A COMPARATIVE APPROACH TO SYNTACTIC CHANGE IN THE HISTORY OF ENGLISH.

ABSTRACT

This article argues that crucial aspects of syntactic change in the history of English derive from the resetting of a single parameter, the pied piping parameter. Whereas Old English (and the Modern Continental-West Germanic languages) treats VP-material invidually, yielding characteristic patterns of object, particle, and verb placement, Modern English treats the VP as a collective, moving it to a position to the left of certain 'low' adverbs and adverbials. The shift from individual to collective movement is described in detail, with its repercussions on the amount of verb movement and on the order of the verb, its object(s), and the verbal particle. The emergence of a zero reflexive and the development of *have* as the exclusive perfective participle are shown to be long range effects of the shift from individual to collective movement.

1. INTRODUCTION

This article argues that crucial aspects of syntactic change in the history of English, particularly in the transition from Old English to Middle English, with repercussions for the transition from Middle English to Early Modern English, derive from the resetting of a single parameter, the pied piping parameter. The pied piping parameter (Koster, 2000a) describes variation in the size of syntactic categories undergoing displacement. Given a universal or language specific requirement for displacement of a category α , a language can move just α , or a more inclusive category β containing a (pied piping). This is well-known from the domain of A'-movement, where a requirement for displacement of a wh-element contained within a preposition phrase PP (about who) may trigger movement of the wh-element in one language and movement of the entire PP in another. In the domain of A-movement, in particular with respect to object placement, it now appears to be the case that the Continental West-Germanic languages (Dutch, Frisian, German) displace just the object, whereas the Insular West-Germanic language Modern English displaces the entire verb phrase VP (Cinque, 1999: 178 fn 59; Koster, 2000a). We furthermore observe that the older stages of all West-Germanic languages differ little from Modern Continental West-Germanic, including Old English, which therefore differs quite radically from Modern English with respect to object placement. However, whereas earlier discussions of this state of affairs have focused on parametric change in terms of phrase structure (English being the only West-Germanic language developing from a common West-Germanic head-final phrase structure to a head-initial phrase structure) or in terms of overt vs. covert movement (English being the only West-Germanic language replacing the common West-Germanic overt object shift by covert object shift), we hypothesize that the only change that took place was one from individual movement of the object to collective movement of the VP containing the object. Under this hypothesis, no changes in phrase structure, timing of movement, or even the target of movement are needed to account for the basic pattern of syntactic development in the history of English.

2. VP-MOVEMENT IN ENGLISH

We first need to establish that Modern English syntax is characterized by VP-movement to a position which is occupied by the object in the remaining West-Germanic languages.

In Continental West-Germanic, we observe that a (definite) object appears to the left of

certain adverbs (we use embedded clauses, as the finite verb occupies a different, VP external position in independent clauses):

- (1) (a) ..dat Jan het boek gisteren las (Dutch) that John the book yesterday read-PAST '..that John read the book yesterday.'
 - (b) ..dat Jan het boek snel las that John the book fast read-PAST '..that John read the book fast.'

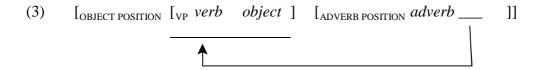
On the assumption that adverbs either mark the VP-boundary, or are generated in a position outside VP, this has generally been taken to indicate that the object in Continental West-Germanic obligatorily moves out of the VP. We will refer to the surface position of the object illustrated in (1) as the 'object position'. In recent work by Cinque (Cinque, 1999), the assumption that adverbs are external to VP has been given a more solid empirical and theoretical basis. Cinque distinguishes a number of adverbial categories which can be expressed by adverbs, closed class verbs, or affixes, with all of these elements occupying designated positions in VP-external functional projections, which are universally rigidly ordered. The facts in (1) then indicate that the object in Continental West-Germanic occupies some position to the left of certain VP-external adverbial functional projections, hence that the object is in a VP-external object position.

While this is uncontroversial, the consequences of the adverb placement diagnostics for English have not been generally acknowledged, even if they were quickly pointed out by Cinque (1999) and discussed in a more fundamental way by Koster (2000a). In English, the object appears to the left of the same types of adverbs as in Dutch, the only difference being that the verb in English *also* appears to the left of these adverbs (we now use independent clauses, as English has no main clause / embedded clause asymmetry with respect to the position of the verb):

- (2) (a) John read the book yesterday
 - (b) John read the book fast

Applying the same logic as in (1), we conclude that the object is outside the VP in (2) as well. What's more, the argumentation leads us to conclude that the finite verb *read* is also outside the VP, a conclusion reached as early as Johnson (1991). Johnson, however, pursues an analysis in which the object and the verb each undergo their separate movements out of the VP. But even outside the VP, the verb and the object are necessarily adjacent in English, a circumstance which remains unexplained under Johnson's assumptions.

Under the Cinque/Koster approach, however, the fact that the verb and the object appear to the left of the adverbs in (2) receives a slightly different explanation: instead of the verb and the object each moving out of the VP individually, the entire VP moves to the object position. This accounts for the relative positioning of the verb and the object with respect to the adverbs, but also for the obligatory adjacency of the verb and the object:



In short, standard distributional tests such relative positioning with respect to certain adverbs and adjacency lead to the conclusion that English differs from the Continental West-Germanic languages in (at least) one respect:

(4) Where the Continental West-Germanic languages move a noun phrase to the object position, English moves an entire VP (i.e. the verb-object combination).

It is perhaps useful to point out that to account for the basic pattern in (1)-(2) in the manner proposed here, no differences with respect to the positioning of adverbs or more generally with respect to the organization of phrase structure need to be assumed. As we will see below (section 4.1), there is a long standing tradition in which the differences between English and the remaining West-Germanic languages are described in terms of head initial (English) vs. head final (Continental West-Germanic) phrase structure. The position of the object to the left of the verb in (1) could then be seen to reflect a basic OV-ordering in Dutch, as opposed to the basic VO-ordering in English. But on standard assumptions regarding adverb placement the OV-order in (1) must be derived, and hence (1) is not the most reliable guide in establishing the basic phrase structure organization of Continental West-Germanic languages. As discussed in Zwart (1994), observations in more reliable domains (basically all types of phrases except the VP) clearly testify to the head initial character of Dutch phrase structure, and the conclusions can easily be extended to the other Continental West-Germanic languages. We will return to this issue in the context of the question of the syntactic development from Old to Middle English.

3. A THREE-WAY COMPARISON

Here we briefly recapitulate some of the typological similarities between Old English and the modern Continental West-Germanic languages, and the differences between Old English and Continental West-Germanic on one hand, and Modern English on the other.

First, both Continental West-Germanic and Old English show the order Object—Verb in embedded clauses:¹

(5) Dutch (Continental West-Germanic)

..dat hij het boek leest that he the book reads '..that he is reading the book'

(6) Old English

..siððan he papanhad underfeng after he papacy received '..after he received the papacy.'

(7) Modern English

..that John is reading the book

Second, in both Continental West-Germanic and Old English, the object and the verb are not necessarily adjacent, whereas in Modern English, they are:

(8) Dutch (Continental West-Germanic)

..dat hij het boek nietleest that he the book not reads '..that he is not reading the book'

(9) Old English

..)pæt he nolde næfre eft eal mancynn mid wætere acwellan (62) that he not-would never after all mankind with water destroy '..that he would never again destroy all mankind with water.'

(10) Modern English

..that John is reading (*ADV) the book

Third, both the Continental West-Germanic languages and Old English show an asymmetry between main and embedded clauses with respect the position of the finite verb:

- (11) *Dutch* (Continental West-Germanic)
- (a) main Jan leest het boek
 John reads the book
 'John is reading the book.'
- (b) embedded ..dat Jan het boek leest that John the book reads '..that John is reading the book.'
- (12) *Old English*
- (a) main He mæg ða synfullan sawle þurh his gife geliffæstan (143) he may the sinful soul through his gift endow-with-life 'He may endow the sinful soul with life through his gift.'
- (b) embedded ...bæt he ure sawle fram synna fagnyssum gehælan mæge that he our souls from sin's ulcers heal may '...that he may heal our souls from the ulcers of sin.'
- (13) *Modern English*
- (a) main John is reading the book
- (b) embedded ..that John is reading the book

Fourth, both Continental West-Germanic and Old English show subject-verb inversion with all types of verbs, whereas in Modern English the inversion occurs with auxiliaries only:

(14) Dutch (Continental West-Germanic)

Toen gingen ze weg then went they away 'Then they left.'

- (16) Modern English
- (a) * Why went they out?
- (b) Why did they go out?

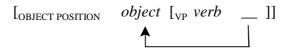
Many more parallels between Old English and Continental West-Germanic distinguishing these languages from Modern English could be listed, but these four serve to illustrate the fact that Old English and Continental West-Germanic are typologically quite similar, and quite distinct from Modern English.

This leads to the hypothesis that Old English differs from Modern English in essentially the same way as the Modern Continental West-Germanic languages do. From our perspective, this implies that the history of English is characterized by a change from individual object movement to collective VP-movement.

Consider how the facts listed in (5)-(16) can be understood in terms of a parametric distinction between object movement (Continental West-Germanic/Old English) and VP-movement (Modern English).

First, the position of the object in Dutch (5) and Old English (6) is a direct consequence of the individual object movement out of the VP to the object position:

(17) OV-order in Continental West-Germanic and Old English



Since Modern English displaces the entire VP to the object position, as illustrated in (3), the underlying Verb—Object order remains intact (7).

Second, the absence of obligatory adjacency between the object and the verb in Dutch (8) and Old English (9) is expected since there is no principled reason why the object position should not be separated from the VP by adverbial material. But in Modern English, the VP moves as a unit and the adjacency in (10) merely reflects the basic adjacency of a verb and its complement when they are first introduced to the structure.

Third, the asymmetry between main and embedded clauses in Continental West Germanic (11) and Old English (12), while not itself following from the individual object shift hypothesis, is also not prohibited by it. We assume that a superficial requirement on the finite verb to occupy the highest head position is responsible for the verb placement in main clauses (the highest head position being occupied by the complementizer in embedded clauses; cf. Den Besten, 1977). But in Modern English the circumstance that the verb moves along with the object to the object position provides an immediate explanation for the absence of an asymmetry between main and embedded clauses with respect to the position of the finite verb. The Continental West-Germanic languages and Old English show no asymmetry between main and embedded clauses with respect to the position of the *object*. In other words, the object position is similarly occupied in both main and embedded clauses. Likewise, in Modern English the object position is occupied by the VP in both main and embedded clauses. Hence, the position of the verb in English reduces to the

position of the object, under the hypothesis under investigation here.

The fourth typological difference between Old English/Continental West-Germanic and Modern English, the restriction on the type of verb undergoing subject-verb inversion, can also be understood in connection with the VP-movement analysis of Modern English. In Dutch (14) and Old English (15), the finite verb moves on its own and is essentially a free agent. There is no difference between lexical verbs and auxiliaries in this respect, and hence there is no reason why a lexical verb should not participate in subject-verb inversion (if the process is part of the syntax of the language in question). In Modern English, there is a distinction between lexical verbs and auxiliaries, on the standard assumption that auxiliaries are generated outside VP as the head of some functional projection. This implies that auxiliaries will never be included in the VP occupying the object position (under the VP-movement hypothesis) and hence are as free as the lexical verbs in Old English and in the Continental West-Germanic languages. On the other hand, it is at least imaginable that the position of the lexical verb inside the VP occupying the object position (see (3)) restricts the possibility of further verb movement. We return to this question in section 5.5 below.

It appears, then, that the major typological differences in the syntax of Old English and Modern English follow from the hypothesis that English developed from an individual object moving language to a collective VP moving language. In the remainder of this article, we consider a number of developments in the history of English syntax in more detail. First, however, we briefly discuss the main aspects of alternative analyses of the historical development of English syntax.

4. ALTERNATIVE HYPOTHESES

4.1 Head-initial vs. head-final structure

Until recently, a common explanation of the differences between the Continental West-Germanic languages and Modern English, and hence between Old and Modern English hinged on the idea that the two types of languages differ in the organization of phrase structure. The Object—Verb order of Continental West-Germanic (5) and Old English (6) was taken to indicate that in these languages the complement (the object) precedes the head (the verb), while the head precedes the complement in Modern English (7)(Canale 1978, Pintzuk 1991). It can however be shown that all West-Germanic languages are consistently head initial through all stages of their development. We restrict ourselves again to a three-way comparison of Continental West-Germanic (Dutch), Old English, and Modern English.

The data in (18) illustrate the order of head and complement in a number of projections where we are certain or reasonably certain that no displacements have taken place to distort the basic organization (the heads are printed in boldface):

(18)	Dutch	Old English	Modern English
(a) DP	de koning	se cing	the king
(b) CP	dat IP	þæt IP	that IP
(c) PP	op die dag	on þam ðæge	on that day
(d) NP	een boek over X	ane boc be X	a book about X
(e) &P	vader en moeder	fæder and moder	father and mother

We see that the projections listed are consistently head-initial.²

A change in the history of English in terms of headedness can therefore not be a general

change from head-final to head-initial structure, but must be described locally as a change from head-final to head-initial VP-structure. But given the existence of object movement to the object position, as evidenced by the nonadjacency of the verb and the object in (8) and (9), the head-final status of the VP in Continental West-Germanic and Old English is not well established.³

4.2 Overt vs. covert movement

Accepting a uniform phrase structure for Old and Modern English, one might assume that the difference between the two languages resides in the *timing* of the object movement, Old English moving the object in overt syntax (before Spell-Out, the point in the derivation of a sentence which is processed by the component of the language faculty dealing with sound) and Modern English in covert syntax (after Spell-Out, at LF) (see e.g. Roberts, 1997). This faces some theoretical and empirical difficulties, however.

First, the idea that Modern English has covert object movement entails that the verb and the object are both in their base position inside VP at the point of Spell-Out. This, however, leaves the position of the adverbs following the verb and the object in Modern English (see (2)) unexplained. Second, the covert movement hypothesis, unlike the VP-movement hypothesis, makes no predictions about the behavior of the verb in Modern English: there is no immediate connection between covert object movement and the absence of a main/embedded clause asymmetry (see (11)-(13)) or the absence of subject-verb inversion with lexical verbs (see (16)). As we will see in section 5.5, our proposal does entail such a connection. Finally, the overt/covert movement parameter, unlike the pied piping parameter, is not independently established and in fact amounts to little more than the description of a surface word order difference.

The overt/covert movement parameter is generally spelled out in terms of the 'strength' of the morphosyntactic features triggering movement. Under the overt/covert movement hypothesis, the features triggering object movement would turn from 'strong' to 'weak' in the course of the history of English. No such change is required in the VP-movement analysis: the features attracting the object remain strong, they just attract the entire VP instead of the object. The pied piping parameter, therefore, is consistent with the proposal by Kayne (1998) according to which all movement is overt (and, hence, no parametrization in terms of strong/weak features is needed).

5. DETAILED DISCUSSIONS

We now proceed to discuss in more detail some aspects of syntactic development in the history of English. The chronology of the syntactic changes can be summarized as in table 1 (based on Fischer, van Kemenade, Koopman & Van der Wurff, 2000):

TABLE ONE HERE

As can be seen, the shift from Object—Verb to Verb—Object order constitutes the first major syntactic change, and it coincides with two other changes regarding the position of verbal complements, the fixing of the order of the objects of ditransitive verbs, and the establishment of the modern Verb—Particle order. The significance of this is that if the OV-to-VO shift reflects a change in the setting of the pied piping parameter, the syntactic development of English indeed appears to hinge on this parameter.⁴

5.1 The position of objects

While the general development from OV to VO word order in the history of English needs no further illustration, we are interested in a number of more specific questions, having to do with a) exceptions to the OV pattern before the change, b) early indicators of the OV-to-VO shift, and c) exceptions to the VO (*cum* adjacency) pattern after the change. In recent years, we have come to understand more about these questions (Pintzuk, 1996; Kroch & Taylor, 2000; Trips, 2001; Van der Wurff, 1997).

It has been noticed that VO-patterns occur throughout the entire recorded history of English. A typical Old English example is (18)

(18) ... bæt hi urum godum geoffrian magon [ðancwurðe onsægednisse] (144) that they our gods offer may grateful sacrifice '... that they may offer our gods grateful sacrifice.'

Several aspects of the construction suggest that the object *dancwurde onsægednisse* in (18) is not in its base position: first, it is not adjacent to the verb *geoffrian* of which it is the internal argument, and second, the postverbal position illustrated in (18) is never found with (weak) pronouns. These observations suggest that (18) illustrates a type of 'heavy NP shift', traditionally analyzed as rightward movement, but some base generation analysis (involving 'parallel structure' along the lines of Koster (2000b)) seems feasible also. ⁵

It follows that the earliest indicators of a change from OV to VO must involve elements that cannot undergo OE-HNPS, such as weak pronouns (Kroch & Taylor, 2000:144). The findings of Kroch & Taylor (2000) show that in Early Middle English a North-South asymmetry exists between the regions of England, with northern dialects (West Midlands) showing more Verb—Pronoun orders (in the relevant contexts, i.e. embedded clauses without verb fronting) than southern dialects (South-East Midlands):

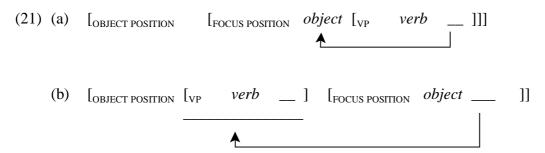
(19) Verb—Pronoun orders in Early Middle English (Kroch & Taylor 2000:146)
West Midlands 54%
South-East Midlands 10%

Given the absence of Verb—Pronoun orders (in the relevant contexts) in Old English texts, both the northern and the southern dialects show an innovation, with the northern dialects apparently leading the change. An example is given in (20) (from the West Midlands Katherine Group):

What is relevant for our purpose at this point is that speakers of English at the time, like we now, needed patterns like (20) to recognize ongoing syntactic change. This pattern, with a weak pronoun following a verb, invariably involves adjacency of the verb and the object. This may have brought about a freezing of the verb and its object inside the VP, setting the stage for VP movement to the object position.

Exceptions to the VO-pattern after the OV-to-VO change took place may involve two types: a) OV-orders, and b) VO-orders without adjacency of the verb and the object. As discussed by

Van der Wurff (1997, 2003), later Middle English OV-orders involve either Stylistic Inversion (indicated by the circumstance that the subject is empty) or negative or quantified objects. In the latter case, Van der Wurff suggests movement of the object to a designated position for such objects external to VP. The VO-orders showing no adjacency have survived into Modern English as cases of (Modern English) Heavy NP Shift. The VP-movement hypothesis suggests an analysis of these cases in which the heavy noun phrase moves individually to some VP-external focus position, after which the verb moves to the left of that position via remnant VP movement to the object position:



Most authors now agree that the OV-to-VO shift involved a transition period of considerable duration where grammars were in competition. From the perspective taken here, the diversity in the data giving rise to the idea of grammars in competition can be a result of the fact that the transition requires a number of steps: i) adopting Verb—Pronoun order, ii) adopting general Verb—Object order, iii) adopting VP-movement to object position, (iv) transition of the Old English Heavy NP Shift (OE-HNPS) mechanism (some form of 'extraposition') to the Modern English Heavy NP Shift mechanism (leftward movement to focus position). The circumstance that various steps are involved may give rise to a varied picture over the course of some time.

5.2 Double objects

In the modern Continental West-Germanic languages, some flexibility exists in the positioning of the direct object (DO) and indirect object (IO) in double object constructions (22), whereas in Modern English the IO—DO order is strictly observed (23):

- (22) (a) ..dass der Mann dem Jungen den Wagenschenkt (German) that the-NOM man the-DAT boy the-ACC car gives '..that the man gives the boy the car'
 - (b) ..dass der Mann den Wagendem Jungen schenkt that the-NOM man the-ACC car the-DAT boy gives
- (23) (a) The man gave the boy the car
 - (b) * The man gave the car the boy

This is a familiar contrast: the objects in Modern Continental West-Germanic move individually out of the VP, and are subject to further constraints determining their eventual ordering.⁶ In English, on the other hand, the objects are stuck inside VP in their base positions, and no reordering possibilities exist (outside of HNPS).

Koopman (1990) shows that Old English patterns with Modern Continental West-Germanic in this respect (examples from Koopman, 1990: 225, 228):

- (24) (a) ær ðon þe he Gode þone lofsang asægde before he God-DAT the psalm-ACC said '..before he said the psalm to God.'
 - (b) bæthe his synna Gode andette that he his sins-ACC God-DAT confesses '...that he confesses his sins to God.'

This follows if the objects in Old English move out of the VP just like in Modern Continental West-Germanic. The development from Old to Modern English then involves a fixing of the object positions as a result of the replacement of individual object movement by collective VP-movement. The fixed IO—DO order emerges around 1375 (Allen, 1995), following the OV—VO shift (dated 1300-1350) closely.⁷

5.3 Particle verbs

Old English and Modern Continental West-Germanic both show the word order Object—Particle—Verb in embedded clauses (25)-(26), which Modern English lacks.

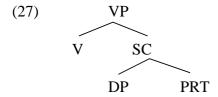
(25) Old English

bonne ne miht bu na bæt mot ut ateon then not can younot the mote out draw 'then you cannot draw the mote out'

(26) *Dutch*

dat ze het boek uit lazen that they the book out read-PAST '..that they finished the book.'

Adopting the Small Clause (SC) analysis of particle constructions (Kayne, 1985: 102; Den Dikken, 1995), we take the object and the particle (PRT) to be generated as subject and predicate of a propositional complement to the verb:



One of the Modern English particle construction orders (*pick the needle up*) reflects this structure directly. The Old English/Modern Continental West-Germanic order than follows on the assumption of Zwart (1994) that SC-predicates need to be licensed outside the VP just like subjects and objects:



Evidence for the VP-external predicate position is provided by word orders like (29), where the particle and the verb may be separated by the stranded preposition of an adjunct PP (Zwart, 1994: 400; see also Koster 1994):

(29) de telefoonwaar Jan Marie op mee belde (Dutch) the phone REL John Mary up with call-PAST 'the phone that John called Mary with'

If this is correct, the Old English pattern in (25) is just a further effect of the individual movement of VP-constituents characteristic of the language, and the history of English can again be seen as the effect of freezing VP-constituents inside VP.

The syntax of Modern English particle constructions is complicated to some extent by the existence of a second pattern, Verb—Particle—Object, which is not available when the object is a pronoun (*pick up the needle/*it*). This pattern is possibly carried over from a secondary Old English pattern Particle—Verb—Object, which is likewise restricted to full noun phrases, and hence arguably involves OE-HNPS (section 5.1).⁸

5.4 Auxiliaries

On one view of the history of English, a key ingredient was the development of auxiliaries from lexical verbs (generated in V) to functional elements (generated in INFL) (Lightfoot 1979). This would explain how auxiliaries in Modern English behave differently from lexical verbs, for instance in their placement to the left of negation and in undergoing inversion with the subject. I agree with Denison (1993) and Warner (1990), however, that auxiliaries should be characterized as functional elements in Old English just much as in Modern English. What seems to have happened, then, is not that the auxiliaries acquired a special status, but that the lexical verbs did: they lost their freedom of movement when English replaced object shift by VP-movement.

We assume that a verb becomes a functional element when it expresses, instead of its lexical content, some temporal, modal, or aspectual feature of the clause. We suggest that Cinque's theory of the phrase structural expression of adverbial notions provides a suitable frame of reference: in Cinque's theory, adverbial features (among which those relating to tense, mood, aspect) are expressed by elements occupying the specifier or head position of designated functional projections, which are universally rigidly ordered outside the VP. IJbema (2002) shows that grammaticalization of auxiliaries invariably involves movement of the auxiliary/verb up the tree structure proposed by Cinque (so that a verb of volition may become a modal element expressing probability, etc.). The order of modal/aspectual/temporal elements proposed by Cinque is as in (30), where each element is a functional head projecting an X'-structure with a specifier and a complement:

(30) probability > future > necessity > possibility > obligation > ability/permission

It follows that a verbal element expressing modality (in particular, epistemic modality) is a functional element generated in one of Cinque's functional heads (i.e. outside VP). As Denison (1993) and Warner (1990) have shown, epistemic readings of modal verbs in Old English are well-attested (examples from Denison, 1993: 300 and Warner, 1990: 543):

(31) (a) nu mæg eaþe getimian (possibility) now may easily happen

(b) ic wat bet hine wile tweogan (future/probability)

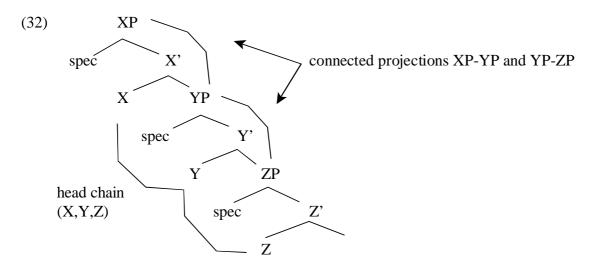
I know that he willdoubt

The same is true for modal auxiliaries in the Modern Continental West-Germanic languages (see Barbiers (1995) for a survey of the various readings, and IJbema (2002) for the historic development).

These observations suggest that the auxiliaries in Old English, Modern English, and Modern Continental West-Germanic are not essentially different. We submit that the peculiar behavior of lexical verbs in English be understood as the result of a different development, namely the one suggested here, where lexical verbs in Modern English are locked inside VP.

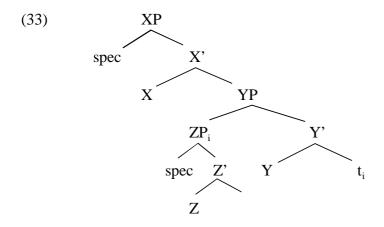
5.5 Verb movement

In line with Zwart (2001), we take verb movement in West-Germanic to be a two-step process: first a chain of heads of connected projections is established, and subsequently one of the positions in the chain is spelled out. The verb-second phenomenon arises when the chain of heads extends to the highest projection, the head of which is then spelled out. The notion of *connected projections* is crucial here: it assumes that two projections α , β are connected when the head of α takes β as its complement. Heads of connected projections are taken to be chained automatically, as a function of the head-complement configuration: ¹⁰



Consider the effect of VP-movement on the availability of head movement. In Old English and Modern Continental West-Germanic, no processes disturb the configuration in (32), so if ZP is taken to be VP, a head chain with the heads of higher connected projections is automatically established, and spell-out rules may specify that the verb be spelled out in one of the heads of these higher projections. As a result, we get more (Continental West-Germanic) or less (Old English) rigid verb second effects.

But in Modern English, the configuration in (32) is disturbed by VP-movement, yielding a structure like (33) (again with ZP=VP):



Here, the connected projections are XP and YP, and the chain of heads includes X and Y, but not Z. As a result, we may expect to find an element generated in Y (say, an auxiliary) to be spelled out in the position of a higher head (as with subject-verb inversion in *Did John leave?*), but the lexical verb in Z=V is no longer part of the chain that creates such spell-out possibilities. Hence, on this theory of verb movement, the idea that Modern English moves the VP collectively instead of the VP-constituents individually immediately yields the result that Modern English lost the verb second pattern with lexical verbs.

We thus get the generalization in (34):¹¹

(34) Generalization XP-movement freezes X

We see now that the 'special behavior' of auxiliaries in Modern English needs no comment: auxiliaries in English behave as expected on the theory of head movement entertained here, and their behavior is not significantly different from that of auxiliaries and lexical verbs in Old English and Modern Continental West-Germanic (or Romance, for that matter; cf. Pollock (1989)). It is rather the Modern English lexical verb that shows special behavior, which is explained by the hypothesis that English developed from an individual to a collective moving language. ¹²

This discussion of the loss of verb second in the history of English glosses over certain distinctions between Old English and Modern Continental West-Germanic languages (Old English is less rigidly verb second in wh-constructions and topicalizations, for instance). These distinctions are real and interesting, but they detract from what appears to me to be the core issue, namely the availability of lexical verb movement in Old English and Modern Continental West-Germanic, and its inavailability in Modern English. As can be seen in Table 1, the loss of lexical verb movement follows closely on the development of verb-initial order, suggesting that there is a connection.

6. LONG RUN EFFECTS

We now turn to some later developments in the history of English syntax, to see if they can be understood as delayed effects of the shift from individual to collective movement (which we date around 1300, cf. Table 1). We restrict ourselves to two cases which seem relatively clear, space preventing us from presenting a more comprehensive treatment.

6.1 The zero reflexive

Older stages of the West-Germanic languages lack a reflexive pronoun (corresponding to Latin *se*) and use an accusative personal pronoun instead. This is still true of Middle English and Middle Dutch, but whereas in Modern Dutch the reflexively used third person pronoun has been replaced by a true reflexive *zich* (a High German borrowing), in Modern English it has disappeared completely (see Table 2 for a survey of various types of reflexive verbs in the three varieties).

TABLE TWO HERE

The disappearance of the reflexive pronoun is also in evidence in middle constructions, where the reflexive of Modern High German has no counterpart in Modern English:¹³

- (35) (a) Dieses Buch liest sich gut this book reads REFL well (German)
 - (b) This book reads well

Steinbach (2002) concludes from these and similar observations that Modern English employs a zero reflexive. The question this raises is why Dutch and other Modern Continental West-Germanic languages retained an overt pronoun to express the reflexive function, whereas Modern English did not.

One suggestion is that in Old English and Continental West-Germanic the reflexive pronoun realizes a separate grammatical function, Object, by moving, individually, to the object position (cf. (17)). But—on the theory we are considering here—in Modern English the entire VP moves to the object position (cf. (3)), hence the reflexive pronoun is not crucial to the realization of the grammatical function Object. In addition, the pronoun finds itself consistently adjacent to the verb, setting up a context for incorporation or weakening.¹⁴

6.2 The generalization of *have* as the perfective auxiliary

In Modern Continental West-Germanic, the perfective auxiliary is *have* with transitive and unergative intransitive verbs, and *be* with unaccusative intransitive verbs:¹⁵

- (36) (a) Ik heb (het boek) gelezen (Dutch)
 I have the book read-PART
 'I have read the book/I have been reading.'
 - (b) De problemen zijnontstaan the problems are originate-PART 'The problems originated.'

Some intransitive verbs show double class membership, in which case a telic interpretation forces unaccusativity and choice of *be*, and an atelic reading forces unergativity and choice of *have*:

- (37) (a) De kinderen zijn naar huis gelopen the children are to house walk-PART 'The children walked home.'
- (Dutch)

(b) De kinderen hebben urenlang gelopen the children have hours-long walk-PART 'The children have been walking for hours.'

This system is also in place in Old and Middle English, but after 1600 we see a slow but steady increase of the use of *have* with unaccusatives, reaching a proportion of over 90% only as late as around 1900 (Rydén & Brorström, 1987).

It is somewhat unclear what triggered the change, and why the development went so slow. The pattern suggests that speakers were for a longer period of time subject to confusion, which has been ascribed to the homophony of the reduced forms of *is* and *has*, and to the double class membership with motion verbs illustrated for Dutch in (37). But these explanations are hardly satisfactory, since the homophony of the reduced forms is restricted to the third person singular, and the double class membership of motion verbs is an integral part of the stable *have/be*-split system of Modern Continental West-Germanic.

There is, however, a class of resultative verbs that can be realized in two ways: as a transitive reflexive construction (38a) and as an unaccusative (38b). In languages featuring the *have/be*-split, the former takes *have* and the latter *be* as the perfective auxiliary:

(38) (a) Hij heeft zich om gekeerd he has REFL around turn-PART

(Dutch)

(b) Hij is om gekeerd he is around turn-PART

both: 'He turned around.'

From Early Modern English on, where the reflexively used pronoun is replaced by a zero reflexive (section 6.1), this inevitably leads to confusion about the correct choice of auxiliary:

- (39) (a) He has turned [$_{REFL} \emptyset$] around
 - (b) He is turned around

From here on it is perhaps not unexpected to find a normative rationalization of the *have/be*-split which reserves *have* for past actions and *be* for present results (as in *he has gone* vs. *he is gone*), ultimately leading to the Late Modern English situation where *be* is no longer used as a perfective auxiliary.

From this perspective, the gravitation towards *have* as the perfective auxiliary is fueled by the emergence of a zero reflexive pronoun, itself made possible by the Middle English innovation to treat the VP as an indivisible unit.

7. LANGUAGE CHANGE

We have argued that major developments in the syntax of English taking place from 1300 on (the

emergence of a fixed VO order, of verb-object adjacency, of a fixed IO-DO order with ditransitives, of postverbal particles, and ultimately of zero reflexives and of *have* as the only perfective auxiliary) are all due to a single parametric change: whereas Old English, like Modern Continental West-Germanic, moves the various VP-constituents individually, Modern English moves the VP collectively to an object licensing position to the left of 'low' adverbs (of the type of *fast*) and adverbials (like *yesterday*). We submit that the change from individual to collective movement represents a significant syntactic change, which may serve to rekindle certain questions about the nature and cause of language change in the history of English.

As is well known, English speaking peoples, who have populated the British Isles since around 500, have been in two stretches of intense language contact: with Nordic people from 875-1045, and with Normandic people (i.e. French speaking Nordic people) from 1065-1265. In a probing survey, Thomason & Kaufman (1988: section 9.8) identify the French/Normandic influence as constituting mainly vocabulary borrowing, ruling out the possibility that the change identified here is an effect of English-French language contact. The status of the Nordic-English language contact, and its ultimate impact, is much less clear, but Thomason & Kaufman (1988: 265, 303, 328) argue against the hypothesis that this first phase of language contact yielded what they call 'shift' or substratum effects, which is what happens when a language shifts as the result of imperfect learning of a target language by a large group of substratum language speakers. These speakers then tend to dress up their own grammar with the vocabulary of the target language, leading to creolization in the more radical cases.

Our findings may cast some new light on these issues, mainly because we find, contrary to Thomason & Kaufman (1988: 264) that the syntactic change that took place around 1300 was not 'normal'. We find no evidence in the history of West Germanic that any other language underwent the shift from individual to collective movement like English did. The question of how this change came into effect is therefore a real one, and the hypothesis that Nordic substratum influence played a role may need to be reconsidered.

Circumstantial evidence that the Middle English changes came in from the North can be found in Kroch & Taylor's (2000: 146) observation that verb-pronoun orders (arguably the ones setting off the change) can be found first, or in higher proportion, in texts from Northern provinces. As is well-known (see Thomason & Kaufman, 1988: 304), the Middle English standard which emerged in London around 1400 was heavily influenced by Northern dialect features (the earlier West Saxon standard stayed outside the sphere of Nordic influence).

To make a convincing case that Nordic substratum influence was involved, one would have to study the social and political circumstances of the language contact situation in more detail. Also, a clearer picture of the syntactic features of the supposed Nordic substratum variety would have to be available.

It may be noted, however, that some of the features of Modern English are found to dominate in creole languages around the world. These include VO order, V-O adjacency, the absence of clitics, the use of Tense/Mood/Aspect particles or auxiliaries, and the absence of true (se-type) reflexives. This is not to suggest that English underwent a process of creolization, but rather that syntactic change (other than through borrowing) seems to tend to imply a shift from individual to collective treatment of VP-constituents. From that perspective, the changes in the history of English may represent universal patterns of language shift, not necessarily the wholesale importation of syntactic features of any single substratum language. We leave these issues for further research.

8. CONCLUSION

We have argued that crucial aspects of syntactic change in the history of English derive from the resetting of a single parameter, the pied piping parameter. Whereas Old English (and the Modern Continental-West Germanic languages) treats VP-material invidually, yielding characteristic patterns of object, particle, and verb placement, Modern English treats the VP as a collective, moving it to a position to the left of certain 'low' adverbs and adverbials. We have argued that movement of a lexical verb out of a raised VP is not allowed, explaining the loss of the verb second phenomenon in Middle English. Other effects of the shift from individual to collective movement are the fixing of VO-order, the emergence of postverbal particles, and the fixing of the order indirect object—direct object. The emergence of a zero reflexive and the development of *have* as the exclusive perfective participle are shown to be long range effects of the shift from individual to collective movement.

The proposal has the advantage that the syntactic developments can be understood as the effects of a single change in parameter setting, and that a uniform phrase structure for all stages of all West-Germanic languages can be maintained.

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FOOTNOTES

- 1 The page numbers refer to Fischer, Van Kemenade, Koopman & Van der Wurff (2000), from which the Old and Middle English examples are taken, unless indicated otherwise.
- 2 The &P in (18e) stands for the Conjunction Phrase, assuming the conjunction to head its own projection; the second member of the coordinate structure is then taken to be the complement of the conjunction, as argued by Munn (1993) and Kayne (1994: 12).
- 3 See Zwart (1994; 1996; 1997a) for more fundamental discussion of headedness in Continental West-Germanic languages.
- 4 On the idea that erosion of the morphological case system, which predates the OV-to-VO shift in the history of English, was the cause of subsequent syntactic changes, see Hawkins (1986), criticized by Haeberli (1999: 417).
- 5 We refer to the pattern in (18) as 'OE-HNPS', to distinguish it from Modern English Heavy NP Shift, which has different properties.
- 6 As discussed in Sprouse (1989: 93f.), the order in (22b) is more marked and requires focus on the indirect object.
- The connection between the fixed IO-DO order and the loss of morphological case (Hawkins 1986) is less tight, since case syncretism was in effect as early as 1150. Also, a virtually caseless language like Modern Dutch to some extent shows the same IO/DO flexibility as Modern German and Old English (Zwart, 1997b: 32).
- 8 See Fischer et al. (2000: chapter 6) for more detailed discussion of the history of particle constructions in English. There is some evidence to suggest that the particle was the first element to reclaim its VP-internal position. As noted in Fischer et al. (2000: 207), Middle English Object-Verb-Particle orders are 'very frequent', and the Ulster Scots dialect seems to have settled on this pattern in perfective constructions (Robinson, 1997: 191).
- It is true, however, that Modern English, unlike Modern Continental West-Germanic, lacks modal infinitives, and, presumably in connection with that, does not allow stacking of auxiliaries. This difference remains unexplained. On the other hand, it can be shown that Dutch auxiliaries have special morphophonological properties just like auxiliaries in Modern English, such as contraction, seen in the English negative auxiliaries *can't*, *won't* etc.and in the Dutch enclitic forms *zak*, *wik* < *zal'k*, *wil'k* 'shall I, will I', for which see Booij (1985).
- 10 We refer to Zwart (2001) for theoretical and empirical motivation of this view on head movement, and to Zwart (2003) for a discussion of current alternatives which reduce head movement to XP-movement.
- 11 For other implementations of the idea that elements in specifier positions cannot participate in head movement phenomena, see Baker (1988: 100) and Harley (2003). (On the other hand, Baker, 1988: 178 does allow for head incorporation out of a VP that has moved to the

- specifier position of CP. From our perspective, this analysis would need to be reconsidered.)
- 12 Another difference between auxiliaries and lexical verbs in Modern English follows as well, namely the fact that only auxiliaries license VP-deletion (*John saw Mary leave and Bill did/*saw too*). This now follows since the complement of the auxiliary, the VP, is treated as a unit in Modern English, but the complement of a lexical verb, an IP or CP, is not. As expected, VP-deletion of the Modern English type is absent from Modern Continental West-Germanic, as well as from Old and even Middle English (cf. Mustanoja 1960: 543).
- 13 Modern Dutch uses no reflexive pronoun in middle constructions, but middles in Dutch have different properties from middles in German and English, for instance in allowing the subject of the middle construction to be a non-argument of the middle verb (Hoekstra & Roberts, 1993).
- 14 The zero reflexive does not occur in Modern English 'exceptional case-marking' contexts, such as *John heard himself ramble*. Arguably, the reduction of the pronoun is prohibited here, since the pronoun expresses an independent argument role, that of external argument of the embedded verb. In this context, the personal pronoun is replaced by another innovation, the complex anaphor *himself*. See Van Gelderen (2000) for a fuller description of the history of reflexive pronouns in English.
- 15 E.g. Hoekstra (1984); on the distinction between unergative and unaccusative intransitive verbs, see Levin & Rappaport Hovav (1995).
- 16 It would be interesting to find that verb-particle orders emerged in the North first as well, but we have been unable to ascertain that at this point.

phenomenon	Old English before 1100	Modern English after 1500	time of change
object position (embedded clause)	OV, nonadjacent	VO, adjacent	1300-1350
object order	free	IO-DO	44
particle position (embedded clause)	preverbal	postverbal	
subject/verb inversion	all types of verbs	only w. auxiliaries	1400
position lexical verb (main clause)	outside VP	inside VP	1500
reflexive	= pronoun	= zero	Early Mod Eng
perfective auxiliary	have/be	have	19th century

Table 1: syntactic change in the history of English

	Middle English	Modern English	Modern Dutch
motion verbs	hasten hym	haste	zich haasten
cognition verbs	remembren hym	remember	zich herinneren
psych verbs	deliten hym	delight	≈zich verheugen
behavior verbs	beren hym	behave	zich gedragen
pseudo-reflexives	strecchen hym	stretch	zich uitstrekken

Table 2: reflexive verbs in Middle English, Modern English, and Modern Dutch