THE POSITION OF NEGATION AND ADVERBS IN EARLY MIDDLE ENGLISH

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Abstract

This paper investigates the placement and structural analysis of negation and adverbs in

early English, focussing in particular on Early Middle English (EME). Although the

clausal syntax of negation and adverbs in EME was complex and variable, we show that

the variation was not unprincipled. The negator *not* and adverbs share certain

distributional properties, but we identify two contexts in which the two types of elements

behave differently. Adverbs exhibit a root/nonroot asymmetry with respect to the

distribution of finite verbs whereas such an asymmetry is not found with the negator *not*.

Furthermore, the placement of object NPs is more restrictive with the negator *not* than

with adverbs. Contrary to claims made in the previous literature, we conclude that *not*

cannot be analyzed as an adverbial element in EME but already occupies NegP and that

NegP in EME is generally situated low in the functional structure.

Keywords: Adverbs; Early Middle English; Negation; Object scrambling; Verb

movement.

1. Introduction

The distributional properties of negation and adjuncts have played an important role in recent work on the clausal syntax of early English. As Van Kemenade (1999, 2000) and Haeberli (2000) show, data involving negation and adjuncts can be used to shed light on various issues arising in the context of the structural analysis of Old English (OE) and Early Middle English (EME) word order. Furthermore, Van Kemenade's work also raises the more specific question as to what the adequate representation of negation is within the clause structure of early English.

This paper pursues these lines of investigation further by focusing on the placement of negation and adverbs in EME. We show that the distribution of adverbs provides evidence for a main clause/subordinate clause asymmetry with respect to the position occupied by finite verbs. It is proposed that, whereas finite verbs occupy the highest inflectional head in main clauses (Agr in the clause structure we adopt), they generally move only to T in subordinate clauses. Extending this analysis to the syntax of negation, we argue that the distributional properties of negation in subordinate clauses is incompatible with van Kemenade's (1999, 2000) claim that negation is represented in a fixed NegP above TP in EME. We therefore propose that the usual structural position for NegP in EME was below TP. Evidence from the interaction of objects with negation and adverbs is shown to support the assumption that low negation occupies a structural position specifically assigned to negation (NegP) rather than a general adjunct position shared by both negation and adverbs.

The paper is organised as follows. Section 2 provides an overview of recent work on the syntax of early English on which our discussion will be based. Section 3 focuses on the distribution of adverbs in EME and its relevance for determining the position of finite verbs in main and subordinate clauses. Section 4 explores the consequences of the

findings in section 3 for the structural analysis of negation and concludes that there is evidence for a low NegP in EME. This conclusion is supported by an investigation of the distribution of objects with respect to negation and adverbs in section 5. Finally, section 6 addresses some remaining issues, and section 7 summarises the paper.

2. BACKGROUND

Since van Kemenade's (1987) seminal work on the syntax of early English, the structural analysis of word order in OE and EME has given rise to much debate in the literature.

The aim of this section is to give an overview of some recent proposals on the analysis of OE and EME clausal syntax, focusing in particular on aspects involving negation and adverbs.

Van Kemenade (1999, 2000) and Haeberli (2000) show that one syntactic domain in OE/EME for which negation and adverbs are an important source of evidence is the syntax of subjects. More specifically, they observe that negation and adverbs can be used as a diagnostics which allows us to distinguish two subject positions. Focusing on adverbs first, we can see the relevant distinction in EME data like those in (1) (adverb in bold print, subject in italics):¹

- (1) a. benne com *pe fule gost* **eft** into his wunienge. (CMTRINIT, 87.1179) then came the bad spirit again into his home

 'Then, the bad spirit came again into his home.'
 - b. Þanne com **eft** *þe fule gost þe* ... (CMTRINIT, 87.1170)Then came again the bad spirit who ...'Then, the bad spirit came again who...'

¹ The EME data in this paper are taken from the EME section of the *Penn-Helsinki Parsed Corpus of Middle English* (PPCME2; Kroch and Taylor 2000a).

c. þenne cweð *he* **eft**: (CMLAMBX1, 27.329)
then said he again
'Then, he said again.'

d. V(finite) **eft** subject pronoun

unattested

The examples in (1) illustrate root clause contexts in which both subject pronouns and full NP subjects occur in a position following the finite verb. Subject-verb inversion with both types of subjects in OE and EME typically occurs in questions, negative clauses and in clauses with fronted adverbs like *ba* or *ponne* ('then') (cf. e.g. van Kemenade 1987, Pintzuk 1993, 1999).² These contexts have generally been referred to as operator-fronting contexts, and they have been structurally analyzed as involving verb movement to C. With respect to adverbs, we can observe that whereas full NP subjects occur either to the left or to the right of such constituents (1a/b), pronominal subjects can never be immediately preceded by an adverb in operator-fronting contexts (1c/d).³ In Haeberli (2000), this contrast is accounted for in the following terms: (i) There are two subject positions in the inflectional domain (Spec AgrP and Spec TP) and an adjunct position between the two. (ii) Pronominal subjects obligatorily move to the higher subject position in Spec AgrP. As a consequence, they are always adjacent to the finite verb in C. (iii) Full NP subjects are licensed in the lower subject position in Spec TP. Orders of the type 'finite verb – adverb – subject NP' as in (1b) are therefore grammatical. As for word

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² In other contexts, subject-verb inversion can be found with full NP subjects but not with subject pronouns. See the discussion of example (2) below.

³ As shown by Haeberli (2002a), this generalisation is very robust. In 12 EME texts from the PPCME 2, there are 914 clauses involving subject-verb inversion with a subject pronoun, and in all of these clauses the finite verb and the subject are adjacent. In OE, we find the same situation. In 37 texts from the *York-Toronto-Helsinki Parsed Corpus of English* (Taylor et al. 2003), there are 4083 clauses with a subject pronoun following the finite verb, and not a single clear example can be found in which the two elements are non-adjacent. With full NP subjects, the data in Haeberli (2000:125/6) suggest that non-adjacency due to an intervening adjunct can be found in about 10% of all clauses with a postverbal subject in OE and EME.

orders as in (1a), they can be derived either through optional subject movement to AgrP or as the result of adverb placement below TP.

Additional evidence for the different syntactic behaviour of pronominal subjects and full NP subjects can be found in clauses with fronted non-operators (cf. again e.g. van Kemenade 1987, Pintzuk 1993, 1999). Non-operator fronting contexts in OE and EME differ from the operator fronting contexts illustrated in (1) in that pronouns generally precede rather than follow the finite verb. Full NP subjects, however, can occur either before or after the finite verb, the latter option being the more frequent one. The following examples illustrate this contrast for OE (verb in bold print, subject in italics).

- (2) a. þæt *þu* **meaht** swiðe sweotole ongitan (OE; Boethius, 88.14) that you can very easily understand 'That, you can very easily understand.'
 - b. Das gifu sealde seo ceasterwaru on Tharsum Apollonio þam tiriscan.This gift gave the citizens in Tharsus Apollonius the Tyrian'This gift, the citizens of Tharsus gave to Apollonius the Tyrian.'

(OE; ApT, 16.10.16)

c. ŏone *Denisca leoda* **lufiaŏ** swyŏost (OE; Wulfstan, 223.54)
that Danish people love most
'That, the Danish people love most.'

To account for the difference between operator and non-operator fronting contexts in (1) and (2) and for the contrast between pronominal and full NP subjects in (2), it has generally been assumed that (i) finite verbs move to the inflectional head below C in non-operator fronting contexts and (ii) pronominal subjects have to move to the highest

subject position whereas full NP subjects can remain in a lower subject position (cf. e.g. Cardinaletti and Roberts 1991, Fischer et al. 2000, Haeberli 2000, 2002b, Hulk and van Kemenade 1997, Kroch and Taylor 1997, Pintzuk 1993, 1999 for proposals along these lines).

The points discussed so far can be represented schematically as shown in (3).

[CP [XP] C [
$$_{AgrP}$$
 SU1 Agr adjunct [$_{TP}$ SU2 T ...]]]

C and Agr are targets for verb movement in different types of root clauses. Pronominal subjects always move to the higher subject position SU1 while full NP subjects can remain in the lower subject position SU2. Finally, adjuncts can occur between AgrP and TP. This analysis accounts for the main root clause phenomena found in OE and EME. However, as discussed in Haeberli (2005), it raises certain problems once we consider nonroot clauses. In nonroot clauses, C in (3) is occupied by a complementizer, but Agr is still available as a target for verb movement. Therefore, if V moves to Agr and if, as suggested above, full NP subjects can remain in SU2, we would expect now that word orders of the type 'complementizer - finite verb - NP subject' should frequently occur in EME nonroot clauses. Yet, as shown in Ingham (2003a), this expectation is not borne out: the rate of inversion in EME prose texts is 1.7% and the handful of such examples mostly involve bridge verbs.

An additional problem for the extension of (3) to nonroot clauses is the well-known root/nonroot word order asymmetry found in OE (cf. e.g. van Kemenade 1987). Finite verbs tend to occur towards the front of the clause in root clauses but towards the end of the clause in nonroot clauses. If V targeted Agr in both root and nonroot clauses, it would

independent functional projection between AgrP and TP (cf. Haeberli 2000).

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⁴ The nature of the inflectional projection below C has given rise to some discussion in the literature. Here we will label it AgrP (see Haeberli 2000 for an argument in favour of this assumption), but this choice will not be crucial for the points made in the remainder of this paper. Another aspect of (3) which will not be of major importance for our analysis is the exact position of the adjunct. One possibility would be that the adjunct is adjoined to TP. Alternatively, it could be argued to occupy the specifier position of an

be difficult to see why the two types of clauses differ with respect to the distribution of finite verbs. In terms of Pintzuk's (1999) double base hypothesis according to which individual projections can show variable directionality, one would have to say that AgrP is head-final much more frequently in nonroot clauses than in root clauses, but the reason for this contrast would remain unclear. In order to deal with these problems, Haeberli (2005) builds on the theoretical framework outlined by Bobaljik and Thrainsson (1998) for modern Germanic and proposes that finite verbs generally move only to T rather than to Agr in nonroot clauses in OE.⁵ One consequence of this analysis is that a subject always precedes the finite verb in nonroot clauses regardless of whether it is pronominal or non-pronominal. Furthermore, the root/nonroot asymmetry in OE can be accounted for by assuming that it is TP which is frequently head-final whereas AgrP is generally head-initial. Thus, nonroot phenomena suggest that, in addition to C and Agr, there is a third target of verb movement in (3).⁶

Let us finally turn to the status of negation in the clause structure of OE and EME. The contrast between pronominal and full NP subjects shown in (1) and (2) is also manifest in the context of negation (cf. Einenkel 1912:204, Haeberli 1991:97ff., van Kemenade 1999:157ff., 2000:64f.). In the OE period, the negative verbal prefix *ne* starts co-occurring with secondary negators like *na*, *nawiht*, *noht* or their various spelling variants. For consistency of reference, we will adopt the present-day English spelling *not*

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⁵ However, as pointed out by van Kemenade (1997:333, 342), the possibility that nonroot clauses in OE and EME occasionally exhibit root clause syntax should not be entirely ruled out. In particular, there is some evidence suggesting that, as in the Modern Mainland Scandinavian languages, root clause syntax can be licensed in complement clauses of bridge verbs. Thus, the claim here is not that the verb is in T in every single nonroot clauses, but at least in the large majority of such clauses. This caveat should also be borne in mind for our discussion of EME below. See fn. 14 below for EME evidence for root clause syntax in nonroot clauses.

⁶That the verb does not move as high in nonroot clauses as in root clauses in OE has been independently proposed by Fuss and Trips (2002). However, as pointed out in Haeberli (2005:277/8, fn. 5), the evidence these authors provide for such an analysis is actually not conclusive.

Kroch and Taylor (1997:319) also suggest that T rather than Agr is the final target of verb movement in a variety of Northern Late Middle English, and they link this analysis to the lack of agreement morphology in this variety. The present analysis takes a different position given that EME has rich verbal agreement morphology.

when mentioning this secondary negator. In OE and EME, *not* always follows postverbal pronominal subjects, but it can precede full NP subjects. This contrast is illustrated for EME in (4).

- (4) a. ... ne muge we **noht** singe be blisfulle songes (CMTRINIT, 55.763)
 - ... NEG may we not sing the blissful songs
 - '... we may not sing the blissful songs.'
 - b. ne V(finite) **not** subject pronoun unattested
 - c. benne ne mihte **noht** *hire sune* habbe bene nome... (CMLAMB1, 83.170) then NEG could not their son have the name

 'Then, their son could not have the name ...'

Van Kemenade (1999, 2000) seeks to show that a structure along the lines of (3) can also account for the asymmetry between pronominal subjects and full NP subjects in (4). She proposes that subject pronouns always move to the highest inflectional projection (FP in her system, corresponding to AgrP in (3)), that full NPs can stay in a lower inflectional projection (TP), and that the secondary negator occupies the specifier position of a NegP occurring between the two inflectional projections. Thus, negation can be added to (3) as an element occurring between SU1 and SU2:

However, we can see that van Kemenade's analysis encounters the problem that it fails to account for cases where a full NP subject precedes the secondary negator, as in (5).

(5) And þat ne mugen *pe godfaderes* **naht** don (CMTRINIT, 21.247)

And that NEG may the godfathers not do

'And that, the godfathers may not do.'

In van Kemenade's system the higher subject position FP is reserved for pronouns. A full NP subject could therefore not stand to the left of *not*. We shall return to this and other difficulties with van Kemenade's account below. In any case, van Kemenade presents a different analysis from Kroch (1989) who took *not* in EME to be a structural adverb, and from Frisch (1997) who argued for a variable analysis of *not* as a VP-adverb and a Spec NegP element. In this article, we shall adopt this key feature of her analysis.

With respect to the structural representation of negation, van Kemenade (2000:66, 69) claims that the position of NegP is fixed above TP in OE and EME. But she also proposes that the placement of NegP within the clause structure was unstable in the early history of English. She speculates that early OE may have had a low NegP (below TP). Similarly, for later Middle English, she argues that negation occurs in a low position. The evidence for the claim related to ME comes from the distribution of pronominal objects. As van Kemenade observes, object pronouns can precede negation in later ME. This is illustrated in (6) (data from van Kemenade 2000:72).

(6) a. And freten hym, for that they *knewe* hym **naught**.

(Chaucer, Knight's Tale 2068)

b. I woot right wel, thou *darst* it **nat** withseven

(Chaucer, *Knight's Tale* 1140)

The occurrence of an object pronoun before negation is not an innovation of the ME period. But according to van Kemenade, the structural representation of this option changes in the ME period. For OE and EME, she assumes that FP (AgrP in 3) is a pronominal position which is available not only for subject pronouns but also for object pronouns. With the negated verb in C, object pronouns can therefore occur to the left of negation even though NegP is high in the clause structure. Such cases occur in EME, e.g.

(7) [CP ne mai [FP ich hie [NegP noht [TP [VP forlete]]]]] (CMTRINIT 75.1028)

NEG may I them not lose

'I may not lose them.'

However, van Kemenade claims that this option to derive 'pronominal object – secondary negation' orders is lost in the ME period because 'object pronouns from the EME period onward no longer occur in the high pronoun position' in FP (2000:72). A comparison with van Kemenade (1987:200) suggests that this should be taken as meaning that the process was completed after the EME period. She therefore concludes that the late ME orders in (6) can only be derived if negation now occurs in a low position, or more specifically right above VP, if it is assumed that the object pronouns occupy Spec AgrOP (cf. Roberts 1995).

Van Kemenade's proposals for the structural representation of main clause negation in the early history of English are thus summarised as follows: '[I]t would seem that the history of negation is shaped by a delicate interplay between the high and the low negation position: low in early Old English; high in late Old English and early Middle English; low again in late Middle English and early Modern English.' (2000:74) In this

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⁷ This assumption is based on the observation that object pronouns frequently precede the finite verb in V-to-Agr contexts (non-operator fronting) and that object pronouns often precede full NP subjects in V-to-C contexts (operator fronting). See e.g. Fischer et al. (2000:119) for illustrations.

article we shall see that her analysis cannot be satisfactorily applied to nonroot clauses, in which negated verbs do not normally move to C, an observation which has led us to formulate an alternative hypothesis for this paper. In its strongest form, it proposes that EME already had reached the stage van Kemenade that attributes to late Middle English, with NegP between TP and VP. A weaker form of the hypothesis is that the two NegP positions coexisted in EME. Variationist syntactic studies of pre-modern English have already shown that such variation would not be especially surprising. To evaluate the low NegP hypothesis, we will focus on the distribution of adverbs and negation in EME in order to shed some more light on the structural analysis of EME word order in general and of EME negation in particular.

3. ADVERBS, SUBJECTS AND FINITE VERBS IN EME

The main syntactic properties discussed in the context of (3) above are identical in OE and EME. But the two stages do differ in one important respect. As mentioned earlier, finite verbs in OE frequently occur at or near the end of nonroot clauses in OE while they occur towards the beginning of root clauses. No such word order asymmetry has been observed in the literature for EME. The distinct verb-final subordinate clause word order seems to have become a very marginal option after OE. In theoretical terms, the difference between OE and EME has been captured by assuming that while OE has a productive head-final inflectional projection (cf. e.g. Pintzuk 1999), the inflectional domain is to a large extent head-initial in EME (cf. Kroch and Taylor 2000b).

Although these observations suggest that EME does not have a root/nonroot word order asymmetry any more, a combination of the proposals discussed in section 2 predicts that we should nevertheless still find an effect of this asymmetry in EME in terms of later verb position. If (i) adjuncts occur between AgrP and TP, (ii) pronominal subjects have to

move to AgrP, and (iii) finite verbs generally move to T in nonroot clauses, then we would expect the frequent occurrence of word orders of the type 'subject pronoun - adverb - finite verb' in EME nonroot clauses containing adverbs. This option is schematically represented in (8).

In root clauses, however, the verb moves to Agr and hence to the left of the adverb. The word order 'subject pronoun - adverb - finite verb' would therefore not be expected to occur as frequently as in nonroot clause.

Both of these expectations are borne out. Nonroot clauses with the order 'subject pronoun - adverb - finite verb' can indeed be found frequently in EME. Some illustrations are given in (9).

- (9) a. þt *tu* **eauer** *dudest* te in-to swuch þeowdom (CMHALI, 132.59) that you ever put you into such servitude 'that you ever put yourself into such servitude'
 - b. 3ef *bu* **pus** *ne dest* naut (CMANCRIW, II.217.3133)

 if you thus NEG do not

 'if you do not act in this way'
 - c. þt *ha* **blindlunge** *gað* forð (CMMARGA, 80.397) that she blindly goes forth 'that she goes forth blindly'
 - d. þe *ich* **her nu** *seide* (CMTRINIT, 121.1626) which I here now said

'which I said now here'

e. þat *hie* **ofte** *mihte* þenken on him (CMVICES1, 125.1535) that they often could think about him 'that they could often think about him'

In root clauses, the word orders in (9) are much less frequent. This contrast between root and nonroot clauses is shown in Table 1, which presents quantitative data based on the text samples contained in the EME section of the Penn-Helsinki Parsed Corpus of Middle English (Kroch and Taylor 2000a; cf. appendix for details on the texts used).

TABLE 1 Pronominal subjects and adverbs in PPCME2 period M1

Syntactic pattern	Root clauses	Nonroot clauses
Su Adv ⁸ V	50 (9.4%)	403 (45.1%)
Su V Adv	484 (90.6%)	490 (54.9%)
TOTAL	534	893

Whereas the word order 'pronominal subject – adverb – finite verb' occurs very frequently in nonroot clauses containing an adverb (45.1% of the nonroot clauses with an adverb following the subject), such orders are quite rare in root clauses (9.4% of the root clauses with an adverb following the subject). Thus, there is a clear root/nonroot asymmetry in the relative position of the finite verb and adverbs in EME. ⁹ This contrast

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⁸ Here and in the remainder of this paper we are using the label 'Adv' to refer to AdvP adverbials. PP and NP adverbials are thus not included in our data.

⁹ A question that may arise from the data in Table 1 is whether the type of adverb has an effect on the frequency of the two word order patterns. The answer is generally negative. We considered the following subsets of our data: (i) all adverbs except for manner adverbs; (ii) all adverbs except for manner adverbs and direction adverbs; (iii) temporal adverbs only. The frequencies for root clauses were nearly identical in all subsets, category (iii) exhibiting the biggest difference with a frequency of 'Su-Adv-V' orders of 2% below the 9.4% in Table 1. Category (iii) also showed the biggest divergence in nonroot clauses. Here, the difference was a 15% increase in 'Su-Adv-V' orders. Thus, the root/nonroot asymmetry is even more pronounced with temporal adverbs than with all adverbs taken together as in Table 1. As for groups (i) and (ii) in nonroot clauses, they also show higher frequencies in 'Su-Adv-V' orders as compared to Table 1 but the increases are smaller (3 to 5%). Thus, although distinctions among adverb types do have some influence on the exact frequencies of the different word orders, these distinctions do not affect the

supports the claim that finite verbs generally do not occur in the same structural position in root and subordinate clauses. 10

One question that may arise with respect to the data in Table 1 is how the 'Su-Adv-V' pattern can be derived in root clauses at all. Two possibilities are conceivable here. First, it has been observed for OE that root clauses occasionally exhibit nonroot (i.e. verb-final) word order. Such orders are generally rare (cf. Koopman 1995), but more frequent in coordinate clauses (cf. e.g. Traugott 1992:272, Mitchell 1985:694). Haeberli (2005) accounts for this observation by proposing that second conjuncts can have a structure which triggers verb movement to T only. Assuming that this option remains available in EME, some root 'Su-Adv-V' orders can be analyzed in terms of V-to-T movement. However, a look at the data shows that not all 'Su-Adv-V' orders in root clauses involve coordination. Some root 'Su-Adv-V' orders may therefore have to be analyzed as involving a finite verb in Agr. This result can be obtained by assuming that both the subject and the adverb occur in the CP domain. More specifically, following Rizzi (1997), we could propose that they occupy the specifier positions of a recursive CPprojection for topics (TopP). Both of the derivations discussed in this paragraph can be argued to have a marginal status and therefore to give rise to only a relatively small number of 'Su-Adv-V' orders in root clauses.

The frequent occurrence of 'Su-Adv-V' orders in nonroot clauses in Table 1 follows from the assumption that subject pronouns move to AgrP and that finite verbs generally

general conclusion reached here that there is a root/nonroot asymmetry with respect to the distribution of adverbs and finite verbs.

¹⁰ An anonymous reviewer points out that root and nonroot clauses may also differ with respect to the position the subject pronoun occupies. In nonroot clauses, the subject is in Spec AgrP whereas for root clauses it is plausible to assume that a clause-initial subject is in Spec CP. Therefore, it may be this contrast rather than the position of the finite verb that is crucial for the pattern in Table 1. However, such a conclusion does not seem to be justified. If the verb occurred in the same position in root and nonroot clauses, the occurrence of the subject pronoun in Spec CP rather than Spec AgrP in root clauses would increase the structural space between the verb and the subject as compared to nonroot clauses. Assuming that an increase in structural space would also lead to an increase in adjunct positions, we would actually expect that there are more 'Su-Adv-V' orders in root clauses than in nonroot clauses, contrary to what the data in Table 1 show.

occupy T in nonroot clauses. Given that full NP subjects usually remain in TP, i.e. in SU2 below the adjunct position in (3)/(8), the situation should be different in nonroot clauses with full NP subjects. In particular we would expect a considerably lower frequency of 'Su-Adv-V' orders than in nonroot clauses with pronominal subjects because full NP subjects do not have to move to AgrP. Again, this expectation is borne out by the quantitative data from the PPCME.¹¹

TABLE 2 Full NP subjects and adverbs in PPCME2 period M1

Syntactic pattern	Root clauses	Nonroot clauses
Su Adv V	99 (21.6%)	50 (19.8%)
Su V Adv	360 (78.4%)	203 (80.2%)
TOTAL	459	253

The frequency of 'Su-Adv-V' orders as compared to 'Su-V-Adv' orders in nonroot clauses is 19.8%. As expected, this figure is considerably below the 45.1% found for pronominal subjects in Table 1.

Table 2 raises two additional issues however. First, we may wonder how the order 'Su-Adv-V' can be derived in nonroot clauses. If full NP subjects always occupied the SU2 position in Spec TP, we might expect them to be adjacent to the finite verb in nonroot clauses because V occupies T. The way to deal with this apparent problem is to assume that full NP subjects can optionally move to the SU1 position in AgrP, as will be necessary to account for subject-initial V2 orders. The same assumption is made in Haeberli (2002b:103) to account for the occurrence of V3 orders with full NP subjects in non-operator fronting contexts in OE/EME (cf. example 2c).

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¹¹ Distinguishing different adverb types along the lines of fn. 9 gives similar results as with pronominal subjects. In root clauses, the differences among the three groups of adverbs mentioned in fn. 9 are again minimal. In nonroot clauses, we find bigger differences (up to 12% with temporal adverbs as compared to the frequency in Table 2). In this case, however, the differences are due to lower frequencies in the order 'Su-Adv-V', confirming our expectation that the frequency of such orders with full NPs is considerably lower than with subject pronouns.

The second issue that arises for the data in Table 2 is the status of 'Su-Adv-V' orders in root clauses. Structurally, they can be analyzed as outlined above (i.e. occasional root V-to-T with the subject moving to SU1 or recursive TopP). What does not immediately follow from the proposals made so far, however, is the observation that the 'Su-Adv-V' pattern in root clauses seems considerably more frequent with full NP subjects (21.6%) than with pronominal subjects (9.4%). At present, we have to leave it open as to what the explanation for this contrast could be.¹²

In summary, the distributional properties of adverbs in EME nonroot clauses generally confirm the validity of the proposals discussed in section 2 for the structural analysis of early English clausal syntax. In particular, the discovery of a previously unnoticed root/nonroot asymmetry concerning the distribution of adverbs and finite verbs in clauses with pronominal subjects supports the hypothesis that the finite verb occupies different positions in root and nonroot clauses in early English and, more specifically, that V generally moves to a lower position in nonroot clauses than in root clauses (T as opposed to Agr/C).

4. THE DISTRIBUTION OF SECONDARY NEGATION, SUBJECTS AND FINITE VERBS

We now turn to the structural position of negation in EME. Recall that van Kemenade (2000) argues that in clauses with subject-verb inversion the secondary negator is ordered differently with respect to the subject, depending on whether the subject is a pronoun or a full nominal, and that this pattern provides evidence for the position of NegP in the

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¹² A contrast between different types of subjects also emerges if we consider all root clauses with a subject and an adverb preceding the finite verb (i.e. 'Su-Adv-V' and 'Adv-Su-V' orders). With full NP subjects, 'Su-Adv-V' orders occur with a frequency of 41.9% (99 examples vs. 137 with the order 'Adv-Su-V' (58.1%)) whereas this order can only be found in 10.3% of the cases with pronominal subjects (50 examples vs. 436 with the order 'Adv-Su-V' (89.7%)). Thus, if two elements precede the finite verb, there is a strong preference for the subject to follow the adverb if it is pronominal whereas there is no such preference (or at least a much weaker one) with full NP subjects. The difference discussed in the text may therefore be a consequence of ordering preferences with preverbal elements, and the question would then be what determines this kind of difference. Possible factors here might be prosodic ones or restrictions on CP (TopP) recursion for multiple topics.

syntactic structure. Table 3 shows the relative linear positions of full nominal compared with pronominal subject, the secondary negator *not* and the finite verb in root clauses in PPCME2.

Table 3 Secondary negation in root clauses in PPCME2 period M1

Syntactic pattern	Pronominal subject	Full NP subject
Su V not	59 (39.6%)	39 (61.9%)
V Su not	80 (53.7%)	8 (12.7%)
V not Su	0	16 (25.4%)
Su not V	3 (2.0%)	0
not Su V	0	0
not V Su	7 (4.7%) ¹³	0
TOTAL	149 (100%)	63 (100%)

The most frequent pattern (Su V not), in which we commonly find both full nominal and pronominal subjects, is indecisive with respect to the position of NegP. Subject-verb inversion contexts, seen in the second and third rows in Table 3, are more revealing: we observe that a pronoun subject never follows *not*, whereas a full NP subject does so in 16 of the 24 inversion cases. These data are in line with van Kemenade's (2000) claim that NegP is higher than the usual position of full NP subjects but below that of pronouns. The eight cases of V Su *not* in Table 3 where the subject is a full NP require further consideration, on her assumptions, because they restrict a subject position higher than negation to pronoun subjects; we return to this issue in section 6.

When we consider nonroot clauses, van Kemenade's analysis of negation becomes more problematic. Her proposal that secondary negators occupy a fixed NegP right above TP, when combined with our finding that finite verbs generally move only to T in EME nonroot clauses, makes a clear prediction for the distribution of secondary negators in nonroot clauses. With V usually in T, NegP above TP and pronominal subjects in the

¹³ The occurrence of this word order shows that, in contrast to Modern English, the negator *not* can be fronted to clause-initial position in EME.

higher subject position, secondary negation is expected to typically occur between the subject pronoun and the finite verb, as in (10).

[(10)
$$[CP \ C \ [AgrP \ subject \ pronoun \ Agr \ not \ [TP \ SU2 \ ne \ V-T \dots]]]$$

Furthermore, given that full NP subjects do not move to the higher subject position in van Kemenade's analysis but stay in TP, nonroot word order with full NP subjects should be restricted to the order 'C-*not*-Su-V'. As Table 4 shows, neither of these expectations is borne out.¹⁴

TABLE 4 Secondary negation in nonroot clauses in PPCME2 period M1

Syntactic pattern	Pronominal subject	Full NP subject
C Su V not	70 (73.7%)	21 (91.3%)
C Su not V	17 (17.9%)	2 (8.7%)
C V Su not	8 (8.4%)	0
C V not Su	0	0
C not Su V	0	0
C not V Su	0	0
TOTAL	95 (100%)	23 (100%)

In nonroot clauses the secondary negator normally follows both the subject, whether pronominal or full NP, and the finite verb. This word order pattern is illustrated in (11) (11c repeated from 9b above).

(11) a. ʒif ðat hali writ *ne wiðseið* ðe **naht** (CMVICES1, 1010.1223) if that holy writ NEG prevent you not 'if that holy writ does not prevent you'

-

¹⁴ Note that the row with 'V-Su-*not*' orders provides an illustration for the point made in fn. 5 that nonroot clauses may sometimes license root clause word order and hence V-movement that goes beyond T. Subject-verb inversion with pronominal subjects is generally assumed to involve V-movement to C. Hence, we have to conclude that in the 8 'V-Su-*not*' clauses in Table 4 the verb moves to C and, more generally, that in a small number of nonroot clauses the verb does not remain in T.

b. 3ef ha *naueð* **naut** oðer mete oðer drunh efter hire wille

(CMANCRIW, II.90.1093)

if she NEG-has not either food or drink after her will

'if she does not have food or drink as she wishes'

c. 3ef bu bus ne dest naut

(CMANCRIW, II.217.3133)

if you thus NEG do not

'if you do not do act in this way'

Since the finite verb is generally in T, the fact that nonroot clauses normally position a secondary negator to its right provides compelling evidence, we believe, for a Neg position below T. There are, it is true, potential instances illustrating a high NegP in the second row of Table 4, where we do in fact find the word order schematically represented in (10) above and illustrated in (12).

(12) be he naut ne isih δ

(CMLAMBX1, 125.1247)

whom he not NEG sees

'whom he does not see'

However, we shall argue that such word orders do not provide clear-cut evidence for a high NegP, as the clauses are plausibly INFL-final. This issue will be further discussed in section 6.

In summary, the main finding of this section is that secondary negation generally follows the finite verb in nonroot clauses. Assuming that V is in T in nonroot clauses, we conclude that NegP is generally below TP in the clause structure of EME.

5. THE DISTRIBUTION OF ADVERBS, NEGATION, OBJECTS, AND FINITE VERBS

Thus far, we have assumed – as does van Kemenade (2000) – that the sentential negator *not* regularly indicates the position of NegP. A way of resisting our conclusion that NegP already occupied a low position in EME would be to reject this assumption. It may be that *not* was quite often a structural adverb in EME, a claim explicitly made by Kroch (1989) and Frisch (1997). In this section, we therefore check our basic premise that *not* was not a structural adverb left-adjoined to VP.

If *not* were a structural adverb in EME, it might be expected to have had roughly similar privileges of occurrence to other adverbs in terms of their co-occurrence with objects and finite verbs. We therefore analysed occurrences of bona fide adverbs with respect to objects and finite verbs, in order to see whether their distribution parallels that of *not*. More specifically, we investigated whether the finite verb and a following adverb or *not* could be separated by the direct object. In uninverted simplex clauses this is relatively straightforward to analyse. In a linear sequence where a finite V was followed by an object NP and an adverb/*not*, we categorised data according to whether the object NP preceded the adverb/*not* or vice versa. Auxiliated clauses are slightly less straightforward because there is a further possible position for the direct object: to the right of the non-finite lexical verb. We excluded such cases because we were interested only in cases where the direct object was close to the finite verb.

5.1. Adverbs, objects, and finite verbs

Table 5 shows the distribution of adverbs with respect to full NP objects in a position following the finite main verb.

Table 5 Adverb, tensed main verb, and full NP object order in PPCME2 period M1

Simplex clauses			
Syntactic pattern	Root clauses	Nonroot clauses	Total
V Obj Adv	65	48	113 (30.6%)
V Adv Obj	171	85	256 (69.4%)
Total	236	133	369

Adverbs are generally able to appear on either side of a full NP direct object, with a two-to-one preference for positioning the full NP object after an adverb.

Concerning the structural position of object NPs in relation to adverbs in the word order patterns in Table 5, we can observe that the position of the two constituents is often hard to determine in simplex root clauses. In particular, the order 'Obj-Adv' could either be the result of object movement past a medial (i.e. left-adjoined) adverb or it could simply be the result of a VP-final (i.e. right-adjoined) adverb with the object potentially in its base position. This ambiguity can be avoided if we look at certain auxiliated clauses. In auxiliated clauses, a VP-final adverb follows the non-finite verb whereas an adverb occurring between the finite auxiliary and the non-finite verb must be medial. For the purposes of comparing adverbs and *not*, the crucial type of adverb is the medial one because we found no instances of *not* after a non-finite verb. Hence, if *not* were an adverb, it would have to be one that is restricted to a medial position in the clause and we therefore have to compare the distribution of *not* with that of medial adverbs.

Table 6 shows the distribution of unambiguously medial adverbs with respect to objects in the domain between the finite auxiliary and the non-finite main verb.

TABLE 6 Adverb, tensed verb, and full NP object order in PPCME2 period M1

Auxiliated clauses			
Syntactic pattern	Root clauses	Nonroot clauses	Total
Vaux O Adv Vmain	12	13	25 (59.5%)
Vaux Adv O Vmain	11	6	17 (40.5%)
Total	23	19	42

As in Table 5, both orders of object NPs and adverbs can be found. What will be particularly important in the context of the comparison with *not* is the fact that adverbs can occur to the right of NP objects and that the positioning of the adverb after the object is actually the preferred order, especially in nonroot clauses. This suggests that object NPs can undergo scrambling to the left of an adverb. This word order pattern is illustrated in (13).

- (13) a. Nu ðu wilt *mine name* **swa ʒiernliche** witen (CMVICES1,23.248)

 Now you want my name so dearly know

 'Now you so dearly want to know my name.'
 - b. he haueð wise men of hali & of hech lif **ofte swa** bi cherred

 (CMANCRIW,II.166.2302)

 he has wise men of holy and of high life often so mocked

'he has often mocked wise men of holy and high life in such a way.'

- c. For he wolde *pone forwordene middeneard* **eft** aræren

 (CMKENTHO,144.260)
 - For he wanted the decayed world again lift-up
 'For he wanted to lift up this decayed world again'
- d. bet heo ne schal *pene stude* neauer mare changin (CMANCRIW,I.46.52)
 that she NEG shall this place never more change
 'that she shall never change this place again'

As in the case of the data in Tables 1 and 2, adverb type does not seem to be essential for the different word order patterns with objects. Thus, in (13a) the order 'O-Adv' is found with a manner adverb, and in (13b-d) with various temporal adverbs.

5.2. Negation, objects, and finite verbs

Let us now consider whether the secondary negator *not* behaves in the same way as adverbs with respect to full NP objects. In all types of clauses (root/nonroot, simplex/auxiliated), the outcome was very clear, as Table 5 shows.

TABLE 7 Secondary negator, tensed verb, and full NP object order in PPCME2 M1

Simplex clauses			
Syntactic pattern	Root clauses	Non-root clauses	Total
V O not	0	0	0
V not O	30	15	45
Total	30	15	45

Auxiliated clauses			
Syntactic pattern	Root clauses	Non-root clauses	Total
Vaux O not Vmain	0	0	0
Vaux not O Vmain	5	3	8
Total	5	3	8

Not always intervened between the finite verb and the direct object. The different structural position of the verb in root and nonroot clauses made no difference.

Illustrations are given in (14) for auxiliated clauses, and for simplex clauses in (15).

(14) a. Ne mai ich **noht** *alle þing* tellen (CMTRINIT, 177.2407)

NEG can I not all things tell

'I cannot tell everything'

b. be ne wilen **noht** here sinnes forleten (CMTRINIT,83.1110)

who NEG want not their sins renounce 'who do not want to renounce their sins'

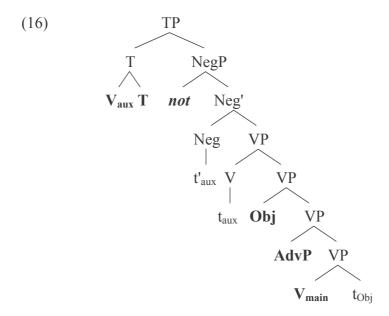
- (15) a. ne bridleð he **naut** *his tunge*NEG curbs he not his tongue

 'he does not curb his tongue'
 - b. Ich nat **nawt** *pe time*I NEG-know not the time

 'I do not know the time'

 (CMSAWLES, 170.57)
 - b. hwenne he feleð naut his achne sechnesse (CMANCRIW,II.136.1812)
 when he feels not his own sickness
 'when he does not feel his own sickness'

These results indicate that EME had a ban on full NP objects standing between the finite verb and *not*, in simplex as well as in auxiliated clauses. This finding is in contrast to the conclusions reached in section 5.1. There we observed that object NPs frequently occupied a position to the left of the adverb, suggesting that they could undergo scrambling. Combining the results of this section and of section 5.1., we can now conclude that scrambling targeted a position lower than *not*, but higher than the attachment position of a medial AdvP. This would account for the empty cells in Table 7, corresponding to where in Tables 5 and 6 object NPs intervene between the finite verb and the AdvP. We argue that this distinction was implemented by analysing *not* in NegP, whereas medial adverbs where left-adjoined to VP. Scrambled objects are for present purposes analysed in terms of VP-adjunction (see Kidwai 2000).



This analysis can be applied to the following examples illustrating the respective order of negation, a scrambled full NP object, and a VP-initial adverb, where all three elements co-occur.

- (17) a. þt naueð **naut** *pe heorte* **þus** afaitet (CMANCRIW, II 208.2992) who has not the heart thus disciplined 'who has not disciplined his heart in such a way'
 - b. Þu qð ha Keiser nauest **nawt** þis strif **rihtwisliche** idealet

(CMKATHE, 30.187)

You said she emperor NEG-have not this contest equitably shared 'You, she said, emperor, have not shared this contest equitably.'

As for the absence of 'O-Neg' orders, it can be accounted for under the assumption that no structural position higher than NegP was available to full NP direct objects:

(18) a. $*[_{CP} \text{ ne bridle}\check{o}_i \text{ he } \textit{his tunge}_j \ [_{NegP} \text{ naut } t_i t_j \]]$ unattested NEG curbs he his tongue not

b. *[CP] hwenne he feleð_i his achne sechnesse_j [NegP **naut** t_i t_j] unattested when he feels his own sickness not

The comparison of object positions in relation to *not* and in relation to adverbs has helped to confirm the assumption made by us and by van Kemenade (2000) that *not* is a diagnostic of NegP rather than a sentence adverbial. The analyses set out in this section and the preceding section have shown that in a position following the finite verb:

- full NP objects commonly preceded adverbials left-adjoined to VP
- full NP objects never preceded not

These findings militate against an analysis in which *not* has the attachment status of an adverbial. Rather, they support an analysis in which *not* appears consistently in NegP, and full NP objects even when they raise out of VP can raise only to a position lower than NegP.¹⁵

5.3. Negation, pronominal objects, and finite verbs

To conclude this section on the interaction between objects, adverbs/*not* and finite verbs, let us briefly consider the status of pronominal objects co-occurring with *not*. We will show that an investigation of pronominal objects provides further evidence in support of a low NegP in EME.

We used the same analysis criteria as for full NPs. The results are shown in Table 8:

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¹⁵ If *not* does not have the same status as adverbs, we might expect that its distribution also differs from a negative adverb like *never*. There is indeed some (weak) evidence suggesting that this expectation is borne out. Whereas the order 'O-*not*' never occurs in the 53 examples in Table 7, we do find the order 'O-*never*' in our corpus. However, 'O-*never*' occurs only once among 27 examples with *never* and the word order patterns in Table 7. This very low frequency of the 'O-*never*' order as compared to the 'O-Adv' order in Tables 5 and 6 may be related to the licensing requirements of negative elements. If we assume that negative elements have to be licensed in a structural position related to negation at some point in a derivation (cf. the Neg Criterion), base generation of *never* in NegP is the default option. The alternative, i.e. base generation in an adverb position to the right of the scrambling position of object NPs, would imply subsequent movement to NegP and may therefore be a marked option.

Table 8 Secondary negator, tensed verb, and pronoun object order in PPCME2 M1

Simplex clauses			
Syntactic pattern	Root clauses	Non-root clauses	Total
V O not	28	10	38
V not O ¹⁶	0	0	0
Total	28	10	38

Auxiliated clauses			
Syntactic pattern	Root clauses	Non-root clauses	Total
Vaux O not Vmain	3	1	4
Vaux not O Vmain	0	3	3
Total	3	4	7

In simplex clauses we find the exact opposite scenario to our findings with full NPs, with the pronoun intervening between the finite verb and *not* in all clause types, e.g. (19):

(19) bt ich ne seo *hire* **nawt** heonne-forð mare (CMJULIA,123.489) that I NEG see her not henceforth any-more 'that I will not see her any more'

Example (20) further illustrates the distributional contrast between pronoun and full NP objects. Whereas the pronoun *hem* precedes the secondary negator, the full NP object follows it.

(20) ac it ne openede *hem* **noht** *pe blisse of heuene* (CMTRINIT, 95.1272) but it NEG opened them not the bliss of heaven

¹⁶ These figures include unmodified object pronouns only. As is well known, modified pronouns generally have the syntactic properties of full NPs. For the purposes of this table, we have therefore omitted two examples with the 'not-O' order where the object pronoun is postmodified. An illustration of this type of example is given in (i):

⁽i) bt ich ne leose **nawt** him bt is mi lif & my leof (CMKATHE,43.386) that I NEG lose not him that is my life and my love 'that I do not lose him who is my life and my love'

'But it did not open the bliss of heaven to them'

With auxiliated clause data, numbers are very small, but they do show cases of 'not – pronoun object' order in three out of seven cases. They can be analysed in the same way as full NPs in OV order in auxiliated clauses (van der Wurff 1997, Kroch and Taylor 2000b, Ingham 2003b). Whether this is seen as attributable to object scrambling or to an optional underlyingly head-final VP, it seems to have permitted both full NP and pronoun objects to occur between the negator and the main verb, as shown in (21):

- (21) a. be nele **naht** him cnowen (CMTRINIT, 183.2549) who NEG-wants not him recognise 'who does not want to recognise him'
 - b. Þu qð ha Keiser nauest **nawt** *þis strif* rihtwisliche idealet(CMKATHE, 30.187)

You said she emperor NEG-have not this contest equitably shared 'You, she said, emperor, have not shared this contest equitably.'

But in simplex clauses, where this complication does not arise the outcome, as we saw, is categorical: full NP objects and pronoun objects were in complementary distribution with respect to the sentence negator *not*. This difference recalls the full NP/pronoun split in subject positioning vis-à-vis the secondary negator discussed by van Kemenade (1999, 2000). It suggests a need to distinguish the differing structural position of postfinite object pronouns from that of full NP objects. Crucial here are the nonroot clauses with V in T, e.g.

(22) a. ʒif ðat hali writ ne wiðseið *ðe* naht (CMVICES1, 101.1223)
if that holy text NEG prevents you not
'if that holy text does not prevent you'
b. þt ich ne seo *hire* nawt heonne-forð mare (CMJULIA,123.489)
that I NEG see her not henceforth any-more

'that I will not see her any more'

The position of pronoun objects must therefore be fairly low, and in any case not the high FP position claimed by van Kemenade (2000). On the other hand, the position of the pronoun object in (22) cannot be within the VP domain, since we assume that *not* is in Spec NegP, above VP.

We shall take it that postfinite object pronouns are in Spec AgrOP, positioned between TP and NegP. Full NP objects on the other hand, are not; they remain in a lower position, and do not undergo movement to Spec AgrOP. This would be analogous to leftward movement of object pronouns, but not full NP objects, in Mainland Scandinavian. Roberts (1995) makes a similar claim for Early Modern English along these lines. We take the systematic appearance in EME of object pronouns already standing between a finite verb in T and *not* as further support for our claim that EME already had the low negation position that van Kemenade attributes to later Middle English.

6. THE POSITION OF NEGP RECONSIDERED

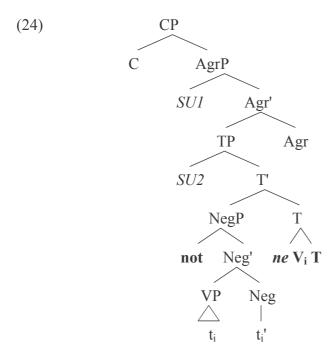
So far we have seen very substantial evidence for a low NegP in Early Middle English.

On the strongest hypothesis, this would be the only available position for a secondary negator. However, the data present apparent counterexamples to a claim that negation is

always below TP. First, in nonroot clauses, where the tensed verb is in T, there are 17/95 cases (17.9%) of prefinite *not* with pronoun subjects and 2/25 (8.7%) with full NP subjects (cf. Table 4 above). The following examples illustrate this construction.

- (23) a. as he ham **naut** *nuste* (CMANCRIW, II.162.2227) as he them not NEG-knew 'as he did not know them'
 - b. þt wedlakes heuel-bedd nawt ham ne *ihente* (CMHALI, 142.221)
 that wedlock's curtained-bed not them attracts
 'that wedlock's curtained bed does not attract them'

We believe that such cases are not necessarily fatal to the claim that NegP was always below T. Although EME is to a large extent head-initial in the inflectional domain, some head-final structures can still occasionally be found (cf. Kroch and Taylor 2000b). Thus, (23) could potentially involve a head-final TP with a NegP below T rather than a head-initial TP with NegP above TP:



In INFL-final clauses, a T projection takes NegP as its left complement, hence *not* in Spec NegP is projected lower than T, but appears before the finite verb.

It is true that, at 17.9% and 8.7% respectively, the incidence of INFL-final we would assume to cover these cases of prefinite *not* might seem rather high, as compared with the figures reported in Kroch and Taylor (2000b:138-42). They performed a number of analyses to determine the frequency of INFL-final in EME nonroot clauses in the same EME samples as we are using here. They found a rate of 2-4%, depending on the method used, of necessarily INFL-final, as demonstrated by the presence of additional clausal material. However, as these authors recognise, their figures constitute only a 'lower bound' on INFL-final, because many examples with ambiguous structure may well have been INFL-final. It is unwise to assert that INFL-final syntax cannot have been any more frequent than a few percent of any given dataset, so these datapoints do not provide clear-cut counter-evidence against a low NegP in nonroot clauses.

Indeed, this conclusion is strengthened by the fact that word orders which plausibly manifest a head-initial structure did not exhibit preverbal negation in our data. Thus,

clauses with an object pronoun following the tensed verb have been taken to be INFL-initial because pronouns are assumed not to undergo rightward movement (cf. Pintzuk 1999, Kroch and Taylor 2000b); clauses with postfinite full NP objects, which may have undergone rightward movement, are indeterminate as regards the underlying position of INFL. In the 18 cases in our data where an object pronoun follows the finite verb in the nonroot clause data, secondary negation is never to the left of the finite verb.

- (25) a. * as he **naut** *nuste* ham unattested (vs. 23a) as he not NEG-knew them
 - b. þt he *ne sturede* hire **nawt** (CMKATHE, 47.445) that he NEG disturbed her not 'that he did not disturb her'
 - c. pat we *ne understonden ne bisechen* him **noht** (CMTRINIT, 121.1638) that we NEG understand nor beseech him not 'that we do not understand him nor beseech him'

Hence there is no unambiguous evidence for a NegP above TP in the EME nonroot data.

Van Kemenade's claim that NegP is above TP can thus be re-interpreted: in EME

INFL-final clauses, NegP is selected by a head-final TP.

(26) a. [CP as [AgrP he ham [TP [NegP naut [VP] Neg] nuste T] Agr]]
b. [CP bt [AgrP [TP wedlakes heuel-bedd [NegP nawt [VP ham] Neg] ne ihente T] Agr]]

As can be seen in (26a-b) above, this analysis will generate a secondary negator in NegP to the left of a tensed verb. However, the selection of NegP by TP, which according to van Kemenade occurred only later in ME, is uniformly posited as a feature of EME, both in clauses with linear INFL-final as well as linear INFL-initial.

It may be noted that in a study of a smaller number of early and late ME verse and prose texts, Iyeiri (2001:49) observed that most cases of INFL–final occurred in subordinate clauses, and concluded that "they may be a reflection of older syntax". Our analyses uphold both points, in the sense that the prose data can be argued to show a restriction on prefinite *not* to putative INFL–final clauses, i.e. older syntax. The completion of the shift from INFL-final to INFL-initial in EME had the effect of rendering impossible a structural analysis of surface prefinite *not*.

The more serious problem for an analysis in terms of NegP below TP appears to lie in van Kemenade's data on inverted root clauses. The majority of full NP subjects in EME root clauses (16/27) stood to the right of *not*. Assuming they were in Spec TP, and *not* was in Spec NegP, we appear to have NegP above TP, contrary to the proposal made so far. However, many of these are again not conclusive counterexamples. In the vast majority of cases the finite verb was a form of *be*, or another verb which lacked an external argument.

- (27) a. Ne bið **naut** *his lare* fremful (CMLAMBX1,109.1006)

 NEG is not his teaching profitable

 'His teaching will not be profitable.'
 - b. Pe-3et nes **nawt** *pe kinges purst* wið al þis blod ikelet. (CMKATHE,49.483)

 Nevertheless NEG-was not the king's thirst with all this blood cooled.

¹⁷ Iyeiri (2001:45-47) finds that prefinite *not* is 'more or less restricted to verse', where 'most instances locate the finite verb at the line-end position'.

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'Nevertheless, the king's thirst was not cooled with all this blood.'

We would argue that the full NP subject in such cases is licensed in a position within the VP, as with postverbal subjects of passives in pre-Modern English discussed by Haeberli (2002c), or postverbal subjects of unaccusatives (van Kemenade 1997). In other cases, the subject followed modal verbs, which are argued by van Kemenade (1997:336) to lack an external argument:

Nalde **nawt** *godd* leoten his Martyrs licomes liggen (CMKATHE,49.482)

NEG-would not God let his martyrs' bodies lie

'God would not let his martyrs' bodies lie'

There are no more than a handful of cases that cannot be dealt with along such lines, e.g.:

- (29) a. Swo ne andswerede **noht** *moyses* ure drihten (CMTRINIT,215.3009)

 So NEG answered not Moses our Lord

 'Moses did not thus answer our Lord.'
 - b. Nule **naut** *vre lauerd* bt amon for an bing beo twizen idemed.

 (CMANCRIW,II.228.3296)

 NEG-want not our Lord that a man for one thing be twice judged

 'Our Lord does not want a man to be judged twice for one thing.'

These examples show the secondary negator following an active voice transitive verb in a simplex clause and preceding an NP subject. Since the full NP subject must structurally be no lower than Spec TP, the position of the secondary negator in these cases must be higher than TP. However, as pointed out by a reviewer, even here the negator could have

moved up from NegP; a small number of cases of root clause Neg-V-Su order were found in which the negator can be seen to have moved out of NegP, albeit to a different landing site, presumably Spec CP (cf. Table 3 and fn. 13).

With these few exceptions, our analysis in which T routinely selects NegP is successful in accounting for the distribution of the secondary negator in EME. Our assumption, shared by other analysts, that TP was sometimes head-final in nonroot clauses was shown to deal with most of the apparent counter-examples. We consider our proposals an advance on Van Kemenade's (2000) analysis which left certain unanswered questions. In particular these involved the alternation in the respective positions of *not* and full NP subjects in V2 clauses, and the position of negation in nonroot clauses.

We have substantiated the assumption, made both by ourselves and van Kemenade, that *not* was a Spec NegP element, by showing that *not* and adverbs behaved differently with respect to direct objects. However, we believe that our predominantly low NegP analysis of EME offers a more cogent account of the phenomena, in particular the distinctness of the structural positions of *not* and of adverbs. Contrast this with the inverted main clause context where van Kemenade argued for NegP above TP (co-occurrence with subject NPs): here, *not* and adverbs behaved similarly. The analysis presented in Table 3 showed an alternation between Verb-Su-*not* and Verb-*not*-Su corresponding to the alternation exemplified in (1a-b) with Verb-Adv-Su and Verb-Su-Adv (cf. Haeberli 2000). Since the structural position of adverbs is not distinguished from that of *not* in inverted main clauses, we consider that the evidence for a NegP above TP in this context is weaker than the evidence for a NegP below TP, which is available when a full nominal direct object is present, as discussed in section 5.2 above. Presumably this unambiguous evidence for a lower NegP as compared with ambiguous evidence for a

higher NegP affected the learnability of the two structural positions. The likelihood would therefore be that the higher NegP would be lost, as was indeed the outcome.

Let us now summarise how we see the development of NegP in early English in overall terms. We would agree with van Kemenade (2000) that, by the early 13th century, sentential negator *not* regularly occupied Spec NegP. We therefore believe that the claim in Frisch (1997:38) that two-thirds of 13th century uses of *not* were structural adverbials is greatly overstated, for the reasons discussed in section 6. However, for the periods before and after Early Middle English, we do not take a position as to the structural representation of sentential negation. Following Frisch (1997), Kroch (1989) and Roberts (1993), uses of the secondary negator *not* in Old English could have been adverbial, in which case they did not furnish evidence as to the position of NegP. The fixing of *not* as a Spec NegP element would then have occurred in the transition from OE to EME. Alternatively, following van Kemenade (2000), the secondary negator normally stood in NegP, normally in a high position, but perhaps the lower NegP position started emerging in late Old English. As regards later developments in the history of English, clearly the low NegP position was the one which survived, and became predominant later in the Middle English period. In declaratives, this may have been related to the loss of Verb movement to C in negated clauses. Apparent survivals of the high NegP position in interrogatives continued to be found (Rissanen 1997), but in PDE they are stylistically marked, e.g.

(30) a. Do **not** *different schools* have different needs?

(C. Woodhead, Class War, 2002)

b. Does **not** the threat of an atomic catastrophe which could wipe out the whole human race also serve to protect the very forces which perpetuate this danger?

(H. Marcuse, *One-dimensional man*, Routledge Kegan Paul, Ark Editions, 1984, p.ix. (1st ed.1964))

We do not know when this construction lost its status as an unmarked grammatical construction, and became a highly marked stylistic trait. In any case, we assume that the existence of such data as (30) would not mandate the persistence of a high NegP into PDE. The evidence in terms of learnability for a high NegP must therefore have become less and less robust. A more detailed analysis of developments in these areas will be left for future research.

7. CONCLUSION

The clausal syntax of negation and adverbs in EME was undeniably complex and variable, but in this study we have shown that the variation was not unprincipled. Let us recall the overall descriptive findings: (i) there is a sharp asymmetry between root and nonroot clauses as regards the possibility of an adverb intruding between a pronominal subject and the finite verb; (ii) there was no such asymmetry as regards the positioning of the secondary negator *not*, which stood in postfinite position the overwhelming majority of the time in root and non-root clauses; (iii) pronominal objects intruded between the finite verb and the secondary negator *not*, whereas nonpronominal objects never did; (iv) there was no such contrast as regards nonpronominal objects and adverbs, where

The first conclusion we draw from these findings is that there is large-scale evidence against the analysis of EME *not* as a structural adverb (*contra* Kroch 1989 and Frisch 1997). Its distribution with respect to subjects and objects has been shown here to be quite dissimilar from that of adverbs. No doubt it had developed from an adverb, as is generally assumed in accounts of historical English syntax, but it had quite clearly become grammaticised as a regular NegP element by the early 13th century.

Secondly, we have been able to incorporate these observations into a consistent analysis of the respective positions of finite verbs, nominal positions and negation. The finite verb generally stands in T in nonroot clauses but Agr in root clauses, in accordance with the proposals of Haeberli (2005). In a nonroot clause, a pronominal subject is in Spec AgrP, so there is structural space for an adverb to intervene between it and the finite verb in T. But in a root clause, where the finite verb is in Agr, there is no such space, nor is there in nonroot clauses with a full NP subject in Spec TP. NegP is normally below TP in all clause types, hence our account explains the dominant 'V[fin] – not' order in nonroot clauses. Object pronouns occur regularly between the finite verb and not and, as shown by nonroot clause data, stand in AgrOP, between T and NegP. Adverbs in the postfinite verb field occupy a range of positions, including a position for adverbs left-adjoined to VP: scrambled objects stand just above this adjoined position, and below NegP. We can thus distinguish the positions of object pronouns in AgrOP and scrambled full NP objects in a left-adjoined position.

Variation in the position of NegP arises from the persistence into EME of the position of NegP proposed by van Kemenade between AgrP and TP, residually found in EME inverted root clauses with full NP subjects. We have argued that it is not needed to account for any other uses of the secondary negator. The eventual elimination of V-to-C

in negated clauses after the 13th century (Ingham 2005) entirely removed this type of structural analysis.

Finally, we have refined the proposals made by van Kemenade (2000) as to how a theoretical account of EME syntax could capture the spirit of Jespersen's (1917) negative cycle. We believe that in substance her account is correct, but that in the period studied it had reached a more advanced point than she recognised. The innovations of later Middle English did not in our view consist of providing a new attachment site for negation, but rather of accommodating the consequences of the loss of the negative head *ne*. The secondary negator *not* now became the primary sentential negator, but by the time this change occurred, in the 14th century, it had already long been in the same structural position it occupies in Modern English. The possible raising and lowering of the structural attachment site of negation in English, as proposed by van Kemenade, should therefore be considered developments that would have occurred primarily between the 8th-12th centuries, in other words within the Old English period. Since then NegP has been stationary.

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Appendix

The Early Middle English data discussed in this paper have been taken from the *Penn-Helsinki Parsed Corpus of Middle English 2* (Kroch and Taylor 2000a), periods MX1 (comp. date unknown, ms. date 1150-1250) and M1 (1150-1250). Below are the original publication details of the texts used.

Ancrene Riwle (CMANCRIW)

Part I in: Ackerman, R. W. and R. Dahood (Ed.). 1984. *Ancrene Riwle. Introduction and Part I.* Medieval and Renaissance Texts and Studies 31. Center for Medieval and Early Renaissance Studies, SUNY at Binghamton, Binghamton, NY.

Part II in: Dobson, E. J. (Ed.) 1972. *The English Text of the Ancrene Riwle*. Early English Text Society O.S. 267, London.

(sample: Introduction/Part I from Ackerman and Dahood, rest from Dobson pp. 39-246) *Hali Meidhad* (CMHALI)

In: D'Ardenne, S.R.T.O. (Ed.) 1977. *The Katherine Group. Edited from Ms. Bodley 34*.

Bibliothèque de la Faculté de philosophie et lettres de l'Université de Liège CCXV.

Société d'Edition Les Belles Lettres, Paris. (exhaustive sample)

Kentish Homilies (CMKENTHO)

In: Warner, R. D.-N. (Ed.) 1917. Early English Homilies from the Twelfth Century. Ms. Vespasian D XIV. Early English Text Society O.S. 152., London. (sample: pp. 134-139, 140-145)

Lambeth Homilies (CMLAMB1, CMLAMBX1)

In: Morris, R. (Ed.) 1969 (1868). Old English Homilies and Homiletic Treatises of the Twelfth and Thirteenth Centuries. First Series. Early English Text Society O.S. 29, 34, London. (exhaustive sample of prose homilies)

Peterborough Chronicle (CMPETERB)

In: Clark, C. (Ed.) 1970. *The Peterborough Chronicle 1070-1154*. Clarendon, Oxford. Second edition. (sample: pp. 41-60 (exhaustive sample of continuations))

St. Juliana (CMJULIA)

In the same volume as *Hali Meidhad*. (exhaustive sample)

St. Katherine (CMKATHE)

In the same volume as *Hali Meidhad*. (exhaustive sample)

St. Margaret (CMMARGA)

In the same volume as *Hali Meidhad*. (exhaustive sample)

Sawles Warde (CMSAWLES)

In the same volume as *Hali Meidhad*. (exhaustive sample)

Trinity Homilies (CMTRINIT)

In: Morris, R. (Ed.) 1873. Old English Homilies of the Twelfth Century. Second Series.Early English Text Society, O.S. 53, London. (exhaustive sample)

Vices and Virtues (CMVICES1)

In: Holthausen, F. (Ed.) 1888. Vices and Virtues. Part 1. Early English Text Society, O.S.89, London. (exhaustive sample)

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