

Speculations on the syntax of subordinate clauses in Old English

Eric Haeberli^{*}

School of Linguistics & Applied Language Studies, The University of Reading

Abstract. This paper considers some issues that recent proposals made for the syntactic analysis of Old English main clauses raise for the analysis of subordinate clauses. Two possible approaches are explored, one involving a rich CP-structure as outlined by Rizzi (1997) and one based on proposals made by Bobaljik and Thráinsson (1998) with respect to the syntax of verb movement. The latter approach is shown to have the advantage of capturing main clause/subordinate clause asymmetries and of shedding light on some additional issues such as the syntax of conjoined clauses and the loss of verb movement in the history of English.

1. Introduction

The word order patterns found in the early stages of the history of English and the adequate structural analysis of these patterns have given rise to much discussion in the literature. In her seminal work on Old English (OE), van Kemenade (1987) argues that the main word order properties of OE can be analyzed in terms of proposals that have been made for the modern Germanic SOV/Verb Second languages like Dutch or German. Adapted to the standard X-bar-theoretic analysis of Dutch or German, van Kemenade's proposal means that OE has systematic verb movement to C and XP movement to [Spec, CP] in main clauses and that it has head-final projections below C (I and V) which give rise to verb-final word orders with finite verbs in subordinate clauses or with infinitives. Although van Kemenade's analysis accounts for many of the word order patterns found in OE, it has been shown in more recent work that a parallel treatment of OE and Dutch/German fails to capture certain properties of the syntax of OE in a satisfactory way.

One of the problems a parallel analysis of OE and Dutch/German raises is that the V2 syntax of OE has some characteristics which cannot be found in the modern Germanic languages. First, as often observed in the

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literature (cf. e.g. Fourquet 1938, van Kemenade 1987, Pintzuk 1991, van Bergen 2000), main clauses involving pronominal subjects often manifest Verb Third (V3) orders. This is illustrated in (1) where the verb follows both a fronted constituent and a subject pronoun, thus occurring in third position rather than right after the clause-initial constituent in second position (fronted constituent in brackets, subject in italics, finite verb in bold print).

- (1) a. [þæt] *þu* **meaht** swiðe sweotole ongitan (Boethius, 88.14)
that you can very easily understand
'You can very easily understand that.'
- b. and [mid gelæredre handa] *he* **swang** þone top mid swa
micelre swiftnesse þæt ... (Apollonius, 20.13.22)
and with skilful hand he swung the top with such
great swiftness that ...
'And with skilful hand he swung the top with such great
swiftness that ...'

The main exception to the word order pattern in (1) with pronominal subjects can be found in what has been referred to as operator-fronting contexts (i.e. in questions, negative clauses but also in clauses containing some adverbs which are not typically operators such as *þa* ('then'), *þonne* ('then') and *nu* ('now')). In these contexts, the finite verb occurs to the left of the subject and we obtain genuine V2 orders, as shown in (2).

- (2) a. [hwi] **sceole** *we* oþres mannes niman (Ælfric LS 24.188)
why should we another man's take
'Why should we take those of another man?'
- b. [þa] **ge-mette** *he* sceaðan (Ælfric LS 31.151)
then met he robbers
'Then he met robbers'

The contrast between (1) and (2) is very systematic and it is one that cannot be found in the modern Germanic V2 languages. In these languages, subject-verb inversion obligatorily occurs not only in the context shown in (2) but also in the context in (1). Thus, the fact that V2 orders generally cannot be found in the context illustrated in (1) in OE (cf. Koopman 1998, Haeberli to appear a for quantitative data) is not expected in terms of a syntactic analysis which treats OE and modern Germanic languages like Dutch or German alike.

With respect to the V2 phenomenon, there is a second property of OE which suggests that OE does not share its basic syntax with Dutch or German. Once we consider clauses involving non-pronominal (i.e. full DP) rather than pronominal subjects, we can observe that subject-verb inversion can be found in OE when a non-operator is fronted and the subject is not a personal pronoun. Thus, in contrast to the cases shown in (1) involving subject pronouns, V2 patterns occur in (3) where the subject is non-pronominal.

- (3) a. [Ðas gifu] **sealde** *seo ceasterwaru* on Tharsum Apollonio
 þam tiriscan (Apollonius, 16.10.16)
 This gift gave the citizens in Tharsus Apollonius the Tyrian
 'The citizens of Tharsus gave this gift to A. the Tyrian.'
- b. [On his dagum] **sende** *Gregorius* us fulluht
 (Chronicle A, 18.565.1)
 In his days sent Gregory us baptism
 'In his time, Gregory sent us Christianity.'

Given that the Dutch or German equivalents of the sentences in (3) have the same word order, the data in (3) would be in line with a parallel syntactic analysis of OE and Dutch/German. However, what is problematic now for such a parallelism is the fact that fronting of a non-operator in a main clause with a full DP subject does not always give rise to subject-verb inversion in OE. Instead, we can find V3 orders, as illustrated in (4), alongside of the V2 orders shown in (3).

- (4) a. [ðone] *Denisca leoda* **lufiað** swyðost (Wulfstan, 223.54)
 that Danish people love most
 'The Danish people love that one most'
- b. [æfter þan] *þæt lond* **wearð** nemned Natan leaga
 (Chronicle A, 14.508.1)
 after that that land was named Natan lea
 'After him, that land was called Netley.'

In Dutch or German the word orders in (4) would be ungrammatical. In OE however, they occur fairly regularly although less frequently than the orders in (3) (around 70% of subject-verb inversion as in (3) vs. 30% of non-inversion as in (4) in the data discussed in Haeberli to appear a; cf. also Koopman 1998 for similar observations). This contrast between OE and Dutch/German with respect to the occurrence of V3 patterns again

suggests that an identical syntactic analysis of these languages is problematic.

The observations made so far shed doubt on the assumption that V2 phenomena in OE can be analyzed along the lines of the standard analysis of the modern Germanic V2 languages in terms of V-movement to C and XP-movement to [Spec, CP]. As for the second consequence of analysing OE like Dutch/German, i.e. the assumption that projections below CP are head-final, it has also been shown to be problematic. Thus, data concerning the syntax of particles and object pronouns discussed by Pintzuk (1991) and properties of the syntax of negation discussed by Haeberli and Haegeman (1995) suggest that the projections below C are not exclusively head-final but that the inflectional domain contains (at least optionally) a head-initial projection.

Given the problems arising with an approach which treats OE and Dutch/German alike, alternative structural analyses of OE have been proposed in much recent work. If we focus on the data in (1) to (4), an analysis of the basic syntax of OE should be able to account for the following main properties of main clauses:

- (a) In operator-fronting contexts, subject pronouns (and full DP subjects) always follow the finite verb (cf. example 2).
- (b) In contexts in which a non-operator is fronted, pronouns precede the finite verb (cf. 1).
- (c) Full DP subjects can both precede and follow the finite verb in clauses involving non-operator fronting (cf. 3 and 4).

In order to capture these facts, most recent analyses of OE make the following two main assumptions (cf. e.g. Cardinaletti and Roberts 1991, Fischer et al. 2000, Haeberli 2000, to appear b, Hulk and van Kemenade 1997, Kroch and Taylor 1997, Pintzuk 1991, 1993):

- (i) Finite verbs move to two potential landing sites, namely to C when an operator is fronted and to the head of a head-initial inflectional projection below C in cases of non-operator fronting. As for the nature of the lower target of V-movement, various proposals have been made in the literature. Here, I will adopt the proposal in Haeberli (2000) where this head is identified as Agr on the basis of some observations related to the Middle English dialect variation discussed by Kroch et al. (1997, 2000).
- (ii) Different types of subjects occur in different structural positions. Pronouns, being clitics or weak pronouns, have to occur in a high position (above the Agr-head), full DP subjects can remain in a lower position (below the Agr-head). I will assume here that the lower subject position is [Spec, TP].

These proposals can be summarized as follows (targets of V-movement in bold, subject positions in italics).

- (5) [CP [XP] **C** [_{AgrP} *SU1* **Agr** [_{TP} *SU2* ...]]]

The structure in (5) accounts for the properties (a) to (c) above in the following way:

- (a) Fronting of an operator XP triggers V-to-C movement. A subject therefore always follows the finite verb regardless of whether it occurs in the subject position *SU1* or in *SU2*.
- (b) In contexts of non-operator fronting, the finite verb only moves to Agr. Subject pronouns, which have to move to the higher subject position *SU1*, therefore generally precede the finite verb,
- (c) Full DP subjects can remain in the position *SU2* and can therefore occur postverbally in contexts of non-operator fronting. Optionally (and less frequently), non-pronominal subjects can also move to *SU1*, thereby giving rise to V3 orders. As for the difference between the occurrence of full DP subjects in *SU1* or *SU2*, it is argued in Haeberli (to appear b) that the contrast is due to the presence or absence of an empty expletive (expletive *pro*) in a derivation. If a derivation is based on a numeration containing an empty expletive, the expletive is inserted in *SU1* and checks the relevant features in AgrP. The full DP subject thus can stay in *SU2*. However, if the numeration does not contain an empty expletive, it is the full DP subject itself which has to move to *SU1* for feature checking in AgrP.

The approach outlined above provides a simple account of the distinctive behaviour of OE with respect to the syntax of V2/V3 in main clauses, and, as shown in Haeberli (2000, to appear b), one of the main assumptions on which it is based (i.e. the distinction of pronominal and full DP subjects in terms of different subject positions) is supported by cross-linguistic evidence from the modern Germanic languages. An analysis of the basic syntax of OE along these lines therefore seems more promising than an analysis in which OE is dealt with like modern Germanic languages such as Dutch or German. However, so far we have only been looking at the syntax of main clauses. Once we consider subordinate clauses, the proposals made above seem to raise an important problem. Recall the structure in (5) above:

- (5) [CP [XP] **C** [_{AgrP} *SU1* **Agr** [_{TP} *SU2* ...]]]

If (5) is applied to a subordinate clause, we would expect the following scenario to be possible: (i) C is filled by a complementizer; (ii) the finite verb moves to Agr ; (iii) SU1 can be occupied by an empty expletive if the subject is non-pronominal. The consequence of (i) to (iii) would be a subordinate clause with the word order 'complementizer-finite verb-full DP subject' (henceforth 'C-V-SU'). Furthermore, given that, in terms of the analysis discussed earlier, empty expletive insertion in AgrP must occur fairly regularly in main clauses (i.e. in particular each time we get subject-verb inversion when a non-operator is fronted), we would expect this word order option to occur quite frequently. However, this expectation is clearly not borne out. The order 'C-V-SU' is not a productive word order pattern in OE. Instead the subject generally precedes the verb in OE subordinate clauses.

Given these observations, the question arises now as to how the analysis of matrix V2/V3 discussed in this section can be extended to the analysis of OE subordinate clauses without leading to the wrong prediction that the word order 'C-V-SU' should be a productive word order pattern in OE. This is the issue that the remainder of this paper addresses.¹ Section 2 starts with some general remarks on the syntax of subordinate clauses in OE. Then, two possible analyses of OE subordinate clauses will be outlined, and it will be shown that only one of them can capture the main clause/subordinate clause asymmetries found in OE. Finally, section 3 briefly explores some consequences of this approach for other aspects of the syntax of OE and Middle English.

¹ It should be pointed out here that one potential solution to this issue has already been discussed in the literature, namely by Kroch and Taylor (1997:306ff.). Their proposal is based on two assumptions: (i) Empty expletives incorporate into Infl (or Agr in terms of the structure in 5) and therefore do not occupy [Spec, IP]; (ii) There is a V2 constraint holding at the level of IP in OE which, in main clauses, is satisfied by the topic XP on its way to [Spec, CP] (i.e. by a trace) and, in subordinate clauses, generally by the subject due to discourse factors which disfavour fronting of non-subjects in subordinate clauses. However, both of these assumptions are fairly idiosyncratic. For empty expletive incorporation and for V2 at a structural level (IP) below the target of topics (CP), there is no cross-linguistic evidence, and I will therefore explore an alternative approach in this paper.

2. Subordinate clauses in OE – an analysis

2.1 Some preliminary observations

One of the main properties of OE subordinate clauses is that they frequently have word order patterns in which the finite verb occurs in final position. This is illustrated in (6) (examples from van Kemenade 1987:16/19).

- (6) a. þæt ic þas boc of Ledenum gereorde to Engliscre spræce
awende (AHTh, I, Pref, 6)
 that I this book from Latin language to English tongue
 translate
 '... that I translate this book from Latin to English.'
- b. þæt Darius hie mid gefeohte secan **wolde** (Or, 45.31)
 that Darius them for battle visit wanted
 '... that Darius wanted to seek them out for a battle.'

As mentioned earlier, the frequent occurrence of this type of word order in OE was one of the main reasons for van Kemenade's (1987) analysis of the basic syntax of OE along the lines of proposals made for Dutch or German. It seems that, as in those languages, finite verbs generally occur towards the front of main clauses in OE but towards the end of subordinate clauses, and this asymmetry could be accounted for by assuming that in main clauses the finite verb moves to the structural position occupied by the complementizer in subordinate clauses (i.e. C) and that the inflectional projection below C is head-final. As for subordinate clauses such as those in (7) below where constituents occur to the right of the finite verb, they are analyzed in terms of rightward movement (extraposition) of the postverbal elements (examples from van Kemenade 1987:33/34).

- (7) a. þæt hit **sie** feaxede steorra (Parker 892)
 that it is a long-haired star
- b. forðam ðe he hine **ætbræd** fram flæsclicum lustum
 (AHTh, I, 58)
 because he himself withdrew from fleshly lusts
 '... because he withdrew himself from fleshly lusts.'

Although an analysis in terms of head-final projections below CP and, in cases like (7), in terms of a productive rightward movement option accounts for the main syntactic properties of OE subordinate clauses, it has

been shown that these assumptions are not sufficient to deal with the entire range of word order patterns. For example, Pintzuk (1991, 1993) observes that the following type of examples raises problems for van Kemenade's (1987) analysis of OE (from Pintzuk 1991:91/92).

- (8) a. þæt he **wearp** þæt sweord *onweg* (Bede 38.20)
 that the threw the sword away
 '... that he threw away the sword'
 b. gif Crist **scute** ða *adun* (ÆCHom i.170.21-22)
 if Christ casts then down
 '... if Christ then casts himself down'

In terms of an analysis in which finite verbs always occupy the head position of a head-final inflectional projection in subordinate clauses, the word orders in (8) would have to be derived through rightward movement of several elements including the clause-final particles. However, based on cross-linguistic observations and on statistical evidence from OE, Pintzuk (1991, 1993) convincingly argues that it would not be plausible to assume that particles (in italics in 8) can undergo rightward movement. The only way to obtain the order 'finite verb-particle' as in (8) is therefore by assuming that the finite verb occurs in the head position of a head-initial projection. Pintzuk (1991) also discusses data related to the distribution of pronouns and to the constructions referred to as Verb Raising and Verb Projection Raising which lead to the same conclusion, i.e. that certain OE subordinate clauses must be analyzed in terms of a head-initial IP (cf. also Haerberli and Haegeman 1995 for additional evidence from Verb Projection Raising).

Given these observations and given the data in (6) which are most straightforwardly analyzed as involving a finite verb occurring in the head position of a head-final projection, Pintzuk (1991, 1993) proposes that the projection below C (i.e. IP in her analysis) can be either head-final or head-initial in OE.² This proposal is based on the assumption made in much recent work in diachronic syntax (cf. Kroch 1989, 2000, Lightfoot

² In terms of a theory which bans head-final projections (universal base hypothesis, cf. Kayne 1994), the data in (6) would have to be analyzed as involving movement of a large constituent to the left. The variation would then be one between moving such a large constituent and not moving it rather than one between a head-initial and a head-final projection. I will continue using the terminology referring to variation in directionality here, assuming that the basic proposals made in these terms could be reformulated fairly straightforwardly within a universal base framework (cf. also fn. 10 below).

1999 and references cited there) that children learning a language in the course of a syntactic change can acquire two (or more) grammatical systems and thus may exhibit a kind of diglossia which accounts for variation that can be found during a period of transition from one grammar to another. Pintzuk thus proposes that OE is an intermediate stage in a change from a grammar in which IP is head-final to a head-initial IP grammar and that during this stage speakers acquire both parametric options (double base hypothesis).

The conclusions reached on the basis of subordinate clauses thus converge with those discussed in the previous section for main clauses in the sense that satisfactory analyses of both main and subordinate clauses seem to depend on the assumption that the inflectional projection below CP can be head-initial in OE. However, an important problem arises now. Although verb-final main clauses can be found in OE, the finite verb occurs towards the beginning of the clause in a large majority of main clauses. In terms of Pintzuk's double base hypothesis, this suggests that IP (or AgrP in terms of a richer structure as in 5 above) is head-initial in most main clauses and head-final only rarely. For subordinate clauses however, we obtain the opposite picture. The finite verb tends to occur towards the end of a subordinate clause much more frequently than towards the beginning of the clause, suggesting that IP/AgrP is generally head-final rather than head-initial in subordinate clauses. In the data Pintzuk (1991:339) discusses, head-initial IP occurs in 85% of the main clauses and in 47% of the subordinate clauses and, as Pintzuk (1991:339) observes herself, this striking contrast between the two clause types remains unexplained in terms of the double base hypothesis. If there is variation with respect to the directionality of IP/AgrP, one might expect this variation to occur in roughly similar frequencies across contexts.

In conclusion, two problems remain unsolved at this point in terms of the analyses discussed so far. First, it is not clear why the word order 'C-V-SU' is not a productive pattern in OE subordinate clauses. And secondly, the main clause/subordinate clause contrast with respect to word orders is unexpected. In the next two subsections, two options for dealing with the first problem are explored and it will be shown that only one of them allows us to deal with the second issue at the same time.

2.2 Analysis 1: Split CP

The first option for dealing with the problem raised by the absence of 'C-V-SU' orders in subordinate clauses is based on an additional observation

that can be made with respect to the syntax of main clauses. Recall the structural analysis of main clauses given in (5) above, repeated here in (9).

- (9) [CP [XP] C [_{AgrP} *SU1* Agr [_{TP} *SU2* ...]]]

As discussed in section 1, the structure in (9) has been proposed in order to account for the behaviour of OE with respect to V2 in contexts of non-operator fronting in main clauses. For such contexts, I have been assuming that the verb moves only to Agr and that full DP subjects frequently remain below Agr in the *SU2* position because *SU1* can be occupied by an empty expletive (hence V2), whereas subject pronouns have to move to *SU1* and full DP subjects only occasionally move to *SU1* (hence V3).

One issue we have not addressed so far, however, is the analysis of main clauses in which no non-subject XP is fronted to clause-initial position in (9). If the subject is non-pronominal and stays in *SU2* in (9), the absence of XP fronting would be expected to lead to Verb First (V1) word order. Furthermore, we would expect this word order to be quite frequent because main clauses often do not have a fronted non-subject XP and because the evidence from contexts involving non-subject fronting suggests that full DPs occur more frequently in *SU2* than in *SU1*. Yet, such an expectation is not borne out. Although V1 clauses can be found in OE, they are not very frequent. Furthermore, V1 also occurs with pronominal subjects, suggesting that it is V-movement to C rather than to Agr which derives most V1 clauses (cf. e.g. Pintzuk 1991, 1993). As for cases in which the verb moves to Agr and no non-subject XP is fronted, they generally seem to lead to 'subject-verb' orders instead, the most frequent main clause word order pattern in OE.

At first sight, the problem raised by the low frequency of V1 in main clauses lacking non-subject fronting and the problem raised by the absence of 'C-V-SU' in subordinate clauses seem to be very similar. Both cases involve some kind of a V1 pattern – in main clauses the verb would be in clause-initial position and in subordinate clauses the verb would be in initial position after the complementizer. Given this parallelism, it would be conceivable that an analysis which accounts for main clauses could deal with subordinate clauses as well. Let us therefore briefly reconsider the syntax of main clauses here.

Given the observations made above, the main remaining question for the analysis of main clauses is why, in the structure in (9), a subject generally seems to precede rather than follow the finite verb when no other XP is fronted and, hence, why we do not find regular V1 orders in OE main clauses. There are two main possibilities for dealing with this issue.

First, it could be argued that the occurrence of the subject in the position SU1 or the position SU2 in (9) is determined by discourse factors which require the occurrence of some constituent in preverbal position. The effect of these factors would be that, when some other element is fronted, the subject tends to stay in the SU2 position, whereas it moves to SU1 if no other element occurs in clause-initial position. Yet, such a proposal seems problematic. Apart from the fact that it would have to be made more precise to be convincing, the data involving non-operator fronting suggest that it is very difficult to identify clear (discourse or other) factors which determine the placement of subjects in the two positions SU1 and SU2 (cf. Haeberli to appear a, Koopman 1998).

Let us therefore consider an alternative option. According to the traditional analysis of the modern Germanic V2 languages, V2 is the result of movement of the finite verb to C and of some constituent to [Spec, CP].³ As discussed earlier, there are good reasons to assume that the finite verb does not always move to C in OE main clauses. However, I propose now that the second property of V2 languages does hold in OE. Thus, I will assume that OE declarative main clauses have a CP whose specifier always has to be filled by some constituent. If a topic XP is fronted to CP (topicalization), the subject remains either in SU1 or SU2. If no other element moves to the [Spec, CP] position however, it is the subject which moves there. This movement is the default option for filling [Spec, CP] because the subject is the closest available constituent that can be attracted to CP. As a result, main clauses involving verb movement to Agr are generally not V1 but at least one constituent precedes the finite verb.⁴

³ But cf. Travis (1984) and Zwart (1997) for the proposal that CP is only involved in derivations in which a non-subject is fronted but not in subject-initial main clauses. Here, I will follow the traditional approach according to which all V2 clauses involve CP (cf. e.g. Vikner 1995).

⁴ An additional issue might arise at this point though. As discussed earlier (cf. point (c) after example 5), the occurrence of a full DP subject in the lower subject position (SU2) can be argued to be related to the presence of an empty expletive in the higher subject position (SU1). The question that arises then is whether it would not be possible for an empty expletive in SU1 to subsequently move to CP in order to fill the [Spec, CP] position, thereby giving rise to V1 since no overt element precedes the finite verb in Agr. This option can be excluded on the basis of cross-linguistic evidence. As often observed in the literature, empty expletives only occur in subordinate clauses or postverbally in main clauses in the modern Germanic V2 languages (cf. e.g. Vikner 1995:226). One way to account for this is to assume that empty expletives are not licensed in [Spec, CP] but only in a position below CP. For OE, this means that an empty expletive cannot leave the [Spec, AgrP] position and it is therefore an overt

Let us consider then whether this approach could be extended to the 'C-V-SU' problem that arises in the context of subordinate clauses. At first sight, the answer seems to be negative. In terms of the structure in (9) above, subject fronting to [Spec, CP] would mean that the subject is fronted not just to the left of the verb in Agr but also to the left of the complementizer. But the word order pattern 'SU-C-V' is not attested in OE, and, hence, fronting to [Spec, CP] in (9) cannot be the explanation for the absence of 'C-V-SU' orders in OE subordinate clauses.

However, there would be an alternative to (9) which solves this problem. If we assume that OE allows CP-recursion (cf. e.g. Vikner 1995 for modern Icelandic or Yiddish) or that OE has a rich CP-structure (split CP, cf. e.g. Rizzi 1997) in which the complementizer is inserted above a topic position, 'subject-verb' orders could be derived in subordinate clauses as in main clauses and the absence of 'C-V-SU' orders in subordinate clauses could be accounted for. In terms of a split CP, the structure in (9) could be reanalyzed as shown in (10) (where ForceP, Top(ic)P and Fin(iteness)P are projections in the CP-domain):

$$(10) \quad [\text{ForceP Force } [\text{TopP XP Top } [\text{FinP Fin } [\text{AgrP } \textit{SU1 Agr } \textit{SU2} \dots]]]]$$

(10) allows us to analyze the absence of 'C-V-SU' in subordinate clauses in terms of the proposals made for 'subject-verb' orders in main clauses. The basic assumption would be that the specifier of TopP always has to be filled by some constituent, the subject being the default constituent in TopP.⁵ For main clauses, (10) does not make any difference as compared to (9) apart from the fact that the target of fronting is identified as [Spec, TopP] rather than as [Spec, CP]. As for subordinate clauses, however, the

constituent which has to occupy [Spec, CP]. Hence the absence of V1 in contexts of V-movement to Agr.

Note however that there is one point which distinguishes OE from those modern Germanic languages which license empty expletives. Whereas in the latter expletives can move to [Spec, CP] and then be realized overtly, this option does not seem to be a productive one in contexts involving an expletive and a nominal associate in OE. Expletive-associate constructions with an overt expletive only seem to become productive as a result of the loss of empty expletives in the Middle English period.

⁵ (10) omits a potential focus projection (FocP) between ForceP and FinP within the split CP structure proposed by Rizzi (1997). It is conceivable that some fronted constituents in OE could indeed be analyzed as focus rather than as topic, so the requirement might be more general than suggested in the text. Thus, the condition may be that simply some specifier position of any type in the CP domain has to be filled (either [Spec, TopP] or [Spec, FocP]). For simplicity's sake, I will leave focus movement aside in my discussion.

consequence of (10) is that fronting of a subject to the CP-domain does not necessarily lead to a 'SU-C-V' order because we can assume now that complementizers in OE are inserted in Force. Hence, fronting of a subject to the CP-domain gives rise to the order 'C-SU-V', and 'C-V-SU' orders are ruled out because the [Spec, TopP] position would remain unfilled.

In terms of these proposals, the problem raised by the absence of 'C-V-SU' orders can be solved. However, another problem arises immediately. The analysis discussed in the previous paragraph implies that the syntax of main clauses and the syntax of subordinate clauses are to a large extent parallel because all syntactic operations in main clauses take place in the structural domain below the position occupied by complementizers in subordinate clauses. This consequence is problematic for two main reasons:

- (a) Since we can often find subject-verb inversion in main clauses ('XP-V SU'; cf. example 3 above), we would expect this word order to occur fairly regularly in subordinate clauses as well. Yet this expectation does not seem to be borne out. As observed by van Kemenade (1997), subject-verb inversion in subordinate clauses is very rare and, when it occurs, tends to occur in quite specific contexts. This suggests that subordinate clauses do not exhibit main clause syntax.

It should be pointed out, however, that the contrast between main and subordinate clauses with respect to subject-verb inversion may not necessarily be fatal for an analysis which treats main and subordinate clauses as syntactically equivalent. In modern V2 languages like Icelandic or Yiddish where topicalization and, thus, subject-verb inversion is grammatical in both main and subordinate clauses, inversion seems to occur much less frequently in subordinate clauses than in main clauses.⁶ It has therefore been suggested (cf. Kroch and Taylor 1997:309) that fronting of a non-subject in subordinate clauses may be constrained by discourse factors. Thus, discourse-based information structure might favour topicalization in main clauses whereas in subordinate clauses the discourse motivation for topicalization is very weak. If discourse factors impose restrictions on embedded topicalization in modern Icelandic or Yiddish, the same analysis could be extended to OE, and it could therefore be argued that the rarity of subordinate clauses with a non-subject preceding the finite verb and the contextual restrictions found with the attested cases are

⁶ Maling (1990:89, fn. 5) refers to Kossuth (1978) who observes that an average of 6.5% of embedded clauses begin with non-subjects in Icelandic texts as opposed to 20% of main clauses.

not the effect of a syntactic constraint on embedded topicalization but rather the consequence of discourse restrictions. However, much more work on word order in OE subordinate clauses is needed to draw any firm conclusions on whether topicalization asymmetries between main and subordinate clauses can be accounted for in pragmatic terms rather than in syntactic terms. For the time being, I will follow van Kemenade (1997) in assuming that there is a syntactic motivation for this asymmetry. Support for an asymmetric approach comes from another domain of the grammar.

- (b) As observed in section 2.1 already, the finite verb frequently occurs in final position in OE subordinate clauses. Although verb-final word order does occur in main clauses as well, its frequency is very low (cf. e.g. Koopman 1995). This suggests that there is a substantial contrast between main clauses and subordinate clauses with respect to the distribution of finite verbs. But if, as suggested by the Split-CP analysis discussed above, the syntax of subordinate clauses was determined by the same syntactic properties as main clauses, such a contrast would be surprising. In terms of such an approach, the landing site of V-movement would have to be the same in both main and subordinate clauses, i.e. Agr in (10). As a consequence, the main/subordinate contrast could only be captured under the assumption that AgrP can either be head-final or head-initial and that the frequency of head-initial AgrP is much higher in main clauses than in subordinate clauses (cf. Pintzuk 1991). But what remains unexplained then is why there is such a substantial contrast between main and subordinate clauses with respect to the directionality of AgrP. This is exactly the second problem identified in section 2.1 and the split-CP analysis discussed in this section thus would not have anything to contribute to this problem arising with the syntax of subordinate clauses in OE.

In summary, a possible analysis of the non-productivity of 'C-V-SU' word orders in OE subordinate clauses could be based on the following two main assumptions: (i) OE has an XP position in the CP-domain which always has to be filled (e.g. [Spec, TopP]; the subject being the default option for filling this position). This assumption is needed independently for the analysis of main clauses (i.e. 'SU-V...' orders in main clauses). (ii) The complementizer is above this XP position (in Force). The consequence of these assumptions is that some XP generally has to precede the verb and that therefore the absence of 'C-V-SU' orders can be accounted for. But in addition, this approach has a less desirable consequence. It implies that the main properties of the syntax of subordinate clauses should be to a large extent identical to those of main clauses, an expectation which is not borne

out. Subordinate clauses differ from main clauses in two important aspects: First, subject-verb inversion is very restricted in subordinate clauses, and secondly main and subordinate clauses have different characteristics with respect to the placement of finite verbs. Given these potential problems, I will explore an alternative analysis in the next section which accounts both for the absence of 'C-V-SU' orders in subordinate clauses and for the syntactic asymmetries between main and subordinate clauses.⁷

2.3 Analysis 2: Different targets for head movement

In analyses of the modern Germanic languages, asymmetries between main and subordinate clauses have generally been argued to be the result of the availability/unavailability of certain projections as the target for movement in the different clause types. Thus, for languages like German or Dutch, it has generally been assumed (cf. den Besten 1983 and much subsequent work) that V2 orders are the result of verb movement to C and of XP movement to [Spec, CP] and that the word order in subordinate clauses is SOV rather than V2 because verb movement to the C position is blocked by the presence of a complementizer in C and the verb therefore occurs in the head position of a head-final projection below C. In this section, I will propose an analysis of OE which is based on a similar idea. More precisely, pursuing proposals made by Bobaljik and Thráinsson (1998), I will argue that in main clauses the finite verb moves higher in OE than in subordinate clauses.

The syntax of verb movement has received considerable attention in the generative literature. An important issue in this context has been the question why verbs undergo movement in some languages but not in others. With respect to verb movement to an inflectional head, it has often been proposed that it is related to the richness of the verbal agreement morphology in a language (cf. e.g. Holmberg & Platzack 1995, Roberts 1985, 1993, Rohrbacher 1994, Vikner 1995). Thus, in languages with a

⁷ It should be pointed out however that the claim made here is not necessarily that main clause syntax in subordinate clauses is entirely impossible in OE. Thus, it may very well be that occasionally a subordinate clause is best analyzed along the lines discussed in this section (as for example certain subordinate clauses after bridge verbs in otherwise asymmetric V2 languages like the Mainland Scandinavian languages). The main point here is simply that an approach in which subordinate clauses are systematically analyzed in terms of main clause syntax does not seem to be sufficient to account for word order in OE subordinate clauses and that therefore an alternative option must be available. Cf. also van Bergen (2000:216) for the conclusion that main clause syntax may sometimes occur in subordinate clauses but not consistently.

rich verbal agreement morphology, finite verbs move to the inflectional domain, whereas in languages with no or impoverished morphological agreement, verbs tend to remain in V. Although this correlation is fairly adequate from a descriptive point of view, it has been difficult to provide a theoretical explanation for the verb movement properties found across languages. A possible solution to this problem has been proposed by Bobaljik and Thráinsson (1998) (henceforth B&T). They argue that the syntactic structure of a language is related to its morphological properties and that the presence or absence of verb movement is due to distinct functional projections. More precisely, B&T's analysis of verb movement is based on the following main assumptions made within the Minimalist framework:

- (i) Elements move for the purposes of feature checking (cf. Chomsky 1995). Inflectional heads and V have features which require checking against one another.
- (ii) Features are checked in any type of local configuration (head-specifier, head-adjoined head, and, *contra* Chomsky (1995), head-complement).
- (iii) The splitting of Infl into projections such as AgrP and TP is parametrized (*Split IP Parameter* (SIP)). In languages in which a verbal agreement morpheme can co-occur with a tense morpheme, IP has to be split and the clause has the format AgrSP-TP-AgrOP-VP. In languages in which agreement does not co-occur with tense, the clause structure can consist of an unsplit IP and the clause structure then simply consists of IP-VP. The correlation between the co-occurrence of agreement and tense morphology and the format of the clause structure is based on the assumption that inflectional morphemes correspond to inflectional heads in the syntax. Hence, a single inflectional head is insufficient for a language with co-occurring tense and agreement morphemes.

Consider now the consequences of these proposals. A language like Modern English lacks the morphological properties for a split IP because agreement and tense morphemes do not co-occur (cf. **she look-ed-s*). This is in contrast to OE where we can find agreement morphemes co-occurring with a tense morpheme (cf. e.g. *frem-ed-est* 'perform-past-2SG'). In Modern English, there is also no other (syntactic) evidence for a split IP, and the SIP is therefore set negatively in English. With respect to the distribution of the verb, the effect of a simple IP-VP structure is the following. As mentioned in (ii) above, B&T assume that features can be checked in any local configuration, i.e. also in a head-complement

configuration. In addition, B&T adopt the standard Minimalist assumption that the features of a projection (e.g. VP) are those of its head (e.g. V). Hence, even though Infl may have a feature which has to be checked against V, the verb does not have to move to Infl in English because a feature checking relation can be established between Infl and its complement the VP. A language with an unsplit IP such as English therefore does not have verb movement to an inflectional head.

In other languages, however, verbs do move and, within B&T's framework, movement is related to a split IP structure. Icelandic is an illustration of this option.⁸ In Icelandic, agreement and tense morphemes co-occur (e.g. *kasta-ði-r* – 'throw-PAST-2SG'). The syntactic structure therefore has to contain more than one inflectional head and the SIP is set positively in Icelandic. Given a split IP structure of the form AgrSP-TP-AgrOP-VP, the occurrence of verb movement out of the VP can be accounted for by assuming that T and V have features which require checking against one another. Given that AgrOP intervenes between T and VP in a split IP structure, *in situ* checking is not possible here. The only option for establishing a checking relation between T and V is therefore V movement out of the VP so that V can enter a local relation with T. Thus, the correlation between agreement morphology and verb movement which has frequently been observed in the literature is captured by variation in the clause structure by B&T.

For our purposes, an additional point made by B&T with respect to V-movement in Icelandic will be crucial. B&T argue that V-movement out of the VP in Icelandic does not target the highest inflectional head (AgrS) but only the head below AgrS, i.e. T. Evidence for this claim comes from two different domains of the grammar of Icelandic. First, in subordinate clauses which do not involve V-to-C movement (i.e. clauses which generally do not license embedded topicalization; cf. fn. 8), B&T (1998:63) identify two subject positions above the finite verb, and they suggest that these subject positions are [Spec, AgrSP] and [Spec, TP]. In terms of this

⁸ Note however that, as B&T (1998:48) observe, clear-cut evidence for V-movement to an inflectional head in Icelandic is rather scarce. The reason for this is that Icelandic is a symmetric V2 language which licenses V2 both in main and subordinate clauses. If we adopt the traditional analysis of V2 in the modern Germanic languages according to which V2 always involves CP, then we could conclude (following Vikner 1995) that embedded clauses have a recursive CP in symmetric V2 languages. V-movement could then always be argued to target C rather than an inflectional head. However, there are certain contexts in which embedded topicalization (and, hence, CP-recursion) generally seems to be excluded (in particular embedded questions). For these contexts, the standard diagnostics used to identify V-movement to the inflectional domain suggest that Icelandic has such movement.

analysis of subjects, the finite verb thus has to occur in T when it does not move to C. And secondly, again in clauses which generally do not license embedded topicalization, certain adverbs can either follow the finite verb or immediately precede it and thus intervene between the subject and the verb. This phenomenon is illustrated in (11) (examples from B&T 1998:64).

- (11) a. *María las kvæðið þegar hún (loksins) keypti (loksins) bókina. (Icelandic)*
 Mary read poem-the when she finally bought finally book-the.
 ‘Mary read the poem when she finally bought the book.’
- b. *Það er nú það sem ég (ekki) veit (ekki).*
 That is now it that I not know not.
 ‘That’s exactly what I don’t know.’

If we assume that finite verbs move only to T, the variation in (11) can be accounted for in a simple way. With the subject in [Spec, AgrSP] and the verb in T, it is sufficient to insert an adverb at the edge of TP to derive the order ‘subject-adverb-verb’. Thus, the data in (11) can be analyzed as involving V-movement to T and variation with respect to the placement of the adverb (TP-adjoined or VP-adjoined).

In summary, B&T make the following main proposals for Icelandic. First, Icelandic has a split IP structure (AgrSP-TP-AgrOP-VP). This structure is responsible for V-movement because feature checking by V in the inflectional domain cannot be done *in situ* as in languages with an unsplit IP such as English or the Mainland Scandinavian languages. Secondly, V-movement in Icelandic targets T rather than the highest inflectional head AgrS.

I will adopt B&T’s basic proposals here for the analysis of OE word order. However, before doing so, an additional point should be discussed here briefly. B&T assume that V-movement is triggered by formal features on an inflectional head and V which require checking against one another. Although B&T do not discuss this issue in much detail, the claim that Icelandic verbs only move to T and not to AgrS may suggest that only T has a feature which requires checking against V whereas AgrS does not have such a feature. However, there would be an alternative option. Suppose that all inflectional heads have a feature which requires checking against V. For languages like Modern English with a simple IP-VP structure, the consequences of this assumption are straightforward (as discussed above already). I and V can enter a feature checking relation

without movement because, as B&T assume, the features of a projection (VP) are those of its head (V) and features can be checked in a head-complement configuration. So what about Icelandic which has a rich IP structure (AgrSP-TP-AgrOP-VP) and which has V-movement to T? I propose that the intuition behind the analysis of English can be extended to this case as well. If the features of a projection are those of its head, we could assume that this also holds for complex heads derived through head movement. Thus, a T-head containing V after V-movement has features of both T and V and the maximal projection could then be argued to contain features of both of these heads as well. As a consequence, AgrS can enter a checking relation with verbal features through the head-complement configuration with TP, given that T contains V after movement, and V-movement to AgrS is therefore not necessary. In other words, V-movement to T is sufficient in Icelandic not because AgrS lacks features which require checking with V, but because, by moving to T, the verb is sufficiently close to enter a checking relation with AgrS due to feature percolation within TP.

Given these proposals let us now return to Old English. As discussed in section 1, the assumption made in most recent work on OE is that in main clauses, V-movement can target two possible positions. A head-position in the CP-domain and an inflectional head below C. The two head positions are given in (5) above, repeated here as (12). Note that the distinction between AgrP and TP in (12) is in line with B&T's approach. As pointed out earlier, OE has verb forms in which a tense and an agreement morpheme co-occur and, in terms of B&T's framework, this means that more than one inflectional head must be available in the inflectional domain.

(12) [CP [XP] C [AgrP *SU1* Agr [TP *SU2* ...]]]

A first question that arises in terms of (12) is why verbs which do not move to C move to the inflectional head below C in OE. In terms of the proposals made above, movement of the verb to Agr cannot be triggered by features of Agr (since these features could be checked by V-to-T movement), but it has to be triggered by a head in the CP domain which requires checking by V. Given a split CP structure as shown in (10) above (i.e. a structure of the type ForceP-TopP-FinP-AgrP etc.; cf. Rizzi 1997), the crucial head is the finiteness head Fin. Thus, I propose that Fin has a feature which has to be checked by V and that the verb therefore moves up to Agr. The features of V then percolate up to AgrP and Fin can enter a

checking relation with the verb in the head-complement configuration Fin-AgrP.

What about V-movement to C? As observed earlier, this movement generally occurs in contexts where an operator is fronted to CP in OE. It could therefore be argued that V-fronting is necessary in order to meet a well-formedness criterion of the type discussed by Rizzi (1996). Rizzi argues that for example subject-auxiliary inversion in English questions occurs because Infl carries a *wh*-feature that has to occur in a specifier-head configuration with a *wh*-constituent (*wh-criterion*). Fronting of a *wh*-element to [Spec, CP] (or more specifically [Spec, FocP] in a split CP, cf. fn. 5 above) therefore goes together with fronting of Infl to C. Similarly, we could assume that a fronted operator in OE also has to occur in a specifier-head relation with a feature borne by an inflectional head and that this requirement triggers V-movement to C.⁹

Having considered main clauses, let us now return to the main issue of this paper, the syntax of subordinate clauses in OE. The discussion in section 2.2 has suggested that there is generally a substantial syntactic asymmetry between main and subordinate clauses. One observation we made is that the landing site of fronted non-operators in main clauses ([Spec, TopP] within a rich CP structure) does not seem to be available in subordinate clauses because subject-verb inversion is generally absent. This suggests that an analysis in which the complementizer is inserted above TopP (in Force) is problematic. Instead, we may assume that complementizers are generated in Fin (cf. also Rizzi 1997:288 for insertion of a complementizer in Fin, and Haerberli 1999:22 for this proposal for the modern Germanic languages). Hence, there is no position available for non-operator fronting to the right of the complementizer. So what about the position of the finite verb? If we assumed that the verb moves to Agr as in main clauses, we would have the problems discussed in section 2.1. We would expect 'C-V-SU' orders (given that [Spec, AgrP] could be filled by

⁹ Note that in this case verb movement to a head below the target of operator fronting would not be sufficient because the verb does not simply satisfy a locality requirement of a C-head, but of an element occupying a specifier position within the CP.

A more general requirement of the type discussed in the text may hold for the modern Germanic languages where V2 is not restricted to operator fronting contexts. Thus, verb movement to C in these languages could be argued to be due to a condition which requires any fronted element in CP to be in specifier-head relation with a feature on the verb or an inflectional head. That a condition of this type may be required to account for V2 languages in terms of a split CP framework is proposed for independent reasons in Haerberli (1999:22, fn. 12).

an empty expletive) and we would not expect the much higher number of verb-final orders in subordinate clauses.

Given the discussion of Icelandic above, both of these problems can be dealt with in a very simple way now, namely by assuming that in subordinate clauses the finite verb only moves to T and not to Agr. If we assume that the SU2 position in (12) is [Spec, TP] and that the finite verb remains in T, then we can account for the absence of 'C-V-SU' orders because a subject always precedes the finite verb regardless of whether it occupies the higher subject position (SU1) or the lower subject position (SU2). As for the frequent occurrence of V-final subordinate clauses, we can account for them in terms of Pintzuk's (1991) double base hypothesis which postulates that OE exhibits variation with respect to the directionality of an inflectional projection. However, in our analysis, the crucial projection for the double base hypothesis is not the highest inflectional projection as in Pintzuk's analysis (i.e. IP, or in a richer structure AgrP). Instead it is TP which can be both head-final and head-initial and, given the much higher frequency of verb-final subordinate clauses we may conclude that TP is predominantly head-final.¹⁰ Given that in main clauses the verb generally moves on at least to Agr, a head-initial projection, the presence of a predominantly head-final TP does not have any consequences for main clauses. Hence the main clause/subordinate clause asymmetry with respect to the placement of finite verbs.

One additional issue remains to be addressed at this point. Why is it that the verb only moves to T in subordinate clauses whereas it has to move at least to Agr in main clauses? As proposed above, verb movement to Agr in main clauses can be analyzed as the result of the feature checking requirements of the Fin-head. But the Fin-head in main clauses is substantially different from Fin in subordinate clauses. Whereas in main clauses Fin is empty, it is filled by a complementizer in subordinate clauses, as proposed above. The presence of a complementizer in Fin could then be argued to have one of the following two possible consequences. First, we could assume that the complementizer actually satisfies Fin's feature checking requirements itself. V therefore does not have to move into a local configuration with Fin, but only with Agr, and it therefore only moves to T. Alternatively, we could argue that the Fin-head which allows insertion of a complementizer has different syntactic properties from the empty Fin-head. It is only the latter which bears features requiring a

¹⁰ Alternatively, within a framework which bans head-final projections (cf. Kayne 1994), we simply would have variation between movement of a large part of the structure to the left of T and the absence of such movement.

feature checking relation with V, whereas the former does not bear such a feature. Again the result would be that the finite V remains in T. I will have to leave it open for the moment whether there are any clear arguments in favour of one approach or the other. What is common to both of them is the idea that the insertion of a complementizer interferes with the movement properties of finite verbs. In this respect, they are similar to the traditional analyses of main/subordinate clause asymmetries as found for example in Dutch or German.¹¹

To sum up, following a proposal made by Bobaljik and Thráinsson (1998) that finite verbs in Icelandic only move to T and not to Agr in certain subordinate clauses, I have argued in this section that finite verbs in OE also move only to T in subordinate clauses rather than to Agr/C as in main clauses and that an analysis along these lines can deal with the problems raised in section 2.1 (absence of 'C-V-SU' and main/subordinate clause asymmetries with respect to verb placement). More specifically, developing B&T's assumptions that the features of a projection are those of its head and that feature checking can occur in head-complement configurations, I proposed that an empty Fin-head in a main clauses has to establish a feature checking relation with the verb and therefore triggers V-movement to Agr. In contexts of operator fronting the verb must move on to C, possibly in order to satisfy a Spec-head requirement (cf. wh-criterion). As for subordinate clauses, I proposed that the insertion of a complementizer in Fin satisfies or alters the feature checking requirements of Fin and that the verb therefore only has to move to T in order to enter a checking relation with Agr. As for TP, I argued that it may have variable

¹¹ At first sight, there seems to be a substantial difference, however. In the traditional analyses of Dutch or German, it is generally assumed that the complementizer and the finite verb compete for the same head position and that the presence of a Comp blocks V-movement to the C-domain, whereas in the proposal made in the text the interference of Comp is less direct. Yet, although the traditional analysis of Dutch or German seems intuitively plausible, it is not clear whether it is sufficient to explain the situation in these languages entirely. If a C-head is normally the target for V-movement in main clauses, the insertion of a complementizer in subordinate clauses does not necessarily have to mean that V-movement is blocked. Instead, the verb simply could move to the same head, thereby creating a complex Comp-V or V-Comp head. Given that such heads do not occur in Dutch or German, we may conclude that there must be an independent reason why verbs do not move to C in subordinate clauses. Adopting the proposals made in the text, one possibility would be to say either that a complementizer can check the relevant feature in C which is generally checked by the verb or alternatively that the feature content of a C which allows insertion of a complementizer is different from the feature content of an empty C. Given these additional observations, the situation in OE may indeed be directly comparable to the situation in languages such as Dutch or German

directionality (following Pintzuk's 1991 proposals) but that it is predominantly head-final. Given this analysis, we can distinguish three main types of clauses in OE, each clause type being characterized by a different landing site of the finite verb. This situation is illustrated in (13) below. In clauses in which an operator is fronted the verb moves to the C-domain (13a/b). In contexts of non-operator fronting, the verb moves to Agr (13c/d/e). And finally in subordinate clauses the verb moves only to T which takes its complement either to the left or to the right (13f/g/h). [SU: higher subject position (for pronouns, some DPs); SU2: lower subject position (only DPs)]¹²

- (13) a. [_{Foc(?)P} XP(operator) V [_{FinP} [_{AgrP} SU1 [_{TP} SU2 ...]]]]
 b. [hwi] **sceole** *we* *opres* *mannes* *niman* (example 2a)
 why should we another man's take
 c. [_{TopP} XP(non-operator) [_{FinP} [_{AgrP} SU1 V [_{TP} SU2 ...]]]]
 d. [pæt] *þu* **meaht** *swiðe* *sweotole* *ongitan* (example 1a)
 that you can very easily understand
 e. [On his dagum] **sende** *Gregorius* *us* *fulluht* (example 3b)
 In his days sent Gregory us baptism
 f. [_{FinP} COMP [_{AgrP} SU1 [_{TP} SU2 (...) V (...)]]]
 g. **pæt** *Darius* *hie* *mid* *gefeohhte* *secan* **wolde** (example 6b)
 that Darius them for battle visit wanted
 h. **gif** *Crist* **scute** *ða* *adun* (example 8b)
 if Christ casts then down

Note that the analysis of subordinate clauses in (13) makes certain predictions which remain to be confirmed by detailed empirical work. For example, the structure in (13f) means that when TP is head-initial (as in 13h) some material should be able to occur between a pronominal subject in [Spec, AgrP] and the verb in T, leading to 'C-SU-XP-V...' orders. This follows from the discussion of Icelandic which has shown that certain

¹² (13) covers the main word order patterns that can be found in OE. One pattern is omitted here, however, namely verb-final main clauses. Although such clauses are relatively rare, they do occur (cf. e.g. Koopman 1995). The question that then arises is how these could be dealt with in terms of the options given in (13). There are two main options which I present here without committing myself to one of them:

(i) AgrP (like TP) has variable directionality (double base hypothesis) and verb-final main clauses are of the type shown in (13c) with a head-final Agr. AgrP differs from TP in that it is head-final only very rarely, whereas TP is head-final very frequently.

(ii) Main clauses optionally (but rarely) lack a CP layer. The verb then only moves to T (no feature checking with Fin) and can therefore occur clause-finally, given that TP can be head-final.

constituents can occur between AgrP and TP (cf. example 11 for Icelandic; cf. also Haerberli 2000 for this proposal for Old and Middle English). With full DP subjects however, ‘C-SU-XP-V...’ orders would be expected to be less frequent because full DP subjects can occupy [Spec, TP] and when the subject is in [Spec, TP] there would be no position for a constituent between the subject and the verb. This result might indeed be desirable (Susan Pintzuk, p.c.) but I will have to leave a detailed empirical investigation of this issue for future work.

3. *Some consequences*

To conclude this paper, I will explore some further consequences of the proposal made in section 2.3 for OE and for the historical developments after the OE period.

3.1 *Conjoined clauses in OE*

It has often been observed in the literature that conjoined main clauses seem to favour subordinate clause word order in OE. Thus, Traugott (1992:272) suggests that, apart from contexts involving certain fronted adverbial elements, co-ordinate clauses introduced by *and* “tend to be verb-final, like subordinate clauses” (cf. also e.g. Mitchell 1985:694, van Kemenade 1987:177). Yet, it has remained unclear how this property of conjoined clauses could be accounted for.

In terms of the analysis outlined in section 2.4, a simple explanation can be given which is based on an observation related to the following type of subordinate clause conjunction found for example in Modern English.

- (14) Mary thought [_{CP} that [_{IP} I would walk] and [_{IP} she could take the car]]

In (14), two subordinate clauses are conjoined. Given that the second conjunct lacks a complementizer, it could be argued that it lacks a CP-layer and that the two clauses are thus conjoined at the IP-level. Suppose now that the same option is available with OE main clause conjunction. Thus, the first conjunct is generally a standard main clause involving a CP-layer and giving rise to V-to-Agr or V-to-C movement. As for a conjoined clause following such a clause, however, it can simply be an AgrP. And if it is an AgrP, the verb has to move only to T because there is no Fin-head which would trigger V-movement to Agr. And if the verb moves only to T,

it occupies the same position as in subordinate clauses and it therefore frequently occurs in clause-final position. Thus, the proposals made in the previous section and the plausible assumption that clauses can be conjoined at the AgrP-level provide a simple solution to a frequently observed puzzle of OE word order.

3.2 Early Middle English

As shown by Kroch and Taylor (1997), the OE V2 syntax described in section 1 above (cf. examples 1 to 4) was preserved to a large extent in Early Middle English (EME). It has therefore generally been assumed that the structural analysis proposed for OE main clauses (cf. example 5) also holds for EME. Thus, subject-verb inversion in contexts of non-operator fronting is analyzed in terms of verb movement to Agr and to the occurrence of a full DP subject in a position below Agr. As a consequence, EME subordinate clauses raise the same problem as OE subordinate clauses in the sense that the absence of 'C-V-SU' orders seems problematic at first sight. However, the proposals made in section 2.3 can again be extended directly to EME. Thus, we can assume that verbs only move to T in subordinate clauses and that subjects therefore precede the finite verb regardless of whether they occur above or below the Agr-head (i.e. in [Spec, AgrP] or in [Spec, TP]). The only difference between OE and EME is that in EME the frequency of head-final TP has dropped considerably (cf. Kroch and Taylor 2000) and subordinate clauses are therefore very rarely verb-final.

3.3 The loss of verb movement in the history of English

As often discussed, verb movement was lost in the history of English (cf. e.g. Roberts 1985, Kroch 1989) and this loss was the source of the rise of *do*-support. The standard analyses of the loss of V-movement in English assume that there was a unique underlying change in the grammar of English, namely loss of V-movement to an inflectional head. However, Han (2000) and Han and Kroch (2000) provide evidence suggesting that the loss of V-movement was actually (at least) a two-step process. First, at the beginning of the 15th century, movement from one inflectional head to a higher inflectional head starts being lost. And secondly, at the end of the 16th century, movement from V to the inflectional domain starts being lost. Although this sequential loss scenario seems attractive given the evidence Han and Kroch provide, they basically leave this development unexplained. In particular, it remains unclear why the loss of V-movement

between inflectional heads should have begun at the beginning of the 15th century.

The analyses discussed in this paper may shed some light on this issue. I have proposed that in both OE and EME, the lowest C-head (i.e. Fin) in main clauses has to enter a checking relation with the verb and thus triggers V-to-Agr movement. Learners of OE/EME received clear-cut evidence for such a system in the form of the pronoun/full DP contrasts in contexts of non-operator fronting as shown in (1) and (3) above. Data like these identify a V-position (i.e. Agr) between the subject position for pronouns and a lower subject position which can only be occupied by full DP subjects. This type of evidence for identifying the Agr-head as a landing site of V thus depends on the ability of full DP subjects to remain in a lower position ([Spec, TP]) than subject pronouns ([Spec, AgrP]). What is important now is that this evidence is disappearing by around 1400. As argued in Haeberli (to appear a/b), full DP subjects cannot remain in [Spec, TP] any more in later Middle English because the fillers of [Spec, AgrP] in OE/EME, i.e. empty expletives, are being lost in this period. Thus, full DP subjects have to move to AgrP as well. Subject-verb inversion in non-operator fronting contexts is therefore lost and subjects always precede the finite verb regardless of whether the subject is pronominal or non-pronominal. In other words, the crucial evidence for the feature on Fin which requires checking by V and, hence, the crucial evidence for V-movement to Agr were lost. Instead, a finite verb could just as well occupy T rather than Agr when it follows a subject because it still would precede adverbs occurring at the VP-periphery.

Thus, I propose that the loss of the distributional contrast between pronominal subjects and full DP subjects ultimately also had the effect of destabilizing the V-movement system in Middle English because the target of V-movement could not be identified as clearly as in OE/EME any more. This situation led to the first step in the loss of V-movement around the beginning of the 15th century, as suggested by Han and Kroch. Thus, the approach adopted in this paper and in Haeberli (to appear a/b) may provide an explanation for the starting point of the sequential loss of V-movement outlined by Han and Kroch.¹³

¹³ The discussion in the text merely provides a sketch of how the approach pursued in this paper may fit into Han and Kroch's approach. Additional work will be necessary however to see how the details of the two approaches can be made compatible. The most important point here is that the clause structure Han and Kroch adopt differs from the one adopted here. Their system includes several additional functional heads such as M(ood) and Asp(ect), but it does not contain Agr. The highest inflectional projection is

4. Conclusion

In this paper, I considered some issues that recent proposals made for the analysis of Old English and Early Middle English main clauses raise for the analysis of subordinate clauses. I discussed two possibilities for making these proposals compatible with the syntax of subordinate clauses. The first one is based on a rich CP structure (cf. Rizzi 1997) and allows main clause processes to occur in subordinate clauses as well. The main problem such an approach raises is that it may lead to the expectation that subordinate clause word order should be more similar to main clause word order than it actually is. I therefore proposed an alternative analysis along the lines of proposals made by Bobaljik and Thráinsson (1998). This approach captures main clause/subordinate clause asymmetries in OE under the assumption that finite verbs generally do not move to the same position in the two types of clauses. Finally, I showed that the proposals made in this paper may have additional desirable consequences for issues such as the syntax of conjoined clauses in OE and the loss of V-movement in the history of English.

As the title of this paper suggests, some of the proposals made in this paper are rather speculative at this stage. They were mainly driven by theoretical considerations and based on well-known properties of OE syntax. Whether the approach outlined here is on the right track will have to be determined on the basis of much more detailed empirical work.

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TP and they therefore analyze the development in the 15th century as loss of M to T. I will have to leave the potential issues these contrasts raise for future work.

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