16.
Verb–Object Order in Old English: Variation as Grammatical Competition
SUSAN PINTZUK

16.1. INTRODUCTION

The relationship between morphological case and constituent order is well known: in general, languages with overt case-marking have freer constituent order than those with little or no overt marking. Partly because of this relationship, changes in constituent order and syntactic structure have frequently been linked to changes in morphological case. This is particularly true for languages where the morphology and the syntax seem to change during the same period of time. In the history of English, for example, the language has changed from the rich case morphology and relatively free constituent order of Old English to the severely impoverished case morphology and relatively fixed constituent order of Modern English.

Traditional grammarians and linguists invoked functional and processing explanations for these changes, suggesting either that the loss of overt morphology resulted in the fixing of constituent order so that subjects and objects could be distinguished (for example, Baugh and Cable [1978] 1993: 162–3, Marchand 1951, Mustanoja 1960: 68, Sapir 1921: 166), or that the fixing of constituent order permitted the gradual loss of overt morphology (for example, Chao 1949: 608–10, Lehnert 1957, Trink 1938: 142f.). Recent work in syntax has taken a more formal approach to the relationship between constituent order and morphology: for example, Roberts (1997) analyzes change in verb–object order in the history of English as a change in the strength of the feature that forces leftward movement.

Earlier versions of some of this material were presented at various conferences and talks over the past two years. I thank members of the audience in College Park, Durham, Manchester, and York, particularly David Adger, Frank Bedin, Eric Haederle, Nigel Vincent, and Anthony Wener, for suggestions and helpful discussion. I thank Anthony, Win van der Waerff, and two anonymous referees for comments on earlier written versions; and I thank Jane Nunes for his oral and written commentary on the DGIS presentation and for much interesting discussion. All errors and misunderstandings remain my own responsibility.

1 Traskett (1973) combines both approaches and describes 'a kind of cyclical development with some word-order patterns allowing the partial collapsing of inflectional distinctions, this collapsing itself becoming a condition for further restrictions of word order, and these restrictions in turn allowing for more collapsing of inflections, and so on' (p. 111). See also Samuel (1971: 82–4).

of objects from postverbal position, a change triggered by the loss of overt case morphology. In contrast, in Pintzuk (1997), I analyze the change from OV to VO in the history of English as involving grammatical competition, without invoking morphological facts or explanations at all.

In this chapter I examine the possible effects of case-marking on constituent order in Old English, and I demonstrate that overt morphology plays no role at all in determining verb–object order. The chapter is organized as follows: in Section 16.2, I briefly discuss variation, optionality, and the concept of grammatical competition. In Section 16.3, I describe the case-marking system of Old English, and show that the language exhibits some of the well-known syntactic effects of morphological case. In Section 16.4, I show that neither overt case-marking nor case ambiguity has any effect on verb–object order. In Section 16.5, I demonstrate that an analysis involving feature strength and leftward movement for case-checking, like that of Roberts (1997), is equivalent to grammatical competition, with no relationship to overt morphology. In Section 16.6, I provide distributional evidence for grammatical competition, OV vs. VO, and I show that an analysis of head-initial structure with optional preposing of objects cannot account for the Old English data. And in Section 16.7, I briefly discuss the analysis of Hrðarðstþið (1999, 2000) for Icelandic, and show that it cannot hold for the history of English.

Except where otherwise noted, the data used for this study have four sources: first, the data collected for Pintzuk (1999); second, the Brooklyn–Geneva–Amsterdam–Helsinki Parsed Corpus of Old English (Pintzuk, Haederle, van Kemenade, Koopman, and Beths 2000). These two corpora together contain data from twenty-seven Old English prose texts written between the last quarter of the ninth century and the end of the eleventh century. I also used data from Hitlunen (1982), a study of separable particles in Old and Middle English, and from Koopman (1994), a study of double-object constructions in Old English. These two scholars provide specific references for their data, and in fact Koopman lists in full all of the double-object clauses that were relevant for Section 16.6.3 of this chapter.

16.2. VARIATION, OPTIONALITY, AND GRAMMATICAL COMPETITION

Many major syntactic changes, like the loss of the verb-second constraint in French and English and the change from OV to VO in English, Icelandic, and Swedish, have been found to involve lengthy periods of structured variation, in which two grammatical options (that is, verb-second clauses and non-verb-second clauses, OV clauses and VO clauses) are used by individual speakers. The language of historical written texts thus shows variation and optionality in the use

1 The Brooklyn–Geneva–Amsterdam–Helsinki Parsed Corpus of Old English (the Brooklyn Corpus) is a syntactically and morphologically annotated version of selected texts from the Helsinki Corpus of English Texts. I thank Beth Randall for CorpusSearch, the search engine that facilitates searching annotated corpora like the Brooklyn Corpus.
of word orders and structures that within a Principles and Parameters model of language should be ruled out by economy conditions. There are in principle two ways of analyzing this type of variation: by setting up two or more equally economical derivations, or by establishing competing parameter settings.

The first type of analysis involves optionality in derivations which are equivalent in terms of economy. This view has been put forth, for example, by van der Wurff (1997) for the loss of OV structure in the history of English. According to his analysis, the verb moves overtly to AgrO to check a strong V-feature, and this V movement makes Spec of AgrOP and Spec of VP equidistant, so that overt movement of the object to Spec of AgrOP is optional. If the object moves overtly to Spec of AgrOP, OV order is derived; if the object moves covertly, VO order is derived. Since the derivation with overt object movement requires the same number of operations as the derivation with covert movement, they are equally economical; and therefore both are permitted by the grammar.

In contrast, Kroch (1989, 1994), among others, has interpreted some types of variation in historical data as the reflex of competition between grammars with two different options that are incompatible within a single grammar. The competition occurs within the individual speaker and can be understood in terms of code-switching or register-switching. The way in which the competing options are analyzed and described depends upon the syntactic framework being used. In a Government and Binding framework, options frequently correspond to contradictory parameter settings: for example, head-initial vs. head-final VP structure (that is, a directionality parameter), verb second vs. non-verb second. Within the Minimalist Program, competing options correspond to the presence in the lexicon of items with contradictory features. Thus it is not entire grammars that are in competition, but rather incompatible options within the grammars. The question immediately arises as to the number of different parameters or features that can vary simultaneously. In principle there should be no limit beyond that of learnability. Kroch and Taylor (2000) demonstrate that both IP and VP vary between head-initial and head-final structure during the Early Middle English period, and I have made the same claim for Old English (Pintzuk 1997, 1999).

I will show in this chapter that the variation between OV and VO in Old English is best analyzed as grammatical competition rather than optionality, and I will characterize the competition in terms of variation in headlessness in underlying structure.

15.3. CASE-MARKING IN OLD ENGLISH AND ITS SYNTACTIC EFFECTS

Old English had four productive cases,3 nominative, accusative, genitive, and dative; and three genders, masculine, neuter, and feminine. Case was marked overtly on nouns, pronouns, determiners, adjectives, and some quantifiers, as well as on some participles. There was, however, a substantial amount of syncretism throughout the Old English period. I give seven sample paradigms below:

### Paradigm 1. Masculine *-stems*

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
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<tbody>
<tr>
<td>nom stàn</td>
<td>stánum</td>
</tr>
<tr>
<td>acc stán</td>
<td>stánum</td>
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<tr>
<td>gen stân</td>
<td>stánum</td>
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### Paradigm 2. Neuter *-stems*

<table>
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<tr>
<th>Singular</th>
<th>Plural</th>
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<tbody>
<tr>
<td>nom scip</td>
<td>scipum</td>
</tr>
<tr>
<td>acc scip</td>
<td>scipum</td>
</tr>
<tr>
<td>gen scipes</td>
<td>scipum</td>
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</tbody>
</table>

### Paradigm 3. Feminine *-stems*

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
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<tbody>
<tr>
<td>nom giëf</td>
<td>giëfum</td>
</tr>
<tr>
<td>acc giëf, e</td>
<td>giëfum</td>
</tr>
<tr>
<td>gen giëfe, -e</td>
<td>giëfum</td>
</tr>
</tbody>
</table>

### Paradigm 4. Weak masculine nouns

<table>
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<th>Singular</th>
<th>Plural</th>
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<tbody>
<tr>
<td>nom nama</td>
<td>namana</td>
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<tr>
<td>acc naman</td>
<td>namana</td>
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</tbody>
</table>

### Paradigm 5. Definite determiner/demonstrative pronoun

<table>
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<tr>
<th>Singular</th>
<th>Plural</th>
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<tbody>
<tr>
<td>mascs è, ìt</td>
<td>ìs, ít</td>
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</table>

### Paradigm 6. Strong adjectives

<table>
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<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>mascs tiil, tiile</td>
<td>ìs, ís</td>
</tr>
</tbody>
</table>

### Paradigm 7. Weak adjectives

<table>
<thead>
<tr>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>mascs tilan, tilan</td>
<td>ìlum, ílum</td>
</tr>
</tbody>
</table>

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3 Adjectives and some pronouns had distinct forms for instrumental case.
As Allen (1995: 159) emphasizes, it is important to distinguish here between case-marking categories and the forms that express these categories, that is, between the system itself and the overt morphological forms. Although there was a great deal of synchronism in forms throughout the Old English period, the case-marking system was alive and well until early in Middle English.

Given this synchronism, it is clear that Old English nominal objects could be ambiguous in several ways, depending on the noun type of the head and the additional content of the object. Examples are given in (1) through (3) of unambiguous case-marking, and in (4) through (6) of ambiguous case-marking.

1. **Unambiguous accusative object**
   
   *pu sceal oncanwan þone gesetwunan dom you must suffer the appointed doom*
   
   (ApT 5.8–9)

2. **Unambiguous genitive object**
   
   *þi he his willo gehyrnen noldne that he his will listen to its would . . . that he wouldn’t listen to his will . . . .*
   
   (ApT 4.5–6)

3. **Unambiguous dative object**
   
   *þæt þu sceal dom yfcan wite onfro that you must the same punishment receive . . . that you must receive the same punishment . . . .*
   
   (Bede 36.7–8)

4. **Ambiguous nominative/accusative object**
   
   *hæt bi milbon heora fynd oferwimanm so that they could their foes overcome . . . so that they could overcome their foes.*
   
   (Bede 44.14)

5. **Ambiguous accusative/genitive/dative object**
   
   *ac þu hæfist beheofdtunge gecearned but you have beheading earned . . . but you have earned beheading.*
   
   (ApT 5.5–6)

6. **Ambiguous nominative/accusative/genitive/dative object**
   
   *þæt ic his sceal her fela oferhiebon that I of it must here much pass-over . . . that I must pass over much of it here . . . .*
   
   (Or 1.8.4)

* The quantifier fela ‘much, many’ is invariant, and frequently takes a genitive DP like his ‘of it’ in example (6).

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**Verb-Object Order in Old English**

Let us consider the possible effects of the morphological case system on the syntax. Weeraman (1997) summarizes the relationship between morphological case systems and syntactic phenomena with four generalizations (Weeraman 1997: 459, his (33)):

1. **The order of indirect object and direct object has to remain constant unless there is a morphological case system.**
2. **The order of indirect object and direct object with respect to the verb has to remain constant unless there is a morphological case system.**
3. **The complement of N[oun] is a PP unless there is a morphological case system.**
4. **The complement of A[jective] is a PP unless there is a morphological case system.**

Certainly all four of the generalizations in (7) hold for Old English. The order of objects can vary, as shown in (8) and (9) (= Koopman 1990: 177, his (128) and (129)).

8. *þæt he forgera gode willan þem soocan hæðenman that he granted good will-acc the sick heathen-DAT . . . that he would grant good will to the sick heathen. (ÆCHom i.2.12.28)

9. *gif þu geoffræt Gode amige lac at his weofode if you offer God-DAT any sacrifice-ACC on his altar . . . if you offer God any sacrifice on his altar . . . . (ÆCHom 16.19)

Nouns and adjectives may take DP complements, as shown in (10) and (11).

10. *þæt he was swa swide Driftmæ ege underpeoded that he was so severely Lord-gen fear subjegated . . . that he was so severely subjugated to fear of the Lord . . . . (Bede 268.10–11)

11. *hwæþere ic fara fræg froste gedige, siges worrig however I foes’ grasp life survived, journey-gen weary ‘However, I survived the foes’ grasp with my life, weary of the journey.’ (Beco 578–9)

And the order of objects with respect to the verb can vary: in clauses with full DP objects, there are five basic patterns, all of which occur in both main and subordinate clauses, although their frequency varies by clause type. Examples are given in

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1. I exclude clauses with topicalized objects. Although many of the examples in this chapter show the subject in clause-initial position, Old English is a verb-second language, which permits topicalization of non-subject constituents. The verb-second status of Old English is irrelevant to the central concern of this chapter.
(12) Aux–O–V
(a) he ne mæg his agene aæran
he NEG can 'his own' support
'He cannot support his own.'
(CP 52.2)
(b) þæt hi milton heora fynd oferwætan
so that they could 'their foes overcome
'... so that they could overcome their foes.'
(Bede 44.14)

(13) Aux–V–O
(a) þu hæfast geccore þone wer
you have chosen the man
'You have chosen the man.'
(Apt 23.1)
(b) þæt he mot ehtan godra mann
that he might persecute good men
'... that he might persecute good men...'
(Whom 130.37–8)

(14) O–V–Aux
(a) him þær se gionga cyning þæs oferfæredes forwiæman methe
him there the young king the crossing prevent could
'... the young king could prevent him from crossing there '
(Or 44.19–20)
(b) hu he his agene unbeawas ongiætan wille
how he his own faults perceive will
'... how he will perceive his own faults'
(CP 22.21–2)

(15) O–Aux–V
(a) Ne God jonne ane hwile his mîtha ne his wundera syf
Nor God then a while his powers nor his wonders self
nele cyðan
NEG would reveal
'Nor would God himself then reveal his powers or his wonders for a
while...'
(Whom 138.64–5)

8 It is extremely rare that any constituent, either argument or adjunct, appears between the nonfinite main verb and the finite auxiliary. I have found only one such example, in the poetic text Beowulf, lines 1676–1678. See also note 12.

(b) swa hwider swa se cining Otwi his rice mihæ þennan
as far as the king Oswy his kingdom could stretch
'... as far as the king Oswy could stretch his kingdom'
(Chad 44)

(16) V–Aux–O
(a) he þæs habban sealc ece edlean on Godes rice
he therefore have must eternal reward in God's kingdom
'... he therefore must have eternal reward in God's kingdom'
(Whom 164.164–5)
(b) þæt ægol mægelææ man ealne þone dænum
den that any man relate can all the misery...
'... that any man can relate all the misery...
(Or 52.6–7)

In this chapter I leave aside the implications of (10), (13), and (15), and focus on the order of verbs and their DP objects as illustrated in (12) through (16). I have shown in previous work (Pintzuk 1997, 1999) that one way of analyzing these data is in terms of grammatical competition in underlying structure: in both IP and VP, head-initial structure competes with head-final structure during the Old English period, and finally replaces it completely sometime during the Middle English period. In Pintzuk (1997), I examined the effect of various factors on the position of DP and PP complements, and demonstrated that the heaviness of the complement, the clause type, and the clause structure had significant effects. In the next section, I examine the effect of overt case on the position of objects in clauses like those above, to determine whether the case-marking system imposes any additional constraints on constituent order.

16.4. The effect of case-marking on the position of DP objects

Let us consider how the case-marking system of Old English might affect the behavior of DP objects. One simple and straightforward possibility is that DPs with structural case may behave differently from DPs with inherent Case,3 if case-checking is done differently: perhaps inherent Case is checked within the VP, while structural case is checked in Spec of AgrOP. In this situation, other things being equal, we might expect a difference in their surface position, preverbal vs. postverbal. Another possibility is that DPs with unambiguous case-marking, like those in (1) through (3) above, might behave differently from DPs with ambiguous case-marking, like those in (4) through (6). This difference would presumably have a functional basis: since the grammatical function of the unambiguous DPs

3 It is generally accepted that Old English had both structural and inherent Case; see, for example, van Kempen (1997).
is obvious from their morphology, clauses with unambiguously case-marked DPs may exhibit free constituent order than clauses with ambiguously case-marked DPs. With respect to the order of non-finite main verbs and their DP objects, this would mean that the frequency of postverbal DPs would show significant differences for unambiguous vs. ambiguous case-marking.

The results of testing the above hypotheses are shown in Table 16.1. It is clear that distinctions in case-marking have no effect at all: not only is the frequency of postverbal DPs about the same for unambiguously and ambiguously case-marked DPs (35.8% vs. 37.1%), but it is also the same regardless of whether the unambiguously case-marking is structural (accusative) or inherent (genitive/dative) (33.5% vs. 36.0%). It should be noted that the effects of the other factors influencing the position of the object (heaviness, clause type, clause structure) are the same in clauses containing unambiguously case-marked DPs as in clauses containing ambiguously case-marked DPs; in other words, there is no difference in the behavior of the two groups of DPs. In addition, the early texts also show the same lack of effect of case-marking on the position of DPs as the later texts.

In summary, the data presented in this section demonstrate that during the Old English period, overt case-marking had no effect on the position of the object with respect to the main verb: DPs that are ambiguously case-marked behave the same as DPs for which the case and therefore the grammatical function are unambiguous, and DPs with structural case behave the same as DPs with inherent Case. Let us be very clear on the conclusions that can be drawn from these data. I have shown that there is no link during the Old English period between case ambiguity and word order. But I have not shown that there is no link between the loss of the case system and the fixation of word order: this is impossible to demonstrate on the basis of Old English data, since during that period the case system was operative despite some syncretism of forms. However, as I will show in Section 16.5 (see Table 16.2), the fixation of word order is beginning even in the Old English period, with the frequency of VO order increasing during the period. I conclude that a simple link between the loss of the case system and the loss of OV word order cannot be maintained for the history of English, since the latter started well before the former.

16.5. SYNTACTIC EXPLANATIONS OF THE EFFECT OF CASE-MARKING ON THE POSITION OF DP OBJECTS

In this section I discuss the analysis of Roberts (1997), in which the position of the object is in part determined by the strength of the feature that checks morphological case. Roberts’s analysis has been chosen because as far as I am aware, no one else has made explicit the relationship between morphology and verb-object order in Old English, and no one else has analyzed Old English as a head-initial language in such detail. I will simplify Roberts’s analysis considerably, and focus mainly on those derivations that affect the position of DPs in one particular clause type: clauses with the finite verb in medial position and the object either between the finite and non-finite verbs, as shown in (176), or else after the non-finite verb, as shown in (176).

(17) (a) þæt hī milton herea findora winnan
so that they could their foes overcome
(Bede 44.14)
(b) þæt he not ehtan godra manna
that he might persecute good men
‘that he might persecute good men’
(Whitby 130.37-38)

In accordance with the asymmetry hypothesis of Kayne (1994), Roberts proposes that Old English structure is uniformly head-initial, with complements to the left of heads derived by movement. Overt movement is triggered by strong features on functional heads. Finite verbs in Old English, for example, move overtly to AgrO, and may move higher inverb-second clauses, AgRO has a strong N feature, which attracts DPs to Spec of AgrOP to check case, as shown in (18). Not only case-marked DPs, but also small-clause predicates (including particles), non-finite complement clauses, and some PP are subject to the same checking requirement that is satisfied by movement to Spec of AgRO. Thus, as Roberts (1997: 415) states, his notion of case is somewhat abstract. But the loss of overt case morphology in Early Middle English plays a role in Roberts’s explanation of the loss of OV order, as will be discussed below.

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Table 16.1. The effect of case-marking on the position of DP objects in clauses with auxiliary verbs

<table>
<thead>
<tr>
<th>Case-marking</th>
<th>Preverbal</th>
<th>Postverbal</th>
<th>TOTAL</th>
<th>% postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unambiguous</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accusative</td>
<td>113</td>
<td>57</td>
<td>170</td>
<td>33.5%</td>
</tr>
<tr>
<td>Genitive</td>
<td>35</td>
<td>21</td>
<td>56</td>
<td>37.5%</td>
</tr>
<tr>
<td>Dative</td>
<td>76</td>
<td>47</td>
<td>123</td>
<td>38.7%</td>
</tr>
<tr>
<td>Total unambiguous</td>
<td>224</td>
<td>135</td>
<td>359</td>
<td>35.8%</td>
</tr>
<tr>
<td>Ambiguous</td>
<td>366</td>
<td>216</td>
<td>582</td>
<td>37.1%</td>
</tr>
<tr>
<td>Total</td>
<td>590</td>
<td>341</td>
<td>931</td>
<td>36.6%</td>
</tr>
</tbody>
</table>

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* As pointed out by an anonymous referee, DPs that are ambiguously case-marked in isolation are frequently not ambiguous in context, due to other morphological, semantic, and pragmatic cues. This further weakens support for a functional explanation of the change from OV to VO. See Potthast (2006) for discussion.
(18) "hæt hit hæton [lÆ̣]ðr [beorh fynd], [Æ̣]ðro, AgrO so that they could their foes
 lÆ̣Þferwinnan t,]]]] overcome
 '... so that they could overcome their foes.'
 (Bede 44.14)

From Spec of AgrOP, DPs may scramble higher to Spec of AgrSP or Spec of TP
(that is, before the finite auxiliary verb in subordinate clauses), as shown in (19).

(19) "hæt he hæt godes hæus woldel mid fyre forbernan
 so that he the God's house would with fire burn
 '... so that he would burn the house of God with fire'
 (ÆLS 25.61-14)

DPs can escape case-checking, and therefore overt leftward movement, by
being focused. In clauses with focused DPs, there is no overt movement out of
the lowest VP, as shown in (20). If focus can be linked with heaviness, this analysis
has the advantage of explaining the correlation between length of DP and position
described in Pintzuk (1997): the heavier the DP, the more likely it is to appear in
postverbal position.

(20) "hæt he mot [lÆ̣]ðro, AgrO [lÆ̣]ðro, ðæhtan godra mæna]]
 that he might persecute good men
 '... that he might persecute good men...'
 (Whom 130.37-8)

In case the link between focus and position is not supported by empirical
evidence, Roberts offers an alternate analysis for such clauses: a head-initial variant
of West Germanic verb-raising, with the non-finite verb moving leftward and attach-
ting to the finite verb. As shown in (21), the object moves to the lower Spec of AgrOP,
and the non-finite verb moves beyond it to adjoin the finite verb in the higher VP,
which in turn excoercaptates and moves leftward, at least to the higher AgrO.5

(21) "hæt he mot, lÆ̣ðro, ðæhtan +t, [lÆ̣]ðro, AgrO [lÆ̣]ðro, godra mæna]
 that he might persecute good men
 [lÆ̣]ðro, AgrO [lÆ̣]ðro, ðæhtan]]
 '... that he might persecute good men...'
 (Whom 130.37-8)

Roberts analyzes the change from OV to VO in Early Middle English as a
change in the strength of the N feature of AgrO from strong to weak, eliminating

5 Roberts (1997: 417) states that the two verbs must be adjacent in clauses like (21), but this is
clearly not true. Koopman (1941) found 122 clauses with double objects where both objects follow
the finite auxiliary + non-finite main verb, but also forty clauses with double objects with one object in
preverbal position and one object in postverbal position.

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Overt movement to Spec of AgrOP. To explain how language learners acquire
strong or weak features and how the strength of a feature can change over time,
he presents the following criteria for acquisition (= Roberts 1997: 420, his (35)):

22 (a) Morphological trigger: if a head H has the relevant L-morphology, then
H has strong L-features.

(b) Syntactic trigger: if a well-formed representation can be assigned to a
given string by assuming that H has strong L-features, then H has strong L-features.

(c) In general, weak features are the default value. These are assumed in the
absence of clear evidence to the contrary of the type in (a) or (b).

During the Old English period, the trigger for the acquisition of a strong AgrO
feature was both morphological (the overt case-marking on DPs) and syntactic (the
numerous instances of OV order). In Early Middle English, however, the morpho-
logical case system broke down, which resulted in the loss of the morphological
trigger for acquisition of the strong feature on AgrO; in addition, the VO orders
that existed in the primary linguistic data weakened the syntactic trigger. Since the
weak feature is the default, and was also confirmed by some of the data, the strong
feature on AgrO was lost, which resulted in the loss of OV order.

Roberts's analysis thus links the position of the object in Old English to case-
marking requirements and to focus, and explains the change from OV to VO by
the effect on language acquisition of the collapse of the case system in Middle
English. If movement to Spec of AgrOP is a prerequisite for scrambling to higher
positions, and if scrambling is a prerequisite for cliticization of pronominal objects,
then his analysis also explains the simultaneous loss of scrambling and cliticiza-
tion in early Middle English (Roberts 1997: 419). But Roberts's analysis claims
that verb-object order in Old English clauses like those in (17) is determined
evexiously by focus, and one clear prediction is that the order of verbs and their
objects should vary but not show any particular chronological trend during the Old
English period. It is during the Early Middle English period that word order should
change dramatically, with the loss of overt case morphology. But this prediction
is not correct: as shown in Table 16.2, the frequency of postverbal DPs increases

<table>
<thead>
<tr>
<th>Date</th>
<th>Preverbal</th>
<th>Postverbal</th>
<th>TOTAL</th>
<th>% postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 950</td>
<td>580</td>
<td>144</td>
<td>724</td>
<td>19.0%</td>
</tr>
<tr>
<td>After 950</td>
<td>210</td>
<td>197</td>
<td>407</td>
<td>48.4%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>590</td>
<td>341</td>
<td>931</td>
<td>36.6%</td>
</tr>
</tbody>
</table>

If instead we accept the verb-raising analysis of clauses with Vf-Val-O orders, as in (21), then
the position of DP objects is determined by whatever constrains this process.
from the early texts to the later ones, independent of the other factors influencing the position of DPs. An analysis that ties the position of objects only to (abstract or concrete) case-checking and focus cannot describe or explain this increase.

We could modify Roberts's analysis so that the strong feature forcing the leftward movement of objects is not related to morphology at all; rather, it is a syntactic feature which varies between weak and strong and which has a syntactic trigger for acquisition. Within a framework where parametric variation is expressed in terms of feature strength rather than directionality, this characterization of the variation is equivalent to grammatical competition and does not involve case morphology, as Roberts himself states (1997: 416). The modified Roberts's analysis of Old English thus differs from the analysis of Pintzuk (1997) mainly in terms of the framework being used, and may indeed have some advantages as far as explaining the other changes in Early Middle English. But I will show in the next section that even this modification is not sufficient, and that most DPs in preverbal position cannot be derived from underlying VO structure.

16.6. DISTRIBUTIONAL EVIDENCE FOR VARIATION IN UNDERLYING STRUCTURE

I turn now to evidence for underlying structure: I will demonstrate that a Kaynean framework with uniform head-initial structure cannot explain the distribution of DP objects. It has been shown in previous studies (for example, Haeberli 1990a; van Kemenade 1987; Pintzuk 1999) that Old English appears to allow both leftward and rightward movement of various types, as illustrated in the examples below. (23b) (= Haeberli 1990a: 356, his (39c)) shows leftward scrambling, with the object before a VP-adjoined adverb; (23b) shows postposition, with the object after an otherwise clause-final auxiliary.

(23) (a) & ƿæhwaþeþ hofrne oftredlice uhtredlice
and each other frequently out-drove
(and each of them frequently drove the other away)
(ChronA So.887.10)
(b) þæt ægenv mon ætellan marge ealne þone demin
that any man relate can all the misery
(that any man can relate all the misery)
(Or 52.6–7)

For purposes of exposition, I will make the following three assumptions in discussing the distribution of DP objects. First, I will assume the phrase structure of Chomsky (1986c), with only two functional projections, CP and IP, as shown in (24):

(24) \[ [\{\text{XP} \} \{ [\text{C} \{ \text{IP} \{ [\{ \text{I} \{ [\{ \text{DP} \{ [\text{V} \{ \text{XP} \} \} \} \} \} \} \} \}] \}] \] ]

12 But see van der Wurff (1997, 1999) for a different picture of the loss of OV in the history of English.

Second, I will assume that IPs and VPs can vary in headedness, head-initial vs. head-final. In other words, I am adopting neither the exploded Inf hypothesis of Pollock (1996) nor the antisymmetry hypothesis of Kayne (1994). Third, I will assume that the finite verb in subordinate clauses and in normal declarative main clauses is in I rather than in C, regardless of the underlying position of I; in other words, that verb-seconding in Old English is to a position lower than C (see Haeberli, this volume, Pintzuk 1999, among others).

Since finite main verbs categorically move to I, their surface position can tell us nothing about the order of verbs and their complements: in I-initial clauses, the finite main verb will frequently precede its complements; in I-final clauses, the finite main verb will frequently follow its complements. Therefore, the data for this section will be limited to clauses that contain both a finite auxiliary (Vf) and a non-finite main verb (Vnf), and I will assume that the non-finite verb remains in its underlying position within the VP. I will concentrate on the positions before and after the non-finite main verb in I-initial and I-final clauses, as shown in (25). In I-initial clauses, preverbal position is between the finite auxiliary and the non-finite main verb, and postverbal position is after the non-finite main verb. In I-final clauses, preverbal position is between the first heavy constituent and the verb cluster, and postverbal position is after the verb cluster:

(25) (a) I-initial: \[ \{ [\text{Vf} \} \{ [\text{I} \{ [\{ \text{DP} \{ [\text{V} \{ \text{XP} \} \} \} \} \} \} \} \]
(b) I-final: \[ \{ [\text{XP} \} \{ [\text{I} \{ [\{ \text{DP} \{ [\text{V} \{ \text{XP} \} \} \} \} \} \} \}

In the remainder of this section, I will look at the distribution of DP objects in terms of their possible derivations from uniform head-initial structure and uniform head-final structure, and I will show that both structures are needed to account for the data—in other words, that Old English exhibits grammatical competition in underlying structure, head-initial vs. head-final.

16.6.1. Verb-object adjacency and underlying structure

One type of distribution that we could examine to determine underlying structure is verb-object adjacency. If, for example, the language is uniformly VO, with preverbal objects derived by scrambling, we might expect preverbal objects to appear before left-periphery VP adverbs and other adjuncts, with postverbal objects adjacent to the non-finite main verb. However, the data do not support that prediction. We can see from (26) and (27) that in clauses with preverbal objects, the object may either precede or follow an adjunct, including adverbs that are assumed to be on the left periphery of the VP.

12 The fact that head-initial VPs cannot occur with head-final IPs is unexplained under these assumptions, as Nunes (this volume) and Wim van der Wurff (personal communication), among others, have pointed out. See also note 6.
(26) but we woldan a God lulian
so-that we would always God love
'so that we would always love God'
(WUFL3 226.17.16)

(27) after þam be Lacedemonie harðon Perse oft
after Lacedaemonians had Persians frequently
overcome
'after the Lacedaemonians had frequently overcome the Persians'
(Or 94.22)

Similarly, in clauses with postverbal objects, the object may either precede or follow an adjunct, as shown in (28) and (29).

(28) Cristene men sculan secan cyrican gelome
Christian men must seek churches often
'Christian men must often seek churches'
(AELET4 24.105.147)

(29) He scéal habum eor massaerof
He must have also mass-vestments
'He must also have vestments for the mass'
(AELET4 14.55.74)

The distributions are given in Table 16.3, the data for which consist of I-initial clauses with a full DP object plus an adjunct either before or after the main verb in clauses with auxiliary verbs, like those in (26) through (29).

Thus even in clauses like (29) with postverbal constituents, there must be some sort of movement affecting the position of the object. An analysis in which postverbal constituents are derived by a combination of base generation and postposition can account for these data. But if underlying structure is uniform and rightward movement is not permitted, their derivation is not as clear.

16.6.2. Evidence for VO structure

As was shown in Table 16.2, there is a considerable amount of surface VO order in Old English texts. If we assume a head-final analysis (for example, van Kemenade 1987), much of the surface VO order could be derived from head-final structure by postposition. However, there are instances of surface VO where postposition is grammatically excluded, so they can be regarded as underlyingly VO. In general, prosodically light elements do not move rightward in West Germanic languages; and in clauses with auxiliaries, light elements to the right of the non-finale main verb are diagnostics for VO structure. To demonstrate this, I look at the distribution of three types of light elements: pronouns, particles, and stranded prepositions.

The distribution of pronominal objects is shown in Table 16.4. Pronouns appear both preverbally and postverbally in I-initial clauses, but never postverbally in I-final clauses; examples are given in (30). The distribution supports the assumption that pronouns do not move rightward, and that they therefore can be used as diagnostics for VO structure when they are found in postverbal position.

<table>
<thead>
<tr>
<th>Clause type</th>
<th>Preverbal</th>
<th>Postverbal</th>
<th>TOTAL</th>
<th>% postverbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-initial</td>
<td>129</td>
<td>10</td>
<td>139</td>
<td>7.2%</td>
</tr>
<tr>
<td>I-final</td>
<td>32</td>
<td>0</td>
<td>32</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

(30) (a) We ne magan eow neadian
we NEG can you constrain
'We cannot constrain you'
(AELET3.104.85.149)

(b) ac nan ne mot swæpaeh syllan him blestan
but no-one NEG may give them consecration
'But no one may give them consecration however'
(AELET3.124.155.236)

(c) swa Datianus him gedifu hathe
as Datian them directed had
'as Datian had directed them'
(AELIVE1 316.158.122)

The second diagnostic for VO structure is the position of particles. The distribution of particles is shown in Table 16.5: particles, like pronouns, appear both preverbally and postverbally in I-initial clauses, but never postverbally in I-final clauses; examples are given in (31). Again, the distribution supports the use of postverbal particles as diagnostics for VO structure. 1

1 There are many more I-final clauses in the database with pronominal objects in preverbal position than are shown in Table 16.4, but in these clauses the pronominal object is either first in the clause or else occurs immediately after a pronominal subject. In both cases, the pronoun may have been fronted.

24 Particles have frequently been analyzed as predicates of small clauses (for example, Hothauden 2000 for Icelandic, Roberts 1997 for Old English). An analysis of this type does not preclude their use...
Stranded prepositions are governed by the main verb of their clause, and the direction of government is the normal one for the language (Kayne 1984). In Old English, therefore, the position of stranded prepositions reflects the underlying order. The data in Table 16.6 demonstrate that stranded prepositions appear preverbally and, in one instance, postverbally in I-initial clauses, but never postverbally in I-final clauses. Again, the distribution supports the use of postverbal stranded prepositions as diagnostics for VO structure.

Although the numbers in Tables 16.4, 16.5, and 16.6 are small, they all show the same distributional pattern: no postverbal light elements in I-final clauses, and a low frequency of VO structure in I-initial clauses.

16.6.3. Evidence for and constraints on scrambling

Although the postverbal position of pronouns, particles, and stranded prepositions is diagnostic of VO structure, the preverbal position of these elements cannot be used as evidence for OV structure: light elements do not extrapose to the right, but they may move leftward in Germanic languages. We know that there was leftward movement in Old English, both of pronouns and of full DPs, as demonstrated by clauses with these constituents before the finite auxiliary:

(33) (a) þin agen geleafe þe hæf gehealde
    your own faith you has healed
    'Your own faith has healed you.'
    (BðForn 15.24-5)
(b) þet he þæt godes hus wolde mid fyre forðearn
    so that he the God's house would with fire burn
    'so that he would burn the house of God with fire'
    (ELS 25.613-14)

In addition, as discussed above, we can find constituents, again both pronominal and nominal, to the left of VP-adjoined adverbs, as shown in (34).

(34) (a) Ac ic wold þe þe nu ascian
    but I would you now ask
    'But I would ask you now...'
    (BOETH 86.22.252)
(b) after þæm þe Lacedemonian hæfden Persse oferwunnan
    after the Lacedaemonians had Persians often overcome
    'After the Lacedaemonians had often overcome the Persians...'
    (Or 59.10-11)

The distributional evidence that I have presented so far is consistent with a uniform VO grammar and optional leftward scrambling to preverbal position. Indeed, Roberts's analysis can be described in these terms; and van der Wurff (1967) presents such an analysis for Middle English, and suggests that it can also account for the Old English data. As discussed in Section 16.2, van der Wurff incorporates...
optionality into the grammar by showing that if the non-finite verb moves to AgrO, derivations in which objects move overtly to Spec of AgrOP are as economical as derivations in which objects remain within the VP. To determine whether such an analysis is possible for Old English, it is necessary to investigate the extent to which leftward movement from postverbal position can account for objects in preverbal position.

It first should be noted that there is evidence for the leftward scrambling of pronominal objects from postverbal position in Old English: we find clauses with pronominal objects both before and after the non-finite main verb, as in (35) (=Koopman 1994: 77, hist 143). The postverbal pronoun is diagnostic of VO structure, and therefore the preverbal pronoun must have moved leftward from postverbal position. These clauses are not very frequent (Koopman 1994 found three of them out of thirty-four clauses with two pronominal objects and the finite auxiliary before the non-finite main verb); their low frequency is only to be expected, since the number of clauses with postverbal pronominal objects is quite small, as was shown above in Table 16.4.

(35) hwæ holdest þa her scegan me why NEG-would you it say me ‘Why wouldn’t you say it to me?’ (Gen 31.27)

Scrambling is sometimes assumed to be limited to West Germanic languages that are OV. However, it is productive in Modern Yiddish (a VO language) for both pronouns and full DPs (Beatrice Santorini, personal communication, cited in Kroch and Taylor 2000). In Modern Icelandic, another VO language, leftward scrambling is productive for negative and quantified DPs (Rögnvaldsson 1987, van der Wurff 1999, Svenssonius 2000), but not for other full DP objects. One might ask whether the scrambling of full DPs in the history of English is more like Yiddish or Icelandic. Kroch and Taylor (2000) argue that quantified DPs (including negatively quantified DPs) in Early Middle English may scramble leftward from postverbal position, but that the scrambling of non-quantified DPs from postverbal position is quite limited, perhaps non-existent. They show that with a single exception in their Early Middle English data, non-quantified DPs do not scramble leftward in clauses with postverbal pronominal objects, that is, in those clauses which are necessarily VO in underlying structure. Their data are shown in Table 16.7; notice that of the twenty clauses with non-quantified DP objects and postverbal pronouns, those that are unambiguously VO, only one clause has a preverbal DP; while the other nineteen are all postverbal. The rate of leftward scrambling of non-quantified DPs from postverbal position is therefore at most 5%. But in clauses without a diagnostic postverbal pronoun, the frequency of preverbal non-quantified DP objects is 30.2%. Kroch and Taylor conclude that the number of non-quantified DPs in preverbal position is too high to be accounted for by scrambling from VO structure, but must instead be derived from OV structure. This means that Middle English is more like Modern Icelandic in the constraints on scrambling: scrambling from postverbal position is (almost entirely) limited to negative and quantified DPs.

Let us now consider the distribution of DP objects in Old English. There are indications that Old English is much like Early Middle English with respect to the distribution of objects and the constraints on leftward movement. The data are shown in Table 16.8. I follow Kroch and Taylor in grouping negative DPs with quantified DPs, although it should be noted that negative DPs appear preverbally more frequently than quantified DPs in Old English. I have included in Table 16.8 clauses with a postverbal diagnostic element and with the finite auxiliary in C. These clauses were not included in Tables 16.4 through 16.6, since the underlying position of I is impossible to determine if the finite verb is in C.

First notice that in Old English, as in Middle English, the frequency of quantified DPs in preverbal position is higher than that of non-quantified DPs, regardless of whether the clause has a postverbal diagnostic element.

Second, of the thirty-three clauses with a non-quantified DP object and postverbal diagnostic elements (pronouns, particles, and stranded prepositions), those that are necessarily VO in underlying structure, only one has the object in preverbal position.
show that a uniform head-initial analysis such as Roberts (1997), with optional leftward movement of DP objects, cannot be correct for Old English, and strongly suggest that preverbal non-quantified DP objects are base-generated in that position. From there they can of course scramble leftward, as in (34b) above. In other words, I have shown that the grammatical competition cannot take the form of variation in the strength of a case feature (either concrete or abstract) triggering leftward movement from uniform head-initial structure, but instead is better represented by variation in the headedness of VPs. As was stated in Section 16.2, the way that competing options are described depends upon the syntactic framework being used, and other analyses of the grammatical competition are possible: we could, for example, analyze Old English transitive clauses as having a uniformly head-initial VP dominated by vP, with obligatory movement of the verb (finite or non-finite) to v. In that case, the variation in headedness would be located in vP rather than VP, with preverbal objects in head-final vPs and postverbal objects in head-initial vPs.

16.7. Grammatical Competition as PredP Fronting

There is one other analysis of the change from OV to VO that involves grammatical competition, but of a different type than variation in underlying structure. This is the analysis that has been proposed by Hrðarsdóttir (1999, 2000) for Icelandic, which showed a similar gradual replacement of OV by VO in the course of its history. Hrðarsdóttir demonstrates that while a uniform head-initial analysis with optional leftward movement adequately describes synchronic variation in the position of complements in Older Icelandic, it cannot explain the fact that the frequencies of preverbal DPs, PPs, and non-finite main verbs all decline at similar rates over time and are lost at about the same time. Older Icelandic examples are given in (38) (= Hrðarsdóttir 2000, her (1a), (1b), (1g));

(38) (a) so Porstein skyldi lifnua tapha
    so Porstein should lie the lose
    'so that Porstein should die'
(b) að þú matst hjóð mér vera nokkra dagu
    that you would with me stay few days
    'that you could stay with me for a few days'
(c) þú munst frætí hafa, að...
    you will have heard have, that...
    'you will have heard, that . . .'

Hrðarsdóttir instead proposes an analysis in which the leftward movement of DPs to Spec of AgrOP is obligatory, VO order results from the obligatory fronting of a remnant VP, and both OV order and main verb–auxiliary verb order are derived by optional PredP fronting. All of the head-initial/head-final surface variation is a direct result of the optionality of PredP fronting. As PredP fronting is gradually lost, there is a decline and simultaneous loss of all three head-final orders. In pre-
changes are not necessarily connected. Icelandic, for example, changed from OV to VO without corresponding change in overt morphological case-marking; and in Dutch, the case system outside pronouns was lost entirely without a corresponding change from OV to VO.

Second, I have shown that the distribution of DPs in preverbal and postverbal position cannot be explained by an analysis based on leftward movement of DP objects from postverbal position in uniform head-initial structure, neither triggered by a strong feature (Roberts 1997) nor optional (van der Wurff 1997). Instead, I have shown that the distribution is better accounted for by placing grammatical competition in the headness of underlying structure, head-initial vs. head-final. This is not to say that in principle, a head-initial analysis could not be proposed for Old English: Nunes (this volume), for example, sketches a Minimalist account in which objects optionally scramble to positions outside the VP, with pronouns moving further than full DPs. Scrambled pronouns, via relativized minimality, prevent the long distance movement of remnant vPs and non-quantified objects, thus blocking the derivation of many of the unattested orders. This analysis does, however, require some stipulations: it is not clear why scrambled pronouns do not similarly block the long distance movement of subjects and of quantified objects, nor why scrambled pronouns must move first to block the subsequent movement of remnant vPs and non-quantified objects. These and similar questions are left to future research, both my own and that of others.