Variation and change in Old and Middle English –
on the validity of the Double Base Hypothesis

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Abstract

This paper investigates the role of *Grammar Competition* (Kroch 1989) in explaining word order variation in embedded clauses of Old and Early Middle English. It is argued that heretofore unnoticed distributional properties of adverbs point to the conclusion that the finite verb does not leave the extended verbal projection (i.e. vP/VP) in embedded clauses of Old English. Therefore, we claim that in these contexts, variation in the placement of the finite verb has to be attributed to competing grammars that differ with respect to parameter settings associated with the functional head v. Moreover, the proposed analysis provides a principled account for the intriguing fact that a certain serialisation pattern (S-V-O-V_{do}) is absent from the variety of ordering possibilities encountered in Old English. It is further argued that our account opens up a new perspective on a set of syntactic factors (including clause type) which can be shown to have a statistically significant influence on the position of the finite verb in embedded clauses.

Keywords
diachronic syntax, grammar competition, word order variation, Double Base Hypothesis, verb movement, light verb, Old English, Middle English
1. Introduction

It is a well-known observation that older Germanic languages like Old English (OE) (Pintzuk 1993, 1999, Roberts 1997), Early Middle English (EME) (Kroch & Taylor 1998, 2000, Trips 2000a, 2000b) and Old High German (OHG) (Tomaselli 1995, Fuss 1998) exhibit a degree of word order variation which is not encountered in their modern descendants. The following examples illustrate this fact for embedded clauses of OHG and OE. The examples in (1a) and (2a) display a verbal complex with the finite verb in absolutely final position, which is standardly taken to indicate the OV character of these languages. In (1b), (2b) however, the finite verb appears in a sentence medial position, followed by one or more pronominal objects. Importantly, these elements cannot undergo postposition in OE (Pintzuk 1999). Therefore, it is more plausible to regard these orders as the result of a (derived) head initial position of the finite verb.

Old High German

(1)  a. ...bihuuuiu man in Judases chunnes fleische Christes bidendi uuas
    why one in Judah-gen tribe-gen flesh Christ expecting was
    '...why one was expecting Christ in the flesh of the tribe of Judah.'
    (Isidor, 575; Eggers 1964)

    b. ... dhazs uuerodheoda druhtin sendida mih zi dhir.
    ... that Lord of Hosts sent me to you
    '... that the Lord of Hosts sent me to you
    (Isidor, 236; Eggers 1964)

Old English

(2) a. ... þæt man þam hlægan were þæt ilce hors eft bringan sceolde.
    that one the holy man that same horse again bring should
    '...that one had to bring the holy man the same horse again.'
    (GDC, 78.15; Haeberli 1999, p. 356)
b. ... þæt he wolde geswutelian swa his digelnyse eow.

... that he would reveal so his secrets you

'... that he wanted to reveal his secrets to you in such a way.'

(ÆLS (Thomas) 166; Haebertii 1999, p. 360)

The simultaneous occurrence of examples as in (1) and (2) is commonly interpreted as the result of a mixed OV/VO character of the languages in question. In contrast, the Modern Germanic languages do not license a similar kind of word order freedom in the (basic) serialisation of the verb and its complements, this is what is shown in (3) to (5). The historical development that led to the fixation of linearisation is apparently independent of the basic word properties of the languages in question. In other words, there seems to be a general tendency in the Germanic languages that led from the existence of both OV and VO orders to the fixation of either OV or VO as a single basic word order (cf. Gerritsen 1984, Weerman 1989).

**English**

(3)  a. ... that Max read a book.

b. * ... that Max a book read.

**Dutch**

(4)  a. ... dat Max een boek las.

b. * ... dat Max las een boek.

**German**

(5)  a. ... dass Max ein Buch liest.

b. * ... dass Max liest ein Buch.
In this paper, we focus on the (re-)ordering possibilities of the verb and its nominal complements in embedded clauses in OE and EME. Based on this set of data, it is shown that an analysis in terms of the Double Base Hypothesis (DBH) (Pintzuk 1999) faces serious empirical problems since it predicts the existence of a word order option (S-V-O-V_in) that cannot be found in the OE records and is apparently absent cross-linguistically. Instead, we will argue for an alternative approach that attributes word order variation in embedded clauses of OE to competing grammars (cf. Kroch 1989, 1994) that differ with respect to parameter settings associated with the light verb v and came into existence via language contact with the Scandinavian VO languages. Our analysis is motivated by a new empirical generalisation on adverb placement in OE. More specifically, we will show that there exists an asymmetry between main and embedded clauses which indicates the absence of V-to-INFL/T movement in the latter context. Therefore, variation in the placement of the finite verb cannot be attributed to parameters governing verb movement to INFL/T in embedded clauses of OE (contra Pintzuk 1999 and Kiparsky 1996). Rather, the data in question points to an analysis that involves leftward movement of the finite verb to a lower functional head, which we identify as v.

The paper is organised as follows. First, section 2 illustrates the relevant empirical facts with data from OE and EME, focussing on the serialisation possibilities of the verb and its nominal complements in embedded clauses. In section 3 we discuss an analysis of OE in terms of the DBH involving competing values of the Head Parameter for V and INFL (Pintzuk 1999). Section 4 presents a new theoretical perspective on word order variation in OE, arguing that the various patterns found in embedded clauses of OE are the result of competing grammars that differ with respect to the availability of V-to-v movement. Section 5 contains some speculations on the historical origins of grammar competition in OE. More specifically, we will argue that language contact was an important factor that influenced the development of OE into EME. Finally, section 6 provides a discussion of several factors (including clause type, the main/embedded distinction, and type of object) that have a statistically significant influence on word order in OE and EME (cf. Pintzuk 1999, ch. 5, Trips 2000b).
2. Variable word order in previous stages of English

2.1 Kemenade (1987): Old English: OV + rightward movement?

Van Kemenade (1987) proposed an analysis of OE which is quite similar to the standard generative approach of the Modern Germanic OV-languages Dutch and German; she claimed that the V2 order found in main clauses is derived from a uniform OV-base by movement of the finite verb to the head of CP (with a topicalised XP in SpecCP). The following OE examples illustrate the frequent final position of the finite verb in embedded clauses introduced by a subordinating conjunction (suggesting a head-final IP). Furthermore, the final position of verbal particles stranded by verb fronting in main clauses and the relative position of participles and nominal complements suggests that the VP is head-final as well:

(6) ... þæt hie [þr gemong him] [þr mid sibbe] sittan mosten.

... that they _among them with peace settle must

'... that they must settle in peace among themselves.'

(Oros., 52.33, Kemenade 1987, p. 59)

(7) Pa _abof Drihten hie up.

Then _lifted the Lord _them up

'Then the Lord raised them up.'

(Blick, 157; Kemenade 1987, p. 33)

(8) On twam þingum hæfde God [or þæs mannes swæ] gegodod.

In two _things had God _the man's soul _endowed

'God had endowed man's soul with two things.'

(AHth, 1, 20; Kemenade 1987, p. 18)
However, it is a well-known fact that the finite verb may appear in a medial position of the embedded clause as well. In standard generative accounts of examples (9) to (11) orders of this kind are analysed as the result of a set of rightward movement operations like extraposition or verb (projection) raising that adjoin elements to the finite verb or VP/IP (for OE see Stockwell 1977, Kemenade 1987).

(9) **Extraposition**

... þæt ægnig mon t; atellan mæge [ealne þone drmn].

... that any man relate can all the misery

'... that any man can relate all the misery.'

(Oros., 52.6-7; Pintzuk 1993, p. 14)

(10) **Verb Raising**

... þæt he Saul ne t; dorste [oðsican].

... that he Saul NEG dared murder

'... that he didn't dare to murder Saul

(Oros., 52.33; Kemenade 1987, p. 59)

(11) **Verb Projection Raising**

a ... þæt he t; mehte [his feorh generian].

... that he could his property save

'... that he could save his property.'

(Oros., 48.18; Kemenade 1987, p. 59)
b. ... *par thi mhton* [swa bealdlice Godes geleafan bodian].

... that they *could* so boldly God's faith preach

'... that they could preach God's faith so boldly.'

(AHtH, I, 232; Kern, p. 59)

In other words, the standard analysis of these data in terms of rightward movement processes does not allow for the possibility that the finite verb could have moved to a position to the left of its base position. In the next section, however, we will see that there is a number of examples that can only be accounted for by the latter assumption.

2.2 Arguments for leftward movement of the finite verb

Contrary to the standard analysis, Pintzuk (1993, 1999) claimed that in OE embedded clauses are not uniformly Infl-final in the base, i.e. that there is variation in the position of the finite verb which reflects variation in the underlying position of Infl. She found a significant number of examples with the finite verb in a medial position which cannot easily be accounted for by a rightward movement analysis. Evidence for an Infl-medial structure are examples which show a) verbal particles in final position and the finite verb in medial position (26.9% with finite main verbs in the corpus considered by Pintzuk), as in (12); b) final position of "light" elements like pronouns and monosyllabic adverbs, which do not undergo postposition in the modern Germanic languages (5.7% in subordinate clauses with finite main verbs) as in (14); c) cases which seem to exhibit verb projection raising (VPR) - a pronoun intervenes between the finite auxiliary and the main verb - as in (16) but which are not found in the modern Germanic languages which display VPR as in (17) (like Swiss German). According to Pintzuk (1993, 1999), these examples are better analysed as instances of leftward movement of the finite verb.¹

¹ Similar to Old English, the following examples cast some doubt on the standard analysis of Old High German as a uniform OV language, since they involve final pronominal elements which cannot be extraposed in the modern Germanic languages that exhibit extraposition phenomena:
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Verbal particles may show up in final position with the finite verb in a medial position:

(12) a. ... þæt he wearp, þæt swœord onwege tē.

... so-that he threw that sword away

'... so that he threw away the sword.'

(Bede 38.20; Pintzuk 1999:57)

b. ... þæt wære swiðe gilplice dēd gif Crist scute, ða adūn tē.

... that would-be very proud deed if Christ cūst then down

'... that would be a very proud deed if Christ then casts himself down.'

(ÆCHom 170.21-22; Pintzuk 1999, p. 58)

Verbal particles cannot move rightward in the Modern Germanic OV-languages, cf. German:

(13) a. dass der Student das Buch nicht weggeworfen hat.

that the student the book not away-thrown has

'that the student did not throw the book away.'

b. * dass der Student das Buch nicht geworfen hat weg.

that the student the book not thrown has away

---

a. [... dḥahas uueroðheoda druhtin tē, tē sendītīa mīhit zi dīr].

... that Lord of Hosts sent me to you.

'... that the Lord of Hosts sent me to you.'

(Isidor, 236; Eggers 1964)

b. [... dḥahas ih tē, tē fora sinemū antihute hneige imu, dheodun,]

... that I before his face subdue him people.

'... that I subdue people/nations before his face.'

(Isidor, 152; Eggers 1964)
Similarly, pronouns and monosyllabic adverbs never show up to the right of a finite verb that is in final position (*V-V₂-pronoun/adv.), but can appear after a finite verb in medial position.

(14) a. ... swa þæt hy asettan, himi upp on æmne sið ti.

... so that they transported themselves inland in one journey

(ChronA 132.19 (1001); Pintzuk 1993, p. 17)

b. þæt martinus come, þa into þære byrig ti.

that Martin came then into the town

'that Martin then came into the town.'

(ÆLS 31.490-491; Pintzuk 1993, p. 17)

Again, these elements generally cannot be postposed in the Modern Germanic OV-languages, e.g. in German:

(15) a. dass der Student sie auf den Mund geküsst hat.

that the student she on the mouth kissed has

'that the student kissed her on the mouth.'

b. * dass der Student auf den Mund geküsst hat sie.

that the student on the mouth kissed has she

There are cases of apparent Verb Projection Raising (VPR) where a pronoun intervenes between the finite auxiliary and the main verb as in (16). Such orders are generally excluded in languages that display VPR (like Swiss German), see (17).
(16) a. ... þæt he wolde, hine læran t.
... that she would him teach
'...that she would teach him.'
(ÆLS 25.173; Pintzuk 1999, p. 73)

b. ... þæt Libertinus mihte, ðis gedon t.
... that Libertinus might this do
'...that Libertinus might do this.'
(GD (C) 19.7-8; Pintzuk 1999, p. 75)

(17) a. ?*das er t.törf [vr en is] Huus bringe],
that he may him into-the house bring
'that he is allowed to bring him into the house'

b. das er en, t.törf [vr t is] Huus bringe],
that he him may into-the house bring
(Santorini 1992, p. 613)

Pintzuk's claim that there is a clause-medial position of finite verbs and the evidence she found for it shed new light on the situation in OE. Thus, embedded clauses can be categorised as being either underlyingly INFL-final or INFL-medial, i.e., the order of the main verb and the complement can be modified by postposition (INFL-final clauses) or by leftward movement of the finite verb (INFL-medial clauses).

2.3 Evidence for a VO base?

As noted in section 2.2, according to the standard analysis OE was taken to be a language which uniformly exhibits OV word order. According to Pintzuk (1999) however, there is evidence which contradicts this assumption. In her database, there is a small number of examples (18 in 712
relevant clauses, around 2.5%) where light elements like verbal particles, pronouns and monosyllabic adverbs appear after the non-finite verb. As these elements cannot undergo postposition in the modern Germanic languages Pintzuk interpreted these examples as the early beginnings of VO base structure:

(18) ... he wolde **adæfan ut ane æpeling.**

... he would **drive out** a prince

'... he would drive out a prince.'

(ChronB (T) 82.18-19 (755); Pintzuk 1999, p. 116)

(19) ... þæt he wolde **geswutelian swa his digelnyse eow.**

... that he would **reveal** so his secrets *you*

'... that he wanted to reveal his secrets to you in such a way.'

(ÆLS (Thomas) 166; Haebler 1999, p. 360)

Again, these data show that OE was not as restricted as assumed under the standard analysis, i.e., to an underlying OV structure only, but that both underlying OV and VO word orders were possible.

2.4 Early Middle English

As opposed to Old English, EME consistently displays the finite verb in a medial position in embedded clauses. Moreover, within the VP OV/VO alternation is more robustly attested than in OE, i.e., the non-finite verb precedes the object in almost 50% of all cases (*S-Vfm-V-O* vs. *S-Vfm-O-V*). The examples from two East Midlands texts (*Vices and Virtues*, dated 1200-1225, and *The Peterborough Chronicle*, dated to the 12th century) illustrate this:
(20) ... for no man scholde *excusen* hym to lerne it ... 
... for no man should *excuse* him to learn it ...

(CMVICES4,97.15)

(21) ... *bat* he wile *pane lichame of ure eadmodnesse* in to michele brihtnesse * wanden*, ...
... that he will *the dead corpse of our meekness* in to much brightness *alter*, ...

(CMVICES1,31.350)

(22) ... *pa bed se kyng heom* *het hi scoldon cesen hem ærcebiscop to Cantwarabyrig* ...
... then bade the king them that they should *choose them archbishop to Canterbury* ...

(CMPETERB,43.43)

(23) ... *het hi scolden hi forlæten* be Sanctes Andreas messe, ...
... that they should *them release* by Sanct Andreas's mass, ...

(CMPETERB,51.291)

There is one text called the *Ormulum* which is of special interest here. The text was written in Lincolnshire in the 12th century by Orm, an author of Danish origins. It exhibits variation between OV and VO orders quite early and it also shows a lot of syntactic as well as non-syntactic Scandinavian influence (see Trips 2000b). In the text we can find clauses which exhibit both orders:

(24) Forr þätt I wolde biliþeg þätt all Ennglißhe lede wipp ære sholllide
    For that I would gladly that all English people with ear should
    lisstenn *itt*, wipp herte sholllide *itt trowwenn*, wipp tunge sholllide
    listen *it*, with heart should *it trust*, with tongue should
    spellenn *itt*, wipp dede sholllide *itt follghenn*.
    spell *it*, with deed should *it follow.*

(CMORM,DED.L113.33; Trips 2000b)
Table 1: Frequency of pronominal objects in postverbal position in the *Ormulum*

Table 1 shows the distribution of pronominal objects in this text. What is striking is that pronominal objects occur in postverbal position in the *Ormulum* about 50% of the time (see section 6.4 for further discussion of this observation).

Table 2: OV and VO word orders in EME texts (from Kroch & Taylor 1998, and Trips 2001)

Table 2 shows that variation between OV and VO word orders can be found in all EME texts but that the frequency of postverbal pronominal objects differs between the texts and seems to be dependent on the dialectal area where they come from (from Kroch & Taylor 1998, and Trips 2000b).

3. The Double Base Hypothesis

Based on her arguments against a uniform OV analysis of OE, Pintzuk (1993, 1999) develops an account of the word order variation found in OE in terms of the *Double Base Hypothesis* (DBH) (Kroch 1989, Santorini 1992 and others), assuming that the encountered reordering possibilities are the result of co-existing different settings of the Head Parameter for INFL and V within the usage of individual speakers. Thus, according to Pintzuk the word order variation found in the verb phrase is not mainly due to (rightward) movement operations but to the fact that there is synchronic
competition between OV and VO order in the base. Following work by Kroch (1989, 1994),
Pintzuk identifies this situation as an instance of *Grammar Competition* where more than one
grammar is available for the speaker; eventually one of the grammatical options wins out.
Moreover, she claims that embedded clauses are not uniformly INFL-final in the base. Pintzuk
argues that the variation in the position of the inflected verb in embedded clauses (see section 2)
reflects variation in the underlying position of INFL, that is, INFL is either clause-final or clause-
medial. On these assumptions, the presence of the following four phrase structure options is
predicted for OE:²

\[
\begin{align*}
(25) & \quad \text{SOVT: } I' \quad \text{SIOV: } I' \quad \text{SIVO: } I' \quad \text{SVOT: } I' \\
& \quad \text{VP} \quad \text{VP} \quad \text{VP} \quad \text{VP} \\
& \quad \text{obj.} \quad \text{obj.} \quad \text{obj.} \quad \text{obj.} \\
& \quad V \quad V \quad V \quad V
\end{align*}
\]

Pintzuk assumes that the relatively rich verbal inflection of OE triggers uniform V-to-I movement
in all contexts. According to this, the following word order patterns are logically possible
(schematicised, see Kiparsky 1996, p. 162):

\[
(26) \quad \begin{align*}
& \text{a. } I' \text{ right, } V^0 \text{ right:} \\
& \quad \text{bæt se bisco } [I', \text{vp } [\text{vp } \text{bæt cild up aheafan } t_1 ] \text{ wolde, } ] \\
& \quad \text{that the bishop the child up lift wanted} \\
& \text{b. } I' \text{ left, } V^0 \text{ right:} \\
& \quad \text{bæt se bisco } [I, \text{wolde, } [\text{vp } \text{bæt cild up aheafan } t_1 ]] \\
\end{align*}
\]

² Pintzuk's analysis of OE comprises some further assumptions the most important of which are: (i) subjects remain in
their base position SpecVP unless topicalised; (ii) SpecIP is assumed to be an A'-position hosting topicalised XPs;
(iii) only syntactic operators (like wh-phrases) move to SpecCP; V-to-C is licensed only in these contexts; (iv)
pronouns cliticise to the left edge of IP, giving rise to the well known V3 orders of OE.
c. I⁰ left, V⁰ left:

\[\text{þæt se bísçop [}_t\text{ wolde, } [\text{VP ti [}_v\text{ aheafan up þæt cild ]}]\]

d. *I⁰ right, V⁰ left:

\[*\text{þæt se bísçop [}_t\text{ [}_v\text{ ti [}_v\text{ aheafan up þæt cild]] wolde, }\]

There is, however, a gap in the word orders predicted by the DBH. As Pintzuk (1999) herself notes, option (26d) is unexpectedly not attested in the Old English data. Since there is only a very limited number of OE records, one might argue that S-V-O-INFL orders are absent simply by chance, that is, the order in question could actually be generated by the grammar of OE but somehow failed to be recorded in the texts handed down to us. However, evidence from a broader linguistic perspective suggests that we should not be content with this kind of explanation. It is a well-known typological generalisation that the combination of a basic VO syntax with a final position of finite auxiliaries (i.e. S-V-O-INFL) is very rare, if not absent across the world's languages (Steele 1975, Dryer 1992, among others).³ From a generative perspective, such an observation typically calls for some kind of deep explanation. Consequently, the apparent cross-linguistic absence of S-V-O-INFL structures inspired the conjecture that the problematic order is excluded by some principle of UG

³ There are in fact some languages that apparently exhibit S-V-O-Aux orders. A case in point seems to be Kandoka-Lusi, a dialect of Kalia-Kove, an Austronesian language spoken on the northern coast of Western New Britain, described by Counts (1969):

(i) \[\text{na-þeta pater murva.} \]

I ask priest will

'I will ask the priest.'

(Counts 1969, p. 130)

However, it's not clear at all whether the auxiliary-like elements that appear in clause-final position are really verbal elements; apparently, they do not agree with the subject and show no other signs of finite inflection. Nonetheless, more research is certainly necessary to settle the status of these apparent counterexamples to the generalisation in question.
(Travis 1985, den Besten 1986, Pintzuk 1999, Kiparsky 1996, Kroch & Taylor 2000). These considerations suggest that one should look for an analysis of the OE word order facts that excludes the absence of S-V-O-V_{an} orders on principled grounds.

Recent accounts of the word order facts of OE (Roberts 1997, Hróarsdóttir 1999) analyse the absence of S-V-O-V_{an} in terms of a theory of phrase structure (Universal Base Hypothesis, Kayne 1994) according to which projections are invariably head-initial (with the specifier universally preceding the head). Under this assumption, apparent SOV-orders are to be analysed as the result of leftward movement of the complement of the verb up to a higher functional projection (like, for example, SpecAgroP, with the finite verb in Agro). It can be shown, however, that these approaches raise a number of problems. A first question concerns the nature of the "obligatory scrambling" movements of XPs. The triggers of these processes often remain unclear or have to be stipulated (Case for DPs, "similar" requirements for PP- and oblique complements). This is especially problematic in accounts that make use of massive leftward movement of VPs or VP-shells (see Hróarsdóttir 1999; here, even SVO orders are the result of multiple leftward movements). This general conceptual concern is related to an empirical argument made by Kroch & Taylor (2000). In a quantitative study of EME, they show that not all SOV orders can be analysed as the result of scrambling/movement of the object to SpecAgroP. Kroch & Taylor demonstrate that only quantified DPs undergo regular scrambling in Early Middle English (EME); if DP-V_{an}-Pron. is a diagnostic for scrambling, then only 5% of the preverbal scrambled object are non-quantified DPs. However, the overall rate of OV-orders with non-quantified object DPs is much higher, namely around 30%. In other words, the few clear cases of leftward scrambling of non-quantified objects are much too rare to account for the high frequency of OV word order found in the EME texts considered by Kroch & Taylor.\footnote{See Hawkins (1990) for an analysis that attributes the lack of head-initial structures embedded in head-final structures (i.e. S-V-O-INF) to general properties of the human parser.}

\footnote{Furthermore, it can be shown that the analysis of Hróarsdóttir (1999) is in principle not restrictive enough to exclude the non-existing order S-V-O-V_{an}. The relevant grammar would involve the following parametrical options:}
Still, we believe that a form of the Universal Base Hypothesis (UBH) constitutes an important and powerful restriction on phrase structure that can be used to explain the absence of the problematic structure/word order discussed above. In the next section we are going to develop a new approach to the OE data that is based on a weaker version of Kayne's original proposals, assuming that the UBH holds only for functional categories.

4. An alternative approach

At this point, we can formulate two basic criteria for an adequate analysis of OE. First, a successful theoretical approach must be liberal enough to generate the set of word order patterns found in OE. Second, we postulate that the absence of S-V-O-V_{en} orders should find serious consideration, that is, the analysis should be restrictive enough to exclude the non-existent word order on principled grounds.

To these ends, we claim that the concept of Grammar Competition is necessary to explain the situation in OE and EME, i.e., we believe that the idea of a single grammar that generates OV and VO properties is to be rejected. Rather, the high degree of word order variation is conceived of as the result of several competing grammars. Note that this approach to word order variation fits nicely into a research programme that aims to eliminate optional movement operations (Chomsky 1995, 2000, 2001). Thus, apparent optionality is not treated as the result of optional movement processes within one grammar. Rather, we assume that competing internalised grammars employ obligatory movement operations to generate the variety of surface orders (see Lightfoot 1998, p. 92ff. on this point).

It should be clear, however, that the amount of variation generated by this kind of competition has to be restricted by general principles to exclude the non-existent word order option. Here, we

(a) no object movement to SpecAgroP; (b) extraction of the embedded VP hosting the non-finite verb and the object to a position to the left of the matrix VP projected by the finite verb; (c) no movement of the finite remnant VP to a position to the left of the extracted non-finite VP.
assume that a form of the UBH is at work that rules out grammars generating the surface order S-V-O-V_{fn}. That assumption is further explicated in the next section.

4.1 The UBH is restricted to functional categories

In order to exclude the non-existing order S-V-O-V_{fn} we will follow work by Haider (1993, 2000), Kiparsky (1996) and Vikner (2000) and propose that lexical heads may precede or follow their complements, whereas functional categories are uniformly head-initial. Empirical arguments for this assumption include the observation that in the Germanic languages, functional elements like complementisers and determiners uniformly take their complements on the right, whereas the direction of complementation of lexical categories may vary even within a single lexical item, compare German adjectives which may take their PP-complements either on the left or on the right.

6 Haider (1993:58) derives this assumption as an effect of his Basic Branching Conjecture according to which all projections must be right branching.

7 Cross-linguistically, there is a strong tendency for functional elements to precede their complements, i.e., it is much more common for a OV-language to have head-initial functional elements (e.g. complementisers) than for VO-languages to have head-final functional elements (see Dryer 1992).

8 Further arguments against the availability of overt rightward verb movement (i.e. the possibility of a head-final functional projection that acts as landing site for the finite verb) include (Zwart 1993, Haider 1993, 2000, Vikner 2001; cf. Kayne 1994 for arguments against rightward movement in general): Particle verbs like German *Uraufführen 'to perform (or to put on a play) for the very first time' fail to undergo V-to-C, but this should be possible after verb movement to INFL (assuming that further verb movement is always possible after V-to-INFL):

(i) *Uraufführen sie das Stück?
    "Did they perform the play for the first time?"

Vikner (2001) notes that *Uraufführen can only take on a finite form if it occurs in sentence-final position which leads to the conclusion that the clause-final position of finite verbs in embedded clauses is a non-moved position:

(ii) ... ob sie das Stück uraußführen.
    "...if they performed the play for the first time'
(27) a. für den Studenten angenehm
   for the student pleasant

b. angenehm für den Studenten
   pleasant for the student

Given this assumption, one could analyse the kind of variation encountered in OE as competition between the phrase structures in (28), which differ with respect to the value of the Head Parameter for V and the availability of overt V-to-INFL movement (cf. Kiparsky 1996):

Other verbs that cannot undergo V2 are e.g. German bauchreden 'to stomach-speak', i.e. 'to ventriloquise', bausparen 'to building-save', i.e. 'to save with a building society' and e.g. Dutch herinwoeren 'to re-in-lead', i.e., 'to reintroduce', herindelen 'to re-in-split', i.e., 'to redvide'. The fact that several Dutch and German verbs behave in this way seem to support the assumption that these languages do not have V-to-I movement.

The assumption of rightward V-to-I necessitates obligatory extraposition of sentential complements to an IP-adjoined position to derive their sentence-final position. This, however, is at odds with examples where the (VP-internal) participl is topicalised together with an extraposed complement clause (cf. Haider 1993:60):

(ii) [Gefragt, [ob ich zufrieden bin]] hat er mich nicht.
    asked whether I satisfied am has he me not
    'He didn't ask me whether I am satisfied.'

Finally, an analysis involving rightward V-to-I falsely predicts ungrammaticality in connection with VP-adverbs that must c-command the verb. (iii-a-b) illustrate the relevant property with the adverb mehr als bloß 'more than just'. In (iii-c), the VP adjoined adverb should not be able to c-command the finite verb verdreifachte 'tripled' after V-to-INFL movement. However, in contrast to (iii-b), the example is perfectly well-formed (Haider 1997a, 1997b, Vikner 2001).

(iii) a. Dies hat den Wert mehr als bloß verdreifachte.
    this has the value more than just tripled
    'This has more than just tripled the value.'

b. *Dies verdreifachte den Wert mehr als bloß.

c. weil dies den Wert mehr als bloß verdreifachte
   because this the value more than just tripled
   '...because this more than just tripled the value.'
Under this analysis, the non-existing order $S\cdot V\cdot O\cdot V_{\text{fin}}$ can only arise as the result of a head final VP projected by the finite verb that embeds a head initial VP hosting the non-finite verb (in a grammar that lacks $V$-to-INF movement). Kiparsky (1996) excludes this possibility by assuming that different settings of the Head Parameter for VP are associated with different competing grammars in OE. Therefore, nested VPs must always share the same setting of the Head Parameter and the problematic phrase structure cannot be generated. Note that this approach attributes variation in the placement of the finite verb to the absence vs. presence of $V$-to-INF movement in both main and embedded clauses (giving rise to V2 orders in main clauses and a medial position of the finite verb in embedded clauses). In the following section, we are going to demonstrate that such an analysis is not compatible with an asymmetry between main and embedded clauses that concerns the placement of adverbs and (to the best of our knowledge) has gone unnoticed in the literature up to now.
4.2 The distribution of adverbs: evidence for different verb positions in main and embedded clauses

In this section we are going to show that evidence from adverb placement suggests that leftward moved finite verbs occupy different head positions in main and embedded clauses. This asymmetry is taken to suggest that word order variation in embedded clauses of OE cannot be attributed to the availability of V-to-INFL movement. Let’s first have a look at the syntax of finite verbs in main clauses of OE before we turn to the relevant data.

It is by now standardly assumed that the V2 character of OE is only in some well-defined contexts (like wh-questions, see below) the result of V-to-C movement. Facts like the placement of pronouns and the general availability of V3 orders are taken to indicate that the finite verb does not move higher than INFL in main declaratives of OE (see Cardinaletti & Roberts 1991, Kiparsky 1995, Eythórsson 1996, Kroch & Taylor 1997, Pintzuk 1999, Haeberli 1999, Fuss 2000). The examples in (29)-(31) illustrate the distributional properties of pronominal elements.

(29) [Æfter his gebede] he aholpæt child up.
    after his prayer he lifted the child up
    ‘after his prayer, he lifted the child up’
    (AHth, II. 28; Kemenade 1987, p. 110)

(30) Hu begæst þu weolc þin?
    how go-about you work your
    ‘how do you go about your work?’
    (Æcolli. 22; Kemenade 1987, p. 138f.)
Pronouns always appear between the finite verb and an initial topicalised XP, giving rise to V3 orders.\textsuperscript{9,10} In contrast, pronominal elements must follow the finite verb if the clause-initial constituent is a syntactic operator like a Wh-phrase, a Neg-adverb or a Neg-particle, see (30), (31). On the assumption that the OE pronouns always occupy a fixed position on the left edge of IP, which is the typical position for weak pronominal elements in the Germanic languages, V2 and V3

\textsuperscript{9} Note that there are very few examples in which the pronoun follows the finite verb and a clause-initial topic, resulting in V2-patterns similar to the modern Germanic languages, cf.

\begin{itemize}
  \item[(i)] eadig eart ðu abgar
  \hspace{1cm} blessed art thou Abgar
  \hspace{1cm} 'blessed art thou, Abgar...'

  (ÆLS 24.113; Pintzeuk 1999, p. 122)
\end{itemize}

OHG and Old Saxon display violations of the V2-constraint in connection with pronouns as well. See Tomaselli (1995) and Fuss (1998) for a uniform analysis of OE and Old High German which is based on this observation.

\textsuperscript{10} Furthermore, there are V3-patterns of the type \textit{adverb/PP-nominal subject-finite verb}, which also indicate that the grammar of OE was different from the grammars of the modern Germanic V2 languages:

\begin{itemize}
  \item[(i)] a. [Æfter þeostum wordum] [se Hœlend] cwæp to his leornerum
  \hspace{1cm} after these words the Savior said to his disciples

  (Blickling 135; Swan 1994:241)
  
  \item[(i)] b. [Æfter þam gefeohhte] [eaðle Egypti] wurdon juliusænderpeowas
  \hspace{1cm} after that battle all Egyptians became Julius's subjects

  (Orosius 123; Swan 1994:241)
\end{itemize}

Note that these examples are compatible with the assumption that the finite verb does not move to C in main declaratives of OE (with the subject in SpecIP/TP and the clause initial constituent in SpecCP or an IP-adjoined position). However, a detailed discussion of these facts would go well beyond the scope of this paper.
are the result of different structural positions of the finite verb: finite verb and clause-initial phrase are in a spec-head relationship only if the clause-initial phrase is a syntactic operator (resulting in attraction of the finite verb due to criterial features in C). As a consequence, the finite verb must occupy a lower head position in main declaratives, presumably INFL (or, as we will assume later, T). Then, according to the analysis depicted in (28), leftward moved finite verbs occupy the same position in main and embedded clauses. In what follows, however, we will argue that this conclusion cannot hold. Based on an investigation of adverb placement in main and embedded clauses we will show that leftward moved finite verbs must target an even lower head position in embedded clauses.

A close study of the Brooklyn Corpus reveals that adverbs apparently cannot intervene between pronominal subjects which mark the left edge of IP and the finite verb in main declarative clauses of OE. Note that this empirical generalisation only holds for examples that display the subject pronoun in second position and a topicalised phrase in sentence initial position (if the pronoun itself is topicalised, adverbs may intervene between the pronoun and the finite verb). The following examples illustrate the fact that a pronominal subject in second position is adjacent to the following finite verb:

(32) a. Mid þam haligan ele ge scylian þa hæþenan cild mearcian on þam breoste [...].

with the holy oil you-rl. should the heathen’s child mark on the breast

'With the holy oil you should mark the heathen’s child on the breast.'

(AELET3,148.5.317)

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11 We found only three apparent counterexamples to this generalisation (i.e. orders of the type XP-pronominal subject-adverb-finite verb) in the whole Brooklyn Corpus. All these examples involve no complex verb forms (i.e. they contain only a finite main verb) and may thus be analysed as verb final structures.
b. Nu þu meaht sweotole ongitan þæt þæt is good self.
   now you can openly understand that that is good self
   'Now you can openly understand that that is the good self.'
   (BOETH, 83.6.168)

c. gewislice ic mæg be him mare segan.
   certainly I can about him more tell
   'Certainly, I can tell more about him.'
   (GREGD3,5.20.12.56)

In embedded clauses, however, a different picture emerges. In examples that display the finite verb in a sentence medial position, adverbs may intervene between the pronominal subject and the leftward moved auxiliary/modal:

(33) a. ... forðon þu nu scealt eft to lichoman hweorfan.
   ... because you now should again to body turn
   '...because you should now turn again to the body.'
   (BEDE, 13.432.21.566)

b. ... þa hie ða hæfdon Cirinen þa burg ymb seten.
   ... when they then had C. the stronghold surround
   '...when they had surrounded the stronghold C.'
   (OROSIU, 86.17.62)

c. ... þæt hie þonan mosten to þæm sawlum þecuman.
   ... that they thence must to the soul come
   '...that they must thence turn to the soul.'
   (OROSIU, 102.14.191)
These empirical findings can be summarised by the following set of descriptive generalisations:

(34) a. In main clauses, adverbs may not intervene between a subject pronoun in second position and a leftward moved finite Verb:

$$XP\text{-subject pronoun-(*adverb)}-V_{fin} - [...]$$

b. In embedded clauses, adverbs may intervene between a subject pronoun and a leftward moved finite Verb:

$$C^0\text{-subject pronoun-(adverb)}-V_{fin} - [...]$$

On the plausible assumption that pronominal subjects in second position are always located in the same structural slot, this asymmetry suggests that the finite verb occupies a lower head position in embedded clauses. We are now in a position to interpret the main/embedded asymmetry concerning the distribution of adverbs along the following lines. In main clauses, adverbs cannot intervene between a pronominal subject and the finite verb since these two elements occupy Spec and Head of TP, respectively (cf. Fuss 2000).\(^{12}\) In embedded contexts, however, leftward movement of the finite verb targets a functional head further below in the clause. This head position is separated from the subject pronoun (in SpecTP) by an XP node that provides an adjunction site for adverbs. Therefore, word order variation in embedded clauses of OE cannot be attributed to the absence vs. presence of V-to-INFL/T (contra (28) and the analysis proposed by Kiparsky 1996). In the next section, we are going to develop an alternative analysis of the relevant empirical facts that is based on the

\(^{12}\) Several authors (Kemenade 1987, Tomaselli 1995) analyse the OE pronouns as clitics that adjoin to the finite verb (or to the complementiser). From a comparative point of view, however, this analysis raises some serious problems: (i) on the assumption that the weak pronouns of OE and those of the modern Germanic V2 languages should be analysed in a uniform manner, the absence of V3 orders in connection with pronouns in modern Germanic is somewhat puzzling. (ii) If the OE pronouns were clitics, one would expect them to behave like the clitic pronouns of the Romance languages, but this is obviously not the case (e.g. they do not incorporate overtly into the verb or accompany verb movement to C\(^0\)).
assumption that in embedded clauses, the finite verb undergoes only short movement to a lower functional head position.

4.3 Competing grammars: absence vs. presence of V-to-ν

It is a well-known observation that language change goes often hand in hand with a degree of variation which is not encountered in "stable" linguistic communities. In a series of publications (Kroch 1989, 1994 and subsequent work), Anthony Kroch has developed a formal account of that observation which is based on the Principles & Parameters framework. Here, the notion of Grammar Competition represents the core concept of an integrated theory of language change and variation. The basic idea of Kroch's approach is that parametric change must always proceed via a stage where the speaker (or, a generation of speakers) of a language X has access to more than one internalised grammar. The grammars in question may differ in a number of parametrical choices, giving rise to a wider range of linguistic variation. However, Blocking Effects imposed by UG (see Aronoff 1976 on Blocking Effects on morphological doublets) restrict the existence of parameter doublets (i.e. co-existing "competing" values for one parameter), thereby warranting that one grammar will win through against its competitors, which completes the change process in question.

In this section, we develop an analysis of OE that is based on the assumption that word order variation in embedded clauses of OE is due to the existence of competing grammars which differ minimally in as to whether they license overt movement of the finite verb to a light verb ν that closes off the series of VP-shells. Moreover, we will show that this alternative approach receives further support in that it can be related to the basic word order properties (VO or OV) of the language in question. Before we start to lay out our theoretical assumptions, let's have again a cursory look on the data the analysis wants to account for. At the beginning of this section we have postulated that an adequate analysis of OE must take into account two basic observations, namely the general phenomenon of word order variation and the absence of S-V-O-V\_in orders. Furthermore,

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13 See Labov (1994) for the claim that linguistic variation constitutes the origin of language change.
we have seen (in section 2, basically following Pintzuk 1999) that OE exhibits the possibility of moving the finite verb to a head-initial (functional) projection in embedded clauses. Here, we claim that it is attractive from both a conceptual (elimination of optional movement operations, cf. Chomsky 1995, Lightfoot 1998) and an empirical point of view (a degree of variation which is not encountered in modern Germanic) to associate each the presence and absence of this leftward movement operation with a separate competing grammar.

Finally, if we take the main/embedded asymmetry illustrated above in section 4.2 seriously, we have to assume that the landing site of this movement operation is a functional head different from the head position that hosts the finite verb in main clauses. The heads in question are presumably some head of the inflectional system in main clauses, but a head further below in the structure of embedded clauses. In a Split-INFL structure as devised in Pollock (1989), Chomsky (1991) or Ouhalla (1991), several combinations are possible (Agrs in main clauses, T or Agro in embedded clauses etc.). However, if we follow Chomsky (1995, ch. 4.10) and assume a more minimalist clause structure, another possibility comes to mind. In a structure like (35), another target for a "shorter" leftward movement of the finite verb in embedded clauses is the head of the vP that immediately dominates the series of VP shells:

(35)  

\[
\begin{array}{c}
\text{CP} \\
\text{Spec} \\
\text{C}' \\
\text{C} \\
\text{Spec} \\
\text{T} \\
\text{Spec} \\
\text{vP} \\
\text{Spec} \\
\text{v} \\
\text{VP}
\end{array}
\]

In other words, we suggest that variation in the placement of the finite verb in embedded clauses is
to be analysed in terms of the absence vs. presence of short verb movement within the borders of vP. In contrast, the finite verb moves further up to T (and in some contexts to C due to the presence of criterial features) in independent clauses (cf. Fuss 2000). This difference results in the apparently more fixed placement of the finite verb in unembedded contexts.14

Before we further elaborate our analysis of verb placement in terms of V-to-v movement, let’s first address the question as to what prevents movement of the finite verb to T in embedded clauses. The intuition behind our analysis is to assimilate the contrast encountered in OE to the familiar main/embedded asymmetries of the Modern Germanic lanaguages. Following work by Travis (1984), and especially Bennis & Hoekstra (1989) (see Roberts & Roussou 1998 and Pesetsky & Torrego 2000 for an implementation of similar ideas in more recent frameworks), we assume that the different positions of the finite verb are the result of parameterised licensing requirements of Tense. According to Evers (1981), Tense is to be construed as an operator that needs a scope-bearing element. This function is carried out by the verb, which has to enter into a structural relation with Tense. In main clauses, Tense and the verb are related by means of a syntactic chain that is established by V-to-T as a Last Resort. In independent sentences, this operation "anchors the temporal reference of the event on the time of the utterance" (Bennis & Hoekstra 1989, p. 26). In contrast, Tense of embedded clauses is dependent on the temporal anchoring of the matrix clause

14 Anthony Kroch (personal communication) pointed out to us that some statistical findings of Pinzcuk (1999) might constitute a problem for an analysis that postulates different positions for leftward moved finite verbs in main (T in declaratives) and embedded clauses (v). Pinzcuk (1999) observes crucial parallels in the development of a medial position of the finite verb in main and embedded clauses of OE. That is, although the developments in question show no temporal parallels (the development in main clauses took place much earlier), they can be shown to evolve at the same rate. Kroch (1989) claims that such constant rate effects indicate that the two surface changes in question are the result of only a single parametric change. Now, on the assumption that a single parameter is always associated with a single functional head, which is presumably T in the case at issue, our analysis seems to face a problem. However, if we assume that V-to-T movement in embedded clauses developed not until the ME period, we can attribute the observed constant rate effect to the fact that surface strings originally derived by V-to-v were reanalysed as V-to-T movement (see footnote 24).
(see Enç 1987). By assumption, this relation is mediated in a local fashion by the complementiser (which is selected by the matrix verb), rendering V-to-T superfluous and therefore by economy impossible.\(^{15}\) Therefore, children will acquire a lower position of the finite verb in embedded clauses as a default.\(^{16}\) In what follows, we will now focus on the properties of that lower verbal position.

Adopting the basic idea proposed in section 4.1, we assume that v as a functional category is uniformly head-initial. Furthermore, v is only present if it is strong, that is, if it triggers overt movement of the finite verb (cf. Chomsky 1995, p. 351 for similar considerations concerning the presence of Agro).\(^{17}\) We want to propose that the realisation of a separate vP is intimately connected to the basic word order properties of the language in question: VO grammars require overt movement of the finite verb to v whereas the finite verb may stay in situ in OV languages like German or Dutch (cf. Larson 1988, Bowers 1993 on the derivation of VO in English; Haider 1993, 2000; Kiparsky 1996, Vikner 2000):

(36) Hypothesis: The possibility of a head-initial VP is bound to the presence of a head-initial vP that closes off the series of VP shells

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15 Enç & Hoekstra (1989) suggest that the relevant information percolates from matrix Tense to embedded Tense via the complementiser. The analysis of Travis (1984) is based on the assumption that the complementiser governs and identifies INFL properly. Both mechanisms are supposed to block V-to-INFL movement in embedded clauses. However, the technical devices of percolation and government are no longer available in more recent developments of syntactic theory (Chomsky 1995 and others). An interpretation of those ideas which is in accordance with current trends (cf. Pesetsky & Torrego 2000) can be given in terms of T-to-C movement in embedded clauses (for reasons of licensing of tense/finiteness). By assumption, the resulting complex is then spelled out as the complementiser, which is only possible if the T head in question has no other material (i.e. V) adjoined to it.

16 One could imagine that this default can be overwritten by triggers like the shape of the embedded C-system (including type of complementiser) or the presence of subjunctive morphology.

17 Rizzi (1997) discusses some related ideas w.r.t. to the structure of the left periphery of the clause. More specifically, he assumes that the node Top is only present if it triggers movement of a topicalised phrase.
If \( v \) is absent its functions are performed by featural content of the (finite) verb itself giving rise to a uniform OV-structure within VP. Relevant properties of \( v \) (see Bowers 1993, Chomsky 1995, Kratzer 1996, Collins 1997) include the introduction of the external argument (in SpecvP/SpecVP) and assignment of accusative Case. These assumptions give rise to a typology of three phrase structural options in the extended verbal projection, since (36) is only a one-way implication – a VO structure in the base implies the presence of a separate \( vP \), but not the other way around. In other words, according to (36), the existence of \( vP \) does not exclude the possibility of an OV base order within VP.

At this point, we want to suggest that the kind of word order variation encountered in OE is the result of competition between the full range of grammars licensed by (36), that is, competition between

- a pure OV grammar without \( vP \),
- a grammar that combines a basic OV syntax with overt V-to-\( v \) movement, and
- a VO grammar with a separate \( vP \) (in later stages of OE).

The structures generated by these grammars are illustrated below. The tree in (38) represents the (base) structure of pure OV patterns as in (6), repeated here as (37).\(^\text{18}\)

\[
\text{(37)} \quad \ldots \text{æt hie [pp gemong him] [pp mid sibbe] sittan mosten.}
\]

\[
\ldots \text{that they among them with peace settle must}
\]

\[
'\ldots \text{that they must settle in peace among themselves.'}
\]

(Cros., 52.33, Kemenade 1987, p. 59)

---

\(^{18}\) Note that we concentrate in the following trees on the structure of the extended verbal projection, abstracting away from further movement operations that target, for example, SpecIP.
Examples like (12a) (repeated here as (39)) which display a verbal particle in final position with the finite verb moved to the left of the complements are assigned a structure as in (40). In other words, the peculiar SIOV patterns of OE are the result of a series of head final VP shells that is embedded under a uniformly head initial vP that obligatorily attracts the finite verb.

(39) ... pæt he wearp, pæt sweord on weg t

... so-that he threw that sword away

'... so that he threw away the sword.'

(Bede 38.20; Pintzuk 1999, p. 57)
At this point, we follow Pinzuk (1999) and assume that the small number of examples like (19), repeated as (41), that show a prosodically light element in postverbal position indicates the beginning of 'pure' VO-phrase structure, where the vP node dominates a series of head-initial VPs.

(41) ... þæt he wolde geswutelian swa his digelnyse eow.

... that he would reveal so his secrets you

'... that he wanted to reveal his secrets to you in such a way.'

(ÆLS (Thomas) 166; Haeberli 1999, p. 360)

(42)

\[ \text{IP} \]
\[ \text{Spec} \]
\[ \text{I} \]
\[ \text{vP} \]
\[ \text{subj.} \]
\[ \text{v'} \]
\[ \text{VP} \]
\[ \text{V}_1 [+\text{fn}] \]
\[ \text{VP}_1 \]
\[ \text{tv}_v=\text{fn} \]
\[ \text{VP}_2 \]
\[ \text{V}_2 [-\text{fn}] \]
\[ \text{obj.} \]

To sum up, the proposed analysis leads to the conclusion that there is no such thing as "the grammar of OE". Rather, the unusual degree of word order variation encountered in embedded clauses of OE motivates an approach where the multitude of serialisation patterns is analysed as the result of two competing parametrical choices that give rise to a set of three competing grammars. The relevant parametrical options are (i) absence vs. presence of a separate vP, affecting the placement of the finite verb; (ii) the set of grammars that involve a separate vP is subdivided according to the directionality of complementation within VP, resulting in variation in the order of non-finite verbs and their complements. Schematically, the linguistic situation found in OE can then be represented as in (43).
Importantly, on these assumptions the cross-linguistically absent order VO-V_{fin} cannot be derived:
A finite verb in final position is only possible in a "pure" VP that lacks a separate vP-projection. On
the other hand, the presence of VO base structure always implies the presence of a head-initial v
which obligatorily attracts the finite verb.

5. Language contact and grammar change

In this section we want to address the question as to which factors led to the development of a
separate vP. We assume that at least one important activating factor of the change in question was
external in nature, namely language contact with the Scandinavian VO languages. It is a well-
known fact that speakers of English were in close contact with Scandinavian invaders who settled
down in England. This intensive relationship is not only attested by a number of lexical borrowings
that even affected the core vocabulary;\textsuperscript{19} furthermore, it has been argued that the loss of V2 might be
due to Scandinavian influence as well (Kroch & Taylor 1997). Most recently, Kroch & Taylor
(2000) and Trips (2000) show that the well-known change from OV to VO is also most likely to be
attributed to this contact situation.

Our analysis now provides a theoretical explanation of the impact Scandinavian VO orders
had on the OV-VO change in English. On the assumption that a VO grammar always implies the
presence of a separate vP, we can reconstruct the following scenario which first led to the
development of a head-initial light verb and ultimatively to the loss of OV order in the history of

\textsuperscript{19} For example, the precursors of the Modern English 3rd person plural pronouns \textit{pat} 'they', \textit{per} 'their', and \textit{pam} 'them'
are early borrowings from Old Norse that first showed up in Northern dialects and spread southwards. Note that the
native OE forms were \textit{hi}, \textit{hira}, and \textit{him}, respectively.
English: In a mixed Scandinavian/English linguistic environment, learners confronted with clear VO data (which was not analysable as instances of rightward movement like extraposition, see above) had to posit the existence of a separate vP, since the relevant empirical facts could only be accounted for in terms of movement of the verb to the left of VP (i.e. to the left of its arguments; cf. Larson 1988 and Haider 1993 for further discussion). On the other hand, OV-orders were still robust enough in the input to trigger a head-final VP (with or without vP and a competing VO option in later stages of OE). Those learners who developed a grammar with the possibility of a separate vP went on to produce the full variety of word orders described above in section 2 for embedded clauses, that is, O-V-V_{fin}, V_{fin}-O-V, and V_{fin}-V-O.

Moreover, the availability of a separate vP contributed to the ultimate loss of the OV option in later stages of English in that it facilitated reanalyses in embedded clauses that contained only a single finite main verb. First, surface VO orders with finite main verbs that were derived from an OV base could be subjected to an reanalysis as underlying VO structures:

\[(44)\]

\[a. \quad [C \text{ subj. } [\nu + V_i \quad ] \quad [\nu \text{ obj. } t_i ]]\]

\[b. \quad [C \text{ subj. } [\nu + V_i \quad ] \quad [\nu t_i \quad \text{ obj. } ]]]\]

Second, surface OV orders that represented the base order of elements in an OV grammar could be reinterpreted by the learner as the result of object shift in a VO grammar.\(^{20}\)

\(^{20}\) Since there exist no records of the language spoken by the Scandinavian invaders, it is not entirely clear whether that grammar permitted object shift. The only available evidence is indirect in nature: It can be shown that Northern dialects that were in close contact with Scandinavian actually display object shift (cf. Trips 2000b on the Ormulum). Furthermore, it has been claimed that older Scandinavian languages like Old Icelandic or Old Swedish show object shift as well (see Hróarsdóttir 1999 for discussion). This can be taken to indicate that the Scandinavian invaders and settlers also had this construction at their disposal and that the emergence of object shift in the English dialects was actually the result of a language contact situation.
In other words, a set of examples that originally signalised an OV grammar (with or without a separate vP) were now attributable to a pure VO grammar. This development further weakened the evidence for a OV grammar in the input, which finally led to the win of the [+vP]-[VO] grammar over its competitors.

6. Factors that influence word order variation

Pintzuk (1999) identifies a set of syntactic factors that have a statistically significant influence on the position of the finite verb in OE. However, Pintzuk offers no theoretical explanation for the results of her quantitative analysis. In other words, it is not clear why these factors influence the position of the finite verb/auxiliary in the way they do. In this section, we illustrate the statistically most significant conditioning factors and attempt to develop an account of Pintzuk’s empirical findings which is based on the analysis outlined in section 4. Furthermore, we will show that in EME, certain properties of the object, namely the distinctions [+pronominal] and [+quantified], constitute another factor that is relevant for the derivation of surface OV/VO orders (cf. Kroch & Taylor 2000, Trips 2000b).

6.1 Main vs. embedded clause

Pintzuk (1999) observes that the distinction between main and subordinate clauses has a statistically significant effect on the position of the finite verb. In main clauses, the finite verb appears much more frequently in a medial position than in embedded clauses.²¹

²¹ Pintzuk (1999) distinguishes between INFL-final and INFL-medial positions. Since this distinction is not available in our theoretical approach (see section 4), we use the more neutral terms Vfin or Aux to avoid confusion. Note furthermore that Pintzuk’s database includes only examples with complex verb forms that involve one finite and one
Variation and change in Old and Middle English

<table>
<thead>
<tr>
<th>Clause type</th>
<th>% finite verb medial</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>main</td>
<td>84.4%</td>
<td>1025</td>
</tr>
<tr>
<td>subordinate</td>
<td>47.0%</td>
<td>1197</td>
</tr>
</tbody>
</table>

Table 3: Effect of the main/subordinate distinction on the position of the finite verb in OE clauses (Pintzuk 1999, p. 223)

Recall that Pintzuk's analysis of OE combines uniform V-to-INFL movement in all types of clauses with varying directionality of INFL. On these assumptions, the word order difference between main and embedded clauses receives no explanation, since it is not clear why main clauses should favour a head-initial IP.

Within our theoretical approach, the otherwise mysterious difference between main and embedded clauses of OE receives a natural explanation in terms of two different structural positions of the finite verb: the finite verb moves up to head-initial T in main clauses but stays behind in the extended verbal projection in embedded clauses. In section 4.3, we attributed this main/embedded asymmetry to different licensing strategies for Tense.

On these assumptions, the distribution of final vs. medial position of the finite verb in embedded clauses reflects free variation (47% vs. 53%) between two competing parametrical options, namely the absence vs. presence of V-to-v movement within the extended verbal projection.

Moreover, our analysis avoids another shortcoming of the standard DBH approach to OE: within an analysis that assumes uniform V-to-INFL in combination with SpecIP as a topic position (Pintzuk 1999), it remains unexplained why there is no general embedded V2 in OE. Rather, most embedded clauses display the order Comp-subject-[...]-V₂-[...] with the subject in the "topic position". The absence of V2 effects receives a simple explanation in our account: the order

or more non-finite verbs.

22 OE shows embedded V2 only in a very limited set of contexts (in contrast to "symmetric" modern V2 languages like Icelandic or Yiddish, see Kemenade 1997). Environments where embedded clauses display V2 effects include sentential complements of bridge verbs and examples with subject gaps (with impersonal verbs or due to extraction
Comp-Subj.-V is dominant in embedded clauses, since it reflects the base order of elements, none of which have to leave the VP in embedded clauses (except perhaps the subject).  

6.2 Parallelism in conjoined clauses

It is a traditional observation that conjunct clauses in Old English behave more like subordinate clauses than main clauses (e.g. with respect to word order) (Traugott 1972, Mitchell 1985, Kemenade 1987). In particular, second conjuncts of conjoined main clauses are more frequently verb-final than other main clauses (similar orders can be found in Old High German; see Behagel or passivisation). V2 effects in embedded clauses with subject gaps are perhaps better analysed as a form of Stylistic Fronting, where the empty subject position is (optionally) filled by another XP (perhaps due to a phonological version of the EPP, see Holmberg 2000):

(i) a. þonne wice dæge beoð [manega] acennede þurh hy mihte on worulde

when each day are many-nom given birth through his power on world

'when every day many are given birth through his power on earth'

(AHP, VI.120; Kemenade 1997:335)

b. for þan þe on me is afunden [ætforan Gode rihtwisnyss]

because that in me is found before God justice-nom

'because justice before God is found in me'

(AHP, XXI, 331; Kemenade 1997:335)

23 Presumably, nominal subjects are licensed in their base position within VP/vP in OE (i.e. in contrast to Modern English, there is no obligatory movement of the subject DP to SpecIP). This is indicated by the fact that VP-adverbs may intervene between a nominal subject and the finite Verb which is located in T, giving rise to the order V-Adv-Subj. in main clauses (for additional arguments and discussion see Kiparsky 1997, Kroch & Taylor 1997, Pintzuk 1999, Haereli 1999, Fuss 2000). Furthermore, Fischer et al. (2000:124f.) note a very interesting distributional difference between nominal and pronominal subjects which provides further support for the assumption that nominal subjects are licensed in situ: In examples with multiple sentential negation (consisting of the clitic ne and the negative adverb na) pronominal subjects appear to the left of na whereas nominal subjects consistently follow na, cf.

(i) Ne het he us na leornian beofonas to wyrcenne

not ordered he us not learn heavens to make
Variation and change in Old and Middle English

1932):

(46) a.  Þa was domne Leo papa, on Rome: ond he hine
Then was lord Leo pope in Rome and he him
to cyninge gehalgode, ond hiene him to biscepsuna nam.
to king consecrated and him sent him son to godson took
'Then was lord Leo pope in Rome, and he consecrated him king, and adopted him as his godson.'

(ASC (853); Kiparsky 1995, p. 148)

b.  Her for se here from Lindnesse to Hreopedune, ond þær wintersetl nam
Here went the army from L. to H. and there winter quarters took
'Here (this year) the army went from L. to H., and took up winter quarters there.'

(ASC (874); Kiparsky 1995, p. 148)

Pintzuk (1999) suggests that the higher rate of verb-final structure in second conjuncts is influenced by a tendency for conjoined constituents to have similar structures. Her quantitative analysis supports this claim: the frequency of orders with the finite verb in a medial position is significantly lower in second conjuncts when the first conjunct displays the finite verb in a final position as well.

'He did not bid us learn to make the heavens.'

(ÆLS, 127; Fischer et al. 2000:125)

(ii)  Nis na se halga gast wuniende on his gecynde swa swa he gesewen was
not-is not the holy ghost existing in his nature as he seen was
'The Holy Ghost is not existing in his nature as he was seen.'

(ÆCHom 1, 22.322.17; Fischer et al. 2000:125)

Under standard assumptions concerning the structural positions of negative adverbs – either located in SpecNegP or adjoined to VP – these examples suggest that nominal subjects remain in their base position whereas pronominal elements can move to a position in the left periphery of TP.
Variation and change in Old and Middle English

<table>
<thead>
<tr>
<th>Position of finite Verb in 1st conjunct</th>
<th>finite verb medial in 2nd conjunct</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>medial</td>
<td>87.3%</td>
<td>110</td>
</tr>
<tr>
<td>final</td>
<td>58.6%</td>
<td>58</td>
</tr>
<tr>
<td>ambiguous</td>
<td>80.1%</td>
<td>336</td>
</tr>
</tbody>
</table>

Table 4: Position of the finite verb in conjoined main clauses (Pintzuk 1999, p. 226)

We want to argue for an alternative implementation of Pintzuk's idea which is based on the assumption that there is a strong tendency for the structural position of finite verbs to be identical in conjoined clauses. Compare the following German sentences. Verbs like glauben 'think/believe' may select a verb final complement, as in (47a), or a verb second complement, as in (47b). However, (47c) shows that it's not possible to conjoin verb final and verb second complements (although they are both CPs):

(47) a. Peter glaubt dass Maria ihn liebe.

    Peter thinks that Mary him love-subj

    'Peter thinks that Mary loves him.'

b. Peter glaubt sie werde ihn heiraten

    Peter thinks she will-subj him marry.

    'Peter thinks that she will marry him.'

c. * Peter glaubt dass Maria ihn liebe und sie werde ihn heiraten.

    Peter thinks that Mary him love-subj and she will-subj him marry

    'Peter thinks that Mary loves him and that she will marry him.'

However, examples like (47c) improve considerably if the V2 and V-final complements switch places, that is, the combination of a V2 clause as first conjunct with a V-final clause as second conjunct receives only one question mark (compare the OE examples in (46)): 
(48) ?Peter glaubt Maria werde ihn heiraten und dass sie ihn liebe.
   Peter thinks Maria will-subj him marry and that she him love-subj
   'Peter thinks that Maria will marry him that she loves him.'

The contrast between (47c) and (48) is perhaps amenable to an explanation in terms of economy conditions. More precisely, one can conceive that the absence of a (certain) verb movement operation in the first conjunct strongly disfavours the selection of a second conjunct that is derived via exactly this movement operation. In contrast, the presence of verb movement in the first conjunct implies no strict constraint on the shape of the second conjunct (apart from perhaps a weak "parallelism condition"). This is compatible with the observation that OE displays the combination of V2 structures and V-final second conjuncts as well (cf. (46)).

(49) Constraint on coordination structures (informally)
   The second conjunct of two coordinated clauses should not be derivationally more complex than the first conjunct (w.r.t. to a movement operation $\alpha$).

Given this assumption, the following explanation becomes available for the lower percentage of finite verbs in medial position in clauses coordinated with first conjuncts that display the finite verb in final position: In section 4, we assumed that a final position of the finite verb is to be attributed to the lack of V-to-T movement. If a final position of the finite verb indicates the lack of V-to-T in the first conjunct, then, according to (49), the second conjunct should lack this operation as well. But then we predict that $V_{\text{fn}}O$ and $OV_{\text{fn}}$ patterns are again infixed variation in the second conjunct, due to competition between [-vP] and [+vP] grammars. This prediction is borne out by the statistical facts shown in table 4: the absence of V-to-T in the first conjunct "reveals" the competition between two parametrical options.
6.3 Type of subordinate clause

According to Pintzuk (1999), clause type is another factor that has a statistically significant influence on word order in embedded clauses. If we subdivide the set of subordinate clauses according to clause type, it seems that [+wh] subordinate clauses (i.e. indirect questions and relative clauses) disfavour a medial position of the finite verb, while affirmative sentential complements apparently (slightly) favour it:

<table>
<thead>
<tr>
<th>Clause type</th>
<th>% Aux-medial</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>[+wh] clauses</td>
<td>29.1%</td>
<td>333</td>
</tr>
<tr>
<td>sentential complements</td>
<td>62.6%</td>
<td>286</td>
</tr>
<tr>
<td>all other subordinate clauses</td>
<td>49.5%</td>
<td>578</td>
</tr>
</tbody>
</table>

Table 5: Type of subordinate clause and position of Aux (Pintzuk 1999, p. 228)

It seems that the choice of a grammar with a separate light vP is influenced by a certain property of [+wh] clauses that disfavours this clause structural option. The basic idea here is that the selection of a grammar with a separate vP is influenced by the morphological content of the finite verb. Then, the effect of clause type on the position of the verb can be attributed to the presence of stronger verbal morphology (subjunctive) in [+wh] clauses, in the sense that this type of inflection disfavours the projection of a vP (and therefore a medial position of the finite verb resulting from V-to-v movement). That approach predicts that the availability of a separate vP is connected to the loss of distinctive morphological features for mood/aspect on the finite verb.24 Here, it is perhaps possible

24 According to Kiparsky (1997), the loss of morphological case distinctions required the licensing of nominal arguments to proceed via Spec-Head relations exclusively. This presumably led to the development of the strong EPP feature in T (cf. Fuss 2000) and, similarly, to obligatory object shift for nominal complements, which is bound to the presence of a separate vP (cf. Chomsky 2001). On these assumptions, a new perspective on the history of V-to-T in English becomes available: The fact that learners continued to be confronted with a major number of SVO orders gave rise to a "catastrophic" reanalysis which is exemplified by the following structures:

(i) \( ...[\text{\textbf{Subject}} [v \rightarrow V; [\text{\textbf{PRP}} (\text{\textbf{tt}})] \text{Object} (\text{\textbf{tt}})]) \) was reanalysed as

(ii) \( ...[\text{\textbf{Subject}} [T \rightarrow [v \rightarrow V]; [\text{\textbf{Object}} [\text{\textbf{PRP}} (\text{\textbf{tt}})] \text{Object} (\text{\textbf{tt}})])]]] \)

In other words, we propose the following chain of change events for the development from Old English to Early
to detect some systematic connections with the grammaticalisation of the OE modal verbs as markers of verbal modality. Roberts (1985) argues that due to the loss of distinctive subjunctive morphology by phonological reduction processes, a new way of expressing modality came into existence: (epistemic) modals were grammaticalised as markers of verbal modality, i.e. the subjunctive/indicative distinction. The grammaticalisation process in question was facilitated by the well-known special properties of the OE modal verbs that set them apart from other verb classes.  

Based on the theoretical approach developed in section 4, we postulate that this development could only arise in a grammar featuring a functional v head which was lexicalised by the OE modal verbs in the course of the grammaticalisation process (on the assumption that the subjunctive/indicative distinction is a function of v). Similar to subjunctive morphology, (epistemic) modals entered the lexicon as "clausal operators" that are associated with functional categories and therefore cannot assign θ-roles (cf. Roberts 1985).  

The reanalysed elements existed over quite a long period side by side with the "original" lexical entries that exhibited more main verb characteristics concerning θ-

Modern English: OE: (i) OV = first occurrences of VO; (ii) competing absence/presence of vP; (iii) V-to-T only in root clauses; ME: (i) strong tendency toward VO; (ii) vP obligatory; (iii) rise of positional licensing leads to EPP and object shift in connection with overt V-to-v-v-to-T in all clauses. EModE: (i) VO; (ii) vP obligatory; (iii) loss of V-to-T (according to standard assumptions including the rise of do-support in the late ME period).

Even before their reanalysis, modals subcategorised for another VP. This structure could easily be reanalysed as a periphrastic subjunctive with the modal as a functional head. Furthermore, the OE modals were characterised by special morphological properties. They belonged to the class of Proto-Germanic preterit-presents which are characterised by a defective inflectional paradigm. Therefore, morphological evidence was not strong enough to prevent an analysis as a functional category. Finally, the lexical semantics of many preterit-presents made them a good candidate for the reanalysis in question since they already included a notion of 'modality' (cf. Roberts 1985).

The assumption that the reanalysis of modals as v-heads led to the loss of their capacity to assign θ-roles seems to be at odds with the idea that v assigns the θ-role of the external argument (see Krahmer 1996, Collins 1997:15). However, no such problem arises if we stick to the standard idea that all verbal θ-roles are assigned by V. On this assumption, vP provides only the structural configuration for assigning the agent θ-role via Spec-Head agreement of V and the external argument in a VO grammar (for discussion see Grewendorf, to appear).
role assignment and syntactic distribution.

To sum up, we reconstructed the influence of clause type on the position of the finite verb as an effect of the implementation of the indicative/subjunctive distinction. Again, variation in word order properties can be attributed to the existence of different competing grammars: the realisation of verbal modality by reanalysed modal verbs necessitates the projection of a separate vP, whereas the presence of distinctive subjunctive morphology is a characteristic of the older OV grammar.

6.4 The distribution of nominal and pronominal objects in Early Middle English

There is evidence in texts of Early Middle English that word order variation is not only due to different positions of the finite verb but also to the type of object. This observation can also be made for Old English.

It has often been noted that pronominal objects behave differently from full object DPs, due to the special properties of the former type of objects. The example in (50) shows that full object DPs occur in postverbal position quite frequently (this is an example of a double-object construction):

(50) ... gif ic sceole cypan pinne tocyne helwarum.

... if I had-to make-known your coming-ACC inhabitants-of-hell-DAT

'... if I had to make known your coming to the inhabitants of hell.'

(Haeberli 1999, p. 360)

Generally, it is assumed that whenever a full object DP occurs to the left of an adverb which is taken to mark the left periphery of VP, the object has moved out of the VP. The following examples from OE illustrate this:
(51) & æghwæþer operne oftrædlice utdræfde.

and every-one other frequently outdrove

'and each of them frequently drove the other away.'

(Haeberli 1999, p. 356)

(52) & he monig mynster & circian in ðærmonlondc getimbredé.

and he many monasteries and churches in that land built

'and he built many monastries and churches in that land.'

(Haeberli 1999, p. 357)

Note that in (51) a specific object appears to the left of the adverbial whereas in (52) it is a non-specific object that has undergone scrambling. This implies that both type of full object DPs, specific and non-specific, occur in preverbal position due to scrambling.

The behaviour of pronominal objects is different in that they can occur in a number of positions in the clause where full object DPs cannot occur. Thus, pronominal objects occur a) immediately to the right of the complementiser in embedded clauses as shown in (53); b) immediately preceding the finite verb in main clauses as in (54); in clauses where the first constituent is a wh-element, a negative element or ba immediately after the finite verb as in (55):

(53) ... þæt him his fiend waren æfterfylgende.

... that him his enemies were following

'... that his enemies were chasing him.'

(van Kemenade 1987:113)
(54) God *him worhte* þa reaf of fellum.

God them wrought then garments of skin

'Then God made garments of skin for them.'

(van Kemenade 1987, p. 114)

(55) þa *sticode him mon* þa eagan *ut*.

Then stuck him someone they eyes out

'Then his eyes were gouged out.'

(van Kemenade 1987, p. 114)

Further, pronominal objects occur to the left of the main verb as shown in (56), or to the right of the main verb as in (57) (example (2) from above):

(56) Hwi wolde God swa lytles pinges *him forwyrnan*.

Why would God such small things him deny

'Why would God deny him such small things?'

(van Kemenade 1987, p. 112)

(57) ... þæt he wolde *geswutelian* swa his digelnyse *eow*.

... that he would reveal so his secrets you

'... that he wanted to reveal his secrets to you in such a way.'

(ÆLS (Thomas) 166; Haeberli 1999, p. 360)

The OE data shows that the orders object-verb as well as verb-object can be underlying orders on the one hand, but also derived orders on the other hand, as there is evidence for leftward movement of objects, full DPs as well as pronouns.
This observation also holds for EME. Kroch & Taylor 2000 and Trips 2000b have shown that the OV/VO word order variation is not only due to different positions of the finite verb but also to the type of object. First, both full object DPs and pronominal objects can move leftward which is evident by the fact that they occur to the left of adverbs:

(58) ... þet heo ne schal þene stude neauer mare changin bute for nede ane.

...that she NEG shall the abode never more change but for need alone

'...that shall never again change her abode except when necessary.'

(Kroch & Taylor 2000, p. 17)

(59) ...pach god ne cunne him neauer þone of his sonde.

...though God NEG can him never thank of his sending

'...though God can never thank him for sending it.'

(Kroch & Taylor 2000, p. 17)

Moreover, pronominal objects occur in postverbal position about 50% of the time (see section 2.4):

(60) & unnc    birþp    biddenn Godd tatt he forrgife hemm here sinne;

and we-two behoves-to bid    God that he forgive them their sins

(CMORM,DED.L83.23; Trips 2000b, p. 256)

(61) ... purrh patt he wolde toleenn deþ wipputenn hise wrihtte &

...through that he would permit death without his fault and

turnmenn menn till Cristenndom. ...& fulltenn hemm & clenensenn hemm ...

turn    men till Christendom. ...and baptise them and cleans them ...

(CMORM,1.148.1212; Trips 2000b, p. 130)
Further, there is evidence that pronominal objects undergo leftward movement as they occur in a position immediately preceding the auxiliary:

(62) ... patt menn himm sholldenn fosstrenn.
    ... that men him should nourish
    (CMORM, I, 267.2175; Trips 2000b, p. 254)

(63) forrbi patt he Pe wolle de gifen bise, ...
    forthi that he thee wanted-to give example ...
    (CMORM, I, 129.1103; Trips 2000b, p. 254)

(64) ... hu ge ham schulen leoueliche learen.
    ... how you them shall lovingly teach
    (CMANCRIW, I, 32.125; Trips 2000b, p. 246)

(65) ouer michel ping ic de scal setten.
    over much things I thee shall set
    (CMVICES, 1, 17.190; Trips 2000b, p. 246)

Table 6 shows that pronominal objects move to the left with a much higher frequency than nominal objects, i.e., the variation between OV and VO orders is at least partly due to the properties of pronouns (see examples above):
<table>
<thead>
<tr>
<th></th>
<th>Pronominal objects</th>
<th>full object DPs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>preverbal</td>
<td>postverbal</td>
</tr>
<tr>
<td>main cl.</td>
<td>18</td>
<td>69</td>
</tr>
<tr>
<td>embedded cl.</td>
<td>21</td>
<td>39</td>
</tr>
<tr>
<td>total</td>
<td>39</td>
<td>108</td>
</tr>
<tr>
<td>total %</td>
<td>27</td>
<td>73</td>
</tr>
</tbody>
</table>

Table 6: Comparison of pronominal objects and full object DPs with respect to the frequency of leftward movement in double-object constructions

If we focus on full DPs only, we find a further difference between types of objects, namely that quantified and non-quantified object DPs behave differently: quantified object DPs appear more frequently in preverbal position than non-quantified DPs do. According to Kroch & Taylor (2000) the difference between the rate of preverbal quantified objects and preverbal non-quantified objects is due to the fact that the former type of nominal objects scramble more frequently than the latter type. The examples below show that both types of objects can occur in a preverbal and postverbal position. The comparison of Table 7 and 8 however shows that quantified DPs occur in a position preceding the main verb more often than non-quantified DPs do.

Non-quantified DPs:

(66) & Godess enngell Gabriël gaff hire anndswere.

and God’s angel Gabriel gave her answer

(CMORM,1.83.733; Trips 2000b, p. 256)

(67) & swa we mughenn alle imæn be lambess bisne folghenn;

and so we may all in common the lambs example follow

(CMORM,1.269.2193; Trips 2000b, p. 257)
Quantified DPs:

(68) & ec icc habbe shæwedd giw summ del off beggre wikegan.
and also I have showed you some part of their duty

(CMORM.I.36.395; Trips 2000b, p. 257)

(69) & off Godspell icc wile giw get summ del mare shæwenn;
and of gospel I want you yet some part more show

(CMORM.PREF.L.81.91; Trips 2000b, p. 257)

<table>
<thead>
<tr>
<th>Non-quantified DPs</th>
<th>pre-aux</th>
<th>post-aux</th>
<th>post-verb</th>
<th>% post-aux</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ormulum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>main</td>
<td>5</td>
<td>16</td>
<td>42</td>
<td>25</td>
</tr>
<tr>
<td>subordinate</td>
<td>22</td>
<td>33</td>
<td>84</td>
<td>24</td>
</tr>
<tr>
<td>total</td>
<td>27</td>
<td>49</td>
<td>126</td>
<td>24</td>
</tr>
</tbody>
</table>

Table 7: Distribution of non-quantified DPs in the Ormulum (from Trips 2000b, p. 258)

<table>
<thead>
<tr>
<th>Quantified DPs</th>
<th>pre-aux</th>
<th>post-aux</th>
<th>post-verb</th>
<th>% post-aux</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ormulum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>main</td>
<td>5</td>
<td>6</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>subordinate</td>
<td>1</td>
<td>10</td>
<td>13</td>
<td>42</td>
</tr>
<tr>
<td>total</td>
<td>6</td>
<td>16</td>
<td>27</td>
<td>33</td>
</tr>
</tbody>
</table>

Table 8: Distribution of quantified DPs in the Ormulum (from Trips 2000b, p. 258)

The frequency of preverbal non-quantified full object DPs shows that base generated OV phrase structure is still robustly attested in the EME text under consideration (contra an analysis in terms of a uniform VO base, cf. Roberts 1997; Hróarsdóttir 1999). Moreover, the fact that quantified and pronominal objects occur more frequently in preverbal position than non-quantified objects suggests that a number of surface OV orders are the result of scrambling from a VO base.
7. **Summary and conclusions**

In this paper, we have presented a new account of word order variation in OE. Our analysis is based on the assumption that the close connection between language variation and language change is to be analysed as the result of several competing grammars which generate the striking multitude of serialization patterns (following Kroch 1989). However, in contrast to previous work that pursues this line of thought (e.g. Pintzuk 1999), we have argued that the variant positions of the finite verb in embedded clauses of OE should not be analysed in terms of different orientations of INFL. Instead, the variation in question is attributed to synchronic competition between grammars that differ with respect to the presence of a head-initial light verb $v$ that closes off the series of VP shells (and attracts the finite verb if present). This approach is motivated by two empirical observations. First, we have postulated that an adequate analysis of OE should take into consideration the fact that S-V-O-$V_{fn}$ orders do not show up in the OE records (and are apparently absent cross-linguistically). Second, we have presented new empirical evidence from the placement of adverbs which indicates that leftward moved finite verbs occupy a lower head position in embedded clauses. Our analysis accounts for these findings by assuming (i) that the UBH is restricted to functional categories and (ii) that the source of variation is to be located within the borders of the extended verbal projection, which we identify as vP or VP (dependent on the choice of grammar). Accordingly, a clause final position of the finite verb is associated with a grammar that lacks a separate vP, whereas the presence of a functional light verb triggers leftward movement of the finite verb to a medial position. On these assumptions, the word order patterns observed in OE can be derived without generating the unwanted option S-V-O-$V_{fn}$.

We then addressed the question of the historical origin of grammar competition in OE. Here, we claimed that the development of a grammar that featured a separate $v$P was the result of language contact with the Scandinavian VO-languages, following the idea that the confrontation with unambiguous VO orders triggered the acquisition of a grammar with leftward movement of the content verb to a functional light verb.
Next, we saw that our analysis receives further support in that it allows for an explanation of a set of statistical findings by Pintzuk (1999). More specifically, we have shown that asymmetries between main and embedded clauses and parallelism effects in conjoined clauses can be successfully accounted for if we assume that OE consisted of competing grammars that differed with respect to the parameter [±vP]. Furthermore, the influence of clause type (i.e. [±wh]) on word order was reconstructed as the result of competing realisations of verbal modality. Again, the same set of grammars is involved, assuming that different implementations of subjunctive mood (periphrastic vs. morphological) are intimately connected to the absence vs. presence of a separate vP.

Finally, considering data from EME, we have shown that scrambling of pronominal and full objects constitutes a further source of surface OV orders. This suggests that some of the OV orders encountered in OE are possibly the result of leftward movement of nominal complements as well.

References


Behaghel, Otto: 1932, Deutsche Syntax IV. C. Winters, Heidelberg.


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Pintzuk, Susan: 1999, Phrase structures in competition: variation and change in Old English word


Travis, Lisa: 1985, 'The role of INFL in word order change', in R. Eaton et al. (eds.), Papers from the 4th International Conference on English Historical Linguistics. John Benjamins,
Amsterdam 331-341.


Trips, Carola: 2000a, 'Scandinavian characteristics in the Ormulum: evidence for Scandinavian influence on the word order change in Early Middle English', *Proceedings of ConSole8*, Leiden, 327-342.


**Corpora**
