', 'left-
branching' or 'right-branching', and so on. The most influential demonstration of the view
that, in this respect, not all combinations of construction-specific structural types within a
language are equally possible, is of course Greenberg (1966).

A legitimate intuition behind Lieber's (1979) approach to transformational passives, or for that matter Baker's (1987) approach to hierarchical structure, or Williams' (1984) approach to the category VP, is that, if there is indeed some evidence, no matter how slight, for the existence of a given structural phenomenon in all languages (even for languages which may seem at first glance to lack such evidence), then this may be taken to mean that there is something extremely natural about such a category or structure—even if this 'natural' character fails to result in extensive or dominant structural expressions in the language. While some may disagree with, say, Baker's interpretation of any evidence for subject-object asymmetries in terms of invariant universal hierarchical structures, or Perlmutter's (1984) representation of certain semantic effects in terms of some primitive structural-relational (i.e. syntactic) status—that is, we may take issue with the application of the insight—that doesn't invalidate the insight itself.1

With respect to the topic of current interest, that of 'raising', we may agree with Langacker (1995) that, given that languages display (in his terms) 'profile-active zone' discrepancies in so many ways, and given that this is by all plausibility a matter of human, rather than language-specific, conceptualization, and accepting an understanding of 'raising' structures in terms of such discrepancies, then it would be bizarre (non-human, we might say) for any language to be completely 'transparent' or 'logical' in all structures

The risk here, of course, is that covert categorial status comes to be equated with some notion of 'significance', an association which may rest on nothing more than some sort of ill-defined and indefensible metaphorical conceptualization.
of the relevant type. At the same time, languages do differ in the amount and type of evidence they display for such discrepancies, at the very least within given domains. While I do not wish to deny the validity or interest of an approach such as Langacker's (or, equally, similar approaches within a 'formalist' framework, e.g. that of Chomsky or those who share his assumptions and work with versions of a model associated with him), I do not simply wish to acknowledge the 'natural' status of 'raising' and leave it at that. I also do not wish to consider even the most limited evidence for a 'raising' analysis of a given use of a given OE predicate to mean that (again, adopting Lieber's words in connection with the passive) 'nothing has changed' since that stage of the language. My emphasis, then, will be on the differences between Old English and Modern English in connection with this structural pattern, rather than on whatever slight evidence we might find for similarities.

In the application of a Hawkins-like typological comparison to a historical dimension, then, my approach is most harmonic with—indeed, is influenced by—that of Kemmer (1988), who views given constructions as evolving on a diachronic axis by subsuming or applying to an increasing number of semantically-characterized sub-domains by the sort of progression traditionally called 'analogical'. This development is incremental—not wholesale, sudden, or 'catastrophic'—and, I would claim, cannot in any satisfying manner be characterized simply in terms of the 'presence' or 'absence' of the structural phenomenon, or form-meaning pairing, at issue. Showing that a language at stage A uses a middle-marking structure in, say, the nontranslational motion domain clearly does not amount to evidence that it has 'the same' construction as at a hypothetical
stage B where the same formal pattern has spread to all domains on her cognitive map.

2 'Raising' in Old English

Having clarified the quantitatively-oriented approach to syntactic change to be taken here, then, we may begin a discussion of the data by considering a representative sample of the sorts of examples that are relevant to an analysis of the status of 'raising' in Old English; the following is a collection of (to momentarily beg the question of the proper analysis of the examples) superficially 'accusativus cum infinitivo' constructions gleaned from the range of OE texts or text excerpts in Mitchell and Robinson's Guide to Old English (Mitchell and Robinson 1992):

(1) Abraham þa het Isaac beran þone wudu to þære stowe
A. then ordered I. to.carry the wood to the place
'Abraham then ordered Isaac to the carry wood to that place'
(Gen. 22:1-19; M&R 178:52-3)

(2) Hig fedatþ hig sylfe & me on wintra, & on lenctgen
They feed them selves & me in winter & in spring
ic læte hig ætwindan to wuda
I let them to.escape to wood

---

I use this term somewhat loosely, since accusative (as opposed to dative) marking on the possible 'raisee' has no bearing on the 'raising' status of the predicate, except in the subclass of potentially 'object-to-object raising' predicates such as hatan: see below for details.

Since Mitchell and Robinson use Sweet's rewriting of Ælfric's Colloquy, I take no examples from the collection's version of that work; instead, I cite examples from the original.

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'They feed themselves and me in winter, and in spring I let them escape into the woods'
(Ellfric's Colloquy 138-9)

(3) Eala, munuc, þe me tospycst, efne, ic hæbbe afandod
well monk who me address even I have discovered
þe habban gode geferan & þearle neodþearfe
you to have good companions & very necessary

'Well, you monk who address me, I have discovered you to have good and very
necessary companions'
(Ellfric's Colloquy 203-4)

(4) Nu hæt he þe dælan þine digelan goldhordas...wið hine
now ordered he you to share your secret hold-hoards with him
'Now he ordered you to share your secret gold-hoards with him'
(Ellfric's Colloquy 198:164-5)

(5) þa gesæoh Hingwar, se ærlæsa flotman, þæt se æþela
then saw H. the dishonorable Viking that the noble
cyning nolde Criste wiðsacan, ac mid anrædum geleafan hine
king not wanted Christ forsake but with resolute belief him
æfre cyplode: het hine þa beheafðian, and þa hæðenan
ever called: ordered him-ACC then to behead and the heathen
swa dydon
so did

'Then Hingwar, the dishonorable Viking, saw that the noble king refused to
forsake Christ, but ever called to him with resolute faith; (he) ordered him to be
beheaded, and the heathen did so'
(Ibid.; M&R 200:214-17)

(6) Hi wurdon þa gebrohte to þam bisceope ealle and he het
they were then brought to the bishop all and he ordered
hi hon on heagum gealgum ealle
them-ACC to hang on high gallows all

'They were then all brought to the bishop and he ordered them all to be hanged on
high gallows'
(Ibid.; M&R 202:284-5)

(7) þa het he hine gebringan on carcerne and þærinne belucan then ordered he him-ACC to.bring into prison and therein to.lock 'Then he ordered him to be brought to prison and to be locked inside'
(AElf. Boethius; M&R 228:24-5)

(8) Het Iohannes, godne papan, heafde beheawan ordered John good-ACC pope-ACC head to.cut.off '(He) ordered John, the good Pope, to be beheaded'
(Ibid.; M&R 229:42-3)

(9) Sende ærendgewrit ealdhlafordum degelice, and hi for Drihtne sent letter old.lord-DAT secretly and them-ACC for God bæd ealdum treowum, þæt hi æft to him comen on asked ancient-DAT beliefs-DAT that they back to him come in þa ceastre, lete Creca witan rædan Romwarum, ríhtes the town let Greek senators to-rule Romans-DAT justice-GEN wyrðe lete þone leodscipe let the-ACC nation-ACC

'(He) sent a letter secretly to the lord from ancient times and asked them for the sake of God and their ancient beliefs that they come back to him in the town, let Greek senators worthy of rule, let that nation have control over the Romans'.
[Mitchell & Robinson's translation]
(Ibid.; M&R 230:63-8)

(10) Leanad grimme þam þe hine wloncne weorþan læteð rewards grimly him that him-ACC proud-ACC to.become allows '[He] rewards grimly him who allows him to grow proud'
(Riddles; M&R 238:9-10)

(11) Het þa hyssa hwæne hors forlætan, feor ordered then warriors-GEN each-ACC horse abandon far afysan, and forþ gangan drive.away and forth go
'[He] then ordered each of the warriors to abandon (his) horse, to drive (it) far
away, and go forth'
(Maldon; M&R 243:2-3)

(12) he let him. þa of handon leofne fleogan hafoc
he let him-DAT then from hands beloved to.fly hawk

wīð þæs holtes
towards the forest

'He then allowed him, his beloved hawk, to fly from his hands towards the forest'
(Ibid.; M&R 243:7-8)

(13) he lihte þa mid leodon þær him leofost wæs,
he dismounted then among people where him most.agreeable was

þær he his heordwerod holdost wiste
where he his body.of.retainers most.loyal knew

'He then dismounted among his people, where it was most agreeable to him, and
where he knew his body of retainers (to be) most loyal'
(Ibid. 243-4:23-4)

(14) 'me sendon to þe sæmen snelle, heton ðe secgan þæt...'
me sent to you Vikings bold ordered you-ACC/DAT to.say that
'Bold Vikings sent me to you, ordered (me) to say to you that...
(Ibid. 244:29-30)

(15) Het þa hæleða hleo healdan þa brícge
ordered then warriors-GEN protector hold the bridge

wigan wigheardne
warriors-ACC war-hard-ACC

'The warriors' protector then ordered the battle-hardened warriors to hold the
bridge'
(Ibid. 245:74-5)

(16) he mid bordum het wyrca þone wihagan,
he with shields ordered to.make the wall.of.shields

and þæt werod healdan fæste wīð feondum
and the troop to.hold fast against enemies
He ordered (them) to form a shield-wall, and (ordered) the troop to hold fast against the enemy
(Ibid. 246:101-3)

(17) þuhte me þæt ic gesawe sylicre treow on lyft lædan
seemed me that I saw rarer tree in air to lift
leohte bewunden, beama beorhtost
light-DAT enveloped trees-GEN brightest

'(It) seemed to me that I saw a rarer tree lifted into the air enveloped with light, the brightest of trees'
(Dream of Rood; M&R 258:4-6)

(18) heton me heora wergas hebban
ordered me-ACC/DAT their-NOM/ACC criminals-NOM/ACC to lift
'(They) ordered their criminals to lift me'
(Ibid. 259:31)

(19) Geseah ic þæ Frean mancynnes efstan elne micle
saw I then Lord mankind-GEN to hasten zeal great-INS
'I then saw the Lord of mankind hasten with great zeal'
(Ibid. 259:33-4)

(20) Feala ic on þam beorge gebiden hæbbe wraðra wyrdæ:
many I on the mountain experienced have hostile events-GEN

geseah ic weruda God þearle þenian
saw I troops-GEN God violently to stretch out

'I experienced many hostile events on the mountain: I saw God be violently stretched out by troops'
(Ibid. 260:50-2)

(21) Heht mec mon wunian on wuda bearwe
ordered me-ACC one to live in woods-GEN grove
'One ordered me to live in a grove of woods'
(Wife's Lament; M&R 266:27)

(22) Ic þæt londbuend, leode mine, selerædende secgan heard that
I that inhabitants-ACC people mine hall-councillors to say hyrde, þæt...
'I heard inhabitants and hall-councillors say that, people of mine: that...'

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The matrix verbs here fall into what we may provisionally identify as three classes: first the physical perception verbs seon 'see' and hieran 'hear', second, the intellectual perception verbs witan 'know' and findan 'find', and third, the causative verbs letan 'let' and hatan 'order'. Of the first group (17, 19, 20, 22), all clearly involve the accusative object as the locus of perception, in other words that object is literally visible or audible as the case may be. The two intellectual perception exemplars (3, 13) seem to suggest a 'raising' as opposed to 'equi' analysis; these examples will be discussed below.

Of the causatives, given at least the intuitive semantics of this class, it is clear that such verbs could logically function as 'equi' predicates, with the object functioning as recipient/patient of the verbal causative ('order') or the direct causative ('let/allow'). However, it is also clear that a number of these examples, most obviously (5), (6), (7), (8), and (14), involve an accusative- or dative-marked object which is not logically the object of the matrix verb. To these examples, too, we shall return.

Before going further, it is worth mentioning that there are two main kinds of criterion for analyzing a given predicate, or (more accurately) a given use of a predicate in terms of 'raising' or 'equi'. One is 'semantic' or 'logical', and has to do with the intuitive relationship of the accusative/dative NP on the one hand and the embedded infinitive on the other with the matrix verb--in Bock's (1931:220) words:

So ergeben sich drei verschiedene Typen je nach der syntaktischen Geltung der Verbindung des Akkusativs zum Infinitiv und beider zum regierenden Verb: 1. die Verbindung des Infinitivs mit dem Verb ist loser als die des Akkusativs

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To the first two of these groups belong the verbs of causation and physical perception, while to the third belong verbs of intellectual perception; as mentioned, it is primarily with the third group that questions of 'raising' arise, given that the object NP fails clearly to contract an independent semantic relationship with the matrix verb, and yet seems to receive case marking from the latter. To this must be added a point of clarification: with a predicate which independently contracts an intuitive semantic relationship with the objectively-marked NP (Bock's types 1 and 2), it is always possible that a particular use of that predicate in an a.c.i. construction will feature an objectively-marked NP in the a.c.i. construction which is nevertheless intuitively not the 'logical' recipient of the causation or perception (not the causee or stimulus).

The other kind of consideration is formal, and has to do with independent evidence for the predicate's meaning based on other subcategorization-arrays (i.e., other empirically-verifiable valences). In fact, as is the case with analyses of the semantic/thematic roles instantiated in the valence of a given predicate (see chapter 2), it is impossible to arrive at a semantic characterization of a predicate without recourse to its overt formal/syntactic coding and behavior, so that apparently synonymous verbs may prove to be non-synonymous by evidence of subcategorization apart from potential 'raising' environments; also, OE verbs functioning as translation-equivalents of ModE
verbs may prove to have, by empirical criteria, different semantics.\textsuperscript{4}

One 'formal' test of valence adicity is whether the predicate may independently take an NP object plus a that-clause. Potential evidence for 'raising' status, then, may be taken to be that an a.c.i. predicate cannot independently be shown to take an accusative plus a that-clause, as with a ModE expect-type verb\textsuperscript{5}:

\begin{enumerate}
\item[(23)] I expect that he will leave.
\item[*I expect him that he will leave.
\end{enumerate}

However, there are obvious problems with an association of the independent unavailability of an NP+that-clause valence with 'raising' status in cases where the same predicate takes a direct object plus infinitive. Note that OE verbs of perception cannot take an NP+that-clause, any more than can their ModE counterparts:

\begin{enumerate}
\item[(24)] *I saw you that you left.
\end{enumerate}

While ample evidence, then, points to a conceptual and empirical two-place status of physical perception verbs in Old English and Modern English, this fails to entail a 'raising' analysis where those verbs take an object NP plus infinitive. The analysis rather

\begin{enumerate}
\item This is why a classification such as Visser's (1963-73:2250 ff.) is frequently confusing, based as it is on semantic criteria independently of syntactic behavior.
\item These must, of course, be distinguished from instances where the that-clause characterizes the direct object rather than functioning as an additional argument.
\end{enumerate}
hinges on whether the NP object is 'logically' the object of physical perception, that is, receives a stimulus-like theta-role from the matrix predicate. The question of the matrix verb's 'raising' status is, in this respect, quite separate from the issue of the two- or three-place status of that verb.

Before proceeding to a discussion of specific examples to which such considerations become crucially relevant, we may note that there are certain large classes of predicates for which, in general terms, an 'equi' as opposed to 'raising' status is most plausible. These are the classes for which, 'logically' and by language-internal evidence, an object NP in an a.c.i. construction is most straightforwardly interpreted as receiving a theta-role from the verb. Such predicates include those of physical perception and verbs of causation including both direct, manipulative causation and indirect or verbal causation. The broad class for which participation in the a.c.i. construction would suggest a 'raising' analysis, on the other hand, corresponds to Bock's third group, comprising those predicates in connection with which the accusative+infinitive form an 'einheitliche Gruppe' without (in contradistinction to the physical perception group) the NP-object representing on intuitive or distributional grounds an argument capable of receiving a theta-role from the matrix verb. This third group, then, comprising such predicates as 'think', 'say', 'like', 'consider', and 'expect'—sometimes referred to as verba declarandi et cogitandi—is the one for which the best evidence typically exists for a 'raising' analysis in Modern English and which would, on the face of it, represent the strongest challenge to a claim for the absence of 'raising' constructions in Old English.

Fischer (1989) points out that the majority view among traditional grammarians is
that 'after some verbal categories, the a.c.i. is an original Germanic construction (notably after verbs of perception and causation), but that the a.c.i. construction in a narrower sense—what is sometime called the 'genuine' a.c.i. construction—is a borrowing from Latin' (156). The 'genuine' a.c.i. referred to here is essentially that involving 'raising', with verbs such as 'expect', 'wish', and so on (Bock's group three). If this received opinion is correct, then the 'original Germanic construction' involves the sort of relatively transparent coding still displayed in Modern German (to a greater extent, in any case, than in Modern English), and the development of 'genuine' a.c.i. is consistent with the overall typological shift towards opacity displayed by Modern English in so much of its morphology and syntax.

The fact of Latin influence having been just as strong on the literary works of other Germanic languages, e.g. all recorded stages of Dutch and German, is one reason Fischer dismisses the theory of the 'Latin borrowing' origin of the construction. To this we might add that the fact that increasing opacity in the morphological coding of the class of infinitive-complement-taking verbs coheres with so many other parallel developments in the language makes it obviously unacceptable to divorce the acquisition of 'genuine' a.c.i. from language-internal developments by attributing it simply to outside influence. Our task, then (assuming for a moment the validity of the received view of a.c.i. in a broad sense being an original Germanic construction only with the physical perception and causation verbs), is to identify the period of the development of 'genuine' a.c.i., or (more to the immediate point) to determine the quantity and quality of evidence for the existence of 'genuine' a.c.i. patterns in Old English.
The clearest immediate challenge to an assertion that Old English preserves an
isomorphism between 'syntax' and 'logic' in the respects under discussion here is provided
by examples such as the one cited above from Ælfric's Colloquy, re-cited here:

(3) Eala, munuc, þe me tospycst, efne, ic hæbbe afandod
    well monk who me address even I have discovered

    þe habban gode geferan & bearle neodpearfe
    you to have good companions & very necessary

    'Well, you monk who address me, I have discovered you to have good and very
    necessary companions'.
    (Ælfric's Colloquy 203-4)

By Fischer's review of the data, however, 'the a.c.i. occurs after [afandian 'prove/discover',
findan 'find', and other verbs of the 'expect' class] almost exclusively in glosses and literal
translations from Latin'; the just-quoted example translates Latin probavi te habere bonos
socios, literally 'I have proved/determined you (ACC) to have good companions'. Since
the argument for the limited status of OE 'exceptional case marking' crucially involves a
judgment of such examples as highly marked relative to superficially equivalent ModE
examples, a few words need to be said about this.

The fact that such 'raising' examples occur at all in OE glosses and translations
presumably indicates that they would not be judged as fundamentally bizarre or
unintelligible to a native speaker.

The fact remains, however, that the manuscriptal distribution of such data must be
accounted for. Although conjectures such as the one I am about to make are of dubious
value, I would like to suggest that an example such as (3) would probably have had roughly the same status to a native speaker of Old English as examples such as the following would have to a native speaker of Modern English:

(25) ??I questioned him to have done it.

??I categorically deny him to be guilty.

With recourse to native speaker judgments, it is easy to categorize such (unattested) examples as marginal or marked at best, despite their intelligibility. In terms of the conception of syntactic change assumed here, these uses of the predicates represent extensions not yet instantiated in the language, but, for what it is worth, plausibly instantiable at some future time. The distinction, however, between already instantiated and plausibly instantiable is important.

In the case of 'raising' uses of verbs like findan in Latin-influenced manuscripts, the distinction might be imagined to match one between internally-motivated abductive inferences (Andersen 1973) and externally-influenced, sociologically restricted adaptations under influence of a foreign prestige model, which may likely have a more tenuous status in the language than developments of the internally-motivated type. A handy parallel is provided by the following ModG development mentioned by Demske-Neumann (1994:22) in her study of 'tough movement' in German: 'Ein nhd. Beispiel für solchen Wandel ist etwa die Übernahme des Terminus X macht Sinn in unsere Sprache. Der Anglizismus hat als Prestigevariante zu X hat Sinn, ist sinnvoll Eingang in unseren
Such cases, which Demske-Neumann considers to represent 'einen Randtyp des Wandels', are plausibly parallel to the manuscriptally-restricted a.c.i. uses of Bock's third group of OE infinitive-taking predicates, with Latin playing the obvious role of the prestige variant relative to Old English. Lest Fischer's claim here be misconstrued, it is important to understand that her approach by no means entails a rejection of all data drawn from Latin translations or glosses. My endorsement of her view here does not represent any inconsistency with my citation of data from potentially Latin-influenced texts in, for example, the discussion of OE conjunction reduction in Chapter 9. Rather, the only such data to be treated with caution are those represented by Latin-parallel structures otherwise unattested, or virtually unattested, in Old English.

In examples from other manuscripts in which findan selects an accusative plus infinitive, there is no dispute that the predicate assigns a theta-role to the accusative-marked NP, as in the following typical examples from Beowulf:

(26) Fand þa þær inne æapelinge gedriht swefan æfter symble found then there in princes-GEN leader to.sleep after feast '(He) found then in there the princes' leader sleeping after a feast' (Beo. 118)

(27) wæs þæra Grendel sum, heorowearh hetelic, se æt Heorote was the-GEN G. one sword-monster hateful who at Heorot

fand wæccendne wer wiges bidan (Beo. 1267) found waking-ACC man battle to.abide

'There was a certain Grendel, hateful battle-monster, who found a wakeful man waiting for battle at Heorot'
Here, *findan* is used in a 'literal' sense, such that the predication without the infinitive is entailed by the predication with the infinitive; there is, in other words, no question of a 'raising' analysis here at all. While *findan* is also used in the 'mental perception' sense correlating with frequent 'raising' status in Modern English, Old English typically represents such semantic structures with a *that*-clause and no 'raised' NP, e.g. Fischer's example:

(28) *þæh þe he uneaþe mihte on his mode findan þæt he though he uneasy might in his mind find that he
    swa leofne freond from him lætan sceolde
    such dear friend from him let should
    'Although he found (it) difficult in his mind to let such a dear friend (go) away from him' (ÆLS (Maur) 224)

Fischer interprets this pattern in terms of whether 'the infinitive... conveys observable, physical action' (193), such that the following would represent a possible challenge to the claim that Old English lacks evidence for 'raising' with this verb:

(29) *þær ic hine finde ferþ staþelian*
    there I him-ACC find mind to.make.stable
    'Where I find him making up his mind' (Jul. 364; Fischer 1989:193)

However, the point is not properly whether the infinitive refers to physical activity, but whether the act of 'finding' is physical/literal, or (given the absence of accusative+*that*-clauses with this meaning) one of subjective mental judgment. Given the nature of the
embedded infinitive, the example at hand in fact requires nothing other than the former reading, in which case the question of 'raising' does not even arise—bær ðæ hē hlē ding hine, in other words, is once again entailed by the entire a.c.i. construction.

Another apparent counterexample to the generalization that OE verbs of mental perception fail to function as 'raising' verbs is provided by gefrignan/gefrīnæn/gefrægnan, variously glossed as 'to ask', 'to inquire', 'to find out', 'to hear of', and the like (Bosworth-Toller). Fischer deals with this verb at some length, and reconciles its behavior with her overall analysis by arguing that, first, it is best regarded as a verb of physical rather than intellectual perception, and, second, that the examples which appear to counterexemplify this are special metaphorical cases restricted to the first person in works of poetry, where the locus of mental perception is presented by the poet as a locus of physical perception in order to make 'what he says he has heard more vivid because it is presented as if directly [i.e. physically] perceived' (194).

In order to address the status of this verb and assess Fischer's treatment of it, we begin by reviewing examples representing its semantic and syntactic range. One common meaning is 'to ask' or 'to question', frequently in translation of Latin interrogare:

(30) stod þa þe hælend heht hine læde to him & mīþy
stood then the savior ordered him led to him & thereupon

genealocade gefrēgn hine...
approached(?) asked him

'The savior then stood and ordered him led to him and thereupon approached and asked him...'

(LkGl(Ru) 18.40)
Therefore (he) asked from them the time in which (he) became better and (they) said to him that...

The savior stood wisely before the governor and the governor asked him, saying "You are king of the Jews"; the savior said to him, "So you say" (MtGl(Li)27.13)

In addition, we have uses in which the predicate subcategorizes for a hæt-clause or an NP plus infinitive with a typical gloss of 'hear', 'find', or 'learn of'. Of these uses, the one of most immediate concern to us is that with an embedded infinitive; I cite several examples here, all from Callaway (1913:115):

(33) ða ic neðan gefrægn under nihtscuwan hælep to hilde
when I venture g. under night-shadows warrior-NOM/ACC to battle
'When I heard venture under night-shadows a warrior to battle'
(Gen 2060)

(34) Ne me soplece swylnce gefrugnan in ærdagum æfre gelimpan
not me truly such-ACC g. in former.days ever happen
'I never heard of such a thing ever happening to me in former days'
(Chr. 79)

(35) ða ic gongan gefrægn gingran ætsomne ealle to Galileam
then I go g. disciples-NOM/ACC together all to G.
'Then I heard (of) the disciples going all together to Gallilee'
(Har. 161)

With most such examples, there is no unambiguous evidence for the notional embedded
subject having been 'raised', i.e. there is no morphological marking which would force us
to interpret that argument as anything but the embedded subject; cf., e.g., (11) and (13).
Unambiguous cases occur in the masculine singular, e.g. (12) and the following from
Beowulf:

(36) Hi sit> dragon, elne geeoden, to þæs þe corla hleo,
they journey made boldly went until men-GEN protector
bonan Ongenþeowes burgum in innan, geongne guþcyning
slayer O.-GEN forts in within young-ACC war-king-ACC
godne gefrunon hringas dælan
good-ACC heard . rings to.divide
'They made their journey, and went boldly until they heard that the protector of
men, Ongenþeow's slayer, the good young warrior-king was within his forts
dividing up rings' (Beo 1966)

(37) þa ic on morgne gefrægn mæg operne billes ecgum
then I on morning heard man other-ACC sword's edges-DAT
on bonan staelan
on slayer to.steal
'Then the next morning I heard that the other man with his sword's edges stole
upon the slayer' (Beo 2484)

Next, we have examples in which gefrægnen selects only a þæt-clause or only an

As usual, the translation should be ignored for the purpose of analyzing the actual
structure of the original.
NP, e.g.:

(38) þæs we gefrægen habbaþ þurh modgemynd  
this-GEN we g. have through spiritual.contemplation  
'Ve have learned (of) this through spiritual contemplation'  
(And 686)

(39) þæt fram ham gefrægn Higelaces þegn, god mid Geatum,  
that-ACC from home g. H.-GEN thane good among Geats  
Grendles dæda  
G.-GEN deeds-GEN  
'The home Higelace’s thane, a good man among the Geats, heard that, of  
Grendel’s deeds'7  (Beo 194)

(40) Ic geleornode & gefrægn æt gesægene swipe arwyrthra  
I studied & g. at recital very honor.worthy-GEN  
witena þæt þæt ic nu secge  
sages-GEN that that I now say  
'I studied and learned at the recital of very honorable sages that which I now relate'  
(GDPref 1(C) 9.19)

Fischer (1989:198) cites the following example with a þæt-clause, to which I add a second:

(41) ac hie hæfdon gefrunen þæt hie ær to fela micles in þæm  
but they had heard that they earlier too many in the  
winsele wældeah fornám, Denigea leode  
hall death took Danish people  
'But they had heard that death had taken too many of them before in the hall, the

There is manuscriptal variation between þa ‘then’ and þæt ‘that’ for the word at the beginning of the first line; given the latter, we have what is most plausibly an accusative object followed by a genitive afterthought topic elaborating the accusative object, and given the former, we just have a genitive object.
Danish people' (Beo 691)

(42) þa gefraegn here, þæt of eallum þam þingum, þe he then g. þe that of all those things þat he

ælce dæge begeat, swa hwæt swa him mihte to lafe beon ofer each day obtained whatever him might to leave be above

his mete & hraegl, symble he gewunode, þæt he eaall þæt his food and clothing always he was accustomed that he all that

brotthe Sæternedagum to sancte Petres cyrican & þæt þær brought Saturdays.DAT to saint Peter’s church and that there

daælde þearfendum mannum divided needy-DAT men-DAT

'Then he learned that of all those things which he obtained each day, whatever was left over beyond his (needs for) food and clothing, he was always accustomed to bring to Saint Peter’s church and divide among the needy’

(GDPref and 4(C) 38.322.5)

The problem, then, is that we are dealing with a verb of apparently intellectual perception, subcategorizing in many examples for a þæt-clause or a pro-form representing an abstract state of affairs (featuring, for want of a better word, a 'content' theta-role), and never subcategorizing for an NPþþæt-clause, but which nevertheless in some cases features an accusative- or genitive-marked object in addition to an infinitive of which that 'object' is the notional subject. We have, then, in examples such as (33)-(37), apparent candidates for 'raising' structures.

Fischer’s approach, as mentioned, is to present an argument that the extensive formal and distributional parallels between gefraegnan and verbs of physical perception such as gehyran 'hear' point to a proper inclusion of the former in the latter group. A
possible counterargument against this analysis, which she herself anticipates, is that 'the verb gefrigian is...also found with infinitival activities that cannot be perceived by the senses' (1989:196); she cites the following as an example:

(43) Gebrægn ic Hebreos eadge lifgean in Hierusalem, goldhord
heard I Hebrews prosperously live in H. gold-hoard
dælan, cyningdom habban...
divide kingdom have

'I heard that Hebrews live prosperously in Jerusalem, share treasure, have a kingdom...' (Dan 1)

To this, her response is that, first, gebyræn too can be used in an 'indirect perception' ('hear of') sense, in which case, in prose, 'a hæt-clause must be used' (1989:197); second, 'surprisingly enough in poetry, gebyræn, when followed by an infinitival complement, does not necessarily convey direct perception, as can be seen from [44]:

[44] Ne hyrde ic guman a fyrn ænigne ær æfre bringan ofer
not heard I man in past any before ever bring over

sealtne mere selran lare...
salt see rarer lore

'T never before in the past heard any man bring rarer lore over the salt sea..." (Men 101...)' (1989:197)

In general, Fischer points out, the distribution of gebrægian seems parallel to a straightforward predication of physical perception—in particular, neither takes an audible activity.

This may not be the best example to prove the point, since the embedded infinitive codes
NP+het-clause. Second, Fischer draws attention to Riggert's (1909:63) observation that, in poetry, 'gefrígnan + a.c.i. in all except three cases occurs in the first person singular, and that ic always refers to the poet himself (Fischer 1989:198). Her conclusion about both gefrágnan and gehyran, then, is as follows: 'In my opinion, the use of the infinitive (or the simple accusative NP) strengthens the direct appeal of the poet, makes what he says he has heard more vivid because it is presented as if directly perceived' (198).

To my mind, this points to an incipient development of 'raising' with certain OE verbs of perception, with first person singular being on the vanguard of this development, rather than eliminating gefrágnan (and, for that matter, gehyran) as problematic--albeit highly limited--counterexamples to Fischer's (and my own) claim. However, there is one simple fact which renders Fischer's entire argument moot. Recall that gefrágnan, like verbs of physical perception, may be used with an (accusative-or genitive-marked) NP-object alone, cf.:

(45) Hwæþre me þær dryhnes þegnas, freondas gefrunon, ond but me there god's thanes friends g. and gyredon me golde ond seolfre prepared me gold and silver

'But God's thanes, friends, discovered me, and brought me gold and silver' (Dream 75)

(46) Me þæt þuhte wræticu wyrd, þa ic þæt wundor me that seemed wonderful fate that I that wonder-ACC gefrágn, þæt se wyrm forswealg wera gied sumes, g. that the worm swallows men-GEN word one-GEN þeof in þystro (Rid 47 1)
thief in darkness

'It seemed to me a wonderful fate, when I discovered that miracle, that the worm swallows the speech of some one of men, thief in the darkness'

(47) Him on mod be-arn þæt heal-reced hatan wolde, medo-ærn him in mind occurred that hall-house command would mead-house

micel men gewyrcean, þone yldo bearn æfre gefrunon

great men to.make which-ACC men-GEN sons ever g.

'It came to his mind that (he) would command men to make a hall, a great meadhouse, which the sons of men would always hear about'

(Beo 67)

Additional examples cited by Fischer (1989:197) are the following:

(48) ...mærost beama þara gefrugnen foldbuende on eorþwege

best trees-GEN which-GEN that g. inhabitants on earth

'...the best of the trees of which the earth's inhabitants have heard' (El. 1006)

(49) Hwæt, We gefrunan on fyrndagum twelfe under tunglum

lo we g. .in former.days twelve under stars


tireadige hæleþ þeodnes þegnas...

glorious heroes lord's servants-ACC

'Listen, we have heard in former days of twelve glorious heroes under the stars, servants of the lord...' (And 1)

(50) Hwæt, We Gardena in geardagum þeoþ cyninga, Thrym

lo we spear-Danes-GEN in former.days people kings-GEN glory

gefrunon, hu

heard that

'Lo! We have heard of the glory of the kings of the spear-Danes in days past, how...'

(Beo 1)

Note that these examples, unlike (38)-(40), feature relatively highly referential NP-objects, including the animate first-person object of (45), as opposed to pro-forms
standing for entire propositions (which we would independently associate with verbs of intellectual rather than physical perception). In connection with the sort of case alternation shown here, Fischer makes the claim that, while the verb 'as a rule takes [the object] NP in the genitive', it may also be 'followed by an accusative NP as if to emphasize a direct transitive relation between the verb and its object' (197). While I cannot corroborate (and Fischer does not attempt to substantiate) the claim for the genitive-taking valence of the predicate having the status of a rule (i.e. in the sense of the default case), the association of the accusative case with some sort of 'direct transitive relation' is, I think, correct. The precise nature of this relation is, however, a bit different from what she claims.

Recall that Fischer's argument is that gefrägnan is essentially a verb of physical (specifically, aural) perception which has been (tentatively) extended metaphorically into a domain of intellectual perception, as witnessed by the fact that the object needn't be a physical (aural) stimulus, cf. (43). If, on the other hand, we more straightforwardly analyze gefrägnan as basically a verb of intellectual perception, then the genitive-accusative alternation Fischer points out could still be associated with a transitive alternation. This would, however, more reasonably be interpreted in terms of a direct discovery (frequently coinciding with a physical finding, as in the Dream example) as opposed to a discovery mediated by the oral accounts of others, corresponding to a 'discover' or 'find' as opposed to a 'learn of' gloss. In this case, the 'poetic' use Fischer discusses would involve the depiction as 'directly' discovered of something or someone learned of via hearsay. This analysis (which, it is worth pointing out, is in line with the
majority view of gefrægnan as a verb of intellectual perception) by no means requires that the object in an a.c.i. construction be aurally perceived in order for an analysis to be preserved by which gefrægnan is a non-raising predicate.9

Note that, in all relevant respects, gefrægnan is completely parallel with geascian/geacsian, typically glossed as 'learn by asking'. First, we have participation in an a.c.i. construction:10

(51) manig yfel we geaxiaþ her on life gelomlician & wæstmian
many evil we g. here in life become frequent & multiply
'We discovered many evils here in life to become frequent and multiply'
(Bl. Horn. 109.2(a,b))

(52) we þa geacsodon be þam heofonlican eþle, and we
we then g. by the heavenly prince and we
geacsodon his geceasterwaran beon godes englas, and we geacsodon g. his citizens to be God's angels and we g.
þæra engla geferan beon þa gastas soþfæstra ... manna
the-GEN angels-GEN companions to be the spirits just-GEN men-GEN

'We then inquired of the heavenly prince, and we learned his citizens to be God's angels, and we learned the angels' companions to be the spirits of just men'.
(Wulf. 2.2,5)

We also have a transitive use parallel to the transitive use of gefrægnan; crucially, not just

In other words, even if we posit a basic meaning to which an aural medium is central, this doesn't mean that the predicate is basically one of physical perception.

These examples are from Callaway (1913:115).

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with a 'content' direct object, but with an animate direct object as well:

(53) Geascode he þone cyning on Meran tune (ASChr. 755)
    g. he the-ACC king at Merton
    'He learnt [that] the king [was] at Merton' (Bosworth-Toller translation)

(54) Gif hine mon geacsige (L.In.39)
    if him-ACC one g.
    'If he be discovered' (Bosworth-Toller translation)

If we insisted on a basic 'aural perception' interpretation of geacsian (which would be more or less equally supported by the distribution and behavior of this verb as for gefrægnan) then we would be forced to view the basic transitive use of geacsian as deviating from this basic meaning in proportion to the extent that the direct object is not an aural stimulus but rather an object of intellectual discovery, at most arrived at by way of an aural/oral medium. Clearly, such an analysis would be misguided for either predicate.

In connection with either Fischer's analysis or mine, in any case, the basic transitive use of gefrægnan is of crucial significance. Given that, independently of the a.c.i. construction, gefrægnan may take an object NP representing a concrete referent which is not literally 'heard', but rather learned of at most by way of an aural medium, we have available to us an analysis of the predicate which allows us to avoid altogether a 'raising' reading for examples such as (33)-(37) involving an objectively-marked argument plus infinitive.

These examples are from Bosworth-Toller.
The last problematic predicate considered by Fischer is *witan* 'to know, understand, be aware (of)', a predicate which she analyzes as displaying parallel distribution (and which she therefore deals with in a parallel manner) to *gefægnan*. The most salient distributional facts are that, while *witan* never occurs with an NP+*stef*-clause\(^1\), it nevertheless does occur in an a.c.i. construction, e.g.:

\[(55) \quad \text{we witan } \text{be } \text{bilewitne } \text{wesan} \]
\[
\text{we know you-ACC innocent-ACC to.be} \\
\text{We know you to be innocent} \\
(Ælf. Coll. 9)
\]

In such cases, in other words, we find discrepancy between a 'logical' propositional/clausal object and a 'formal' object represented by one participant in the situation represented by that proposition—in short, 'raising'. As with *findan*, however, the following facts of manuscriptal distribution permit a qualified dismissal of most of the evidence for a 'raising' status of *witan*: first, 'the a.c.i. construction after *witan* ... occurs mainly in poetry', and second, 'when it does occur in prose the examples are invariably from glosses or works known to be slavish imitations from Latin' (1989:200).\(^1\) (Fischer cites Ælfric's *Colloquy* and *Bede*, both of which by all accounts clearly do have the heavily Latin-influenced character to which she refers.) Based on an etymological account:

\[^n\] More precisely, the only such uses are ones Fischer argues to involve a *het*-clause 'of result and not an object clause' (181).

\[^n\] We may, admittedly, have the feeling that Fischer is trying here to have her cake and eat it too: the evidence of poetic works is dismissed due to 'vividness', while that of glosses is dismissed due to 'slavishness'.
analysis of *witan* as basically sensory (cf. Latin *videre* 'to see', in connection with which the preterite-present form suggests a 'basic' meaning of 'I have seen'; Fischer points out that *gewitan* in Old English 'can still mean "to see, to behold"'), Fischer once again categorizes this predicate with those of physical, as opposed to intellectual, perception. Supporting this interpretation is the fact that 'the infinitival complements in poetry...all refer to a physical state that can be observed and located' (1989:201), e.g.:

(56) þær ic seomian wat þinne sigebroþor mid ðam burgwarum bendum fæstne
where I to.lie know your victorious.brother amid the citizens bonds-DAT fastened

'Where I know your victorious brother lies amid the citizens fastened in bonds'
(And 183)

While it would be going too far to say that the morphological NP-object in such cases is always visually perceivable, an argument may be made parallel to that made for *gefærgnan*, whereby *witan* is used with an NP-object as if that object were visually perceived, in order to convey a more vivid effect.

An intriguing aspect of this analysis is that it points to a different path towards 'raising' structures, and thus too to a different synchronic analysis of such structures, from that which is typically assumed. While the normal understanding of the development of the 'raising' behavior of a predicate such as *understand* is that it simply develops from a stage of formally as well as 'logically' selecting a clausal complement coding an abstract 'content' to a stage where the notional 'subject' of the propositional complement may be
'illogically' coded as the matrix object, Fischer's analysis suggests that this latter stage may instead proceed from one in which the NP-object in an a.c.i. construction is (relatively) literally physically perceived in line with the matrix predicate's diachronically prior semantics of physical perception. More fully-fledged 'raising' status, then, would be represented by uses where the physical perception semantics of the predicate has been vitiated to such a degree that a far broader array of NP-objects may function as formal ('raised') object than the more conservative semantics would permit.

With Fischer's analysis of this class of predicates in mind, we may note that the one example of witan represented in our original sampling of OE texts ((1)-(22)) is from the Battle of Maldon, a poetic work uninfluenced by a Latin model; I re-cite it here:

(13) he lihte $\text{pa mid leodon } $ $\bar{p}r$ $\text{ him leofost wæs, he dismounted then among people where him most.agreeable was}$

$\bar{p}r$ $\text{ he his heor} \text{erod holdost wiste}$

$\text{where he his body.of.retainers most.loyal knew}$

'He then dismounted among his people, where it was most agreeable to him, and where he knew his body of retainers (to be) most loyal'

The interpretation of the example cited as representing an a.c.i. construction would actually be controversial to say the least, since, overtly, there is no infinitive; we would have to view the adjectival complement as derived from a verbal complement via deletion of to be. While such an analysis might be plausible for Modern English, however, it cannot reasonably be posited for Old English, given, as Allen (1984:464) has pointed out, 'that historically, raising with adjectival complements preceded the infinitival
construction.... This presents a problem for any attempt to derive the adjectival construction from the infinitival one, since we would have to say that the rule of to be deletion was obligatory in Old English, and later became optional'.

Allen's claim, that nonverbal predicate constructions were more liberal in admitting of the accusative marking of the embedded 'subject' than were infinitival constructions in Old English, has been made by many students of Old English. For example, Zeitlin (1908), noting that while the a.c.i. construction is attested 'from the very earliest times in English' with verbs of causation and general perception (108), and seems attested to a somewhat more qualified extent with verbs of 'mental perception' (78), 'the accusative with infinitive after verbs of declaration is found in Old English only in translated documents in imitation of the Latin original' (Zeitlin 1908:99). In the predicative adjunct construction, on the other hand, 'after verbs of declaration the early language, in its original literature, shows ... the faintest beginnings of the construction in the form of an accusative followed by a predicate noun, adjective, or participle', and the nonverbal predicative forms 'occur [with some frequency] in Old English after verbs of mental perception' (Zeitlin 1908:110). This prompts the following theory of the origin of a.c.i. in English:

The frequency with which these [noun, adjective, or participle] predicate forms

In more current versions of GB, a 'to be-deletion' analysis would not be posited. Rather, the nonverbal construction would be treated as a 'small clause', a predicative constituent lacking a verb at any stage of the derivation. (Stowell 1981, 1983, Chomsky 1981, Demske-Neumann 1994.) We will return to the subject of 'small clauses' in the chapter on tough movement and other subject-object-coinstantiation constructions.
occur in Old English after verbs of mental perception, and their employment after verbs of declaration previous to any similar use of the infinitive, may be treated as a confirmation of the view that they preceded the accusative with infinitive in time and, in fact, afforded the model by analogy to which the latter construction is more fully developed. The relation between the accusative and the predicate, whatever form that predicate may take,—whether infinitive, substantive, adjective, or participle,—is the same. The practical identity of the two locutions is illustrated by the fact that it is possible to convert every non-infinitive predicate into an infinitive by the introduction of the copula to be.15

Callaway (1913) disputes this theory, partly because (as he substantiates on pp. 225 ff.) he considers the predicative accusative of the present participle to itself be a Latin-influenced structure rather than a native one, and also because, 'as to the predicative accusative of nouns, of adjectives, and of past participles after verbs of perception and of declaring', he 'do[es] not know of any extensive collection of data as to these uses' (Callaway 1913:212). (A footnote points to Grimm (1897-8) IV pp. 732 ff. as 'the fullest [collection] known to [Callaway]', with the caveat that 'in this collection very few examples are given from Anglo-Saxon' as opposed to Gothic and various stages of German (Callaway 1913:212).)

Rather than (as Zeitlin does and others have done since) emphasizing the similarities between these predicative adjunct constructions and a.c.i., Callaway emphasizes the following difference between the nonverbal predicate construction with adjective, noun, and past participle and that with the present participle, and (by implication) between the former and a.c.i.:

This last claim is, of course, not true; verbs of 'naming', among others, have always resisted embedded infinitives.

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It is in no small degree the fact that the present participle is more verbal and less adjectival in nature than a past participle (and, of course, than a predicate adjective or noun in the accusative) that in Anglo-Saxon and in High German precluded the use of the present participle in the predicative accusative except in translation of Latin participles with full verbal power, precisely as the more verbal present participle could not be used appositively except in imitation of the same idiom in Latin. (Callaway 1913:212)¹⁶

Callaway's own view, then, is that the spread of the a.c.i. construction (or the development of what Fischer calls 'true' a.c.i.) is to be attributed to Latin influence rather than to intra-language influence of the nonverbal predicate construction.

Clearly, in any case, what we are dealing with here is a special construction with properties diverging from those of superficially similar constructions with embedded infinitives, and which must therefore be handled independently. Note that we have already encountered this nonverbal predicative adjunct construction in the context of Lieber's argument for the 'transformational' status of OE passive. There is no question that the predicative adjunct construction is a well-attested one in Old English, and in fact displays a wider range in Old English than in Modern English in the sense that it occurs with many predicates whose ModE reflexes or translation-equivalents would require verbal predication (typically with to be), e.g. the following from Visser (1963-73:554 ff.):

* Of course, as we have seen in our discussion of the passive, it would not be anomalous for an adjectival construction to serve as the diachronic source of a verbal one, which may reduce our reluctance to view an adjectival or nominal construction as an analogical model for a verbal one. This is not to imply, of course, that the distinction Callaway points to is irrelevant.
(57) þæt he hine scyldigne ongete
that he him-ACC guilty-ACC perceive/understand
'that he perceived him to be guilty' (Ælfred Bede (Smith) 496,33)

(58) þæt he...hine sylfne gecnawe swa forworhtne
that he him-ACC self-ACC know so condemned
'that he knows himself to be condemned'
(Wulfstan Hom (Bethurum) XV,49)

(59) buton heh in elad ian  d u ire ... (net he hine flyman nyste
without he him exculpate dare that he him-ACC runaway not.knew
'without daring to exculpate him ... that he did not know him to be a runaway'

(60) Syppan he aldorpégan unlyfigendne, pone deorestan deadne
when he elder-thane lifeless-ACC the-ACC dearest-ACC dead-ACC
wisse
knew

'When he knew his elder-thane, the dearest, to be lifeless, dead'
(Beo 1309)

This construction displays the same range of narrow- to wide-scope semantics
(corresponding to a range from 'equi' to 'raising') displayed by embedded verbal-
predication structures, although, if Allen and others are right, the OE nonverbal predicate
construction occupies more of the 'raising' range than does the OE a.c.i. construction.
Like a.c.i., at the 'equi' end, the OE nonverbal predicative adjunct construction frequently
involves, by the usual criteria, the assignment not simply of morphological accusative
case but also of a matrix-verb-determined theta-role to the 'subject' of the embedded
adjectival or nominal predication:
(61) Hire lichama wæs gefunden eal gehal
her corpse was found all whole
Her corpse was found completely intact\(^{17}\)
(ASChr. an. 798)

(62) Gode þancodon þeonnes gefegon, þæs þe hi hyne
God-DAT thanked prince's joining that-GEN that they him-ACC
gesundne geseon moston
sound-ACC see were.able
'thanked God for their prince's return, that they were able to see him safe and sound'

(63) Her mon hadode Byrnstan bisceop to Wintanceastre
here one ordained B. bishop of W.
Here Byrnstan was ordained bishop of Winchester\(^{18}\)
(ASChr. an. 931)

(64) þa freollic wif ... bæd hine bliðne æt þære beorþege
the good woman bade him-ACC happy-ACC at the beer-taking
'The good woman...bade him be happy at the beer-fest'
(Beo 617)

(65) Se ealdormonn sceal laetan hine selfhe gelicne his hieremonnum
the nobleman shall let him-ACC self-ACC similar his underlings-DAT
'The nobleman shall let himself be like his underlings'
(Ælfréd, C.P. (Sweet) 107,8)

This group, then, includes matrix predicates of physical perception and causation, which
we have argued in the context of the a.c.i. construction to fail in general to prompt any
question of the sort of form-function disparity associated with 'raising'.

\(^{17}\) The context indicates that the corpse is literally 'found'.

\(^{18}\) Note that hadian is independently used without a predicative adjunct: bisceopas hadian 'to
consecrate bishops' (Bede 2,8) (Bosworth).
We also, however, find the predicative adjunct construction used in cases where, logically, the entire embedded predicate must be viewed as receiving a theta-role from the matrix verb to the exclusion of the embedded subject. As discussed above, such uses would be clearest with matrix predicates of intellectual perception; I cite representative examples from Visser:

(66) Ic þe godne wat, fæsthyðigne
    I know you to be good and steadfast in mind
    (Genesis (Junius MS; Krapp) 1346)

(67) heo afunde þone hringe gehalne
    'She found the ring to be whole'
    (Ælf. Horn II,28)

(68) þa þing þe ge ... betstan gelyfæþ
    the thing that you best believe
    (Ælfred, Bede (Miller) I,25)

(69) Ælc þara þe sie under þæm gioke hlafordscipes, he sceal
    each of them that be under the yoke of lordship he shall

    his hlaforð ægðhweorc are ... wirþne onmunan
    his lord every one worthy-ACC think

    'Each of them who is under the yoke of lordship, he shall think his lord worthy of every honor'
    (Ælfred, C.P. (Sweet) 201,23)

(70) Buton ic openlice gecype þæt ic God sylfa ðæs, ne onmun þu
    without I openly say that I God himself be not think you

The context indicates there is no literal 'finding' here, since the 'she' referred to was in possession of the ring before this point in the narrative.
me nanre are wyr\-ne
me no honor worthy-ACC

If I do not openly say that I am God himself, then you do not think me worthy of any honor' (Blick Horn 181, 36)

(71) Hie ... sægdon hine sundorwisne
they said him-ACC singularly.wise-ACC
'They said him to be singularly wise'
(Elene 588)

(72) ic secge hine maran & selran þorne æmigne witgan
I say him-ACC greater-ACC & better-ACC than any-ACC man-ACC
'I say him to be greater and better than any man'
(Blick Horn 165,3)

(73) Hie hine scyldigne sægdon
they him-ACC guilty-ACC said
'They said him to be guilty'
(Ibid. 173,33)

In addition, there is some evidence for the apparent 'raising' status of healdan 'have'/\'hold'
in a derived sense of 'consider', which for Old English we see to be only apparent given
Visser's (1963-73:562) comment: 'In Old English this have seems to occur only in the
passive construction ("he is gehæfd"), presumably as a translation of Latin habebatur. In
the non-passive construction the predicative adjunct is usually preceded by for:"Hig
hæfdon hyne for ænne witega"'.

We do, then, find some evidence for the possibility of 'raising' out of predicate
adjuncts in Old English, although if we adopted Fischer's strategy of excluding from
consideration those works (such as Ælfred's and Ælfric's translations) generally
considered to exhibit Latin influence then even this limited evidence would be reduced to
a number of examples which we would probably consider insignificant when compared to

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the number of 'equi' examples attested in Old English (the vast majority cited by Visser) and the number of 'raising' examples from later periods (again, the vast majority in Visser's sample; note, e.g., the large number of 'raising' examples under the find heading from Middle English on).

A more satisfying response to these data, however, would probably be to view them as representing early evidence of a principled polysemy of a class of verbs centering on ones of intellectual perception. All the 'raising' examples cited here are suggestive of a reading of personal judgment, that is, of a reading in which the Actor of the metrix verb imposes a personal evaluation on the 'raised' embedded argument in terms of an attribute represented by an embedded nonverbal predication. The association of 'raising' in this class of OE verbs with this sort of reading of personal judgment is essentially the same as that identified for at least some ModE examples by Borkin (1973), and represents a challenge to the view of 'raising' as a pattern coding a deviation between 'form' and 'meaning'—in Hawkins' terms, a poor 'correspondence between surface clause structure and semantic clause structure' (Hawkins 1986:122). In other words, the examples in which a matrix Actor imposes a judgment on an embedded argument receiving its case marking from that matrix Actor's predicate conform in both form and meaning to transitivity.

The evidence of these examples should, however, be interpreted as providing insight into the genesis of 'raising' patterns rather than as undermining the validity of the notion of 'raising' altogether. What examples (66-73) and Fischer's 'poetic' examples show, I think, is that discrepancies between (in Hawkins' terms) 'surface' and 'semantic'
clause structure don't arise by the sort of reanalysis endorsed by Lightfoot (1979), but rather arise incrementally and by a gradual loosening of semantic restrictions on the use of a given form. As Borkin has demonstrated, the form-function association manifested in the OE nonverbal predicate construction continues to influence the interpretation of ModE examples. The polysemy represented by 'raising' and 'nonraising' uses of a predicate, however, becomes more commonplace as we progress diachronically towards Present-Day English—as demonstrated by the very difficulty we have of finding evidence of 'raising' patterns at all in Old English.

The final, and by far the largest, sub-class of possible 'raising' candidates in our initial sample ((1)-(22)) features the matrix predicate hatan 'command'; I re-cite a representative example:

(5) þa geseoh Hingwar, se arleasa flotman, þæt se æþela then saw H. the dishonorable Viking that the noble cyning nolde Criste wiþsacan, ac mid anræðum geleafan hine king not.wanted Christ forsake but with resolute belief him æfre clypode: het hine þa beheafðian, and þa hæþenan ever called: ordered him-ACC then to.behead and the heathen swa dydon so did

Then Hingwar, the dishonorable Viking, saw that the noble king refused to forsake Christ, but ever called to him with resolute faith; (he) ordered him to be beheaded, and the heathen did so'

(Ælf. St. Edmund; M&R 200:214-17)

The problem here, recall, is that the accusative-marked NP (hine=the king) is not the
recipient of the matrix verb’s theta-role, i.e. is not the ‘commandee’. What we have here, then, is a construction which appears similar to the ModE ‘raising’ use of command such as in ‘I commanded the chair to be removed from the room’, and which in translations from Latin often corresponds to a passive infinitive in the original. Examples cited by Mitchell (1985:886) with the verb (be)beodan ‘order’ include the following:

(74) þæ bebead se biscoþ þeosne to him lædan (Bede 388.20)
then ordered the bishop this-ACC to him to.lead
=Hunc ergo adduci praecipit episcopus

(75) þæ wærp se gerefa swiþe eorre ... and bæd þære færne
then became the governor very angry and bade the-GEN woman-GEN

feþ and handan tosomne gebindon and inne þone weallende ceteł
to.bind and in the boiling kettle

gesetton (LS 14.286)
to.set

=Tunc iubet praefectus ... ligari manus et pedes beatae Margaretae et ibi eam
mortificari

What I will now argue, however, is that there is in actuality never any evidence that the argument in question (i.e., the suggested ‘raisee’) is formally the object of the matrix verb, and that once some simple differences between Old English and Modern English are acknowledged—in particular, differences in the role of passive in promoting an embedded argument to matrix object position in response to discourse considerations—any analysis of the structure at issue as involving ‘raising’ is quite unmotivated.

Of the 12 examples with hatan in our original sample, only five ((5), (6), (7), (8), and (14)) are at all suggestive of ‘raising’. Of the remaining seven ((1), (4), (11), (15),
(16), (18), and (21)), most feature an accusative-marked object which is obviously the recipient of the order (and hence clearly exemplify 'equi' rather than 'raising'). In the single example (16), we find a matrix predicate which is superficially suggestive of a null-instantiated object (and thus, in an overt sense, intransitive) reading, rather than a matrix predicate which contracts a formal relationship with the notional embedded object, given the position of that object following (rather than preceding) the embedded verb.

This lone example of the last type also features an example of the 'equi' type in a following clause, so I re-cite it here to illustrate both:

(16) he mid bordum het wyrcan þone wihagan,
he with shields ordered to make the wall of shields

and þæt werod healdan fæste wip feondum
and the troop to hold fast against enemies

'He ordered (them) to form a shield-wall, and (ordered) the troop to hold fast against the enemy'
(Battle of Maldon; Mitchell and Robinson 246:101-3)

This is not, it should be noted, an unusual example. Consider the following parallel examples cited by Visser (1963-73:1352):

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I do not wish to imply the position of the 'accusative subject' is really a reliable indicator of the predicate with which the argument contracts a formal relationship (cf. Mitchell 1985:891 fn. 202). Independently of the construction at issue here, Callaway (1913:126 fn. 8) refers to the following Beowulf passage involving an 'equi' clauses with the accusative argument following rather than preceding the embedded predicate:

[pa men] gehyrdon...sar wanigean helle hæftan (Beo 785-8)
the men heard painfully to wail hell's captive-ACC
'[the men] heard hell's captive wail painfully'
What I would like to argue for the controversial subgroup—that for which a 'raising' and
'passive infinitive' analysis is sometimes proposed—is that all available evidence supports
an analysis parallel to that overtly suggested by the first use of **hatan** in (16): the matrix
verb **hatan** has a null object which controls the interpretation of a null embedded subject
of the embedded predicate, and the object-marked argument is both formally and
notionally the object of the embedded predicate. In an example such as (5), then, a
translation which more accurately reflects the structural facts of the original would be: '...
ordered someone to behead him'.

The first argument in favor of my structural interpretation of examples like (5) is
that there is, to my knowledge, not a single example in which an argument contracting a
semantic relationship with the embedded predicate but not the matrix predicate (i.e. in
which the argument at issue is not the 'commandee') fails to receive a case appropriately assigned by the embedded predicate. Consider the following cited by Mitchell (1985 vol.2:888):

(80) Het him yplidan godne gegyrwan
ordered him-DAT wave-rider-ACC good-ACC to.prepare
'(He) ordered (someone) to prepare a good wave-raider for him'
(Beo 198)

(81) ...pa on dægrede sende Egeas to þam cwearterne,
then at dawn sent E. to the prison
and het him lædan to þone halgan apostol
and ordered him-DAT to lead to the-ACC holy-ACC apostle

'...Then at dawn Egeas sent (someone) to the prison, and ordered (someone) to lead to holy apostle to him'
(ÆCHom i.592.22)

In (80), him is the beneficiary of the action and receives the dative case independently appropriate for that argument; in (81), dative him codes the goal argument of lædan as would, again, be independently appropriate. A complicating factor here is that, independently, hatan may assign dative as well as accusative case to the 'commandee' (Mitchell 1985 vol.1:455). However, consider the following example cited by Mitchell (1985 vol.2:888) with the matrix predicate abeoðan 'command':

(82) ...and se apostol abæd him wæter bæræn
and the apostle bade him-DAT water to carry
'...and the apostle bade (someone) carry water to him'
(ÆCHom ii.422.28)

Here, him receives the dative case appropriate to the recipient but independently
unattested for the invariably accusative-taking *abeodan* (cf. Mitchell 1985 vol.1:455, Bosworth-Toller). While it is true that the accusative/dative masculine 3rd-person singular distinction begins in Old English to be lost in a syncretic *him*, there is to my knowledge not a single example in which we find *hine*, unambiguously accusative, or other unambiguously accusative pronouns in examples parallel to these.

More conclusive are the following examples cited by Fischer (1991:173), featuring dative-assigning matrix verbs:

(83)  
& he bebead *bone hlaford lufian* swa hine
& he commanded the lord to love as him
'& he commanded (someone) to love the lord as (they loved) him'  
(LawAfEL 49.7)

(84)  
Moyses forbade *swyn* to etenne
M. forbade pigs to eat
'Moses forbade (them) to eat pigs'  
(ÆLS(Maccabees)85)

(85)  
... *hwæder heo gepafedon ba domas to healdenne*
whether they consented the laws to observe
'... whether they consented to observe the laws'  
(Bede 4.5.276.28)

In all three examples, the underlined NP receives accusative case from the embedded infinitive verb, rather than dative case from the matrix verb. 'From this', she concludes, 'it seems certain that it is the infinitive that assigns case to the underlined objects, viz. that the infinitive must be active' (Fischer 1991:173).

In addition, the pattern that I am attributing to these examples is independently so widely attested in Old English that there is no doubt as to its language-internal
motivation. Visser (1963-73:1342 ff.) lists examples with 22 OE verbs of this construction in which 'a (pro)noun is nowadays inserted between the finite verb and the infinitive', including the following verbs of physical perception:

(86) þa of wealle geseah weard Scildinga se þe holm-clifu
then from wall saw watchman Scylding-GEN who that sea-cliffs

healdan scolde beran ofer bolcan beorhte randas...
guard should to.carry over ship-decks bright-ACC shields-ACC

'Then from the wall the Scylding watchman who was entrusted with guarding the sea-cliffs saw bright shields be carried over the ship-decks'...
(Beo 229-31)

(87) Heo geseh niman hyrecild
she saw to.take her child
'She saw her child taken'

(ÆCHom i, 146,10)

(88) me huru þuhte þæt þæt ware heofona rice, be
me truly seemed that that be heaven-GEN kingdom about

þam ic oft gehyrde bodian & secgan
that-DAT I often heard to.preach & to.say

'It truly seemed to me that that was the heavenly kingdom, about which I often heard preach and tell' (Ælf. Bede (Smith) 629,27)

(89) ic gehyrde secgan þæt þu ware gleaw
I heard to.say that you were wise
'I heard it said that you are wise'

(Ælfric, Gen. 41,15)

(90) Ic seah in healle ... on flet beran feower cynna
I saw in hall on floor to.carry four kinds-GEN
'I saw in the hall ... on the floor four kinds be carried'
(Riddles (Ex.Bk., ed. Krapp) 55,1)

Note that a variation on this pattern is (as many authors, e.g. Palmer (1965), Callaway
(1913), Visser (1963-73), and Mitchell (1985) have observed) preserved in the ModE idiom *hear tell*, as in 'I never heard tell of such a thing', as well as a few semantically opaque collocations with causative predicates, e.g. *make believe*, *let go*, and in the superficially similar ModE (re-)innovation *say X*, e.g. 'He said to stay here' (Visser 1963-73:1362 f.); it is also attested in Modern German with causatives such as *lassen* 'allow, let' and *befehlen* 'command', e.g.:

(91) Sie liess mir eine Nachricht zukommen
    she let me-DAT a piece.of.news arrive
    'She sent me some news'

(92) Ich befehle, den Soldaten zu erschiessen
    I ordered the-ACC soldier-ACC to shoot
    'I ordered (someone) to shoot the soldier'

The ModE idioms prescribe in frozen form, and the ModG construction provides a cognate constructional counterpart to, a pattern which used to be much more widespread in English.

When we oppose to these arguments the sort of argument typically made for the 'passive' status of the embedded infinitive in this OE construction, and therefore (at least by implication) the 'raised' status of the supposedly shared argument, we see that there is no contest here at all. Callaway sums up the position which we reject (as so does he) as follows:

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At least, with the exception of *say X*, which, as Visser points out, is separated from OE examples with *secgan* and *cweban* by a hiatus 'so wide that the possibility of non-recorded survival in the spoken language had better be ruled out' (Visser 1963-73:1363).
In favor of the passive interpretation of the infinitive are these facts: that very frequently the Anglo-Saxon infinitive active in form, with or without an accompanying accusative, translates a Latin passive infinitive (with or without an accusative subject) and not infrequently a passive indicative; and that, in most if not all such instances of the infinitive after these verbs in Anglo-Saxon, the infinitive, though active in form, may in modern English be appropriately rendered by the passive infinitive, and the accusative rendered as the subject instead of the object... (Callaway 1913:30)

This kind of argument for the structural status of syntactic elements—resting on translation-equivalents or, for that matter, paraphrases—is the weakest type that one could possibly conceive of. One might as well say that 'You can't beat City Hall' is 'passive' because one may paraphrase it with 'City Hall can't be beaten', or that the Kashaya Undergoer-taking intransitive verbs are 'reflexives' because they frequently have translational counterparts featuring reflexive-like structures in European languages. When we add to this the fact that, as Callaway goes on to point out, 'in a very large number of instances the Anglo-Saxon active infinitive after these verbs translates a Latin accusative and predicative active infinitive or a Latin active finite verb' (ibid.), we see that it is obviously not so much the case that Anglo-Saxon translators considered the formally active embedded infinitive to be 'passive' (whatever that might mean) as that Latin made a formal distinction where Old English did not, and that the active infinitive in Old English simply covered a considerably broader functional range than did the Latin or does the

Van der Wurff (1987) continues this traditional confusion with his 'passive' analysis of the inflected infinitive in OE tough-movement and other 'object-to-subject raising' patterns. We shall see in the next chapter that his justification for the application of the term 'passive' to these structures is no better than the justification described here by Callaway.
ModE formal active counterpart.

3 Summary

We have seen in this chapter that the evidence displayed in Old English for the sort of subject-to-object 'raising' pattern familiar from Modern English is limited at best. The most notable body of exceptions is found in the class of predicate adjuncts or nonverbal predicates, where the case marking of the NP in the adjunct may be determined by the matrix verb (the only verb, in other words) despite the fact that the entire adjunct may be interpreted as the 'logical object' of that verb. As I argued above, however, the available examples of this construction indicate that the discrepancy between 'form' and 'logic' they represent is not as great as we might initially suspect. Specifically, the cited examples are consistent with a view of this construction being chosen precisely in instances in which a reading of 'personal judgment' is appropriate—in which case a semantically transitive 'transfer' is indeed part of the semantics of the construction.

In addition, Old English is conspicuously lacking in the sorts of ModE examples most clearly interpretable in terms of 'raising'—in particular, examples involving a interaction of 'raising' and passive—such as ModE He ordered him (to be) fired. Instead, Old English has a distinctly non-ModE pattern of a generically or contextually interpreted null embedded Actor together with an embedded Undergoer or non-dca argument which receives its case marking from its homoclusal predicate. Significantly, while this embedded 'object' appears in secondary topic position with respect to the matrix verb, it fails to display formal integration into objecthood—that is, it fails to conflate
Undergoerhood with secondary topichood. All in all, then, the evidence presented in this chapter reinforces our understanding of the 'transparency' of Old English in resisting discourse-influenced neutralization of semantically-sensitive case morphology.
Chapter 9: The reconciliation of OE relative-clause formation and conjunction reduction with Hawkins' (1986) comparative-typological predictions

1 Introduction

We continue to develop an argument for the marginal status of GRs in Old English relative to Modern English by examining a construction which is in Modern English, but not in Old English, restricted to targeting 'subjects'. The construction at issue is conjunction reduction or coordination ellipsis, a standard 'test' of subject status cross-linguistically (Keenan 1976). What we shall see here is that Old English fails to exhibit the exclusive association of pivot with 'subject', however defined, in a manner that would suggest a highly developed instantiation of 'subjecthood' in the sense of a reference-oriented, role-neutralizing syntactic pivot.

Since the greater freedom of 'ellipsis' or 'deletion' (more neutrally, 'coinstantiation') exhibited in this OE construction relative to ModE conjunction reduction appears to counterexemplify Hawkins' (1986) predictions based on his typological comparison of English and German, we shall first review his findings and claims. We shall then proceed to a discussion of the facts of OE relative clause formation, both in order to test his predictions and to clarify our understanding of their motivation and intended application.

I will argue that the counterexemplification of Hawkins' predictions may, in some instances at least, be explained with reference to a typological parameter omitted from his study, namely the degree of a language's instantiation of GRs. Where a relatively 'transparent' language, such as Old English, exhibits greater freedom in the 'deletion' of
elements than a relatively 'opaque' language such as Modern English, this may be understood in terms of the more extensive mapping in the latter of diverse argument-types onto relationally characterized referential pivot function.

2 Hawkins' method and predictions: general points

We first summarize the claims of Hawkins (1986) about the typological differences between Modern German and Modern English, and see how well his contrastive generalizations apply to a comparison of Modern English and Old English.

Hawkins' general claims are as follows. First, if we contrast comparable structures (syntactic or lexical) of English and German, we will find in every case that the English structure admits of greater ambiguity, opacity, or semantic neutralization than its German counterpart. This generalization manifests itself in a large number of structures, groupable into major classes: English verbs place less specific selectional restrictions on their arguments, English grammatical relations (subject, object, and indirect object) are more semantically diverse, and English permits more raising, extraction, and deletion of arguments, illustrated as follows (with examples and judgments from Hawkins):

**selectional restrictions:**
English: I put a cloth on the table
da glass of milk in the fridge
a hat on my head
German: Ich legte ein Tuch auf den Tisch
*ein Glas Milch in den Kuhlschrank
*einen Hut auf den Kopf
Ich stellte ein Glas Milch...
*ein Tuch...
*einen Hut...
Ich setzte einen Hut...
    *ein Tuch...
    *ein Glas...

**grammatical relations:**
English: This tent sleeps four.
    Berlin is cold today.
    I helped you.
German: *Dieses Zelt schläft vier.
    *Berlin ist kalt heute.
    *Ich half dich.

**raising:**
English: John happens to be sick.
    I believe him to be sick.
German: *Johann geschieht krank zu sein.
    *Ich glaube ihn krank zu sein.

**extraction:**
English: Who has he requested you to forbid to marry his sister?
German: *Wem hat er dich gebeten zu verbieten, seine Schwester zu heiraten?

**deletion:**
English: Fred saw and thanked the king.
    The woman (who) I love is coming tonight.
German: *Fritz sah und dankte dem/den König.
    Die Frau *(die) ich liebe kommt heute abend.

At the same time, German has a richer grammatical morphology than English, more pied piping, and fewer word order constraints. The differences are summarized as follows:

Where the grammars of English and German contrast, the surface forms (morphological and syntactic) of German are in a closer correspondence with their associated meanings, in the following ways:

a. **Ambiguity (and/or vagueness)**
   There is greater ambiguity (and/or vagueness) of surface forms in English, i.e. greater collapsing of semantic distinctions and of different semantic types onto common surface forms....

b. **Destruction of semantic clause structure**
There is less correspondence between surface clause structure and semantic clause structure... (Hawkins 1986:121-2)

Hawkins argues that all these facts are best viewed as aspects of an interlocking whole, rather than in isolation. First, as with Sapir (1921), the ultimate cause of the overall difference between the two languages is argued to be morphological case syncretism, with concomitant ambiguity of surface forms, and, with the erosion of the semantic significance of the morphological marking of surface forms, the greater participation of a semantically broader class of elements in various kinds of movement and deletion processes. Lack of obligatory Pied Piping in English relative to German is explained simply by pointing out that 'the loss of surface cases also removes the explicit marking of government and frees NPs of the restrictions that force them to be physically present within the c-command domains of their governing nodes' (Hawkins 1986:123).

In addition to these somewhat commonsensical points, Hawkins presents some that are slightly less intuitive. For example, in response to the question 'why the set of English subjects should have increased beyond the set predicted by case syncretism alone,' Hawkins endorses Kirkwood's (1978) view that the emergence of a relatively fixed SVO order and a continuation of the supposedly universal theme-rheme principle resulted in 'a form of conflict...[which] is naturally resolved by permitting more types of NPs to actually be subjects' (69).1

1 Hawkins (p.c.) no longer agrees with this, since he has abandoned a view of word order as pragmatically determined in favor of one by which word order is determined by performance principles of ordering shorter or less complex elements before longer or more complex ones, with a weak secondary correlation of topicality with initial position.
Certain other details of the typological contrast are, however, somewhat more difficult to fit into the overall picture. One could simply say that the fact of German's richer case morphology and the fact of its greater resistance to raising, deletion, and passivization are two aspects of the same thing. If a language chooses to encode certain semantic distinctions, one might say, it will logically be more resistant to the obliteration of those distinctions. However, it is somewhat counterintuitive that German would permit less extraction, or a narrower range of extractions, than English. After all, extraction fails to entail the neutralization of morphological contrast unless we're dealing with a relation-changing process such as passivization—and yet, as Hawkins explains in some detail, German forbids or disfavors extraction out of certain structures even though the extracted NP would preserve the morphological marking associated with its gap, e.g.:

(1) ?Wem hat er dich gebeten zu verbieten, seine Schwester zu heiraten? (=Who has he requested you to forbid to marry his sister?)

(2) *Ich wiss nicht, wer die Polizei glaubte, dass der Schuldige sei. (=I don't know who the police believed that the guilty man was.)

On the one hand, such structures are 'opaque' in both languages in that they 'move an NP (the wh-element) into a clause in which it cannot be interpreted as an argument of the higher predicate in the surface S which most immediately contains it' (93). On the other hand, the German versions are 'transparent' relative to the English counterparts in that they preserve the 'semantically appropriate' case marking on the wh-element. Because of this, the task of semantic 'reconstruction' would logically be easier for the German versions—and yet, it is precisely these versions which are ruled out or disfavored.
Indeed, this greater restriction against extractions appears to clash with one of the other major aspects of the typological contrast between the two languages, namely word order freedom. After all, the standard explanation for the correlation between morphological richness and word order freedom is that surface structural position is not required to link arguments to their grammatical or semantic roles, given the availability of morphology for that purpose. In this respect, following the logic of the association of extraction restrictions with a preservation of transparency and assuming some iconic association of semantic role and structural position, German is actually more opaque than English. It is therefore not at all clear that we would predict the extraction facts of German and English from the overall typological generalization of the greater opacity of English.

Next, recall that, previously in this dissertation, I have made an almost definitional claim for an inverse relationship between the transparency of a language and its instantiation of grammatical relations, in the sense that a transparent language by definition permits fewer of the sorts of semantic neutralizations that we consider constitutive of subjects, etc., as opposed to agents, etc. In this light, English has more evidence for subjects and objects than German.

However, another aspect of this contrast has been argued to be that English would, if anything, be more subject-centered in its behavioral processes than German, given that English has grammaticalized a subject category to a greater degree than German; recall that, among other things, this grammaticalization would express itself in terms of a convergence of reference-related and role-related properties on a single pivotal category,
that of subject. We may, then, expect a certain tension to exist in an opaque language such as Modern English. On the one hand, as Hawkins argues, the language is relatively free in its syntactic processes, raising, moving, and deleting elements with greater abandon than a language like German. On the other hand, certain syntactic processes would reasonably be assumed to be more subject-centered, and therefore less free, than in other more transparent languages with less grammaticalized relational categories.

Given the last two points, we may consider it unsurprising if the greater restrictions on extractions displayed by a relatively transparent language like German, and the overall greater restrictedness of syntactic processes claimed to exist for German, may be counterexemplified in some other appropriate language pair. And indeed, if we compare Old English with Modern English, we find the following. Even though Old English clearly corresponds to German in terms of overall transparency when contrasted with Modern English, Old English is much more liberal than German in deletion processes and, in certain deletion processes, more liberal (less subject-centered) than Modern English. Also, while Old English patterns with German with respect to some restrictions on extraction, it is also more liberal than Modern English with respect to extractions out of certain structures. In addition, Hawkins' extremely general explanation for the pied piping contrast between English and German fails to work adequately for Old English, given that Old English clearly has the same sort of inherent case/structural case distinction manifested in German and yet systematically permits preposition stranding in certain structures while forbidding it in others; it is not enough, in other words, simply to say that 'the richer morphological case marking of [Old English] forces these governed
NPs to remain within their phrasal categories to a greater extent than in [Modern English]’
(Hawkins 1986:106, with 'Old English' and 'Modern English' substituted for 'German' and
'English' respectively). Finally, in the next chapter, I will point out some possible
problems presented by the facts of tough movement for the claim of the invariably greater
opacity of Modern English relative to both German and Old English.

3 The application of Hawkins' methodology to Old English

3.1 Deletion processes

The major kind of deletion process with respect to which Old English is more
liberal than Modern German, but only slightly more liberal than Modern English, is
relative-clause formation using a complementizer but not using a relative pronoun. Recall
(cf. Allen 1980) that Old English has two classes of relative-clause-formation strategies,
most simply identified in terms of whether a relative pronoun is used², but also featuring
more extensive differences which argue against the absence of the relative pronoun being
viewed as resulting from a superficial deletion process following movement:

Strategy I: RP used:

(3) Ac ge onfoð dæm mægene Halges Gastes se
but you receive the power Holy-m.g.s. Ghost-m.g.s. who-m.n.s
cymeð ofor eow
comes over you
'But you receive the power of the Holy Ghost who comes over you'
(Blickling 119.11; Allen 1980:269 ex. 15)

² In differentiating the two strategies, it is irrelevant whether or not the complementizer is
used, since it may be present with either strategy.
Strategy II: No RP:

(4) Gemyne he ðæs yfeles ðæ e worhte.
remember he the-gen. evil-gen. that he wrought
'May he remember the evil that he wrought' (CP Sweet 25.3; Allen 1980:266 ex.4)

Correlating with the difference in use of relative pronoun is one in terms of the position
which may be relativized on. In Strategy I relative clauses (the minority strategy), no
relativized prepositional objects (P-objects) are attested, while relativized P-objects are
well attested with (the more commonly-found) Strategy II types:

(5) *Syx dagas synd δαμ gebyrδ δæt man on wyerce
six days are which-DAT is. fitting that one on work

(6) Ac he sylf asmeade δa up-ahefednymsse δe he ðurh ahreas.
but he self devised the presumption that he through fell
'But he himself devised the presumption that he fell through [=by which he fell]' 
(Alc. Th. Vol.1 192.17; Allen 1980:267 ex. 10)

There are, to be sure, apparent counterexamples to this generalization about Strategy-I
types, but these are counterexamples by appearance only; for example, consider the
following:

(7) Nu ic ðe hate, hæleð min se leofa, þæt ðu þas gesyhðæ
now I you order warrior mine the beloved that you this vision

sece mannum; onwreoh wordum þæt hit is wuldres beam,
say men-DAT reveal words-DAT that it is glory-GEN tree

se δe almihtig God on þrowode
which-m.n.s. that almighty God on suffered

'Now I command you, beloved warrior of mine, that you relate this vision to men;

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reveal with words that it is a glorious tree, which almighty God suffered on'
(Dream of the Rood; Mitchell & Robinson 261:95-9)

Here, we do find a pronoun at the head of the relative clause, together with an embedded
P-object gap, but the nominative case of the pronoun immediately betrays the fact that the
pronoun is associated with the matrix clause, not the embedded clause. *Se*, then,
paratactically repeats *beam* tree' without being embedded under it; it is itself the head of a
Strategy-II relative clause rather than figuring in the spec-of-CP position of a relative
clause headed by *beam*.

The difference between relative clauses with and without a relative pronoun in the
position of the relativized item is explained by Allen (1980) in terms of different
restrictions on deletion versus extraction. Certainly, viewing the two different strategies
in terms of these two different mechanisms is (assuming, at least, the existence of
'movement' and 'deletion' along with the sort of multistratal model they presuppose)
faithful to the overt facts, specifically that in one instance we have a pronoun
corresponding in case-marking to an embedded gap, while in the other we have a gap
with no corresponding pronoun appearing anywhere at all.

Therefore, even though relative clauses using the deletion strategy would be
analyzed in GB in terms of the movement of 'ghost' wh-elements (or, in Kemenade's
approach, 'ghost' *pro*), we will join Allen in viewing the relativized element as simply
being deleted, meaning in our terms that there is some conceptually important element
which is formally uncoded, and so must be construed with a certain position in a sort of
semantic reconstruction. Modern English preserves these two different strategies,
although it is arguable that speakers may sometimes analyze the that complementizer as a relative pronoun (despite the contrast in the (C) examples below):

(8) Deletion:
A) That's the guy (that) I talked to.
B) That's the guy *(that) came.
C) *That's the guy to that I talked.
Movement:
A) That's the guy (who) I talked to.
B) That's the guy *(who) came.
C) That's the guy to whom I talked.

The complementary distribution of relativizer and relative pronoun has been rather unsatisfyingly interpreted in terms of a 'doubly filled COMP' filter operative in Modern English but not in Old English. Moreover, in Modern English, unlike Old English, there is the option of omitting the complementizer even in the absence of the relative pronoun.

Modern English, in other words, fails to require that the finite relative clause be overtly marked as is apparently required in Old English.

The preservation in Modern English of the requirement of an overt marker (whether relative pronoun or complementizer) in the case of relativization out of subject position may be imagined to receive different explanations in functionalist and formalist approaches. A functionalist explanation might make reference to processing difficulties, 

This is true for finite relative clauses only, not for infinitival relative clauses, which in Old English no more accepted a complementizer or relative pronoun than in Modern English (Allen 1980:275):

That's the guy (*who/that) to get.
Ic hæbbe mete (*bone/pe) to etenne.
I have food (*which/that) to eat
arising from a sequence of relative clause head followed by a verb, which would independently be an acceptable homoclausal sequence, while a sequence of two NPs followed by the verb would be an acceptable ModE homoclausal sequence only in a marked contrastive-focus structure, which would presumably be distinct enough from a relative clause structure by a variety of earmarks (intonation, a largely complementary set of NP-types capable of functioning as contrastively-focused elements as opposed to relative clause heads, etc.). In other words, we might say, the relative clause is already 'marked' as such whether or not a complementizer or relative pronoun is present.

In a formalist GB context, no satisfying explanation, astonishingly enough, has been proposed. The problem is that the grammaticality facts are precisely the inverse of those in object that-complements, and the inverse of what one would expect if one straightforwardly applied to relative clauses the ECP-related explanation proposed for that-complements (see below). The rather ad-hoc account of subject traces and that-complementizers proposed by Pesetsky (1982) is that, when a that-complementizer is present, it contracts with the moved 'ghost' operator, such that the subject trace is properly governed by the complementizer which, after contraction, bears the trace's index; this avoids the situation encountered with illicit object that-complements with embedded subject gap (Who do you believe (*that) came) whereby the that-complementizer blocks proper government of the subject-trace by the moved 'ghost' operator. It fails completely, however, in helping to provide an explanation for why an overt complementizer or relative pronoun is required in ModE finite relative clauses, since one would expect the 'ghost' operator in that-less relative clauses to properly govern the subject trace.
completely unproblematically; this serves as a reminder that numerous seemingly pedestrian facts of 'core' grammar remain unexplained in GB, even for English.

In ModG, on the other hand, a complementizer may not be used at all in relative clauses, as opposed to that-complements of so-called 'bridge' verbs of psychological attitude like wissen 'know,' finden 'find,' glauben 'believe,' annehmen 'assume,' and vermuten 'suspect':

(9) der Mann, den (*dass) ich sah
    the man whom (*that) I saw
    *der Mann, dass ich sah
    the man that I saw

Furthermore, a relative pronoun is always required:

(10) der Mann, *(den) ich sah
    the man *(whom) I saw

In Allen's terms, then ModG avails itself only of a movement, not a deletion strategy in relative clause formation. Just as OE movement-strategy relative clauses (Strategy I) prohibit relativization of P-objects without pied piping, so too do ModG relative clauses:

(11) *der Mann, dem ich mit ass/ass mit
    the man whom I with ate/ate with

This is only one respect in which ModG relative clause formation is more restricted than that of Modern English. Another respect, noted by Hawkins in his 'extractions' chapter, is that Modern German, unlike Modern English, resists extraction out of tensed object (dass/that-) clauses:
(12) * Der Mann, den du glaubst, dass du gesehen hast, ist mein Freund
the man whom you believe that you seen have is my friend

Compare:

(13) The man who you think that you saw is my friend. (Hawkins 1986:90)

Hawkins's discussion of this latter restriction makes reference to his Argument Trespassing Generalization, which has to do with restrictions against the movement of an 'NP (the wh-element) into a clause in which it cannot be interpreted as an argument of the higher predicate in the surface S which most immediately contains it' (Hawkins 1986:93).

The notion of 'argument trespassing' is, however, as Hawkins himself notes, a 'descriptive regularity'. What would motivate the greater restrictions against it in German than English? The explanation provided by Hawkins is that, in languages which display the sort of morphological richness assumed to correlate with the existence of oblique case marking (in addition to structural case marking) in its system of abstract case assignment, there is greater resistance to movement of the assignee away from its governing and case-assigning head. The intuition behind this is simply that 'it is plausible to argue that the richer morphological case marking of German [e.g.] forces these governed NPs to remain within their phrasal categories to a greater extent than in English [e.g.], where such government is less explicitly coded in surface' (Hawkins 1986:106).

Whether or not this is plausible, the problem is that the intuition fails to predict the facts. As we saw in Chapter 5, OE prepositions, which by all the usual arguments assign oblique case, may be stranded by certain object NP-types in the context of certain
constructions. Specifically, personal pronouns and 'R'-pronouns may strand their prepositional governor, while wh-elements and full NPs may not. Additionally, P-stranding (by the appropriate NP-types) is licensed under topicalization and only one of the two relativization strategies, namely the relative pronoun-less Strategy II. Again, I provide an illustration of preposition stranding under the relevant strategy:

(14) Seo gesihð ðe we god myd geseon scylon is angyt
    the sight that we God with see shall is understanding
    (Sol. 67.6; Allen 1980:267)

Under Strategy I, with an overt relative pronoun appearing between the head and complementizer, once again, no stranded Ps appear and pied piping thus appears obligatory:

(15) Eode ða to sumum mæssepreoste, from ðæm he gewende
    went then to a mass-priest from whom he thought
    ðæt him hælu ðeg æteawed beon meahte
    that him salvation way shown be might
    (Bede IV.25 p. 350.16; Allen 1980:269)

For present purposes, the important point is this: while Hawkins's prediction would be that P-stranding should be flatly prohibited in Old English, the actual facts are more complicated: P-stranding is permitted by certain NP object-types in certain constructions.

With respect to P-stranding, then, Old English is more liberal than ModG, but the comparison may strike us as unfair. After all, P-stranding is just as proscribed, pied-piping just as obligatory, and the neutralization of case just as prohibited in Old English

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as in ModG in the context of the only relativization strategy the languages share, namely
the one involving (by Allen's taxonomy) movement as opposed to deletion; once again,
compare:

(16) Gehyr ðu æfæsta God mine stefne, mid ðære ic earm to ðe
  hear you merciful God my voice with which I poor to you
cleopie (Blickling 89.13; Allen 1980:270)
cry

(17) Hör meine Stimme, mit der ich dir zurufe.
  hear my voice with which I you to.cry

(18) Her feng to Deare rice Osric, ðone Paulinus ær
  here succeeded to Deira kingdom O. whom-m.a.s. P. earlier
gefullode (Sax. Chron. 634; Allen 1980:269)
baptized

(19) Ich empfang Klaus, den du früher gesehen hattest
  I received K. whom-m.a.s. you earlier seen had

In comparing Old English and Modern English, as long as we similarly restrict
ourselves to the most obviously comparable relativization strategies, the two languages
are equivalent. Just as in OE Strategy II relative clauses any NP, whether oblique or
structural, directly governed by the verb or governed by a preposition, may be deleted, so
too in Modern English:

(20) the man I saw
    the man I talked to
    the man I talked to you about

There is, however, one respect in which Old English, counter to predictions, is more
liberal than Modern English. Consider the following, from Allen (1980:264):
(21) Ac ic wolde witan hu de duhte be ðæm monnum de wit
but I would know how you-DAT seemed about the men that we
ær cwædon ðæt unc duhte ðæt wæron wildiorum gelicran
earlier said that us seemed that were wild.animals more.like
done monnu. (Boeth XXVIII.5 122.13; Allen 1980:264)
than men

'But I would want to know how it seemed to you about the men that we earlier
said that seemed to us that were more like wild animals than men'

Here, we have a deletion of the subject of a tensed that-object complement with
complementizer in place—i.e., a violation of the that-trace filter⁴. Another example is as
follows:

(22) Fordæm sceal daes modes læce ær tilian daes ðæ
therefore shall the spirit's physician first tend that-GEN that
he wend ðæt ðone mon ær mæge gebrengan on færwyrd.
he thinks that the man-ACC first may bring into perdition

'Therefore the spirit's physician shall first tend that which he thinks that may first
bring the man into perdition.' (CP Sweet 457.10; Allen 1980:279)

These examples, then, involve deletions (or, by certain standard assumptions, extractions)
in positions that would not yield acceptable deletions in Modern English—hence, a
counterexample to Hawkins's predictions.

It turns out, however, that ModG as well permits wh-movement out of the subject

The unacceptability of such examples in Modern English has been attributed to various
constraints or filters, including the Fixed Subject Constraint and the ECP.
position of that-complements with the complementizer in place. Consider the following:

(23) a. Wieviele schätzen du, dass darin sind?
   how many estimate you that in there are

b. Wer glaubst du, dass abgehauen ist?
   who believe you that gone is

As Kvam (1983) points out, such examples are good in German as long as the embedded verb is intransitive, while examples with embedded intransitives are bad:

(24) *Wer hat die Presse behauptet, dass das Spiel gewonnen hat?
   who has the press asserted that the game won has

In Chomsky and Lasnik (1977), the pattern at issue is explained simply with reference to a language-specific 'that-trace filter,' which merely stipulates that a 'that-trace' sequence is filtered out. More recently (Chomsky 1986), the illicit structure has been attributed to the requirements of 'proper government' and the ECP. In Modern English, the illicit that-trace phenomenon in an example such as the following

(25) *Who do you think that saw Bill?

is, then, attributed to the fact the trace is neither lexically (or theta-) nor antecedently governed, given (A) that AGR is not a lexical governor in English and (B) the antecedent (who) is 'too far away' or (by a more 'modern' formulation) 'minimality' is respected in there being no intervening potential governing node (Haegeman 1994:442). The role of the that-complement in rendering the antecedent 'too far away' may be seen in the

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following:

(26)

Note that no problem for proper government would arise here with an object trace ('Who do you think that Bill saw?') since it would be lexically governed by the verb saw. If, on the other hand, we assume a less traditional tree structure by which the complementizer and intermediate trace occupy different nodes
and a more recent formulation of ECP or principles of government and minimality with which ECP interacts, then the problem becomes that that, by various assumptions a structurally potential governor of the subject trace, blocks government of the only element which would, in effect, 'save' the subject trace, namely the intermediate trace in the immediately c-commanding SPEC position (Haegeman 1994:445). In a language like Italian, on the other hand, in which no 'that-trace' phenomenon exists (Rizzi 1986), AGR is proposed to have the ability to lexically govern the trace. To cut a long story short, a great deal of effort has been expended within the theoretical context of GB motivating this fairly language-specific phenomenon, with care taken to position the mechanisms accounting for the 'that-trace' pattern at a sufficiently superficial level, or at least to ensure that they admit of multiple 'parameter settings,' so that a fairly English-specific phenomenon is not built into the provisions of Universal Grammar in too inflexible a manner.
The acceptability of such examples as 23 (a) and (b) in German is of special interest given that, independently, German consistently permits fewer extractions out of such finite-clause environments than English. Apart from this one class of subject-extractions, one may consistently predict that if the extraction is acceptable in German, English will offer an acceptable close translation-equivalent—but not vice-versa. (Again, cf. Kvam 1983.) The explanation for the extractability of wh-subjects out of tensed intransitive that-clauses with complementizer in place in German, then, is quite specific: German has no that-trace effect. It is not required, in other words, that the complementizer be absent in such structures, although complementizer-less versions are perfectly acceptable:

(28) Wieviele schätzest du sind darin?
    how.many estimate you are in.there

The absence of a 'that-trace' effect in both Old English and ModG, then, accounts for the extractability out of, or deletability in, a small class of structures that permit no such operations in Modern English unless the complementizer is absent. The 'that-trace' phenomenon, then, seems to represent a minor quirk of syntax that in no clear way coheres with independent generalizations about the relative ease of extraction in English and German, and may therefore not be expected to behave in any less recalcitrant a

The general approach in such cases seems to be to tie the ability of AUX to serve as a lexical governor to the inflectional richness of the verb—a strategy suggested by the facts of pro-drop languages like Italian. German, while inflectionally richer than English, is, however, certainly not a pro-drop language.
This is not, however, the case with the other major classes of OE structures which run counter to Hawkins's predictions, namely what have traditionally been referred to as object-to-subject raising structures (which I will often refer to as subject-object coinstantiation constructions) and conjunction reduction structures. We now turn to a presentation and analysis of these structures, starting with conjunction reduction.

4 Conjunction reduction in Old English

I will use conjunction reduction in the following sense: if we have two structurally parallel syntactic elements conjoined and material conceptually shared by the two conjuncts is omitted from one of them, then we are dealing with conjunction reduction. An equivalent term would be coordination ellipsis, and more specific terms would be gapping and VP-deletion. The following are ModE examples:

(29) I chased John and spilled my sasparilla.
(30) I went to the store and bought some sasparilla.
(31) Mary likes liquor and John (?) sasparilla.
(32) I like liquor and you do too.
(33) I won't drink sasparilla, but you will.

The first two examples involve the deletion of the subject of the second conjunct under coreference with the subject of the first conjunct. This kind of reduced coordination structure is standardly considered (cf. Keenan 1976) to offer a diagnostic test for
subjecthood, or for the 'deep' or syntactic typological status of morphologically ergative languages (Anderson 1976, 1977); note that English fails to permit ellipsis of non-subjects and doesn't permit deletion of a subject under coreference with a non-subject, so that, in English, conjunction reduction may be considered to be restricted to subjects in these two respects:

(34) *I chased John(j) and (j) spilled his sasparilla.

(35) *I chased John(j) and Mary caught (j).

(36) I chased John and then caught *(him).

Example (31), involving what has been called gapping, has a somewhat more marginal status, as evidenced at the very least by the requirement of comma intonation (i.e., a slight pause) to derive a grudgingly acceptable status for most speakers. The VP-deletion represented by (32) and (33), on the other hand, is more 'robust'. Note these last two examples may be considered to support an analysis of English clause structure as featuring a bipartite subject-VP division, on the assumption that only entire constituents may be deleted.

If the shared constituent in two conjuncts is a non-subject, then the strategy available to Modern English is either to promote the non-subject to subject by passivization or to conjoin two V or V' constituents, a strategy which is (arguably) structurally distinct from conjunction reduction:

(37) I hit and kicked my shadow.
(38)  *I hit my shadow(j) and kicked (j).

(39)  I walked up to and addressed the President.

(40)  *I walked up to the President(j) and addressed (j).

With this in mind, it is only fair to note that (29) and (30), our first two examples of conjunction reduction, are equally analyzable in terms of VP-conjunction:

(41)

Again, however, this analysis supports a view of a bipartite division between subject and VP in English, and thus, in a sense, of the 'privileged' status of subject or structural external argument, at least assuming the reduced grammaticality of examples such as the following:

(42)  *I hit and John kicked the tree.

(43)  *I chased and John caught the roebuck.
A simplified structural analysis of such coordination examples would be as follows:

(44)

The (?) indicates that there is in fact no available label for a subject-V/V' constituent which excludes the object; by all standard traditional accounts, any such sequence would represent a discontinuous constituent, or a sequence of parts of constituents, and thus be uncoordinatable.

Of course, the correctness of such standard accounts is legitimately open to question, especially given independent evidence for 'flat-structure' languages (cf., eg., Mohanan (1984) on Malayalam) and therefore the untenability of the view of the subject-VP division as innately provided by Universal Grammar (recall the criticism of Baker and Williams in Chapter 2). I would argue that the lack of outright ungrammatical status of such examples as (42-3) indicates that, even for Modern English, the analysis of a
bipartite subject-VP structure is more an analysts' oversimplification or reification of rather cline-like data than anything as fundamental as is widely proposed, even if an attribution of this bipartite division to UG is not made.

The fact remains, though, that the conjunction structure at issue does seem quite clearly to have a more marginal status than that involving conjoined VPs, and is more dependent on pragmatically familiar event-sequences (i.e., sequences easily conceptualized as a 'single event') than the latter; thus, the first of the following would probably be assigned quite unhesitatingly to the 'grammatical' category, while the second would not:

(45) I washed and John dried the dishes.

(46) ??I folded and the critics raved about the new Cardin scarf.

Compare:

(47) I folded the scarf and raved about the movie.

(48) I folded and raved about the scarf.

While it would be false to claim that a judgment of the 'grammaticality' of a sequence such as that represented in (47) or (48) is unaffected by the ability of the judge to construe the event coded in the second conjunct as being pragmatically coherent with or relevant to that coded in the first, VP-conjunction structures such as (47) and V-conjunction structures such as (48) nevertheless appear to admit more freely of the juxtaposition of events which out of context would be considered pragmatically unrelated.

We now turn to OE examples of this general type, which I will first present with
their gloss and translation:

(49) ðæs wordum ðæer cyninges wita and ealdormann
that-GEN words-DAT another king's councillor and nobleman
gēpafunge sealde, and to ðære spræce feng and ðus cwæð
assent gave and to the speech seized and thus spoke

'To that one's words another king's councillor and nobleman gave assent, and took the floor and spoke as follows:...'

(Bede's Conversion; Mitchell & Robinson 217:24-5)

(50) Ond he ða heht his geferan toweorpan ealne þone
and he then ordered his companion throw down all the
herig ond ða getimbro, ond forbærman.
pagan sanctuary and the buildings and burn up

'And he then ordered his companion to throw down the entire pagan sanctuary and the buildings, and burn (them) up'

(Bede; Mitchell & Robinson 219.70-1)

(51) ...pæt man nolde him a timan gafol beodan ðippe wið gefeohtan
that one not wanted him at time tribute offer or with fight

'...that no-one wanted at that time to offer him tribute or fight against (him)'

(Anglo-Saxon Chr. an 1011; Mitchell & Robinson 215.73-4)

(52) ðæt he wolde ælcne cuman swiðe ærrlice underfoon &
that he wanted each arrival very honorably receive &

swiðe swæslice wið gebærnan (Bo 36.30)
very lovingly towards behave

'That he wanted to receive each arrival very honorably and behave very lovingly towards [him]'

(53) Ond hie þa ymb þa gatu feohtende ðær on ðæt hie
and they then around the gates fighting were until that they
þærinne fulgon and þone æþeling ofslagon ond þa men
therein penetrated and the prince slew and the men
‘And they then were fighting around the gates until they penetrated within and slew the prince and the men that were with him’

(Cynewulf & Cyneheard; Mitchell & Robinson 210-11.36-8)

(54) Ac ic wille heora cypen her luflicor þonne gebige þær,
but I will of them sell here dearer than buy there
that some profit me ic begyte, þanon ic me afede
from which I feed
& mon wif & minne sunu
& my wife & my son

‘But I will sell them dearer than I buy them, so that I make myself some profit,
from which I feed myself and my wife and my son’ (Ælfric’s Colloquy 163-6)

(55) Thone onwald mæg wel reccean se þe ægþer ge hiene
the power may well rely on he that both it
habban con ge wiðwinnan (CP 112.21)
have can and resist

‘He may well rely on power who knows both how to have it and resist (it)’

(56) Hi woldon þa ferian mid folclícum wurðmynde þone
they would then carry with public dignity the
halgan lichaman and lecgan innen þære cyrcan.
holy body and lay within the church

‘They wanted then to carry the saintly corpse with public dignity and lay (it)
within the church’ (Ælfric Lives of Saints; Mitchell & Robinson 201.255-6)

(57) ...seo wolde efsian ælce geare þone sanct and his
she would cut each year the saint and his
næglas ceorfan syferlice mid lufe and on scryne healdan to
nails carve neatly with love and in shrine keep as
haligdome on weofode
relics at altar

'She would each year cut the saint's hair and carve his nails neatly with love and keep (his nails and hair) as relics at the altar' (ibid.; 201.268-70)

(58) He scryt me wel & fett & hwilon sylþ me hors ofþe beah
he clothes me well & feeds & sometimes gives me horse or money
'He clothes me well and feeds (me) and sometimes gives me a horse or money'
(Ælfric's Colloquy 84)

(59) Eala, munuc, þe me tospycst, efne, ic hæbbe afandod
well monk that me address to I have found
þe habban gode geferan and þearle neodþearfe
you to have good companions and very necessary

'Well, monk, who speak to me, I have found you to have good companions and very necessary (companions)' (ibid.; 203-4)

Examples from Mitchell (1985) include the following:

(60) ...sua se lœce grapad & stracað & hyt his seax & hwæt
so the leech gropes & strokes & hides his knife & whets
'So the doctor feels and strokes and hides his knife and whets (it)'
(CP 187.5; Mitchell 1985 v2:950 ff.)

(61) þa genam se Hælend þa fif hlafas and bletsode and
then took the savior the five loaves and blessed and

tobræc and todælde betwux þam sittendum
broke and divided among the seated

'Then the savior took the five loaves and blessed and broke and divided (them)
among the seated ones' (ÆCHom i.182.16; Mitchell 1985:655)

(62) Ac we ne underfod gold ne seolfor, ac forseoð
but we not took gold nor silver but scorned
'But we took neither gold nor silver, but scorned (them)'
(ÆCHom i.460.15; Mitchell 1985:655)

(63) gif he agylte, he hit georne gebete and syðan geswice
if he sin he it earnestly amend and afterwards avoid

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'If he should sin, may he earnestly amend it and afterwards avoid (it)'
(AECHom i.268.20; Mitchell 1985:655)

The first example shows a coordination pattern of a type routine in both Old English and Modern English, with the only shared constituent being a nominative/subject, and with that constituent being omitted in conjuncts following the first. Such examples are well attested in all OE documents, and my inclusion of only one here should not be interpreted to indicate that they are rare or unusual at any stage of the language.

The remaining examples represent types likewise routine in Old English, but at least arguably unparalleled in ModE. The bulk of my examples represent such structures in order that the frequently non-ModE nature of OE conjunction reduction be amply illustrated, and in order that it may be seen how well attested such structures in fact are. (For more examples, see Ohlander (1943-4).) Note that, for these examples as a group, the interlinear gloss serves as the only reliable indicator of the true nature of the coordination structure involved, since the ModE translation by necessity relies on constituent ordering and therefore coordination structures frequently at variance with those represented in the original.

Example (50) illustrates two conjunction sequences, with two different coordination strategies. First, we have two coordinated NP objects, ealne bone herig and ba getimbro, a fully 'modern' sequence. The second sequence is, however, decidedly non-modern: coordination of one non-finite embedded clause (toweorpan...getimbro) with a bare non-finite verb (forbaeman)—that is, with a second non-finite clause in which an object coreferential with that of the first clause is deleted.
Example (51) similarly involves two coordinated embedded infinitival clauses, this time with a shared dative argument (him) expressed only in the first conjunct. Here, however, the fronted position of the oblique object within the embedded sequence suggests an analysis whereby that object has scope over the two conjuncts, or where the structure involves two coordinated verbal constituents just as is perfectly acceptable in Modern English:

(64) We offered tribute to and then fought against him.

(52), too, is apparently amenable to such an analysis, a fact which, again, is obscured in the translation by the different major-constituent word order required by Modern English as opposed to Old English (VO versus OV). However, the conjoined-V' analysis of (52) would be acceptable only if there were independent evidence for the acceptability of he wolde ælcne cuman swybe swæslice wib gebæran. The problem is that this would represent a structure which by all accounts is questionably grammatical in Old English. Allen (1980) characterizes 'preposition stranding with topicalized full NPs' as at least 'extremely rare,' explaining in a footnote that 'Wende found only five examples outside of Gregory's Dialogues, all of which he felt to be somewhat dubious for various reasons' (287). Denison (1985:192) describes stranding of a preposition under topicalization of a full NP as 'very rare in OE,' citing the single example of Freond ic gemete wib 'May I meet with a friend.' Kemenade, as we have seen, bases her extensive analysis of OE preposition stranding on the assumption that only personal pronouns, not
full NPs, may strand a preposition. By all accounts, then, a conjoined-V' analysis of (52) would be strongly dispreferred.

Another interesting example of the superficially conjoined-V/V' type is Mitchell's (63); here, the conjoined verbs take different cases, rendering the overt hit ungrammatical as the object of the independently dative-taking geswican.

(53) offers a coordination structure that, again, features a ModE translation which masks the non-modern nature of the pattern involved in the original. While the translation paraphrases the original with a simple conjoined NP-object sequence, such an analysis is unavailable for the Old English, given the OV structure therein represented. The most straightforward interpretation of this (that is, if we interpret this as a true example of conjunction reduction) is that it involves V-deletion. (54) is a parallel example.

(55) combines features of (51) and (53), involving conjunction of two verbal constituents with a shared object, but with the finite verb (con) deleted in the second conjunct. Of course, this presupposes the constituency of the non-finite verb (habban or wiðwinnan) with the finite con, an independently problematic analysis. It may therefore be better to analyze both the object and the finite verb as deleted under coreference in the second conjunct.

With (56) we return again to the sort of object-deletion conjunction reduction strategy exemplified in (50), with more examples given in (57) and (58).

(59) illustrates two conjoined NP-objects with the head N deleted in the second conjunct, which would be rendered in Modern English with coordinated AP constituents modifying a N head ('you have good and very necessary companions').
In Mitchell's example (60), we either have a sequence of verbs (grapað and stracað) conjoined relative to an understood patient (so to speak), followed by a sequence of VPs with a deleted object in the second conjunct (hyt his seax & hwæt), as in (50) and (56-58); or we have a sequence of coordinated Vs (grapað, stracað and hyt) sharing the object seax, followed again by a conjoined VP with deleted object. In (61), we have a sequence of Vs sharing a covert object (fif hlafas) provided by a previous conjunct—again, then, an object deletion-target in a second conjunct. (62) is parallel, and (63) has already been discussed.

What we find, then, is that Old English displays a wider range of conjunction reduction patterns than Modern English, a fact explicitly noted by Ohlander (1943-4:105) in a fairly detailed study of OE object-deletion structures:

On a priori grounds it is natural that the demand for formal accuracy and lucidity should be keener in the more developed stages of a language than during its earlier and more primitive periods. Therefore, though in early records we may come across such examples of omitted speech-elements as are well known in the language of today, we also find in early English examples which can hardly be paralleled in modern times.

While we would naturally disagree with Ohlander's evaluation of the facts and with his judgment of the language on the basis of the greater freedom displayed by Old English in this respect, the facts themselves are not in dispute: in conjunction reduction, Old English fails to restrict itself to targeting a subject in the second conjunct as does Modern English, and fails to require that a deleted NP constituent be controlled by a subject in the first conjunct. Rather than Ohlander's interpretation of this in terms of the 'primitive' status of
Old English, we may instead join Faarlund (1990:104 ff.) in his interpretation of parallel facts for Old Norse as pointing to the relative nonconfigurationality of the older language relative to its modern descendant.

At the same time, while the data cited above indicate that the deletion of NPs under conjunction reduction is not restricted to subjects in Old English as it is in Modern English, note that all the cited examples with coinstantiated objects involve coinstantiated subjects as well. What I have not cited, in other words, are examples of the following sort:

(65) *he clothes me(j) and she feeds (j)

Ohlander acknowledges that such examples are 'rare,' citing only a few ME examples, including the following:

(66) [Jesus] wasche his discypills fete ylkone and sythene he
     J. washed his disciples' feet same and then he
     wypede with a clathe
     wiped with a cloth

     '[Jesus] washed those same disciples' feet and then he washed (them) with a cloth'
     (Northern Passion Add. MS 351; Ohlander p. 114)

While we might interpret the absence of examples such as (65) to the reference- or discourse-related nature of the syntactic process involved, and to a strong correlation even in Old English of nominative with primary topic, this correlation has been argued
elsewhere in this dissertation to be less strong than in Modern English. We would therefore expect to find examples with a fronted non-nominative topic and coordinated clauses with disreferential nominative subjects, and in fact the following example from Beowulf represents such a structure:

(67) þæt hine on ylde eft gewunigen wil-gesìpas, þonne
that him-ACC in age back abide voluntary.comrades when
wig cume, leode gelæsten
war come people serve

'so that in old age comrades stand by him in turn, when war comes, people serve (him)' (Beo 22-4)

However, this kind of structure is relatively poorly attested. Instead, what we repeatedly find is that, while a non-nominative argument may be deleted in a second conjunct without promotion of the controlling NP or the controllee via passivization, a nominative argument additionally perseverates as a topical element likewise unexpressed in conjuncts following the first:

(68) þa hwile gearcode se Ælmihite Scyppend him and his
while prepared the almighty creator him and his
geferum helle wite, and hi ealle adræfde of heofenan
companions hell torment and them all drove from heaven's
rices myrþe, and let befeallan on þæt ece fyr
kingdom's joy and made fall in the eternal fire

'While the almighty creator prepared hell-torment for him and his companions and drove them all from the joy of heaven's kingdom and made (them) fall into the eternal fire' (ÆCHom 12:1-4)
(69) Me sendon to þe sæmen snelle, heton þe secgan
me sent to you sailors bold ordered you to say

þæt þu most sendan raðe beagas wið george...
that you must send quickly rings for peace

'Bold sailors sent me to you, (and) ordered (me) to say to you that you must
quickly send rings in exchange for peace'

(Battle of Maldon; Mitchell & Robinson 244.29-31)

(70) Genaman me ðær strange feondas, geworhton him þær to wæfersyne...
took me there strong enemies made them there to spectacle

'Strong enemies took me there, (they) made (me) into a spectacle for themselves there' (Dream of the Rood; Mitchell & Robinson 259.30-31)

(71) þærinne he sceawode on his mode þa digolnesse þære
therein he saw in his mind the hiding-place of

godcundnesse, ond þonon utbrohte þæm folce (CP 102.2)
divinity and thence brought out the-DAT people-DAT

'Therein he saw in his mind the hiding-place of divinity, and thence brought (it)
out to the people'

Given this, it would be wrong to claim that nominative and other arguments have equal
status with respect to the syntactic process involved here. At the same time, this should
not distract us from the fact that in OE conjunction reduction coinstantiated non-subjects
are frequently found where in Modern English no such coinstantiation pattern is licensed.
The fact remains, in other words, that OE conjunction reduction is not restricted to
nominatives or to subjects however defined.

A challenge to this interpretation of the data is at least implicitly offered by some
analysts who view the greater freedom of coinstantiation possibilities in OE conjuncts as
resulting not so much from any coordination strategy per se as from the more rampant

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possibilities of extraposition independently displayed by Old English relative to Modern English. Thus, for example, Mitchell (1985:655) claims that 'the separation of two verbs by a common object ... is, of course, one particular manifestation of the dislike of 'heavy' groups [in Old English]', which dislike he elsewhere (p. 616) attributes to a 'sense of insecurity in the face of a complicated sentence'. An example such as the Colloquy's he scyr me wel and fett (cf. (58) above), then, would be analyzed as involving not omission of subject and object in the second conjunct, but rather extraposition of fett from a pre-object position in order to avoid the 'heavy' pre-object conjoined sequence scyr and fett (me wel)⁶.

It seems to me, however, that Mitchell's claim is untenable for many of the examples cited above, and that it in any case has little ultimate bearing on the issue. First, note that many of the examples would be unanalyzable in terms of extraposition of a part of a 'heavy' constituent, e.g. (70), where the dative beneficiary him is part of only the second verb's valence, so that it would be impossible to 'reconstruct' a structure in which the two verbs are conjoined before the shared NP accusative object. In this example, as too in other examples such as (71), the sort of structure which Mitchell would presumably propose to stylistically underlie the 'splitting' of the heavy verbal constituent would in any case be inappropriate on independent grounds, since such a conjoined-V structure would implicitly deny the temporal sequentiality iconically expressed by the coordination of entire clauses.

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This at least strongly implies, of course, an analysis of the adverbial wel as modifying not just scyr but also fett, which is unclear in the actually attested example.
The second objection to Mitchell’s interpretation of the facts is related to this last point. While any of a number of factors, including the avoidance of heavy constituents or the sort of iconic consideration just mentioned, may be viewed as contributing to a motivation of the kinds of coordinate structure under consideration, the fact remains that these resulting coordinate structures require a sort of semantic ‘reconstruction’ which is far less constrained than Modern English would permit. This fact remains true regardless of whether we view the second conjunct as resulting from ‘omission’ of objects or ‘extraposition’ of the verb. Once again, then, regardless of the stylistic principle or principles viewed as being responsible for the coordinate structures involved, Old English fails to restrict itself to a targeting only of (nominative) subjects, interpreted or ‘semantically reconstructed’ with reference to other (nominative) subjects, as does Modern English.

5 Summary

We have reviewed the comparative-typological approach of Hawkins (1986), and seen that apparent counterexamples to his prediction may have either of at least two explanations. First, as we discussed in connection with relative clause formation in Old English, Modern English, and Modern German, a counterexample may be only apparent if it turns out that the structures contrasted across languages are in fact not comparable in the relevant respect. Given that the determination of the ‘comparability’ of structures is more difficult than the simple identification of some rough functional equivalence, this source may be expected to yield a considerable fund of apparent ‘messiness’ in the initial
stage of the application of the method.

Second, I have argued that the weaker restrictions placed on the 'deletion' of an argument in conjunction reduction structures in Old English relative to Modern English—a difference which does in fact counterexemplify Hawkins' predictions—may be explained with reference to a typological parameter neglected in Hawkins' approach. This parameter is the degree of instantiation or grammaticalization in the language of GRs. A relatively 'opaque' language such as Modern English, then, may in some cases exhibit stronger restrictions on deletion processes than a relatively 'transparent' one such as Old English, which may be understood to follow from the more extensive neutralization in Modern English of a variety of argument-types in the syntactic pivot function.

This neutralization, which is one aspect of the instantiation of subjecthood as a language-internally justified category, clearly is consistent with certain other predictions Hawkins would make. For example, Modern English permits a greater semantic range in its GR categories than does German (and than Old English would be predicted to do); this range is, after all, part and parcel of the status of the language as 'opaque'. It makes sense that greater semantic neutralization in a subject or object category should correlate with the greater syntactic centrality of that category, that is, the more developed role in the language of the category in a pivotal function with respect to the syntax. If, after all, 'subject' status is a prerequisite for participation of a nominal in a given syntactic process, then some sort of promotional process such as passivization is required to permit an
extensive range of arguments to participate. Such a promotional process, by its nature, results in a semantically diffuse pivot category. We may, then, expect the two phenomena to go hand in hand: the development in a language of referential pivots and the semantic breadth of that pivot category relative to the internally-justified categories found in a language that has not developed referential pivots to the same degree.

We see, then, that it is probably necessary to separate two kinds of phenomena in the application of Hawkins' system. One is the neutralization of semantically significant case morphology (as involved in 'raising' and passive, for example)—which we may almost axiomatically expect to be resisted in a transparent 'role-dominated' language such as Old English or (more extremely) Kashaya Pomo. The other is the freedom of pragmatic interpretation of a structurally/relationally broad body of 'gaps' (such as in conjunction reduction), or role-related 'reconstructions' of those gaps independently of any reference-oriented correspondence of those gaps onto an intermediate reference-related pivot.

In the next chapter, we proceed to the investigation of a further construction-type which appears to counterexemplify Hawkins' predictions. This construction-type is that which has traditionally been referred to as 'tough movement', which is but one of many construction-types, more richly attested in Old English than Modern English, fitting a subject-object ccoinstantiation pattern. I will show that, while this body of constructions is less restricted than is the norm for Modern English in that it contributes to a greater range of pivot types in the language, the specific instantiation of the general pattern 'tough

This is actually not completely true, since there may be a variety of lexical options which may perform this function.
movement' represents is more restricted in a predicted way in Old English than in Modern English.
Chapter 10: 'Tough movement' in Old and Modern English: the development of opacity in a transparent construction

1 Introduction

In this chapter, we examine in some detail the characteristics of an OE construction whose ModE counterpart has been referred to as 'tough movement' (TM). This construction is of interest to us in our study of the instantiation of GRs and the relative transparency of Old and Modern English for two reasons. First, TM, along with other constructions of the general 'purpose clause' type (Jones 1991), appears to counterexemplify the predominant ModE pattern of employing a subject as syntactic pivot. In TM, an overtly expressed subject coinstantiates an embedded object; while, as we have seen, Old English does optionally feature this kind of coinstantiation pattern in conjunction reduction, Modern English generally requires promotion of an object to subject via passivization for the attainment of pivot status. Even with other exemplars of the general purpose clause class, Modern English, as mentioned in Chapter 7, typically at the very least permits embedded passives:

(1)a. These walls are to be painted by tomorrow morning

b. Who is to be blamed?

c. They're eager to be promoted

d. What's still left to be done?

e. This pile of papers is to be gotten rid of

f. It's not to be missed

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g. These packages are ready to be shipped

As already explained, the OE infinitive-embedding constructions corresponding most straightforwardly to these examples all feature a subject-object coinstantiation (SOC) pattern, with no passivization (cf. Callaway 1913, Fischer 1991).

The general historical class of SOC patterns, then, presents intriguing problems for the typological-comparative approach to languages proposed by Plank (1983) and Hawkins (1986) and pursued in this dissertation. Old English, as a generally more transparent language than Modern English, would be expected to be more restricted in its acceptance of argument-types coinstantiated in constructions of this class. And indeed, the class as a whole is, in a sense, more promiscuous in Modern English than in Old English: all ModE SOC examples featuring optional passivization correspond to OE examples which fail to permit passivization; an obligatory object pivot in Old English corresponds in many cases to ModE examples with either an object pivot or (under passivization) a subject pivot.

We may, however, have an uncomfortable feeling about viewing this as evidence for the consistently greater transparency of Old English relative to Modern English. After all, the development of consistent subject pivots, mediated by passivization whenever necessary, represents an increasing restriction on the part of Modern English in the argument-types which may function as pivot—as explained in the last chapter, an increasing restriction of pivots to subjects, and an increasing degree of the grammaticalization of subjecthood.
The OE SOC pattern, then, may be viewed as representing a certain degree of
liberality in that it contributes to a broader range of pivot-types in the language as a whole
than is characteristic of Modern English, while Modern English is in the process of
eliminating this heterogeneity. In this respect, OE SOC constructions appear to
counterexemplify Hawkins' predictions about the greater restrictions imposed by
transparent languages on the 'deletion' of arguments.

At the same time, the coinstantiation in Old English of subject with object in these
constructions is accurately viewed as consistent with the overall transparency of Old
English in the sense that the 'deletion' of an embedded object is a straightforward
representation of the semantics of the construction. The ModE tendency to promote the
embedded non-Actor argument to pivot status via passivization is, semantically speaking,
unnecessary or even obfuscating. The view of a mediating case- or relation-changing
operation as entailing an obfuscation of semantics in form, of course, presupposes an
association of morphological case (or, in Modern English, 'object' or 'subject' status by the
usual criteria) with a restricted, coherent semantics—a far more accurate presupposition
for Old English than for Modern English. Again, we return to an understanding of the
syntactic centrality and the semantic heterogeneity of subjects as two facets of the
phenomenon of the grammaticalization of subjecthood.

The specific examplar of the class of SOC constructions represented by TM is, in
some respects, different from the class as a whole, and poses some especially intriguing
questions. The most obviously atypical feature of the construction with respect to ModE
syntax in general is its instantiation of a non-subject pivot; most of the other ModE SOC
constructions at least optionally feature a subject pivot via passivization. In this respect, ModE TM is a precise match of OE TM.

There are other respects, however, in which a contrastive study of OE and ModE TM may bear on the issue of 'transparency' as a legitimate typological parameter. ModE TM, as has been well discussed in the literature and will be reviewed below, has mixed characteristics of a 'movement' phenomenon (similar to passive or 'raising') and a 'deletion' or 'control' phenomenon (similar to equi). If we understand 'movement' processes as entailing greater opacity than 'deletion' processes, we would expect OE TM to exhibit fewer characteristics of a 'movement' process than ModE TM. I will argue here that this is indeed the case—that, in general, the OE TM construction embodies a more 'transparent' encoding of semantics than ModE TM. The analysis presented in this chapter, then, provides insight into an increase in opacity in a single construction between the OE and Present-Day English periods, consistent with the overall typological development of the language as a whole.

2 'Tough movement': general description

In this section, we begin our investigation of the properties of the OE analog of what has been referred to since Postal (1971) as 'tough movement' in the context of Modern English; I will refer to the construction at issue as the Tough Coinstantiation Construction (TCC). A ModE example of this construction is illustrated in (1), and an

This name is one given to the construction by Yoon-Suk Chung. This chapter arose out of a collaboration with him (cf. Chung and Gamon 1996) in a study of the TCC in Old and
OE example in (2)²:

(2) John is easy to please

(3) þas þing synt earfoðe on Englisc to secganne
these things are difficult in English to say
'These things are difficult to say in English'
(ByrM 1 (Crawford) 76.9)

In the context of the transformational-generative tradition of the past 35 years, a point of considerable dispute has been the question of the nature of the relationship between examples such as (1) and those such as (4) and (5):

(4) To please John is easy
(5) It is easy to please John

Early analyses (beginning with Lees 1960, and including Postal 1971) posited a transformational relationship among (2), (4), and (5) such that (2) is derived (along with (5)) from (4). Such analyses entail a claim that any difference among such examples is nothing more than stylistic and superficial. In particular, it would be inconsistent with this

Modern English, and I am grateful to him for sharing with me his extensive knowledge of the TCC literature and data.

² Strictly speaking, it may be incorrect to refer to (1) and (2) as examples of the same construction, unless it can be shown that any formal and semantic differences between such examples may be attributed to independent properties in the respective linguistic systems which would have to be independently characterized in terms of independent constructions. In some other instances, I refer to 'the analog of' this or other constructions when referring to apparently similar constructions in another language. I trust this will not cause undue confusion.
approach to acknowledge any semantic difference between (2) and (4) of the sort which would be associated with what came to be formulated in terms of the assignment of a theta-role to the subject position in (2). Like other raising structures investigated by Postal (1974), then, the supposed object-to-subject raising structure represented by (2) would, in essence, represent nothing more than a superficial formal deviation from the more iconically 'logical' source represented by (4).

Historical analyses of these constructions (van der Wurff 1987, 1990, 1992a, 1992b; Demske-Neumann 1994) have, at least implicitly, made the claim that speakers have always had one transparently 'logical' means of encoding a situation-type of the sort illustrated by (2), (4), and (5), and one 'illogical' means. The supposedly more 'iconic' OE counterpart to (3), the analog of the ModE structure represented in (4), is as follows:

3

Old English also had a counterpart to (4), illustrated as follows:

Hit is swiðe earfoðe ænigum to þeowienne twam hlafordum
it is very difficult anyone-DAT to serve two lords
'It is very difficult for anyone to serve two lords'

(ÆAdmon 1.2.46)

This construction-type does not have a central role in this chapter, for the following reasons. First, in contrast to the role of (4) in Modern English, the it-type construction has a relatively minor role in Old English; van der Wurff (1992) counts some 64 examples of the it-type, as opposed to 465 examples of the impersonal type in (5) and 357 examples of the TCC. Second, the functional difference between the it-type and the impersonal type in (5) is presumably relatively subtle. Given the suggestion of a somewhat complementary distribution between a fronted it which fails to correspond to an embedded object and a fronted dative experiencer (i.e., examples such as us is hit... are relatively infrequent), hit may have a partly information-structuring role independent of any referential content. On the other hand, there remains the possibility that hit may at least sometimes be cataphoric to the embedded infinitival complement. This possibility is at least suggested by the alternation of hit with bet, as in the following:
(6)  Nis eaðe to asecgenne þises landes earmða
not-is easy to relate this-GEN land-GEN poverty
'(It) is not easy to relate this land's poverty'

(ChronE(Plummer) 1104.21)

In (6), the embedded infinitival complement to asecgenne þises landes earmða may be understood as the stimulus or content of the predication of ease or difficulty with respect to some implicit experiencer. In both this impersonal construction-type and the TCC illustrated in (3), the experiencer with respect to the matrix predicate (eaðe etc.) may be

Nis þæt unaðe eallwealdan gode to gefremmanne on
not-is uneasy omnipotent-DAT God-DAT to perform on foldwege, þæt...
path that
'That is not difficult for omnipotent God to perform on the path, that...'

(And 205)

Ac þæt is lang and wundorlic to ssecgenne, hu...
but that is long and wonderful to say, how 'But that is long and wonderful to relate, how...'

(HomU 35.1 (Nap 43)49)

If both þæt and hit may have a cataphoric function, then the question arises as to the functional differences between the two forms. An investigation of this issue would presumably require a much more detailed exploration of textual context than that offered here in connection with the other constructions. (For example, we would presumably want to test the hypothesis of the greater referentiality of þæt in the sense of referring to a more highly topical proposition, that is, one more clearly activated in the immediately preceding context.)

The form associated with the it-construction certainly becomes far more important during the ME period, as the function associated with the impersonal construction investigated here is in essence mapped mostly onto the it-type and to a presumably smaller degree onto the TCC.

There is no clear distinction between these two roles, used here simply for the sake of exposition. If a referent is coded clausally, it is typically referred to as 'content', while NP-referents are typically called 'stimulus'.
overtly coded as a dative-marked argument:

(7) And me þis is lang to secganne and writanne, hu...
    and me-DAT this is long to say and write, how...
    'And this is long for me to tell and write, how...'

    HomU 35.1 (Nap 43) 198)

(8) þam broðrum wæs symble swyðe gewinnful & uneæðe niðer
    the-DAT brothers-DAT was always very laborious & diff. down
    to astigenne to þam wæteræðe
    to walk to the water-well

    'For the brothers (it) was always very laborious and difficult to walk down to the
    well'

    (GD 2(C) 5.112.15)

The two construction-types, then, have the following characteristics. In the TCC
illustrated in (3) and (7), there is a nominative argument (þas þing and þis respectively)
triggering agreement with the matrix predicate (synt earfoðe and is lang respectively); the
rightward-appearing infinitive transitive verb(s) (to secganne and to secganne and
writanne respectively) lacks the accusative object argument for which it is
subcategorized; rather, the matrix subject corresponds to the 'logical' object of the
embedded verb. In the impersonal construction illustrated in (6) and (8), meanwhile, the
matrix predicate(s) (is eæðe and wæs gewinnful & uneæðe respectively) lacks any
nominative subject NP. In (8), the sentence-initial þam broðrum is dative-marked, and
codes the experiencer of the ease, difficulty, etc., coded by the matrix predicate. The
embedded infinitival clause appearing to the right, meanwhile, functions as a complement
or sentential subject of the matrix predicate, and codes the stimulus of that predicate. In
both 'tough'-construction types, the embedded infinitival clause lacks any overtly-coded
subject; when the matrix clause codes a dative-marked experiencer, that experiencer is co-construed with the notional embedded subject, while in the absence of such a specified experiencer the embedded notional subject is presumably interpreted generically or specifically from context.

I will argue that the OE constructions illustrated here both embody straightforward encodings of their respective functions. Among other things, this means that they are not mere stylistic variants, as argued by Demske-Neumann (1994), and that the TCC is not simply a 'raising' structure lacking the assignment of a theta-role to subject position, as argued by Demske-Neumann and van der Wurff (1987-1992b).

In both van der Wurff's and Demske-Neumann's view, the two constructions are argued to be truth-conditionally equivalent and to share a common derivational source. This source is assumed to be basically what you see in (6) and (8), i.e. with the 'logical' sentential subject occurring in its entirety in a rightward-embedded position and with no nominative subject NP. The structure illustrated in (3) and (7) is proposed to derive from a source resembling (6) and (8) by a process of NP-movement, much like passive. The motivation for this movement is posited to be that the embedded verb in (3) and (7) lacks the ability to assign case to its internal argument, resulting in the movement of that argument to a thematically empty matrix subject position so as to receive case and pass the case filter.

I acknowledge that such explanations possess a certain degree of adequacy in a theory-internal context: that is, they offer an abstract structural account of the relevant examples which results in an avoidance of the violation of any theory-internal principles.
or filters. Beyond this, however, and in particular theory-externally, these analyses are of questionable value, given that they reconcile the data with independently-made structural generalizations about the language, or about language in general, by covert manipulation of abstract structure in a manner which is resistant to falsifiability. When we add to this the fact that the theory within which van der Wurff's and Demske-Neumann's analyses are couched deliberately avoids explanation with respect to the function associated with the structure or structures in question, all we are left with is an unfalsifiable abstract structural distinction with no consideration of why speakers might choose (3) over (6) or vice-versa. Finally, the 'NP-movement' analysis crucially depends on the matrix subject position being thematically empty, an assumption which I will call into question.

A more satisfying analysis, I suggest, may be derived by giving a central role to certain examples which are elsewhere marginalized within the treatment of the 'tough'-constructions, or even dismissed as entirely irrelevant to an understanding of the TCC or its diachronic development. This sort of example is illustrated as in (9):

(9)  Seo burg wæs ... swiðe fæger an to locianne (Or 2 4.74.11)
    the fort was very fair on to look
    'The fortress was very beautiful to look upon'

In such examples, which are well attested in the OE literature, the predicative adjective quite clearly, by intuitive criteria and by the usual empirical tests, has narrow predicational scope over its nominative subject rather than over an embedded infinitive as in (6) and (8); the embedded infinitive which does occur, meanwhile, has a relatively adjunct-like status as may be demonstrated by the possibility of its omission— that is,
examples are readily available of these same matrix predicative adjectives used in the same sense with no embedded infinitive.

In the analysis to be presented below, (9) is argued to transparently encode the canonical semantics in terms of which examples such as (3) and (7) are to be interpreted. Instead of joining van der Wurff in viewing (9), on the one hand, and (3) and (7), on the other, in terms of fundamentally different predicate-types and essentially unrelated abstract structures, I view predicates such as faeger and earoðe as occupying different positions on a semantic continuum extending from narrow NP-scope to wide sentential scope, as illustrated in (10), which in turn corresponds to different degrees of preference for participation in the TCC or the impersonal construction.

I will argue that examples like (3), with predicates of the ead type, display a restriction on what may function as subject which is interpretable as the very sort of restriction associated with the assignment of a theta-role to the subject position.

We begin with an overview of theoretical treatments of so-called 'tough-movement' in Modern English in the transformational-generative literature. I then present
a summary of the treatments of Demske-Neumann, van der Wurff, and Allen (1980) of the OE constructions. Next, I present my own analysis of OE 'tough'-constructions. Finally, I offer some comments on the implications of the OE facts for an understanding of 'tough'-constructions in Modern English.

3 An overview of generative treatments of the TCC in Modern English

The two main issues of disagreement in TG treatments of the syntax and semantics of easy-type predicates with embedded infinitive are: (1) whether the matrix subject is base-generated or derived by movement, and (2) whether a passive-like or relative-clause-like analysis most satisfyingly captures the relationship between the subject and the embedded object 'gap' in the TCC construction.

Many early analyses, including Lees (1960), Rosenbaum (1967), and Postal (1971), proposed a treatment of the TCC in terms of movement. Such an analysis requires the availability of a truth-conditionally equivalent example such as (b) for each example such as (a):

(11) (a) John is easy to please
    (b) It is easy to please John

Lees (1960:218) proposed the following transformation deriving both (b) and (a) from an underlying structure with a sentential subject:

(12) to+V+Nom+be+A -> Nom+be+A+to+V
Many later 'movement' analyses endorsed this same sort of derivation, with (b) simply representing the insertion of a referentially void it following extraposition of the sentential subject; although (b) doesn't represent the source of (a), then, it is in a fairly straightforward sense closer to the derivational source given that it preserves an intact infinitival clause while (a) results from movement of the object constituent out of that clause.

Given the usual assumptions about transformational relatedness, no truth-conditional difference could exist between such variants. One aspect of this is, in terms postdating Lees, that no theta-role may be assigned to subject position. Rather, the only theta-role assigned by the 'tough'-predicate is assigned to the entire sentential subject or (assuming extraposition) to the entire embedded clause. In this respect, the analysis of the TCC is parallel to that proposed for epistemic predicates such as likely:

(13) To kill John is tough
    It is tough to kill John
    John is tough to kill

    =
    That John will leave is likely
    It is likely that John will leave
    John is likely to leave

Lasnik and Fiengo (1974) departed from this view in proposing an analysis in terms of what they called Complement Object Deletion (COD) rather than movement. Several arguments were offered to support this. For one thing, there are TCC examples that have no impersonal counterpart:
John is being hard to please
*It is being hard to please John

Also, there are sometimes differences between TCC examples and their impersonal counterparts with respect to the existence of a subject position in the embedded/extraposed clause:

It is a waste of time for us for them to teach us Latin
*Latin is a waste of time for us for them to teach us

Observations of such differences led Lasnik and Fiengo to view the TCC and the impersonal construction as pointing to double subcategorization rather than a transformational relationship. With regard to the TCC itself, they proposed that the relationship between the matrix subject and the gap was best viewed in terms of object deletion rather than movement. They argued that such an analysis was to be preferred because a rule involving deletion within a VP complement was already required for some constructions which lacked any plausible movement source, including constructions with adjectives such as beautiful and others with the determiners too and enough, e.g.:

The girl was beautiful to look at
*To look at the girl was beautiful/*It was beautiful to look at the girl

In other words, their analysis failed to require or imply that the tough-predicate assign no theta-role to the grammatical subject.

One advantage of such an analysis emerged in the later Extended Standard Theory typology of wh-movement and NP-movement types (Chomsky 1977). The implication of
an analysis of the TCC in terms of movement of the embedded object to subject position is that this derivation is similar to that of passive, which is the major exemplar of NP-movement along with 'subject-to-subject raising' structures such as that illustrated in (13).

However, the NP-movement involved in passive and subject-to-subject raising has theory-internal motivations apparently absent in the case of the TCC. In passive, the moved NP receives a theta-role in base position but no extra theta-role in derived position; at the same time, the NP receives case in derived position but no case in base position. Evidence for the former comes from the fact that the theta-role of the passive subject is always the same as that of the corresponding active object, i.e. there is never any truth-conditional clash. Evidence for the latter is of a somewhat different nature, but we could say that it makes perfect sense for the passive predicate to be viewed as failing to assign accusative case given that the head of the predicate is an intransitive verb, *be*; it is assumed that the movement of the NP is motivated by the absorption of the internal case by the passive morphology, which would result in a violation of the case filter if the NP failed to move to a position where it could receive case. In raising structures with predicates like *seem* or *likely*, meanwhile, the embedded subject moves to matrix subject position because of the need to be case-marked by an inflected predicate, which is absent in the embedded infinitive. With the TCC, on the other hand, there is no clear motivation for the movement of the NP since the gap representing its base position is obviously one to which case is normally assigned.

Chomsky's (1977, 1981) position was, as Foldvik (1989:12) puts it, to '[strike] a compromise between a movement and deletion analysis' by viewing the matrix subject as...
base-generated rather than transformationally derived, but (unlike Lasnik and Fiengo) at the same time viewing the gap as bound by a covert wh-operator. Regarding the gap as representing the site of a wh-trace removes the difficulty represented by the fact that NP-movement from that site to matrix subject position would apparently involve double-case-marking, since the only movement (or, in more current terms, the only binding of a trace) involves that position and the covert wh-operator in COMP, which is an A-bar position. This analysis may be represented as follows:

(17) John(i) is easy [OP(i) [PRO to please t(i)]]

This analysis implies that the relationship between the subject in a TCC construction and the notional embedded object is essentially the same as that between the head and the embedded gap of a relative clause. The main arguments for an analysis in terms of wh-movement are, first, that in the TCC there may be an apparent violation of subjacency in that the subject and gap (or hypothetically moved operator and gap) may be an unrestricted distance apart, second, that the TCC obeys wh-islands, and third, that the TCC, like overt wh-structures, is compatible with parasitic gaps. In addition, any evidence for the unacceptability of idioms in the TCC construction argues against a thematically empty subject position. These four points are illustrated as follows:

(18) John is easy for us to convince Bill to arrange for Mary to meet  
(Chomsky 1977:103)

(19) *This book is difficult to tell anyone why they ought to read  
(Demske-Neumann 1994:11)
This book is difficult to discuss without getting annoyed about (Demske-Neumann 1994:12)

*Advantage was easy to take of Bill (Chomsky 1981:309)

Jones (1991), too, analyses the TCC in terms of a base-generated subject and an adjunct-like infinitive which elaborates on the predication of the main clause. In this respect, the TCC is like relative clause formation, which displays the same sort of semantic relationship between the main and embedded clause, as well as between the relative-clause head and the gap, cf.:

She gave us a book to read

Opposed to analyses of a base-generated subject, including those such as Chomsky's which invoke wh-movement, are more recent proposals which return to a 'passive'-like analysis. In her argument for the desirability of such an analysis, Demske-Neumann relies on the ungrammaticality of examples such as the following (with her judgment included):

*John is easy

In her words, 'Sätze wie [23]..., in denen die thematische Rolle für John von dem Adjektive kommen muss, werden entweder ungrammatisch oder erhalten eine vollkommen andere Bedeutung. Es kann deshalb nicht richtig sein, wenn Jones (1991)
Another argument cited by Demske-Neumann in support of the base-generated nature of the TCC subject is that of Pesetsky (1987), who adduces data such as the following:

(24) These pictures of himself will be difficult to tell Bill about  

(It should be emphasized that Pesetsky presents this as a grammatical sentence, and Demske-Neumann (not a native speaker) implicitly endorses this judgment.) Only on the assumption that the 'picture'-NP here is base generated in embedded object position, plus the assumption that the D-structure representation is the relevant one for the binding theory, is the grammaticality of (23) explained.⁵

On the basis of such considerations, Demske-Neumann proposes for the TCC the same sort of analysis applied to passive, namely one in terms of NP-movement. NP-movement differs from wh-movement in two respects: it involves a thematically empty subject position, i.e. a position which is otherwise capable of receiving a theta-role; and the trace corresponding to the movement site must be locally bound by a subject. The latter results in the following sort of contrast:

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⁵ The relevant principle of the binding theory is Principle C, which states that anaphors (=reflexives) must the bound (=c-commanded by a coindexed NP) in their governing category (=the smallest NP or S in which the anaphor is governed; in this instance, the immediately-containing S).
(25) Who did you claim that John liked?
   *Mary was claimed that John liked

This, then, gives rise to a problem under an NP-movement analysis of the TCC, in that the trace is apparently not locally bound by a subject:

(26) John(i) is tough [PRO to please t(i)]

Demske-Neumann's solution to this is to endorse a 'small-clause' analysis for the embedded infinitive in the TCC, but not the impersonal (it-) construction—in other words, the embedded clause lacks a subject position, so the trace is in fact locally bound by the subject John. Such a dual-subcategorization analysis has been, as we have seen, proposed by other analysts as well, based in part on evidence for or against an embedded subject position represented by the following sort of data, originally cited by Chomsky (1973):

(27) It is pleasant for the rich for the poor to do the hard work
   *The hard work is pleasant for the rich for the poor to do

This also solves the problem of the internal motivation for movement if we join Demske-Neumann in interpreting the small clause as losing its verbal status and becoming integrated with the matrix adjective as a kind of complex adjective which, like adjectives in general, lacks the ability to assign objective case.

The problem for the NP-movement analysis is, then, how to handle the long-distance dependencies of the sort illustrated in (18), which on theory-internal grounds are incompatible with NP-movement. Demske-Neumann's solution is to endorse a wh-
movement analysis for just those examples which rule out an NP-movement analysis—in other words, to posit a dual analysis of TCC rather than a single unified one. Among the justifications for this solution are the fact that all available evidence points to the legitimacy of an exclusively NP-movement analysis of the TCC in older stages of the language. In other words, Demske-Neumann's assumption is that ModE TCC retains its 'passive'-like nature, with the caveat that the language has innovated a wh-movement type in addition to the wh-movement type. A proposal along these same general lines has also been made by van der Wurff (1990), who argues for a 'reanalysis' of an NP-movement OE and ME construction into a ModE wh-movement construction. Demske-Neumann differs from van der Wurff, however, in arguing that ModE TCC retains its basic 'passive' NP-movement character, rather than that TCC as a whole has undergone reanalysis.

The reason for the retention of an NP-movement analysis for ModE TCC is, recall, that by various arguments the subject position is thematically empty. This claim is, however, of dubious validity in Modern English, and even more doubtfully valid for Old English. Out-of-context judgments of the grammaticality of examples such as (23) are worthless as evidence for or against a thematically empty subject position. As I will

This is true as long as certain assumptions are made. For Demske-Neumann, the crucial assumption is that apparent examples of preposition stranding in OE TCC in fact involve 'stranded' particles; I will address this below.

Note that the 'entailment' argument is never applied to subject-control equi examples such as John is quick to anger to make the point that, since this is semantically different from John is quick, the subject position here is theta-role-empty. Thus, this particular argument is only applied when independent reasons exist for reaching the conclusion it supposedly supports, while it is never applied to structures for which it would lead to the 'wrong' results.
argue for Old English, any apparent difference between (23) and examples with an embedded infinitive in place are to be attributed to the underspecified nature of the respect in which (in this example) 'John' is 'easy'. In this, I follow Nanni (1978), who proposes an analysis of the following sort for the ModE TCC. In the ModE TCC with predicates such as easy, the subject NP is presented as bearing responsibility for the 'cost' to the notional agent of the embedded clause of the intentional act represented by that clause. This results in the following sort of paraphrase:

(28) This book is hard for me to read
    =This book exacts a high cost from me with respect to an intentional act of reading it
    =This book requires a great deal of effort from me when I try to read it

The interpretation of the subject position in terms of a semantics of 'responsibility' is, of course, incompatible with an understanding of that position as semantically empty. So is the intuition of a semantic difference between examples such as the following:

(29) It was unpleasant to have to lie to your mother
    Your mother was unpleasant to have to lie to

In other words, the interpretation of TCC examples is constrained by the adjectival predication independently of the embedded infinitive. This fact, noted by Bolinger (1961) in a response to Lees (1960), remains a cogent counterargument to the NP-movement (or thematically-empty subject) analysis, whatever the details of this analysis may be at whatever stage of TG we care to examine. Note, too, that TCC examples remain bad if they fail to admit of such infinitive-independent predication:
It's imperative for us to convince John to leave

??John is imperative for us to convince to leave
??John is imperative

The exclusive selection by certain predicates of sentential complements is, again, inexplicable if we view the TCC simply in terms of formally-licensed movement from an embedded position.

My position, in other words, is that the TCC is indeed parallel to a relative clause in representing a matrix predication which is semantically coherent independently of an elaborative embedded clause. If we consider the following sort of example cited by Demske-Neumann (1994:14):

(31) They had no houses(i) [to sleep in t(i)]

we may note that the matrix clause is indeed (as argued by Jones) coherent independently of its embedded infinitival clause in the same way in which the matrix clause in the TCC is coherent independently of its embedded clause. There are many respects, in other words, in which one may 'have' a house, and the embedded clause specifies the respect of relevance in the use at hand. It is just as defensible to argue for infinitival relative clauses as for TCC that the differences of interpretation of examples such as the following point to an analysis by which the matrix argument (in this case, the direct object) is not base-generated:
(32) They had nothing to eat
    They had nothing

The reasoning applied to examples such as John is easy to argue for an empty subject
position is, then, just as spurious in the one case as in the other.

Note further that it is precisely those matrix predicates which admit only of an
'impersonal' reading which resist use in the infinitival relative clause:

(33) It's imperative to read that book by tomorrow
    ??That book is imperative to read by tomorrow
    ??That's an imperative book to read by tomorrow

Once again, this supports the view of the relationship between the subject NP and the
adjective as being restricted and, therefore, contentful in a manner which would be
incompatible with a view of the subject position being thematically empty. Note that, in
examples such as the following

(34) That's a fun book to read

the modificational relationship between the NP and the adjective is certainly 'contentful',
and no proposal exists for deriving the modification of book by fun from anything
supposedly more 'logical'; the infinitival relative clause to read, then, has an adjunct-like
role of specifying the domain or respect in which that modification holds. Assuming the
validity of an analysis of such examples as parallel to examples such as the following
(35) That book is fun to read

a parallel analysis would be valid for the TCC.

Finally, it is only fair to point out that the evidence cited from Pesetsky (1977), repeated here, for the 'moved' status of the matrix subject is essentially worthless:

(36) These pictures of himself will be difficult to tell Bill about

This is, surely, the kind of example which only a linguist could concoct, and which would be judged as aberrant by most native speakers. My own judgment is that the following is if anything less bad than (36):

(37) ?A picture of himself turned up in Bill's drawer

--and yet no conceivable analysis could 'reconstruct' himself as being c-commanded by Bill at any stage of the derivation. In general, 'picture'-NPs present such notoriously difficult problems for Principle C of the binding theory that any invocation of such examples in support of abstract structures is disingenuous to say the least.

Unfortunately, the same sort of confusion surrounds much of the rest of the data adduced in a variety of analyses for or against other claims about the kind of movement involved in ModE TCC. Consider the sorts of examples Chomsky (1977:103-4) uses to argue for wh-movement:
Culicover and Wexler (1977:42), meanwhile, provide the following as the kind of datum which an adequate rule of tough-movement should fail to generate (their judgment is included):

(40) *Fred is easy for Mary to prove that she saw
taxonomy represents. We now turn to a critical analysis of Demske-Neumann's account of the TCC in Old English, as well as those of van der Wurff (1987-92) and Allen (1980).

4. Analyses of the TCC in Old English: Allen, van der Wurff, and Demske-Neumann


Recall that Old English has what may be thought of as two general types of relativization strategy: one with, and one without, a pronoun appearing adjacent to the complementizer and preserving the case and number inflection associated with the gap:

(41) Seo gesihd þe we god myd geseon scylon is angyt
    the sight that we God with see shall is understanding
    'The sight that we shall see God with is understanding'
    (Sol 67.6/Allen 1980:267)

(42) Eala þu wunderlice rod, on þære þe crist wolde þrowian
    hail you wonderful cross on which-f.d.s. that Christ would suffer
    'Hail, you wonderful cross, on which Christ deigned to suffer'
    (Alc.S.XXVII.115/Allen 1980:271)

In (41), the indeclinable relativizer or complementizer þe simply marks the relative clause which restricts the reference of its head or, in the case of a non-restrictive relative clause, comments parenthetically on that head. If the relative clause were an independent clause, we would typically expect a pronoun corresponding to a topical referent to appear following the proposition, e.g.:
we scylon god myd þære geseon
we shall God with that-f.d.s. see

In (41), no such pronoun occurs in preposition-adjacent position or anywhere else. In (42), meanwhile, the PP on þære appears between the relative clause head rod and the complementizer be; the independent clause corresponding to this relative clause would be as follows:

(44) crist wolde on þære þrowian
    Christ would on that-f.d.s. suffer

Given the assumptions of a multistratal framework, then, the most straightforward analysis is that, in (41), the pronoun has been deleted, while in (42) it has been moved.

Allen points out that, in the 'deletion' or 'be-relativization' strategy, any argument-type, including prepositional objects, may be deleted, potentially resulting in preposition stranding as in (41). In the 'movement' or 'se-relativization' strategy example in (42), any argument-type may be moved, but movement of a prepositional object obligatorily entails pied piping of the preposition, as in (42).

These facts, to Allen, fit a general OE pattern: wherever movement of a pro-form occurs, pied piping is obligatory, while deletion freely permits preposition stranding. For example, the kind of focus-structure exemplified by wh-questions obligatorily involves pied piping:

(45) Ic mat ful geare ymb hwæt þu giet tweost
    I not-know full well about what you yet doubt
    'I do not know full well about what you still doubt'
    (Boeth. V.3 12.26/Allen 1980:285)

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In topicalization structures with a topicalized full NP, virtually all examples involve pied piping:

(46) To þæm sodum gesælðum ic tioghige þæt ic þe læde
to the true happiness I intend that I you lead
'To the true happiness I intend to lead you'
(Boeth.XXII.2 51.12/Allen 1980:286)

As an example of 'deletion' structures patterning with be-relatives, Allen provides the following:

(47) þeah he nu nanwuht elles næbbe ymbe to sorgienne
though he now nothing else not-have about to worry
'Though he now have nothing else to worry about'
(Boeth.XL.1 24.15/Allen 1980:276)

(48) waes seo wunung þær swyðe wynsum on to wicenne
was the dwelling there very pleasant in to camp
'The dwelling there was very pleasant to camp in'
(Alc.S.XXX.315/Allen 1980:283)

The first represents an infinitival relative clause which, as in Modern English, fails to permit a relative pronoun. In the example given here, the preposition ymbe is stranded. (48) shows the TCC with a stranded preposition on. Given Allen's general claim for an association between deletion processes and the possibility of preposition stranding, data such as (48) in effect support a COD (Lasnik & Fiengo 1974) analysis over a movement analysis for such structures in Old English.

However, Allen also notes that 'no examples of stranding [are found] with eaðe "easy" or earfoðe "difficult"'. This suggests that superficially similar structures with adjectives like wynsum and adjectives like eaðe in fact have different derivations:
deletion in the former case and movement in the latter.

There are, however, a number of considerations which serve to vitiate Allen's overall generalization and, therefore, the conclusion she offers regarding OE TCC. First, it turns out not to be true that 'movement' processes fail to license preposition stranding in all cases. Topicalization of proœnouns as opposed to full NPs routinely permit preposition stranding in examples such as the following:

(49) Oð þis ic spræc þe lidælice to
until this I spoke you meekly to
'Until this I spoke to you meekly' (Alc.Th.VolI 594.8)

(50) ...þæt se dæl þære ciricean ne mæg habban þone hrof þær
that the part of the church not may have the roof there
þæs hælendes fotlæstas sindon under
the saviour's footprints are under

'...that the part of the church where the saviour's footprints are under may not have a roof'

(Mart. 76.11)

In order to salvage her generalization, then, Allen proposes that a process of PP inversion precedes movement in the derivation of topicalized pronouns, and that this process somehow disrupts the constituency of the PP and therefore licenses movement of the pronoun away from its governing head. The fact that such inversion is independently well attested with pronouns and locatives such as þær, but is 'extremely rare in full NPs, at least in prose' (287), justifies the restriction of the inversion process to pronouns and locatives. It remains the case, however, that the facts of OE preposition stranding cannot be formulated simply in terms of the type of movement involved; rather, they must be
formulated in terms of an interaction between the relevant construction and the type of NP-object.

Second, as Allen notes, TCC examples with predicates such as eaðe fail to permit movement of a prepositional object with pied piping, even though such movement is perfectly acceptable in other movement processes such as that involved in se-relatives. Allen handles this by stipulating 'that tough movement applied only to NP' (p. 283 fn. 25). The fact remains, however, that this restriction fails to be explained by any of the generalizations Allen attempts to establish, and may point to restrictions of a semantic nature which apply to the TCC but not to se-relatives; I will return to this point below.

Given the GB framework within which he works, one of van der Wurff's (1987, 1990) priorities in his analysis of OE 'tough'-predicates is to provide a structural motivation for the fact that one and the same predicate, e.g. earfoðe 'difficult', may occur in both the TCC and the impersonal construction, as shown below:

(51) þas þing synt earfoðe on Englisc to secganne  
these things are difficult in English to say  
'These things are difficult to say in English'  
(ByrM 1 (Crawford) 76.9)

(52) Us is earfoðe to secgenne þa seltcanan mærnœa...  
us-DAT is difficult to tell the little-known wonders  
'(It) is difficult for us to relate the little-known wonders...'  
(ÆHom M 14 (Ass8) 15)

The first fact of relevance here is that, if we restrict our attention to a certain subset of

For the insight into the circularity of van der Wurff's account, I am once again indebted to Yoon-Suk Chung.
predicates, the TCC construction shares certain features with passive. As explained above in connection with Allen's analysis, in the TCC with predicates such as eafde, the nominative NP is invariably co-construed with a gap corresponding to an accusative-taking argument, never to an oblique of any kind, including prepositional objects. In OE passive, too, only direct core arguments, i.e. accusatives, may be promoted to subject position. Thus, e.g., preposition-stranding is never attested with the OE passive.

Unattested examples illustrating these constraints are as follows:

(53)a. *seo worulde is eafde on to wunigenne
    the world is easy in to live
    'The world is easy to live in'

b. *seo worulde wæs on gewunode
    the world was in lived
    'The world was lived in'

This parallelism, to van der Wurff, implies a deeper structural parallelism between the passively-inflected verb and the so-called inflected infinitive embedded under the tough-predicate. By inflected infinitive is meant the infinitive with to and -ne, in contrast with the bare infinitive without to and lacking the -ne inflection; both are illustrated in (54). It is the inflected version which routinely appears in the both the TCC and the impersonal 'tough' construction.

(54) secgan 'to say'
    to secgyanne 'to say'
    pas ping synt earfode to secgyanne 'These things are difficult to say'

The second fact considered relevant by van der Wurff is the 'passive' meaning
independently associated with the inflected infinitive when used without an embedding adjective, as in (55):

(55)  þas þing sind to donne
      these things are to do
      'These things are to be done'/These things must be done'

Recall the GB treatment of passive: the structural motivation for the movement of the NP to subject position is that the passive form of the verb, while assigning a theta-role to its internal argument, lacks the ability to assign case—by some accounts, because the passive morphology has absorbed the case normally assigned by the verb. The internal argument must therefore move to a position from which case may be received from some other case-assigner. This motivates movement to the thematically empty subject position, where the argument receives structural case from INFL.

For the OE 'tough' constructions, van der Wurff's approach is to posit an analogous motivation for movement in just those cases where a nominative subject argument appears which is co-construed with an embedded object argument, i.e. in the TCC. The analysis is as follows. 'Tough'-predicates such as eafe 'easy' may embed either of two types of clausal complement: a full S' complement, as in (56), or a reduced S complement lacking an INFL node, as in (57). If the embedded complement is S', the embedded verb case-marks its internal argument and no movement results. If the embedded complement is S, the absence of an INFL node in the same clause with the
infinitive verb is claimed to prevent that verb from assigning case⁹; the internal argument must therefore move to a position from which it can receive case, and the thematically empty matrix external argument, or subject, position is conveniently available for just that purpose.

(56)

Van der Wurff (1987) also takes a tentative stab at attributing the loss of the ability of the verb to assign case to 'absorption' by the infinitive inflection of the case normally assigned by the verb, much as the passive inflection 'absorbs' the case normally assigned by its active transitive counterpart; given the independently 'active' behavior of the inflected infinitive, however, this is obviously wrong.
There are, however, a number of problems with this analysis. The most obvious is that there is no evidence for the structural distinction at issue, that is, between S' and S embedded complement clauses, besides the very phenomenon which that distinction is meant to motivate.

Second, the linking of the absence of the INFL node to the inability of the embedded verb to assign case fails to be related to any independent theory-internal evidence for such a correlation. Note that in the passive derivation, the absence of the verb's ability to assign case has nothing to do with the absence of a homoclausal INFL node.

Third, the inflected infinitive independently case-marks its internal argument in examples such as (58). It is therefore problematic, to say the least, to associate the inflected infinitive morphology with either 'passive' behavior or 'passive' meaning.
(58) hie... efeßton þæm biscope to cyðânnen & secgenne þa þing
they hastened the-DAT bishop to inform say the things

þe hie ær gemetton
that they earlier found

'They hastened to the bishop to relate and say the things that they had found'
(Bede 4 31.376.5)

Fourth, in attributing 'passive' meaning to (55), van der Wurff simply perpetuates
a long-standing and arguably misguided tradition of attributing 'passive' character to OE
structures simply because their ModE translation-equivalents feature passive form.

Consider the following:

(59) ...and se apostol abæd him wæter bæræn
and the apostle bade him-DAT water to carry
'...and the apostle bade (someone) carry water to him'
='...and the apostle ordered him to be brought some water'

(ÆCHom ii.422.28)

In this example, representing a common OE construction-type, the dative-marked him is
the indirect object of the embedded verb—both formally and logically. An acceptable
ModE translation would be, '...and the apostle ordered him to be brought some water'.

The use of passive in the ModE translation, however, fails to mean that the OE infinitive
in this example is 'passive'. If, however, we were to apply the logic of van der Wurff's
argument, we would attribute 'passive' character to uninflected infinitive bæræn here,
which would then however further undermine the supposed association between 'passive'
character and the OE inflected infinitival form.

Finally, van der Wurff's approach to the TCC examples, requiring as it does that
the matrix subject position be thematically empty, necessitates a completely different
analysis for any adjective-plus-infinitive collocation that shows any evidence for a
thematically contentful subject position. Any such examples as (60), then, are simply set
aside as irrelevant to an understanding of TCC:

(60) Seo burg wæs...swiðe fæger an to locianne
    the fort was very fair on to look
    'The fortress was very beautiful to look upon'
    (Or 2 4.74.11)

Van der Wurff argues that examples such as (60) represent a structure bearing a similarity
to examples like (50) in nothing more than superficial appearance. The difference
between (50) and (60) is, by his account, no less than that between true 'tough movement'
and subject-control equi examples such as the following:

(61) ic eom gearo to gecyrrenne to munuclicre drohtnunge
    I am ready to turn to monastic life
    'I am ready to turn to monastic life'
    (ÆCHom i, 35 534.32)

This claim is justified partly with reference to the facts discussed above in connection
with Allen: with fægær and a number of other adjectives, the embedded gap may
correspond to a prepositional object, resulting in preposition-stranding as in (60); with
earfode and certain other adjectives, on the other hand, any gap apparently must
correspond to an accusative-taking direct core argument. When this distinction is
considered in light of Allen's argument that 'deletion' operations in OE may strand
prepositions but 'movement' operations may not, then there seems to be independent

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empirical justification for viewing superficially similar examples like (50) and (60) as in fact analyzable in terms of fundamentally different abstract structures. However, as I will argue below, the view of a neat division between predicates such as \textit{fægr} and \textit{gaðe} is falsified in a number of respects. In addition, as I will show, the facts of preposition stranding follow from different coinstantiation constraints imposed by different matrix predicates occurring in one and the same construction.

In her analysis of the diachronic development of the TCC in German and English, Demske-Neumann (1994) endorses and develops the view of the German structure illustrated in (62) as representing adverbial modification of a construction she calls the \textit{modales Passiv}:

(62) Das Buch ist leicht zu lesen  
the book is easy to read

By her view, the reanalysis of what was historically a predicative adjective with embedded infinitive complement into a modal passive construction followed from the loss of any morphological distinction between predicative adjectives and adverbs. By various tests, including coordination 'mit eindeutig Adverbien' (Demske-Neumann 1994:187) and occurrence in constructions such as the \textit{Medialkonstruktion} in which 'obligatorisch ein modales Adverb erscheint', \textit{leicht} and similar lexical items in examples parallel to (62) are to be viewed as adverbs rather than adjectives:

(63) Dieser Esel ist unbequem und mühevoll zu reiten  
this ass is uncomfortably and effortfully to ride  
'This ass can only uncomfortably and effortfully be ridden'  
(Demske-Neumann 1994:188)
Das Buch liest sich langweilig
the book reads itself boringly
'The book reads boringly'
(Ibid.)

This 'adverbial' analysis of the apparent German counterpart to the ModE TCC solves a problem for Hawkins' (1986) generalization of the invariably greater transparency of German relative to English when comparable structures are contrasted. Hawkins himself cites the facts of the TCC as supporting his generalization, in a number of respects:

[First], the class of English triggers is reasonably large, whereas the corresponding German class comprises just five items (leicht 'easy', einfach 'simple', schwer 'hard', schwierig 'difficult', interessant 'interesting')10.... Second, English Tough Movement raises both underlying direct objects and oblique NPs, German only direct objects.... Third, English Tough Movement is an unbounded movement rule, German Tough Movement a bounded rule. I.e. the total set of structural environments over which German Tough Movement can operate is properly included in the corresponding English set. (Hawkins 1986:78)

There is, however, one problem we may have in reconciling these facts with the overall typological claims of the book. If German is always more 'transparent' than English when equivalent structures are compared, it is unexpected that this particular subset of predicates participates in the German TCC. It is surely easier to argue for predicates such

"This claim must be wrong, since Demske-Neumann discusses many more 'tough'-predicates, including lustig 'fun', langweilig 'boring', unbequem 'uncomfortable', and fürchterlich 'frightful'. The claim for a proper-subset relationship would still, however, hold.
as pretty than for ones such as easy that that predicate is not merely 'syntactically', but also 'semantically', being predicated of the grammatical subject—and yet, it is precisely the 'pretty' class, rather than the 'easy' class, which is excluded in German. Thus, the usual 'transparency' relationship between the two languages is reversed.

Of course, the obvious hitch here is that for English to be considered more 'transparent' than German with respect to TCC, we would require that the two languages indeed possess the same structure, rather than two different structures which happen to look similar. In fact, Hawkins makes reference to, and seems to endorse, an argument by König (1971) that the German structure is actually quite different from the English one. The argument König makes is that the 'tough'-predicate modifies the embedded clause just as adverbials such as 'in five minutes', 'without difficulty', or 'often':

(65)  Er ist leicht zu überzeugen  
'He is easy to convince'

(66)  Er ist in zwei Minuten zu überzeugen  
'He can be convinced in two minutes'

What both leicht and in zwei Minuten are doing, then, is simply modifying a clause which can appear independently of any such modification, namely Er ist zu überzeugen, lit. 'He is to convince', meaning 'He can/must be convinced.' This means that, for every English 'tough'-predicate whose German translation-equivalent fails to participate in the construction in (62), 'the ungrammatical German structures...will be out not because of the relevant conditions on Tough Movement, but because they are not interpretable as adverbial expansions of a passive infinitival' (Hawkins 1986:223 fn. 32).
This is the same general conclusion arrived at by Demske-Neumann; among the claims of König with which she would agree is the claim that the only acceptable German 'tough'-predicates are those which may occur with a sentential complement, as follows:

(67) Es war lustig, ihn zu quälen
'It was fun to torment him'

All the acceptable German examples are ones in which which, in her terms, no theta-role is to be interpreted as assigned to subject position.

Demske-Neumann's and König's analyses of the apparent German analog of the ModE TCC, then, prompt the following questions in connection with Old English: Is the OE TCC restricted to a class of predicates for which the assignment of a theta-role to subject position may be excluded? Second, is OE TCC analyzable in terms of the sort of adverbial modification of a potentially self-standing structure, as in ModG? Given the interdependence of these questions, it may be expected that the answer will be the same for both; I will show that that answer is no. I will first address the question of the adverbial status of the OE 'tough'-predicate, and leave the other question for the body of my analysis of the OE TCC presented below.

It must first be noted that, along with the overt marking serving in Modern English to differentiate adverbs from predicative adjectives, the reason an adverbial analysis for the ModE 'tough'-predicate can be ruled out so easily is the unavailability in Modern English of the sort of infinitival construction German possesses. In Old English, by contrast, we have ample evidence for a construction which is at least structurally parallel to the German one; this is exemplified as follows:
(67) Ongean þæt is to cyðanne þæm þe beoð to hraðe, ... þæt...
again that is to tell him that is too hasty that
'Again, that must be told to him who is too hasty, that...'
(Greg. 287.3)

The hedge that this sort of example is at least structurally parallel to the ModG type
reflects uncertainty about the availability of a 'possibility' as opposed to 'obligation'
reading for the OE construction. The reason this is important is that a 'possibility' reading
would be just as necessary for an adverbial interpretation of an example such as (68) as
that same reading would be for the ModG example which follows:

(68) Hwæt, þa stanas ... bioð earfoðe to tedælennne...
lo the stones are difficult to separate
'Lo, the stones ... are difficult to separate' (Bo 34.92.22)

(69) Die Steine sind (nur) schwer zu teilen
the stones are difficult to divide
'The stones can (only) be divided with difficulty'

Demske-Neumann, while leaving this question unaddressed for Old English,
claims that the parallel construction in OHG in fact permitted only an obligation reading.
As she points out (p. 76), if we interpret the 'possibility' reading as epistemic, and the
'obligation' reading as deontic, then the development of a 'possibility' reading out of an
exclusively 'obligation' one fits nicely with independent generalizations about the
development of epistemic uses of modals (Sweetser 1990). Given the facts of OHG, then,
as well as the expectations we would have based on other investigations of similar
phenomena, it would certainly not be surprising if the OE infinitive were limited to a
deontic reading of obligation.
In his inventory, Callaway (1913:97 ff.) attributes only a reading of 'obligation' or 'necessity' to relevant examples of the OE infinitive. While he fails to explicitly address the question of the availability of a 'possibility' reading, then, the implication is that such a reading was unavailable. Fischer (1991), on the other hand, claims to find evidence for a 'possibility' reading of the infinitive in examples such as the following (with her own translations included):

(70) þæt is to gedéncanne þeoda gehwylcum, wisfæstum werum, that is to imagine of-people for-each for-wise men

hwæt seo wiht sy what this creature may be

'Relevant examples' are of the form NP is to V, with the NP corresponding to some sort of object of the V. Other patterns, with coinstantiated subject and a semantics of purpose, or with verbs other than 'be', will be discussed in the section on purpose clauses. For the moment, I simply offer an example of each:

we ... hlaford þinne ... secan cwomon
we lord your to.seek come
'Ve come seeking your lord' (Beo 268)

þæs wiif, þa þe heora bær ... oðrum to fedenne sellað these women who that their offspring others-DAT to feed give
'These women who give their offspring to others to feed...'

(Bede 76.34)

I will also leave until later the question of the relationship between the TCC and the OE infinitival relative clause, illustrated as follows:

Nu ic longe spell hæbbe to secgenne
now I long story have to tell
'Now I have a long story to tell'
'It is possible for each man, for wise men, to find out what this creature might be'
(Rid 418/Fischer 1991:150)

(71) Eac is þeos bisen to geðencenne þæt is þæt ...
also is this example to think that is that
'Also this example can be thought of that is that ...'
(Bo 23.52.2)

These examples are, however, less clear than we might like, in or out of context; the
Boethius line, for example, is translated by Sedgefield (1900) as 'consider also another
eexample.' From my own collection, the following represents a purposive semantics and
is, I think, incompatible with a reading of obligation:

(72) Eall þís was God mid to gremienne, & þas arme leode mid to
all this was God with to plague these poor people with to
tregienne
vex

'All this was to plague God with, and to vex the poor people with'
(ChronE(Plummer) 1104.26)

I do not, however, have any clear examples displaying the 'possibility' reading which
would be required for an interpretation of eapē in (68), repeated here, as an adverb:

(68) Hwæt, þa stanasa... biōd earfoðe to tedælennæ...
lo the stones are difficult to separate
'Lo, the stones...are difficult to separate' (Bo 34.92.22)

In addition, an interpretation of 'tough'-predicates such as eapē as adverbs would probably
cause more problems than it would solve. Consider the following typical examples of the
unmodified infinitive:
(73) ðæm oferblíðum is to cyðanne ða unrotnessā ða
the-DAT overcheerful-DAT is to inform the sadnesses that
ðæræfter cumáð, & ðæm unblíðum sint to cyðanne ða
thereafter come, the-DAT unhappy-DAT are to inform the
gefean ðe him gehatene sindon
joys that them-DAT promised are
'To the overly cheerful (it) is (necessary) to make known the sadnesses that follow, and to the unhappy ones the joys are to be related that are promised them'
(CP 187.15)

(74) þæs seðel wær ece to gelyfenne in heofonum
the-GEN throne were eternally to believe in heaven
'The throne should be believed in eternally in heaven'
(Bede 224.22)

If a 'possibility' reading were available, we would expect to find examples such as the following:

(75) *ðæm oferblíðum is eãe to cyðanne...
'To the overly cheerful (it) is easy to make known...'

Instead, we only find examples of the following type:

(76) And me þis is lang to secganne and to wíttané, hu...
and me-DAT this is long to say and to write, how...
'And to me this is long to say and to write, how...'
(HomU 35.1 (Nap 43) 198)

Here, the fronted dative codes the experiencer with respect to the matrix clause, not an embedded object. Of approximately one hundred examples taken into consideration for the purpose of the investigation of the OE TCC, not a single one features an unambiguously non-nominative fronted NP corresponding to an embedded object—a fact
which would be inexplicable under an adverbial analysis, given the availability of examples such as (73-4).\textsuperscript{12}

Finally, as Demske-Neumann explains, even though a predicative (strong-declined) adjective and an adverb would in many cases receive identical morphological marking in Old English, the syncretism of the two paradigms is not as complete as in ModG. This means that, while many uses of a potentially adjectival or adverbial stem may be formally ambiguous between the two functions, some uses are nevertheless unambiguous. Most frequently, unambiguously adjectival forms lack the -\textit{e} adverbial suffix, as in the following:

\textbf{(77)} \textit{\textipa{\textipa{\v}a} cwæð ic: ðæt is wundorlic ðæt ðu sægst, \& swiðe}
then said I that is wonderful that you say very

\textit{\textipa{\textipa{\v}a}}

We do, however, find two examples with a fronted PP:

be ðam is nu langsum, on ðisum lytlum cwye eow
about which is now longsome in this little discourse you-DAT
to gereccene
to tell
'about which (it) is now longsome in this little discourse to recount to you'
\textit{(ÆCHom ii, 12.1 115.175)}

be heore ealre earmne drohnunge selre is to swigenne,
about their all poor conversation better is to be quiet
donne embe to specenne
than about to speak
'about all their poor conversation (it) is better to be quiet than to speak about'
\textit{(BenRW 1.25)}

(Note the co-occurrence of pied piping and preposition stranding in the \textit{than}-clause in the last example.)

721
Then I said: that is wonderful what you say, and very difficult for foolish men to perceive

(Bo 38 118.5)

Given that the -e suffix may also have the function of marking the nominative plural form of an adjective in the strong paradigm, as well as of completing the uninflected stem of adjectives of the ja-/jo- stem class, contexts which allow for unambiguous identification of the stem as adverbial or adjectival are singular, with stems of the a-/io- or wa-/wo- class.13

Of course, the existence of unambiguous forms doesn't mean that some apparent uses of adjective+infinitive might not in fact be adverbial, especially those uses which are

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Demske-Neumann points out that some forms of the ja-/jo- class may still be unambiguous as long as the non-final stem vowel permits umlaut, since umlauted vowels signal an adjectival as opposed to adverbial function under influence of the stem-final -e; she provides the following as an example of an unambiguously adjectival use, given that we would expect unumlauted swote if the use were adverbial:

ōe him swete wœron to oœœœœœœoœœœnne
that him sweet were to open
'that were sweet to him to open' (BlHom 59,9)

However, this rule is by no means as dependable as we might like; consider the following unambiguously adjectival use of the unumlauted form:

hu swote is ure Drihten
how sweet is our Lord
'How sweet is our Lord' (LS 22 (InFestisSMarie)154)
compatible with the 'obligation' semantics of the unmodified infinitive:

(78) Ac hwæt is þam men betere to þencenne þonne embe his
but what is the-DAT man-DAT better to think than about his
sawle ðearfe
soul's needs
'But what is better for a man to think than about his soul's
needs?' (Hom S 6 (Ass 14) 15)

A final kind of criterion for identifying an unambiguously adjectival use would be
with respect to formal features which are independently unlicensed by the unmodified
infinitive and by the adverb independently of the infinitive; consider the following:

(79) Hit is swide earfoðe ænigum to þeowienne twam hlafordum
it is very difficult any-DAT to serve two lords
'It is very difficult for anyone to serve two lords.'
(ÆAdmon 1 2.46)

Independently, the infinitive fails to license an initial hit 'it' which doesn't correspond to
an embedded gap. There are no examples parallel to (79) lacking an adjective/adverb,
such as the following:

(80) *Hit is to þeowienne twam hlafordum
it is to serve two lords
'Two lords must be served'

This means that, even disregarding the semantic criterion invoked above (i.e. the

Note that comparative and superlative forms feature only weak declension (Campbell
1959:261), so by its form betere could be an adjective or adverb here.
difficulty of reconciling (79) with a semantics of obligation), it would be unacceptable to interpret earfode as an adverb given that the structure it would be modifying would be independently unacceptable.

In sum, then, despite the fact that some apparent examples of adjective+infinitive in Old English might in fact represent adverbially-modified infinitives of the ModG sort das Buch ist sofort zu lesen 'the book must be read immediately', such an analysis clearly cannot be generalized to cover all, or even most, examples in Old English. This means that an 'adverbial' analysis of the TCC, which may immediately be ruled out for such languages as Modern English given the overt morphological distinction between adjectives and adverbs (cf. he is easy to please/ *he is easily to please), may also be ruled out as a sufficient explanation for the OE TCC. When comparing OE with ModE TCC, then, we are indeed comparing equivalent structures in a far more straightforward manner than when comparing ModE TCC with its ModG translational equivalent.

Demske-Neumann's analysis of the OE TCC is, then, as follows. By her account, the TCC arises diachronically out of the impersonal type by a gradual process of the reanalysis of a topicalized embedded object as formal subject of the matrix predicate. This coincides with the reanalysis of the embedded infinitive from a verbal to an adjectival constituent; since adjectives can't assign structural case, this means that movement to the thematically empty subject position satisfies the case-marking requirement of the embedded internal argument, much as in van der Wurff's account.

In other words, by Demske-Neumann's account, the TCC arises out of the impersonal type by a process of formal reanalysis of a stylistic variant of the impersonal
type with embedded object in place—a process facilitated by the erosion of distinctive case-marking from the OE through the ME period.

As a hypothetical proposal, this account seems plausible enough. We might imagine that, if it were supplemented with some kind of explanation of what types of embedded objects might most plausibly be on the vanguard of the reanalysis she proposes, and of what types would be relatively resistant to it, it might lend itself to a satisfying functionally-oriented treatment of the facts. The problem, however, is that the facts fail to support Demske-Neumann's account in any way. Most crucially, given that the reanalysis which she proposes is argued to yield a gradual increase in the domain of the TCC pattern as we move from Old English into ME, we would expect to find in Old English some evidence for the existence of 'pre-reanalysis' examples with unambiguously accusative, dative, genitive, or instrumental topicalized embedded objects; an unattested example of the relevant input structure would, then, be as in (75), repeated here:

(75) *ðæm oferblidum is eaðe to cyðanne...
    'To the overly cheerful (it) is easy to make known...'

However, as already mentioned, this is not the case. Instead, what we find is that any initial NP which corresponds notionally to an embedded object has nominative case or case interpretable as nominative. In addition, any fronted non-nominative NP seems invariably to code the dative experiencer of the matrix clause, as in examples (81) and (82).

(81) þam broðrum wæs symble swyðe gewinnful & uneaðe
    the-DAT brothers-DAT was always very laborious & difficult
nīder to astigenne to þam wæterseade (GD 2(C) 5.112.15)
down to walk to the well

'It was always very laborious and difficult for the brothers to walk down to the
well'

(82) us is langsum to gereccenne ealle þa bletsunga...
us-DAT is long to relate all the blessings
'(It) is lengthy for us to relate all the blessings...'
(ÆCHom ii, 45 337.70)

What we never find is any evidence for the reanalysis of such fronted objects as subjects,
corresponding to something like (83):

(83) *The brothers were very laborious to walk down to the well.

This is only one of many problems. Another results from the fact that the TCC pattern,
that is, the pattern with a fronted NP with unambiguous nominative marking and subject
properties, is already so well-established not just before the ME period but even in early
OE literature such as Beowulf. We would therefore have to accept that Demske-
Neumann's mechanism had resulted in the reanalysis of many predicates well before the
period of widespread case syncretism which has been independently posited, by
numerous analysts since Jespersen (1909-49), to contribute to the ME reanalysis of non-
nominative arguments into 'subjects'.

In addition, her analysis, once again, implies the irrelevance of demonstrably
narrow-scope TCC examples such as (60), repeated here:
In this respect, Demske-Neumann's analysis is similar to van der Wurff's, but the details differ considerably. She argues that, since we have nothing but negative evidence that a predicate such as faegr could not appear in an impersonal construction, even predicates which, like faegr, are unattested in that construction are to be assumed to have developed a TCC use out of an impersonal use. In her own words:


What, then, about Allen's argument, endorsed by van der Wurff, for a fundamental distinction between pretty- and easy-type predicates based on the facts of preposition stranding? Demske-Neumann's response to this is to interpret the alleged stranded prepositions in examples like (60) as, in fact, stranded particles. Moreover, according to Demske-Neumann, the rigid distinction assumed by van der Wurff is undermined with reference to 'Beispiele bei Adjektiven der tough-Klasse' which also strand particles:

(84) ne biðþe ëde þin spor on to findanne
not is there easy your spoor on to discover
'(It) is not easy to discover your trail' (cf. Germ. auffinden 'discover')
Demske-Neumann's arguments here are, however, extremely weak. First, the *on* in *onfindan* is indeed generally acknowledged to be a separable prefix or 'particle', with *onfindan* provided as an entry in all the standard reference works (e.g., Bosworth and Bosworth-Toller) independently of *findan*. The same, however, can by no means be said about *anlocian*, *onseonne* 'look upon', *onbicgenne* 'drink on', *ofpbcgenne* 'drink from', *onwunienne* 'live in', and *onsittenne* 'sit on' in examples such as the following:

(85) þa sæ þe ær wæs smylte wedere glæshlutr u on to seonne
the sea that earlier was calm-INST weather-INST glass-clear on to see
'The sea that earlier was by calm weather clear as glass to look upon'
(Bo 6.14.11)

(86) twegen dagas, þe syndan swyðe derigendlice ægnigne drēnc
two days that are very dangerous any drink
on to ‹picgenne, oððe blod on to lætenne
on to drink or blood on to let
'Two days that are very dangerous to drink any drink on or to let blood on'
(Days 6 (Henel) 1.1)

(87) myrige wæterseaðes ... þa synden swyðe wynsume of to hyngene
merry water-wells that are very winsome from to drink
'Merry water-wells ... that are very pleasant to drink from'
(LS 28 (Neot) 37)

(88) Swa is þeos woruld. hwiltidon heo is gesundful. and myrige
so is this world sometimes she is prosperous and pleasant
on to wunienne...
on to live
'So is this world: sometimes it is prosperous, and pleasant to live in...'
(ÆCHom i, 12 182.33)

(89) and þær wæs micel gaers on þære stowe: myrige on to sittenne...
and there was much grass on that spot pleasant on to sit
'And there was much grass in that place: pleasant to sit on...'

(ÆCHom i, 12 182.11)

As may be readily seen, all these prepositions, unlike the on in onfíndan, have basic spatial or temporal reference typically characteristic of prepositions. Stranded prepositions of this sort are so common with certain predicates that the chances would be vanishingly small that their absence with other predicates such as eæðe and earfóðe is purely coincidental. The single alleged counterexample cannot be taken seriously, meaning that, once again, Demske-Neumann would be forced to fall back on the argument of the illegitimacy of 'negative evidence' in order to justify her claim. This is

There is actually some suggestive additional 'positive evidence' that valences with prepositions (or 'particles', by Demske-Neumann's analysis) were deliberately avoided in the TCC with certain predicates; consider the following:

Swa swa nu earðe is & wætær sint swiðe earfóðe to
just as now earth is and waters are very difficult to
geseonne oððe to ongítonne dysgum monnum on fyre...
see or to perceive foolish-DAT men-DAT in fire 'Just as now earth and waters are very difficult for foolish men to see or to perceive in fire...'

(Bo 33.81.2)

Prepositional-phrase-taking valences of visual predicates such as seon and locian 'see'/look' are, as we shall see below, used extremely frequently with predicates such as glæslhttor 'clear as glass' and fægr 'beautiful'; in the example just cited with earfóðe, on the other hand, an accusative-taking valence (with the ge- prefix) is selected, which would be coincidental by Demske-Neumann's analysis. It would be further coincidental that all the 'stimulus' predicates embedded under predicates such as earfóðe likewise feature an accusative-taking valence, cf.:

ðæs traht is langsum eow to gehyrenne
this narrative is long you-DAT to hear
'This narrative is lengthy for you to hear'

(ÆCHom ii, 41 308.138)
not, of course, to imply that I agree with van der Wurff's interpretation of the significance of the stranded prepositions in these examples, as will be seen in the analysis to which we now turn.

5 An alternative analysis of OE 'tough'-constructions

What I would now like to do is present an alternative analysis of the behavior of 'tough'-predicates in Old English. We begin with an explication of the TCC.

The canonical examples of the TCC feature precisely those matrix predicates which, by all available evidence, exclusively appear in this construction-type as opposed to the impersonal type\textsuperscript{16}, and are as follows:

(90) Seo burg waes... swide fæger an to locianne
the fort was very fair on to look
'The fortress was very beautiful to look upon'
(Or 2 4.74.11)

(91) pa sæ þe ær waes smylte wedere glæshlutræ on to seonne
the sea that earlier was calm weather-INST clear.as.glass on to see
'the sea which earlier was by calm weather clear as glass to look upon'
(Bo 6.14.11)

(92) þonne wyrd heo swide hrade ungladu, þeah heo ær
then turned she very quickly dark though she before

gladu wære on to locienne
bright was on to look

\textsuperscript{16} Wynnum 'pleasant' does appear in the impersonal construction, but only in glosses (cf. van der Wurff's (1992a) table 6, p. 236).
then she [the sea] turned very quickly dark, though she had just before been bright to look at

(Bo 6.14.12)

(93) þæs word sind lustbære to gehyrenne
these words are delightful to hear
'These words are delightful to hear'

(ÆCHom i, 8 130.15)

In these examples, the matrix nominative subject instantiates a stimulus with respect to an implicit experiencer. This matrix subject coinstantiates an object argument of the embedded clause, which in these examples we may see to represent a stimulus.

Other examples display other roles, such as content or locative or even temporal setting:

(94) Seo menniscnes is wundoric ymbe to smeagenne
the incarnation is wondrous about to think
'The incarnation is wondrous to think about'

(ÆCHom i, 12 182.33)

(95) Swa is þeos woruld. hwiltidon heo is gesundful. and myrige
so is this world at times she is prosperous and pleasant
on to wunienne... swa þæt heo foroft bið swiðe unwynsum on to
on to live so that she often is very unpleasant on to
eardigeanne
live

'So is this world: at times prosperous, and pleasant to live in ... so that it is often very unpleasant to live in'

(96) twegen dagas, þe syndan swyðe derigendlice ænigne drenc
two days that are very dangerous any drink
on to þicgenne, oððe blod on to lætenne
on to drink or blood on to let
'two days which are very dangerous to drink anything on or to let any blood on'
(Days 6 (Henel) 1.1)

(97)  On [VI] nihtne monan ... he is eac god circan on to timbrane
      on [VI] night moon he is also god churches on to build

      & eac scipes timber an to anginnanne
      & also ship's timber on to begin

      'On the sixth night's moon ... it [the moon] is also good to build on and also to
      begin ship's timber on'
      (Prog 6.9(Foerst) 6)

The only restriction appears to be that the argument corresponding to the gap be
coherently conceptualizable as a stimulus with respect to the matrix clause. In these
examples, not only arguments which represent a stimulus with respect to the embedded
clause, but also content and locative and temporal settings in the context of the embedded
clause, may function as stimulus with respect to the matrix predicate. The adjunct-like
status of the embedded clause is indicated by the fact that all the predicates which are
listed here as canonical participants in this construction-type are routinely—in fact,
predominantly—used as independent predicates or attributive adjectives with no
embedded infinitive. Examples are as follows:

(98)  ðæs bec syndon swiðe rihtlice & ðægre mid us
      these books are very righteous & beautiful with us
      'These books are very righteous and beautiful to us'
      (GDPred and 4(C) 42.329.8)

(99)  ...ac þe sæde swiðe lang spell & wundoric
      but you-DAT told very long tale & wondrous
      '...but told you a very long and wonderful tale'
      (Bo 35.100.26)
What we are dealing with here, then, is a construction marginally distinct from the regular predicative adjectival construction and which inherits all the features of that construction and adds something extra. That something extra is an elaborative adjunct clause which specifies the domain in which the predication holds. In some cases, e.g. *glæslutter* 'clear as glass' and *fæger* 'beautiful', *glaed* 'bright', and, by metaphorical extension, 'cheerful', the predicate is already so specific in selecting a visual stimulus that we can only imagine the elaborative adjunct clause to be largely redundant, adding little or no information not already specified in the matrix predicate itself. In other cases, e.g. *lusthære* 'delightful', *derigendlic* 'dangerous', *god* 'good', and *wundorlic* 'wondrous', the lesser semantic specificity of the predicate results in a less redundant and, in this sense, less adjunct-like status for the embedded infinitival clause. Even with these predicates, however, use without an embedded infinitive is routine.

Included among the examples involving predication without an embedded infinitive are ones involving prepositional phrases with adjunct status, illustrated as follows:

(100)  
\[
\text{da geseah pæt wif pæt pæt treow wæs god to etenne, then saw the woman that the tree was good to eat}
\]
\[
\text{be þam þe hyre þuhte, & wlitig on eagum & lusthære on gesyhðe as her seemed & fair in eyes & delightful in sight}
\]
\[
\text{Then the woman saw that the tree was good to eat, as it seemed to her, and fair to the eyes and delightful to the sight'}
\]

(Gen 3.6)

(101)  
\[
\text{God þa forð ateah of þæra moldan ælcnæs cynnes}
\]
\[
\text{God then forth removed of the-GEN earth each-GEN kind-GEN}
\]
treow, fæger on gesyhðe & to brucenne wynsum
tree fair on sight & to enjoy pleasant

'God then made every kind of tree grow from the earth, pleasant to the sight and
good to eat'

(Gen 2.9)

In (100), god features the infinitival adjunct to etanne 'to eat', while wlitig 'fair' and
lustbaere 'delightful' feature prepositional adjuncts likewise restricting the domain of their
respective predicates. In the second example, fæger on gesyhðe 'beautiful to the sight' is
conjoined with to brucenne wynsum 'pleasant to enjoy', again indicating a functional
parallelism between the embedded infinitive and prepositional-phrase adjunct.

Some of these predicates, while intuitively and empirically capable of predication
of a referential subject—in certain theoretical terms, capable of assigning a theta-role to
the position occupied by a nominative NP—nevertheless differ from fæger 'beautiful',
glaeshlutter 'clear as glass', myrig 'merry', lustbaer 'delightful' and glaed 'bright' in one
important respect: they show some evidence of being predicatable of some kind of
sentential subject. For example, the following illustrate derigendlic 'dangerous', wundorlic
'wondrous', and egeslic 'dreadful' with scope over a tensed that-clause appearing to the
right, or predicated of a pro-form referring to such a clause:

(102) derigendlic bid þæt þu...
dangerous is that you...
'(It) is dangerous that you...'

(ÆCHom i, 27 390.4)

(103) ðuhte him þat wundorlic and egeslic, þæt se heofonlica
seemed him that wondrous and dreadful that the heavenly
cyning to his fotum onhnigan sceolde
king to his feet bow should

'That seemed to him wonderful and dreadful, that the heavenly king should bow at
his feet'

(HomS 22 (CenDom 1) 132)

(104) Eala þæt hit is god & wynsum þæt mon micelne welan hæbbe
O that it is good & winsome that one many riches have
'O! that it is good and delightful that one have many riches'

(Bo 14.33.14)

A few of these predicates also appear in either of two types of 'impersonal'
construction, lacking any nominative subject, with an embedded infinitive rather than a
tensed that-clause:

(105) Eac is to wietanne þætte hwilum bið god wærlíc to
also is to know that sometimes is good cautiously to
midanne his hieremonna scylda & to licettanne suelce
hide his subjects' sins & to pretend such

he hit nyte
he it not.knew

'O! one should also know that sometimes (it) is good cautiously to hide his subjects'
sins and to pretend as if he were not aware of it'

(CP 21.151.8)

(106) Ac hit is wundorlic to secganne of þære tide þe þa
but it is wonderful to tell of the time that the
bisceopas heora handa ofer his heafod alegdon
bishops their hands over his head laid

'But it is wonderful to tell of the time that the bishops laid their hands over his
head'

(LS 13 (Machutus) 17.R.7)

In the second example, the nominative subject of wundorlic is hit 'it', which may refer

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cataphorically to the following infinitival clause or to the object or prepositional object of
that clause's infinitive, or may be referentially empty. The first example, with god,
illustrates the same structure but with no nominative matrix NP at all; under the most
straightforward interpretation, 'being good' is predicated of an infinitival sentential
complement appearing to its right. This, then, is the impersonal 'tough'-construction.

Numerous examples of the sort of wide-scope construction in question are found
when we move on to the predicate lang and langsum, both featuring a fair semantic range
but roughly translatable as 'long' or 'lengthy'. Consider the following examples:

TCC:

(107) forðan hi [da unðeawas] synd nu to langsume ealle to tellenne
because they [the vices] are now too long all to number
'because they [the vices] are all now too lengthy to number'
(HomM 7(KerTibC1) 28)

(108) Fela oðre tacna ... þe nu sind lange to reccenne
many other signs ... that now are long to recount
'Many other signs ... that are now lengthy to recount'
(ÆCHom ii, 18,173.124)

(109) þæs eadigen Cristoforus wuldorgeweorc synd nu lang to asecgane
the-GEN blessed Christopher's wonder-works are now long to relate
'The wonder-works of the blessed Christopher are now lengthy to relate'
(LS 4 (Christoph) 163)

Impersonal:

(110) Us is langsum to gereccenne ealle þa bletsunga and
us-DAT is long to recount all the blessings and

ðancunga þe Salomon þa gode sæde
thanks that S. then God-DAT said

'(It) is lengthy for us to recount all the blessings and thanks that Solomon said then
to God'
(ÆCHom ii, 45 337.70)
The first set illustrate the use of lang(sum) in the TCC, already discussed in connection with predicates such as feğer 'beautiful', wynsum 'pleasant', and god 'good'. In these examples, being 'long' or 'lengthy' is predicated of an NP coinstantiating a theme- or incremental theme-like object of an embedded predicate such as 'tell', 'number', or 'recount'. In (108), the theme-like object is 'many other signs', in (109) 'miraculous works', in (107) 'vices'; given the independent meaning of lang as 'long' with respect to space or time, we most frequently find lang predicated of or modifying such NPs as gebed 'prayer' and spell 'story' or race 'narrative', i.e. inherently temporally extended, effected referents, although predication or modification of plural count referents is not unattested, cf. the final example below:

(113) þa forswelgað wydwyna hus, hiwgende lang gebed
which devour widow's house fashioning long prayer
'which devour a widow's house while feigning a long prayer'
(Lk(WSCp) 20.45)

(114) ac þe sæde swiðe lang spell
but you-DAT said very long story
'but told you a very long story'
(Bo 35.100.26)
Swa eac þæra ōðra heahfaederā gemynd mid langsumere
so also the-GEN other-GEN patriarchs memory with long
race, ætforan him geniwode
narrative before them renewed

'So also renewed the memory of the patriarchs before them with a long narrative'
(ÆCHom 1.3 46.10)

...þy læs þe þeos raca eow to lang þince
the-INST less that this narrative you-DAT too long seem
'...lest this narrative appear too long to you'
(ÆCHom ii, 10 84.95)

Ne þince þe na þas word to lange ne to hefige
not seem you-DAT not these words too lang nor too heavy
forðam hy þinceað swide sceortæ and swyðe weonsume
because seem very short and very pleasant

ðam þe heora drihten inlice lufiað and wyrðian willað
them-DAT that their lord inwardly love and honor will

'Let these words not seem too long or too burdensome to you
because (they) seem very short and pleasant to those who choose to love and
honor their lord'
(Conf 10.4(Ker) 63)

Considering this, the embedded infinitive with plural count-noun subjects may be posited
to be relatively obligatory, given the lack of inherent temporal extension of these
referents, or, perhaps more satisfyingly, the absence of any salient pragmatic connection
of these referents to any temporally extended activity. Note that this obligatoriness is
presumably relative to the degree to which the plural NP referent's relationship to a
temporally extended act has been contextually evoked or somehow pragmatically
activated in the text or discourse; in this sense, even with subject NPs such as 'signs' and
'miraculous works', it would probably be wrong to be too dogmatic about the obligatory

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status of the embedded infinitive.

The next set of examples shows the same predication in the impersonal construction, with being 'long' or 'lengthy' predicated of an entire sentential complement: to tell or recount 'many things', 'many blessings', and so on. Clearly, this construction, coding in a transparent manner wide-scope predication over a sentential complement, is neither more nor less 'logical' than the examples instantiating the first construction. It is, I think, telling that of all the examples of adjective plus infinitive in my collection, and of all such examples in van der Wurff's collection cited in van der Wurff (1992a), no predicate is distributed more evenly across the two constructions than lang(sum).

It is important to emphasize that the interparaphrasability of many of the TCC and impersonal examples featuring this predicate by no means indicates that this is a 'raising' predicate or that the TCC versions are in any way less 'logical' than the impersonal versions. In this connection it is relevant to point out that lang is attested conjoined with another adjective which we have already argued to occupy a position close to the end of the semantic spectrum occupied by fæger, glæshlutter and the like, namely wundortic; cf. the following example:

(118) Ac þæt is lang and wundortic to secgenne, hu...
    but that is long and wondrous to say, how...
    'But that is long and wondrous to relate, how...'

(HomU 35.1 (Nap 43) 49)

To the extent that we are willing to accept the 'logic' of narrow-scope predication of 'wondrous' of a referent coinstantiating the object of 'relate', we must also accept the
'logic' of the same narrow-scope predication with lang.

While a number of considerations point to a semantic affinity between lang(sum) and routinely narrow-scope predicates such as wynsum, fæger, and lósthær, there is nevertheless evidence for the legitimacy of a semantic distinction between them. This distinction is not perfectly clear-cut, but is nevertheless suggestive: lang(sum), unlike the other predicates, appears to impose an intentional reading on the embedded predication. All the examples with lang(sum) embed nonstative transitive predications such as 'tell a story', 'recount a narrative', or 'relate the works of wonder'. The predicate which may appear to deviate most from this semantic class is gehyran 'hear', as in the following example:

(119) þes traht is langsum eow to gehyrenne
    this narrative is long you-DAT to hear
    'This narrative is lengthy for you to hear'
    (ÆCHom ii, 41.308.138)

Even with gehyran, however, embedding under lang(sum) appears to preclude a mere experiencer-stimulus reading as opposed to a reading whereby a certain degree of agency is attributed to the embedded implicit subject, and intentionality attributed to the embedded predication. All the examples are readily compatible with an inherently causative accomplishment reading, translatable as something like, 'This narrative would take a long time to recount'.

If we recall the sorts of embedded predicates found with adjectives such as derigendlic, wynsum, and egeful, several contrasts are clarified:
(120) Swa is þæos woruld. hwiltidon heo is gesundful. and 
so is this world at times she is prosperous and 
myrige on to wunienne... swa þæt heo foroft bid swiðe 
pleasant on to live so that she often is very 
unwynsum on to eardigeanne 
unpleasant on to live

'So is this world: at times prosperous, and pleasant to live in ... so that it is often very unpleasant to live in'

(ÆCHom i, 12 182.33)

(121) Rihtlice is seo sæ wiðmeten þisre worulde, for þon þe 
truly is the sea compared this-GEN world because 
heo is hwiltidum smyle, and myrige on to rowenne hwilon 
she is sometimes calm and pleasant on to row sometimes 
eac swiðe breoh and egeful on to beonne 
also very rough and fearful on to be

'The sea is truly compared with this world, for she [the world or the sea] is sometimes calm, and pleasant to row on, while sometimes also very rough and fearful to be on'

(ÆCHom i, 12 182.30)

(122) ...and gemacode hine swithe wynsum on to wunigenne 
and made him-ACC very pleasant to live in

'...and made it very pleasant to inhabit'

(LS 9 (Giles) 59)

These other matrix predicates are readily compatible with embedded stative predicates, 
and impose no intentionality on them. While the class of embedded predicates is an 
overlapping one, as in the following pair:

(119) þæs traht is langsum eow to gehyrenne 
this narrative is long you-DAT to hear

'This narrative is lengthy for you to hear'  (ÆCHom ii, 41 308.138)
the semantics of *lang(sum)* is more readily interpretable as imposing a reading of sustained, agentive, intentional action.

Given the evidence provided by the predicate when appearing in the 'tough' constructions themselves, then, I propose that *lang(sum)* imposes on or contributes to the constructions an intentional reading whereby the matrix experiencer cointstantiates an embedded subject interpreted agentively, and, in the TCC, the matrix stimulus (the nominative subject) cointstantiates an embedded argument which would independently receive accusative coding or, in syntactic terms, would function as direct object or non-Actor direct core argument.

To sum up the findings thus far: the different 'tough' predicates discussed up to this point impose different restrictions on the sorts of predicate which may be embedded under them in the 'tough' constructions and, in the TCC, on the cointstantiation relationship which may hold between matrix subject and embedded object. A predicate such as *glaesluttor* 'clear as glass', with its highly specific visual stimulus-experiencer semantics, requires that its embedded predicate be independently characterizable as featuring a visual stimulus and an experiencer argument; *fæger* 'beautiful' and *glad* 'bright' are perhaps slightly less specifically visual in their domain, but otherwise parallel. Given these facts, such predicates naturally involve cointstantiation of their nominative subject with an embedded prepositional object, given that sensory stimuli are routinely coded as
prepositional objects. Also, given that a sentential subject would presumably represent a poor encoding of a visual stimulus, corresponding as it does to a relatively abstract state of affairs, it makes sense that these predicates would be incompatible with the impersonal construction. Predicates such as mynig 'merry', god 'good', and wynsum 'pleasant' require a stimulus of a much less specified type: they merely require that something be perceived as 'good', etc., with respect to or in a domain of some predication-type of unspecified intentionality or aktionsart and, given the underspecified nature of that stimulus, at least some of these predicates show evidence of appearing in the impersonal construction.

In the TCC, the embedded predicate must feature a non-subject argument, which coinstantiates the matrix nominative NP, but this needn't be a direct core argument, or even a core argument; in examples such as the following, the coinstantiated embedded argument codes a temporal or locative setting, and would independently appear as a prepositional object or a dative-marked object as is independently typical for such adjunct locatives:

(123) Se [III] nihta mona se byð god þæm ergendan hys sul
      the [III] night-GEN moon he is good the-DAT farmer his

      sul ut to done, & þæm grindere his cweorn, & þæm
      plough out to put & the-DAT miller his mill & the-DAT

      cipemen hys cipinge to anginnane
      merchant his trading to begin

'The fourth night's moon, it [the moon] is good for the farmer to put out his plough, and for the miller his mill, and for the merchant to begin his trading'
      (Prog 6.9(Foerst) 4)

(124) On [VI] nihtne monan...he is eac god circan on to timbrane
      on [VI] night moon he is also god churches on to build
& eac scipes timber an to anginnanne
& also ship's timber on to begin

'On the sixth night's moon... it [the moon] is also good to build on and also to
begin ship's timber on'

(Prog 6.9(Foerst) 6)

Taken as a group, the predicates near the faëger end of the semantic spectrum, when
appearing in the TCC, combine with the stimulus-experiencer semantics specified by the
construction itself in a manner which imposes relatively few constraints on the nature of
the theta-role of the coinstantiated embedded argument, with any of a wide range of roles
capable of being conceptualized as stimulus: patient, theme, temporal or locative setting,
etc.

The lang(sum) predicates, on the other hand, diverge from the faëger class in, by
all available evidence, imposing a reading of intentionality on the embedded predicate.
The basic constructional semantics remains constant in that the matrix nominative subject
(in the TCC) or the embedded sentential subject (in the impersonal construction) fills a
stimulus role. This alone fails to impose any significant restriction on the nature of the
coinstantiated embedded object. However, the additional semantics of agentivity and the
combination of temporal extension and boundedness imposed by the lang-type predicates
correlates with a restriction on the independent semantics of the embedded predicate: it
must independently feature, or at least be compatible with, an agentive 'accomplishment'
reading, and feature a non-subject direct core argument, i.e. be prototypically transitive.

Thus far, the data dealt with include predicates such as faëger which van der Wurff
would exclude from his class of true 'tough'- predicates, as well as ones such as lang and
langsum which, at least by virtue of their apparent restriction to coconstituting a direct core argument, he would include in the class of 'tough'-predicates sensu stricto. Fischer (1989), endorsing the view of such a bipartite division among OE infinitive-embedding predicates of the relevant type, points out that the **fieger** group contains descriptive adjectives closely tied to the subject of the predicate. OE "easy"-adjectives, on the other hand, can have a comment function: they describe not just the subject but the combined activity of subject and infinitive' (156). I hope to have shown that such a bipartite division cannot be defended. Examples with god 'good' show that predicates which independently function as 'descriptive adjectives closely tied to the subject', and which may have other formal properties of the supposedly distinct 'pretty' class such as occurrence with stranded prepositions, may also function in the impersonal construction.

What about the complementary claim, that of the distinctness of an 'easy' class of predicates bearing a 'comment function' describing 'not just the subject but the combined activity of subject and infinitive'? Fischer herself, in a footnote, equivocates about the legitimacy of viewing any group of predicates as invariably distinct from the supposed 'pretty' class in necessarily involving such wide-scope predication. She does, however, view such examples as the following, for which she claims that 'the selectional restrictions operating on the noun and adjective clash', as featuring 'comment-like' semantics:

(125) *ba stanas ... bioð earfode to tedælænne* (Bo. 34.92.22)

*the stones are difficult to divide
'The stones ... are difficult to divide' (Fischer 1989:184 fn. 21)
It is for adjectives semantically similar to *earfoð(e)*, including *eæð(e)* 'easy' and numerous derivations based on these stems, that a 'movement' analysis has most often been proposed, and it is to this class that we now turn.

As a group, the predicates of the 'easy' semantic class display good distribution across both 'tough' construction types; the following examples illustrate uses with both the TCC and the impersonal type:

**TCC:**

(126) ðær is swyðe god eard, ac he is earfoðe us to begytenne
there is very good earth but he is difficult us-DAT to get

þurh urne fultum swaðeah
through our army however

'The land is very good there, but it [the land] is difficult for us to obtain with our army'

(ÆHom 21 153)

(127) Swa swa nu earðe ist & waþer sint swiðe earfoðe to
so so now earth is & water are very difficult to

geseonne ðode to ongionne dysgum monnum on fyre...
see or to perceive foolish-DAT men-DAT in fire

'Just as now earth and water are very difficult for foolish men to see or to perceive in fire...'

(Bo 33.81.2)

(128) Nu þu miht ongitan hu hefif & hu earfoðe þis is eall to gerecanne
now you might perceive how heavy & how difficult this is all to tell

'Now you might perceive how burdensome and difficult all this is to tell'

(Bo. 39.127.21)

(129) No þæt yðe byð to befleonne, fremme se þe wille...
not that easy is to flee attempt he that will
'That [death] is not easy to flee, try though one might...'

(Bo 1002)
Impersonal:

(130) the-DAT brothers-DAT was always very laborious & difficult
to walk to the well

'It was always very laborious and difficult for the brothers to walk down to the well'

(GD 2(C) 5.112.15)

(131) now is thought that him-DAT be certain-GEN things-GEN easier
to raise the dead of the dust than him-DAT was
to make all creatures of nothing

'Now it seems that it is somewhat easier for him to raise the dead from the dust
than it was for him to make all creatures out of nothing'

(AECHom i, 16 236.11)

There is one feature which most clearly serves to differentiate this class of predicates
from those towards the faeger end of the spectrum: all or virtually all the examples are at
the very least strongly suggestive of an agentive, intentional reading. Those such as (126),
which out of context might be interpretable in terms of a 'hardship' reading ('it causes me
pain' or the like) are clearly seen in context to feature an intentional reading rather than a
nonintentional one. (Nanni (1978) has described the relevant distinction in terms of a
'hard on' (nonintentional) vs. a 'hard for' (intentional) reading.) Consider the following
apparent counterexample:

(132) men on neaweste to hæbbenne
the dead is difficult each-DAT man-DAT in vicinity to have
'The dead is difficult for each man to have nearby'

(HomS 17(BlHom5)78)

Even in this case, the context indicates that the difficulty referred to here derives from the fact that a corpse will rot and stink; we are not, in other words, dealing with any sort of psychological hardship at all.

Another feature which serves to set off the 'easy' class of predicates from the feager class when occurring in the TCC is that the NP always coinstantiates what would be an accusative argument in the embedded clause. This is, in fact, the feature of TCC 'tough' examples most frequently focussed on in the literature, and it is this feature which Allen (1980) interprets as evidence for a 'movement' analysis for this class of predicates, and which van der Wurff interprets as evidence for his 'passive' analysis of the OE TCC.

My explanation for these facts is as follows. First, the invariable or almost invariable intentional semantics of the 'easy' examples is to be attributed to the matrix predicates themselves (eafele, earfofe, etc.) rather than to either of the 'tough'-constructions, since, as we have seen, both the TCC and the impersonal structure is well attested with other predicates and with no semantics of intentionality. The imposition of intentionality, which is conceptualizable at least in part in terms of a requirement that the embedded notional subject (coinstantiated by the matrix dative experiencer, when expressed) be interpreted as an agent, results in an incompatibility with predicates which clash with such a reading, including stative, nonagentive predicates such as 'to be' which are independently attested with predicates such as egeful 'fearful':

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Finally, we have to motivate the obligatory coinstantiation of the subject of the TCC with accusative-taking direct core arguments. My explanation for this makes reference to three factors: one, the semantics independently associated with the TCC; two, the semantic feature of intentionality imposed by the 'easy'-type predicates; and three, the semantically-oriented conception of transitivity formulated in Hopper and Thompson (1980). I also assume the validity of analyses such as Plank (1981) and Fischer (1989), which attribute a transitivity-related semantic grounding to the OE case categories.

Recall that the TCC features a semantics whereby the adjective predicates a quality of the nominative subject, with the embedded infinitive restricting the domain within which that predication or quality holds. The adjunct-like status of this embedded infinitive is directly correlated with the degree to which the matrix predicate, or that predicate together with its nominative subject, already somehow encodes or activates the relevant domain. In the case of 'easy'-type predicates, the adjective is relatively underspecified with respect to the specific domain within which it holds. All that it does...
specify, by the evidence available, is that the nominative argument is 'easy' etc. with respect to some intentional act.

What does it mean to be 'easy' with respect to some intentional act? I find Nanni's (1978) characterization of such predicates in Modern English to be helpful here. In her terms, the subject NP is presented as bearing responsibility for the 'cost' to the experiencer/agent of the intentional act. Given the salient 'hard for' as opposed to 'hard on' reading associated with the OE 'easy' class, this means that we may paraphrase a TCC 'easy' example as follows:

(133) he [the land] is earfoðe us to begytenne (cf. ex. 124)
    =this land would have a high cost with respect to an intentional act of obtaining it
    =this land would require a great deal of effort from us if we tried to obtain it

In OE examples of this type, there is, as already mentioned, a strong syntactic constraint on what kind of argument may be coinstantiated with the matrix subject. Unlike many other predicates which participate in the construction, only direct core, i.e. accusative, arguments may be coinstantiated. How is this to be explained?

The insight is that direct core arguments, but not more peripherally-related arguments, are appropriately conceptualized as the locus of the 'cost' associated with an intentional act involving participants coded by such arguments. If we choose to think of the 'cost' being 'logically' associated with the entire intentional act, then only the direct core argument is felicitously conceptualized as the metonymic representor of the intentional act as a whole with respect to the cost of such an act to an experiencer/agent. It is no coincidence, I contend, that a predicate which in the context of the construction
selects high transitivity in one respect, that of intentionality/agentivity, imposes on the
construction the requirement that the coinstantiated object argument feature high
transitivity in the sense of being the argument-type prototypically associated with patient-like semantics.

Another way of looking at this is to say that the more directly involved the
participant is in the intentional act, the more the 'cost' of that act is perceived to be due to
the nature of that participant. If an intentional act is experienced as exacting a high cost of
effort, then the direct core argument is perceived as bearing responsibility for this cost to
a greater degree than less directly involved arguments, or, in Plank's (1981) terms,
arguments in a less direct relationship of semantic opposition to the agent.

The restrictions placed on the coinstantiation relationship between the matrix
subject and embedded object in the TCC with 'easy'-type predicates challenges the point
of view that the subject position is semantically empty. Assume for a moment the validity
of the perspective that the wide-scope 'impersonal' version encodes the uniquely valid
'logic' of an 'easy'-type example in a transparent way. Even if, that is, we were to agree
with those like Fischer who see in examples such as (125) clear evidence for a
semantically empty subject position, given that, as she puts it, 'the selectional restrictions
operating on the noun and adjective clash', then the strong restrictions placed on the
argument 'moved' into that position are, in our view, indicative of strong constraints on
the nature of the discrepancy between 'form' and 'logic' in such examples. Even if
interpreted in terms of such a discrepancy, then, the restrictions on the nature of the
'raised' argument indicate that there are, in Langacker's (1995) terms, principled
restrictions on the kind of profile/active zone discrepancy countenanced in the OEs TCC featuring the 'easy' class of predicates. These principled restrictions are understandable in terms of restrictions on what sort of participant may function as metonymic representor of the intentional act as a whole.

The claim I am making, then, is that an example such as (133), which supposedly involves a purely formally-motivated movement out of a logical sentential subject constituent, in fact embodies a distinct semantics associated with the TCC, as illustrated most clearly with examples featuring such predicates as feáger and gaéld. In other words, it really is the case that being 'difficult' is being predicated of the subject NP, rather than simply being logically predicated of an embedded clause which diverges from the formal subject\textsuperscript{17}. As a final piece of evidence for this, I would like to cite one last predicate

\textit{Ac soðlice him sind ealle þing gelice eafe: and nan þing earfoðe}

but truly him-DAT are all things alike easy and no thing difficult

'But truly all things are easy for him, and nothing difficult'

\textit{(ÆCHom i, 16 236.13)}

\textit{ðanon up hraðe Wedera leode on wang stigon, sæ-wudu}

thence up quickly Storm-Geats on plain climbed sea-wood

\textit{sældon syrcan hyrscen, guð-gewædo, gode þancedon þæs}

roped shirts shook war-garments God-DAT thanked that-GEN

\textit{ðe him yð-lade eafe wurdon}

that them sea-journey easy was

'Thence up quickly climbed the Storm-Geats on the plain, secured their ships, shook their shirts, their war-garments, thanked God that the sea-journey had been made easy for them'

\textit{(Beo 224)}

In the first example, 'things' may refer either to an entire intentional predication or to the

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\textsuperscript{17}We might finally add that it is not completely clear, or at least certainly no more clear than in Modern English, that examples such as (125) in fact instantiate violations of the selectional restrictions of the predicate. Consider the following:
which takes its place on the opposite end of the semantic spectrum from predicates such
as faegr. Consider the following:

(135)  Heton him þeh þæt andwyrdæ secgan, þæt him leofre ware
      bade him yet that answer say that him preferable were

object of such a predication; in the latter case, some general predicate such as ‘to do’ is
implied. In the second example, the implied intentional predicate would be something
like ‘to traverse’. Next, consider the following:

δa cwæð ic: þu me ahast micles & earfōdēs to ongitame
then said I you me ask much and difficult to perceive
'Then I said: you ask me much [things] and difficult [things] to perceive'
(Bo 42 147.23)

Næs þæt yðe ceap to gegangenne gumena ænigum
not-was that easy bargain to enter into men-GEN any-DAT
'That was not an easy bargain for any man to enter into'
(Beo 2415)

In these infinitival relative clauses, earfōd is nominalized and yðe attributively modifies
the noun ceap. By a heuristic applicable at least to Modern English, the adjectives earfōd
and yð are, then, at least potentially capable of narrow-scope predication. Consider the
following:

It is imperative to read that book by tomorrow.
?That book is imperative to read by tomorrow.
*That is an imperative book to read by tomorrow.

It is possible to read that book in a day.
?That book is possible to read in a day.
*That is a possible book to read in a day.

These show that, in Modern English, 'tough'-predicates which are marginal at best in
ModE NP-type construction but perfectly good in the iconically wide-scope it-type
construction, are clearly bad in the infinitival relative clause construction. The last-cited
Boethius and Beowulf examples, then, at least somewhat indirectly provide evidence that,
in Old English, earfōd and yð/ead were not exclusively wide in scope.

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wið híene to feohtanne þonne gafol to gieldanne
with him to fight than tribute to pay

'Yet he ordered that the answer be given to him, that it would be preferable to him to fight him than to pay him tribute'

(Or 1 10.44.13)

(135) Be þam is awritan þæt betera beo se geðyldega wer þonne
because is written that better be the patient man than the
se gielpna, forðamðe him þið leofra scande to þolianne
the presumptuous since him be preferable shame to suffer
þonne þæt god to cydanne þæt he deogolice deð
than that good to proclaim that he hiddenly does

'For it is written that the patient man is better than the presumptuous man, because (it) is preferable to him to suffer shame than to proclaim the good that he performs in private'

(CP 33.217.10)

Leofre, the comparative form of leof 'dear', has, like most comparative forms, a strong preference for appearance in the impersonal construction. In fact, in van der Wurff's (1992a) survey, it appears 19 times in this construction, as opposed to twice in the TCC. Alongside the kinds of impersonal use cited in (134-5), leofre is also extremely common in an impersonal structure with an embedded that-clause, as in (134):

(136) Ac me were leofre þæt ic hyt wiste
but me were pref. that I it knew
'But it would be preferable to me that I should know it'

(Solil 1 18.15)

The two attested uses of leofre in the TCC are as follows:
...that Christendom would be preferable to him to follow than (it would be) to have his shire

Then the soul goes out from the body of the man to whom his possessions were preferable to have than God’s love

When we look at an example with leofre predicated of an NP without an embedded infinitive, it is immediately clear why use of the adjective in the TCC is rare:

And they wept greatly, for my health was dearer to them than their own

In order for use in the TCC to be felicitous, it is apparently the case that it be entailed that the NP in matrix subject position be ‘dear’ to the matrix experiencer. If (134) or (135) were used in the TCC, then, we may assume that it would at the very least be strongly implied that the enemy is ‘dear’ to the experiencer in (134) or that the shame is ‘dear’ to the experiencer in (135). Both readings would clearly be inappropriate. This apparent constraint is completely inexplicable in an approach which attributes the possibility of
movement to formal constraints alone, and it is evidence that the matrix subject position
is not thematically empty at all. Supposedly 'tough-moved' examples are, then, in fact
interpreted in terms of the narrow-scope semantics I have attributed to the TCC as distinct
from the wide-scope impersonal construction.

6 Implications for Modern English and conclusion

Finally, I would like to consider some of the implications of this analysis of the
syntactic restrictions on the cointstantiated argument in the TCC being motivated by the
semantics of the construction and of the predicate figuring in it. It is a well-known fact
that, even in ModE TCC examples featuring a semantics of intentionality, there is no
restriction of the cointstantiated argument to the direct object of the embedded verb:

(140) He is difficult to get in touch with
      This bridge is difficult to walk on

The formal restrictions argued in the context of Old English to be motivated by semantic
considerations must, therefore, be considered within the context of the language involved.
If we recall the characteristics of OE passive, we will acknowledge a certain degree of
formal parallelism with the OE TCC involving intentionality-imposing predicates. OE
passive is restricted to predicates which have an active valence featuring a direct core
(accusative) argument, and the subject of the passive verb corresponds truth-conditionally
to this and no other argument. OE passive also permits an impersonal use closely parallel
to the impersonal 'tough' construction; consider the following:

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(141) ne is gelefed þe to habbanne hlaf broðes þines
not is permitted you-DAT to have bread brother's yours
'It is not permitted to you to have your brother's bread'
(MkGl(Li) 6.18)

(142) & hlafas getemeseda vel foresetne gebrec naeron gelefed & loaves or set.out ate that not-were permitted

him to gebrucanne (MtGl(Li) 12.4)
them-DAT to eat

'& ate the shew-bread loaves which were not permitted to them to eat'

The first example is 'impersonal' in featuring no subject NP, while the second example features (in a relative clause) a subject corresponding to the accusative argument of the active version of the verb. In fact, van der Wurff (1992a) includes past participles of verbs of permission (gelefed and alvfed) in his inventory of OE 'tough'-predicates, which in our analysis is precluded at the very least by the fact that the semantics diverges from that encoded in our constructions to the extent that there is with the verbs of permission no experiencer: rather, the dative-marked argument is the goal-like recipient of permission.

As discussed above, the formal parallels between OE passive and the TCC with 'tough'-predicates are what inspire van der Wurff's (1987) 'passive' analysis of the latter. As is well known, ModE passive differs from OE passive in permitting a considerably wider array of argument-types to serve as input to promotion. In particular, some prepositional objects are promotable in Modern English while, by all available evidence, neither prepositional objects nor non-direct core arguments, i.e. dative, genitive and instrumental obliques, were in Old English. In the terms of this analysis, even though OE
passive and the TCC are not coextensive in that the range of coinstantiated argument-types in the latter is greater than the range of 'promotable' objects in the former, OE passive nevertheless features a certain formal parallelism with 'long'- and 'easy'-type examples, and they have changed in a somewhat parallel manner in that English has loosened its requirements on what counts as a 'transitive enough' predication to figure in both structures.

I view the formal characteristics of OE passive as, in fact, no more divorced from the meaning of that construction than the formal and semantic aspects of the 'tough' constructions are divorced from each other. The formal characteristics of OE passive point to the sort of thematic-role-related restrictions associated with lexical processes, whereby the passive predication is more accurately characterized in Old English than in Modern English as the predication of a state arising out of a prior action or event, with the prototypically highest-affected or most directly-involved participant, the direct core argument or Undergoer of the active verb, felicitously receiving predication of this resultant state. With the subsequently increased role of passive in manipulating grammatical role in response to discourse considerations, which is presumably related to the increased conflation of agent and topic in a positional 'subject' category which increasingly serves as the obligatory pivot of a variety of syntactic processes such as what are traditionally called equi and raising, a wider variety of object NPs become promotable. This development is centrally involved in the overall increase of opacity in the morphology and syntax of the language as a whole, as English has moved much more towards the extreme 'reference-dominated' end of Foley and Van Valin’s (1984)
typological role-reference parameter. The looser coinstantiation restrictions in the TCC in Modern English relative to Old English, then, are best viewed in this overall typological context.

This is not, of course, intended to imply that a transitivity-oriented explanation is sufficient to explain all the facts of the TCC in Modern English with intentional predicates, or to imply that we would expect the TCC and passive to be coextensive in Modern English any more than in Old English. Clearly, they are not:

(143) That table was easy to put the book on.
    *That table was put the book on.

(144) That parking meter would be easy to lock your bike to.
    *That parking meter could be locked your bike to.

Examples such as these show that, to some extent, the ModE TCC does indeed feature certain commonalities with wh-movement as opposed to passive, given that wh-movement counterparts are perfectly fine:

(145) What did you put the book on?
    What did you lock your bike to?

On the other hand, many of the examples cited by, for example, Chomsky (1977) in support of a w-wh-movement analysis of the TCC have a much more questionable status; recall:

(17) John is easy for us to convince Bill to arrange for Mary to meet.

(Chomsky 1977:103)
Also, consider Culicover & Wexler's (1977) example:

(146) My room is easy for Fred to see the ocean from.

Such examples, which elicit a variety of responses from native speakers, are perfectly fine in a wh-movement construction:

(147) Who did you convince Bill to arrange for Mary to meet?

(148) Where did Fred see the ocean from?

In Modern English, the best TCC examples with intentional predicates seem to be ones in which the coinstantiated argument is a direct object of the first embedded clause, and that argument is readily conceptualizable as bearing 'responsibility' in Nanni's sense for the 'cost' associated with the intentional act represented in that embedded clause:

(149) Granite is difficult to smash with a hammer.

Judgments tend to waver, however, when the coinstantiated argument is something other than a direct object, or when that argument is not reasonably construed as 'responsible':

(146) My room is easy for Fred to see the ocean from.

(150) This light is difficult to study by.
(151) This book is easy to put on the table.

My own judgments would be reflected by the annotation of each of these with '?'. Examples such as (151), or the TCC examples under (143) and (144), are always improved if I can convince myself that the ease or difficulty of the act is conceptualizable as somehow being due to the nature of the subject NP. The transitivity-oriented requirement and the 'responsibility'-oriented requirement thus fail to converge in all cases, but the best examples do indeed feature such a convergence.

In conclusion, we end up with a view of OE TCC as being far less 'illogical' than is commonly presumed, and of examples with predicates such as each being perfectly in line with the semantics of the 'pretty'-type examples once the mediating role of a straightforward mediating metonymic relationship is acknowledged. In addition, I hope to have shown that it is feasible to explain certain formal facts of OE 'tough'-constructions with reference to functional correlates. The formal fact of stranded prepositions, rather than serving to differentiate fundamentally unrelated structures, is in fact understandable in terms of different semantic interpretations imposed on one and the same construction by different predicates appearing in that construction. The formal difference between the TCC and the impersonal structure, meanwhile, is related to different predicational scopes canonically associated with these structures, rather than simply to arbitrary formal abstract distinctions, as in van der Wurff's account, or to a reanalysis of such a distinction out of free variation, as in Demske-Neumann's account.

As a final comment, I would like to mention that I consider it gratifying to find in
an early article of Bolinger's a kind of confirmation in a synchronic context of the insight into the TCC presented in a diachronic context here. In his 1961 Language article on syntactic blends, Bolinger offered a cautionary commentary on the transformational-generative assumption, as represented in Lees (1960), that a given 'derived' syntactic structure can always with confidence be related to a given derivational 'source'. In connection with Lees' claim that 'He is hard to convince' is equivalent to, and shares a common derivational with, 'It is hard to convince him', Bolinger comments:

[W]hat we have here is, I think, another syntactic blend. The impersonal It is hard to convince him has wormed its way into the personal construction He is homely to look at, but not securely enough to permit a completely impersonal adjective to stand there as in *He is imperative to convince. It is no coincidence that the adjectives that do work in this position are ones that can as readily modify the subject as the action: He is nice to send = He is nice, Sending him is nice; He is all right to employ = He is all right, Employing him is all right.... (Bolinger 1961:373)

Bolinger's synchronic insight, that TCC examples with impersonal counterparts are in fact interpreted in terms of the canonical semantics of a construction which is 'personal' in both its form and meaning, is, I hope to have shown, an even more valid insight into the diachronic facts.
Chapter 11: Summary and conclusion

I have argued in this dissertation against a construal of GRs as diachronically and cross-linguistically stable entities, and in favor of an understanding of GRs as language-specific constructs which may be instantiated in different languages, and at different historical stages of a language, in varying ways and to varying degrees. To the extent that the availability of the labels 'subject' and 'object' has been interpreted as necessitating the association of these labels with certain argument classes in all languages, they have distracted us from the fact of this variability; the availability of these labels has at the very least resulted in the false implication that there is, for example, some unified notion of 'subjecthood' which is provided by universal grammar and is always present at some level in all languages. 'Subject' and 'object', then, are reifications; there is little conveyed by their invocation beyond the fact of some resemblance in some respect to the categories referred to by the same labels in Modern English.

In some respects, therefore, we may view 'subject' and 'object' as not only imprecise but intellectually mischievous and methodologically counterproductive. Far superior to the traditional conception of GRs are constructs such as Dixon's (1979) and Role and Reference Grammar's 'pivot', and RRG's Actor and Undergoer categories, along with intersecting variables such as 'reference-related' and 'role-related'. In addition, the construction-specific application of these categories in a model such as RRG is superior to the presumption of some cross-constructionally constant categories of 'subject' and 'object'. The very fact of the incompatibility of subjecthood and objecthood with a
construction-specific status is a reflection of the traditional assumption that each of these categories refers to some unvarying essence, as opposed to correlating with independent semantic and discourse factors on a more restricted basis.

On the other hand, I have acknowledged the validity and usefulness of a theory-neutral and cross-linguistic conception of GRs as empirically identifiable constructs which deviate from independently-required reference-related and role-related categories, and in particular which neutralize or intercalate these other domains in a manner which confounds the identification of, say, a given construction’s pivot in a given language in terms of Actorhood, discourse-topichood, and so on. Given this understanding of GRs, one can meaningfully identify these categories as more or less instatiated in a given language, even though this application of the traditional terminology should never be interpreted as obviating the need to identify the specific tendential correlates of the categories in the specific language, or construction, at issue.

To some extent, this understanding of ‘subject’ and ‘object’ is consistent with Plank’s (1983) understanding of GRs as categories which correlate inversely with a language’s ‘transparency’ and as categories which are questionably relevant to the description of languages of a certain typological affiliation. In addition, we may identify in Hawkins’ (1986) comparative-typological approach a similar understanding of GRs as entities which ‘collapse semantic distinctions’ to varying degrees, and which may therefore be understood as instantiating semantics-independent categories to varying degrees. By both typological perspectives, as well as by the ‘role’- versus ‘reference’-oriented taxonomical approach of RRG, Modern English may be viewed as somewhat
extreme in its opacity or syntactic reference-orientation, which underscores the undesirability of basing universally applicable syntactic models on Modern English or Modern English-type languages.

By the understanding of GRs as nominal constructs which are typologically dependent, which deviate from 'transparent' motivation, and which receive varying expressions, both quantitatively and qualitatively, in different languages, GRs are appropriately viewed as grammaticalized constructs rather than as invariant categories provided by universal grammar. As grammaticalized categories, 'subject' and 'object' may also be viewed as more or less obligatory in a given language, with passivization playing a central role in the mediation of semantics and GR status in languages which do feature grammaticalized GRs.

This view of GRs was both exemplified and substantiated with reference to two languages which are closer to the 'role-dominated' or 'transparent' typological endpoint than Modern English, namely Kashaya Porno and Old English. Kashaya Porno was shown to be a language which not only fails to neutralize semantics in its active-stative morphology—a characteristic which has been interpreted as evidence (Plank 1983) as pointing to the questionable internal relevance of GRs—but which also preserves morphologically-instantiated semantic distinctions in its syntax. We may therefore say that the failure to neutralize transitive and intransitive argument types along the lines of Dixon's (1979) 'subject' category is not merely a superficial characteristic of the Kashaya active-stative morphology, but reflects a deeper maintenance of semantic distinctions which languages frequently neutralize.

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At the same time, we did find some evidence for Dixon's 'subject' category—a conflation of transitive Actor with the intransitive argument regardless of Actor or Undergoer status—in jussives or embedded causatives in Kashaya Pomo syntax and case marking. This shows, first, that the universality of Dixon's 'subject' category is at least not counterexemplified in Kashaya Pomo, and, second, that GRs as categories that conflate role-related and reference-related factors are indeed manifested in even as 'transparent' a language as Kashaya.

Rather than interpreting these facts as validating a view of GRs as universal, however, several conclusions were drawn from the Kashaya data. First, while it may indeed be true that Dixon's subject category is universally manifested in at least some part of every language's morphological or syntactic system, this sense of subjecthood remains, as Dixon himself acknowledges, a semantic one. The essential difference between 'subject' in this sense and the more explicitly semantic notions of Actor or agent lies simply in the level of granularity at which the semantic category is identified. Thus, Dixon's 'subject' is the same construct, under a different name, as van Oosten's (1984) 'Primary', or the argument corresponding to the highest-ranking semantic role.

Second, Kashaya shows no evidence of subjecthood in the sense of a semantically promiscuous syntactically pivotal category of the sort manifested in Modern English. While Actor marking may in some instances reflect a discourse-motivated neutralization of the Actor/Undergoer opposition otherwise respected in the language's morphology and syntax, this restricted status of the Actor category is never reflective of a mapping of Undergoer arguments onto pivot status in order to make that argument accessible to a
given syntactic process or in order to map that argument onto a 'derived' subject category corresponding to topic status. Kashaya thus fails to instantiate 'subjects' in the ModE sense of a uniquely privileged, pivotal category with respect to syntax.

Third—and most intriguingly—even though Kashaya does show some evidence of GRs in its manipulation of otherwise semantically-sensitive case morphology under discourse considerations, the resulting conflation of role-related and reference-related factors bears little resemblance to what is called the subject in a language such as English. The Kashaya 'Actor' category, along with the same category in other Pomo languages, potentially conflates the agent-based Actor semantics with low topicality and topicworthiness, rather than with high topicality and topicworthiness as has been argued (Comrie 1983) to correspond to a universal 'subject' prototype.

This last fact has important implications not just for the understanding of 'subject' as a language-specific category, but for the understanding of cross-linguistic radial categories and prototypes in general. If, as argued here, the specific conflation of role-related and reference-related factors in a neutralized subject category follows from a language's typological status, then the supposedly universal 'subject' prototype must be viewed in terms of a tendency only, not in terms of a fundamental universal reflection of the human mind. This challenges us to consider the possibility that the status as 'cognitive map' attributed by Kemmer (1988) to her cross-linguistic radial 'middle' category is itself a sort of reification. The evidence provided by the Pomo languages, then, offers at least tentative support to the Korean-based findings of Park (1994) that a language's instantiation of a category such as Kemmer's middle voice category will depend to some extent...
degree on the internal structural/typological 'ecology' of the particular language at issue.

In the chapters on OE case morphology and syntax, I developed a perspective of Old English as a language, like Kashaya Pomo, exhibiting a lesser degree of grammaticalization of GRs than Modern English. In the morphological case system, this was argued to reflect itself primarily in a relatively low degree of conflation of 'Motion' semantics with 'Transitive' semantics. The distinction involved here—commonly referred to in terms of an opposition between 'syntactic' and 'semantic' or 'structural' and 'oblique' case—was shown to be preserved in the language's syntax in the inaccessibility of oblique arguments to passivization, and in the preservation under topicalization of an argument's distinctive, semantically sensitive morphological marking.

This preservation of semantically-significant case marking—characteristic of a relatively 'transparent' language as opposed to an 'opaque' one—was shown to extend to a severely limited status of discourse-oriented 'raising' operations, and to a limited role of passivization as a discourse-sensitive relation-changing operation. The limited status of passive is especially crucial, given the potential role of this kind of operation in the syntax-morphology interface, and in particular in mediating the mapping of non-Actor arguments onto a 'subject' category in the sense of syntactic pivot. OE passivization is limited both in the sense of 'promoting' a narrower range of argument-types than in Modern English—of neutralizing semantics to a lesser extent than in Modern English—and in the sense of playing a more limited role in the mediation of syntactic processes involving coinstantiation, such as conjunction reduction and purpose clauses. Passive, then, highlights two important respects in which GRs are instantiated to a lesser degree in
Old English than in Modern English: semantically-sensitive case morphology is preserved to a greater extent than in Modern English, and there is a less-developed conflation of 'pivot' with 'subject' in the sense of the first element in the subject-predicate dyad.

The final chapter, on 'tough movement', offers a detailed study of the relatively high degree of transparency to be found in a single OE construction compared to its ModE analog. I show that the OE 'tough movement' construction in fact embodies an iconic, transparent relationship between form and meaning. While ModE 'tough movement' has not altogether lost this relationship, it has become to some extent obscured as the coinstantiation involved in the construction has acquired more characteristics of a 'movement' as opposed to a 'deletion' process.

I argued that the subject-object coinstantiation pattern represented by 'tough movement' is unexceptional in the context of OE syntax, but has become exceptional as the overall syntactic 'ecology' of English has changed. The most salient change involved here is the increasing exclusivity of subject pivots, which is one manifestation of the grammaticalization of subjecthood as defined in this study.

In sum, our understanding of 'raising', passive, conjunction reduction, and subject-object coinstantiation constructions such as 'tough movement' supports the conception of Old English as a transparent language relative to Modern English, and of Old English as a language that shows relatively little evidence of subjecthood in the sense of a syntactically central, semantically neutral category.
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