The Evolution of Do-Support in English Imperatives
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12.1. INTRODUCTION

This chapter presents an analysis of the syntactic evolution of English imperatives from Late Middle English to the Early Modern period, specifically of the increasing frequency of do-support in negative imperatives. I show that the development of do-forms in negative imperatives cannot be explained with a clause structure that has only one INFL projection and one NegP, as assumed in Roberts (1985) and Kroch (1989b). Therefore, I propose a more articulated clause structure, which I argue is already necessary to explain the syntax of Middle English infinitivals. In particular, I argue that the syntax of negative infinitivals in Middle English can be accounted for if we posit two possible syntactic positions for negation and an intermediate functional projection, which I assume to be an Aspect Phrase (AspP), between the two negation projections. The more articulated clause structure proposed here enables us to distinguish two types of verb movement: movement over the lower negation and movement over the higher negation. I show that the patterns of the development of do-support in imperatives as well as the patterns of the development of do-support in questions and negative declaratives can be explained if the loss of verb movement occurs in two steps in the history of English: the loss of the higher movement precedes the loss of the lower movement.

For data relating to the development of do-forms in various linguistic contexts, I use the online version of Ellegård's (1953) collection of clauses maintained by Anthony Kroch. The source for the data relating to Middle English infinitivals is the Penn–Helsinki Parsed Corpus of Middle English (PPCMME) (Kroch and Taylor 1994b).

I am extremely indebted to Anthony Kroch for encouraging me to pursue this topic and for many helpful discussions along the way. I also thank Brigitte Santonja, Ann Taylor, Alexander Williams, the audience at DIS 5 and the anonymous reviewers for helpful comments.
12.2. DATA AND ISSUES

12.2.1. Development of imperatives in English: a short survey

In Old English (c.850-c.1150), imperatives pattern with questions: the verb precedes the subject, even when the subject is pronominal, in both types of sentences. This is shown in (1) and (2).

(1) Beo þu on ofeste
   be you in haste
   ‘Be quick.’
   (Beowulf 386)

(2) Hwi sceal we opres mænes niman?
   why should we another man’s take
   ‘Why should we take those of another man?’
   (Elfric, Lives of Saints 24.188)

As in Pintruk (1991) and Kroch and Taylor (1997), I assume that weak pronouns in Old English occur at the CP-IP boundary, so that the fact that the verb precedes the pronominal subject implies that the verb is located in C∗.

In Middle English (c.1150-c.1500), the imperative verb also precedes the subject, as shown in (3).

(3) (a) Naske ſe of counseil
    not-ask you of counsel
    (Ancrene Riwle II.58.569)

(b) Helpe þou me
    help you me
    (The Earliest Prose Psalter 150.2299)

(c) Goo ſe . . . ynto þe payne of helpe
    go you . . . into the pain of hell
    (Mirk 4.86)

In the case of negative imperatives with the negative adverbial not, the subject precedes not, and the verb precedes the subject. This is illustrated in (4).

(4) (a) Ne hide þou nect from me þyn comandesment
    ne hide you not from me your commandment
    (The Earliest Prose Psalter 146.2156)

(b) Depart þou norst fro me
    depart you not from me
    (The Earliest Prose Psalter 24.594)

(c) medyl ſe not with hym
    meddle you not with him
    (Margery Kempe I, 56.218)

The word order in Middle English imperatives also shows that the imperative verb occupies C∗.

In Early Modern English (c.1500-c.1700), imperatives show the same word order as in Middle English. But imperatives with do-support are also attested. In imperatives with an overt subject and with do-support, auxiliary do precedes the subject, as shown in (5). In imperatives with an overt subject but without do-support, the verb precedes the subject, as shown in (6).

(5) (a) Rather, O God! do thou have mercy on us (323 355-8-24)
    (b) but I will be your good lord, do you not doubt (391 O.4-2-39)
    (c) Do you and your fellows attend them in (361 M.5-1-106)

(6) (a) And feare ye not them which kyll the body (310 mt10-28)
    (b) Forbid ye hym not (310 fkg-50)
    (c) doubt thou not all things rightly orderd be (356 60-25)

The fact that auxiliary do or the main verb precedes the subject suggests that do or the verb occupies C∗.

In Present-day English, negative imperatives require do-support. In negative imperatives with an overt subject, auxiliary verb do and negation n’i must precede the subject, as in (7).

(7) (a) Don’t you worry!
    (b) Don’t anybody move!

An affirmative imperative does not allow do-support unless it is an emphatic imperative. In an affirmative imperative with an overt subject, the subject must precede the verb, as in (8).

(8) (a) You come here!
    (b) Nobody move!

In emphatic affirmative imperatives with auxiliary do and an overt subject, do must precede the subject. This is shown in (9).

(9) (a) Do somebody open the window!
    (b) Do at least some of you show up for the party!

* Early Modern English examples in this chapter are taken from the sources in Eltis (1953). They are identified using Eltis’s system, with his source number preceding his reference. The full references of the sources are given in the Appendix to this chapter.

* The imperative subject appears to be able to precede do, as in (i). But the imperatives in (i) are degraded unless there is an intentional break between you and the rest of the sentence. This strongly suggests that the apparent subjects in sentences such as (i) are not sentential subjects, but vocatives, which are considered to be outside the clause structure and do not have a structural relation with any element in the clause.

(i) (a) You don’t drink the water
    (b) You do not leave the room
In Present-day English imperatives, the data suggest that while auxiliary do is located in C', the lexical verb is located lower in the clause.

12.2.2. Do-support

In Present-day English, auxiliary do is required in yes-no questions, non-subject wh-questions, negative declaratives (i.e. those containing not), and of course negative imperatives.

(10) (a) Did you finish?
(b) What did you finish?
(c) I did not finish.
(d) Don’t finish!

Ellegård provides a quantitative study of the development of do-forms in various constructions using a collection of sentences extracted from texts ranging in time from Late Middle English to the eighteenth century. Figure 12.1 is from Ellegård (1953: 162). It plots the relative frequency of do-forms in affirmative and negative declaratives, affirmative and negative questions, and negative imperatives, based on a sample of more than 10,000 tokens. After the middle of the sixteenth century, the frequency of do in affirmative declaratives declines steadily until, by 1700, the use of do in this environment is prohibited. The frequency of do in negative declaratives and both affirmative and negative questions rises continuously and sometime after the eighteenth century do is obligatory in these environments.

According to a common analysis of Middle English clause structure, questions have V-L-C movement and declaratives have V-I movement. Supporting evidence for this analysis comes from word-order facts: in questions the verb precedes the subject, as in (11), and in declaratives the verb precedes not, as in (12), and adverbs, as in (13).

(11) Questions
(a) Bileuest thou this thing?
(b) And lo, what seith Seneca in this matere? 
(Chaucer, Melibee 290.C2:237)

(12) verb + not
(a) I hevde not from you syns
(Paxton Letters 450:602)
(b) but he spack not one woode
(Caxton, History of Reynard the Fox 52.278)

(13) verb + adverb
(a) and [he] suffred euer grete peneunce for Goddis sake in weryng and [he] suffered always great penance for God’s sake in wearing of the hayre
of the hair (Life of St Edmund 165.64)
(b) Here men understonden ofte by bise 1531 byr 1531 of synne
here men understood often by this night the night of sin
(Wycliffite Sermons L 477:605)

According to Roberts (1985) and Kroch (1988b), English lost V-I movement for lexical verbs in the middle of the sixteenth century. When V-I movement was lost, only be, auxiliary have, and modal verbs, such as can, may, must, etc. could appear in I'. Based on the behaviour of indicative sentences, Roberts (1985) argues that the rise of do-forms is a reflex of the loss of V-I movement. As V-I movement was lost, INFL-lowering replaced it or verb movement to I' at LF, as in Chomsky 1991, 1993 and so the verb remains in situ. In questions, the requirement that the material in I' overly move to C' persists; thus, auxiliary do is inserted in I' as a last resort device and then moves to C'. Examples of questions with do-support are given in (14).

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**Figure 12.1.** Percentage of do-forms in various sentence types (from Ellegård 1953: 162)
280

Diachronic Syntax

(14) Questions
(a) and wherfore doth the earth sustaine me? (304 25–24)
(b) Dyd ye wyete this with your owne hande? (306 96–96)
(c) doeste thou envi to him the monachye of the thing mortal?
(326 109–30)

In negative declaratives, negation blocks INFL-lowering (or verb movement to
P at LF), stranding the material in P. Again, auxiliary do is inserted in P to
support the stranded material as a last resort device. Examples of negative
declaratives with do-support are given in (13).

(15) Negative declaratives
(a) They dyde not set theyr mynde on golde or rychesse (305 35–23)
(b) Christ dyd not praye for lames and leban & for the other (305 319–11)
(c) but the shepe did not heare them (310 310–8)

Krokh (1986b) provides empirical support for the proposal that the rise of
do-forms is a reflex of the loss of V-I movement by showing that the rate of the
rise of do-forms in various contexts, such as questions, negative declaratives, and
affirmative declaratives, is the same up to the middle of the sixteenth century
(why this is evidence is discussed in §12.5.2).

Comparing the development of do-forms in negative declaratives and negative
imperatives gives rise to an interesting puzzle. The development of do-forms in
the two contexts does not show the same pattern. As can be seen in Figure 12.1,
up to the end of the sixteenth century the relative frequency of do in negative
imperatives was as low as that in affirmative declaratives. Then after 1600, there
was a big change in the development of negative imperatives. The relative fre-
quency of do in negative imperatives jumped to the much higher rate found in
negative declaratives, and subsequently the two negative environments evolved
identically. If do-support is triggered when negation intervenes between V and
P, it is mysterious why the development of do-forms in negative imperatives
patterns with negative declaratives only after 1600.

Comparing the development of do-forms in questions and imperatives gives
rise to another puzzle. In Middle English, subject–verb inversion is attested in
both questions and imperatives, indicating verb movement to C for both types
of sentences, as was shown in (3) and (11). If do-support is triggered in ques-
tions as a reflex of the loss of V-I movement, as proposed in Roberts (1985) and
Krokh (1986b), then we expect to see imperatives pattern with questions with
respect to the development of the corresponding do-forms. However, as can be
seen in Figure 12.1, the rate of use of do-forms in negative imperatives is much
lower than the rate of use of do-forms in questions at all periods prior to the
completion of the change. It is only after 1700 that the rate of use of do-forms
in negative imperatives catches up with the rate in questions. As for affirmative
imperatives with do-forms, the relative frequency is extremely low. The relative
frequency of do in affirmative imperatives never exceeds 1% according to
Ellegård (1953), who therefore does not plot them in Figure 12.1. Here are some
examples of negative imperatives and affirmative imperatives with do-support:

(16) Negative imperatives
(a) Sir, do not marvel if I do bless your coming hither (344 21–17)
(b) Alan ysr kinge Popyn doe not moote your selve in Ire (304 46–13)
(c) doe not wrong the gentleman, and thyselfe too (360 I: 435)

(17) Affirmative imperatives
(a) Rather, O God! do thou have mercy on us (323 355–8–34)
(b) Do you let it alone (350 7–24)
(c) Do you and your fellows attend them in (351 M: 5–1–106)

In Present-day English, although do-support is required in negative imperatives,
it is not allowed in (non-emphatic) affirmative imperatives. If both questions and
imperatives had verb movement to C, then it is mysterious why there should be
this asymmetry in the rate of development of do-forms in questions and negative
imperatives. Moreover, if both questions and imperatives had verb movement to
C, it is even more mysterious why do in affirmative imperatives is not catego-
rical, whereas it is in questions.

12.2.3. Issues
I summarize below the issues raised by the data considered so far:
• Why does the development of do-forms in negative imperatives statistically
  pattern with negative declaratives only after 1600?
• Why do affirmative imperatives not pattern with questions in the development
  of do-forms? That is, why do affirmative imperatives not require do-support
  in Present-day English?
• Why does the development of do-forms in negative imperatives statistically
  pattern with negative declaratives and not with negative questions after 1600?

12.3. INFINITIVALS IN MIDDLE ENGLISH

Before addressing the issues raised in §12.2, I discuss a new set of data from
Middle English negative infinitivals. We will see that the word order attested in
negative infinitivals in Middle English provides evidence for the inventory of
functional projections and their relative positioning in English clause structure.
We will then see that the questions raised in §12.2 can be given an elegant ac-
tount if the clause structure proposed here is adopted.

12.3.1. Infinitive verb and negation
For negative infinitivals, Middle English allowed both 'not-to-verb' order (as
in (18)) and 'to-verb-not' order (as in (19)), as attested in the PPCME.
Given the phrase structure in (20), the word order 'to-verb-not' can be derived only if the verb moves across not and right-adjoints to P. But this is an unattractive solution in that we are forced to admit right-adjunction in syntax. Moreover, the phrase structure in (20) cannot derive the word order 'not-to-verb'. Alternatively, if to is in P, and not originates and stays in a fixed position higher than P, as in (21), then the word order 'not-to-verb' can be derived. But there is no way to derive the word order 'to-verb-not' with this phrase structure.

(21) \[ \text{neg} \not \to [\not \to [\not \to \text{to} \to \text{... verb ...}] \]

12.3.2. Two possible positions for negation

If there are two possible structural positions for negation in the clause structure of English (see Zanuttini 1991, 1997), then both the 'to-verb-not' and the 'not-to-verb' order in Middle English can be accommodated. Motivations for positing two structural positions for negation exist in Present-Day English as well. In this section, I discuss what they are and determine where the two negations are located in the phrase structure of a sentence.

In to-inflinitival, not can either precede or follow to, as shown in (22). If to is structurally fixed, then the variable word order calls for two possible locations for negation.

(22) (a) I promise not to be late
(b) I promise to be not late

Furthermore, in declaratives with a modal verb, negation not can occur either before or after an adverb, or in both positions, as shown in (23).

(23) (a) John would not often eat meat dishes
(b) John would often not eat meat dishes
(c) John wouldn’t often not eat meat dishes

Following Cinque (1999), let us assume that adverbs occur in fixed positions. Since often occupies the same position in the sentences in (23), the fact that negation not can be located above or below the adverb suggests again that there are two possible locations for negation.

The higher negation requires do-support for lexical verbs (as in (24)), and it licenses negative polarity items (NPIs) (as in (25)).

(24) (a) *John not often eats meat dishes
(b) John does not often eat meat dishes

(25) John would not often eat any meat dishes

The lower negation also requires do-support for lexical verbs (as in (26)), and it also licenses NPIS (as in (27)).

\[ \text{neg} \not \to [\not \to [\not \to \text{to} \to \text{... verb ...}] \]

5. Unlike in negative sentences in which do is adjacent to to or in negative sentences in which do is separated from not by an adverb, do is emphatic, as in (26b). I do not have an explanation for this fact.
Diachronic Syntax

(26) (a) *John often not eats his vegetables
(b) John does not often eat his vegetables

(27) John would often not eat any vegetables

In addition, both the higher negation and the lower negation have similar scope properties. For instance, both the sentences in (28) are ambiguous in that the negation can take either wide scope or narrow scope with respect to the universal quantifier of the subject NP. The ambiguous readings are paraphrased in (29).

(28) (a) All of the players will not certainly drop the ball
(b) All of the players will not certainly drop the ball

(29) (a) For all x, x is a player, x will not drop the ball (∀ > not)
(b) It is not the case that for all x, x is a player, x will drop the ball (not > ∀)

Given that the syntactic behaviour of the lower negation is similar to that of higher negation, I conclude that the lower negation heads its own NegP projection, just like the higher negation.

There are, however, some differences between the syntax of the lower negation and the higher negation. For instance, the higher negation determines the polarity of the tag question but the lower negation does not, as shown in (30).

(30) (a) John wouldn’t often eat any vegetables, would he?
(b) John would often not eat any vegetables, wouldn’t he?

One may argue that the reason for this contrast is that the higher negation is a sentential negation and the lower negation is a constituent negation. The account proposed in this chapter does not hinge on this matter. The crucial point here is that both the high and low negations are syntactic heads each of which projects NegP and requires do-support for lexical verbs. And the contrast attested in (30) can simply be attributed to the structural difference between the two negations: that is, one negation is higher in the structure than the other.

So where are the higher negation and the lower negation located in the phrase structure of a sentence? The variable word order of negative infinitivals in Middle English suggests an answer. The word order ‘not-to-verb’ indicates that the higher negation is located immediately above to, and the word order ‘to-verb-not’ suggests that the lower negation is located somewhere below to. Let us assume that TP is the highest functional projection for tensed clauses and that in infinitivals TP does not project at all (following Baltin 1993). Such a phrase structure for infinitivals reflects the fact that the infinitive does not have tense morphology.4 Let us further assume that to is in a functional head that hosts

mood features, namely Mv. Then, the higher negation is immediately above MP, deriving the word order ‘not-to-verb’.

Supporting evidence for the assumption that infinitivals do not project TP and that infinitive to cannot occupy Tp is provided by Baltin (1993), who points out that negation can never precede finite auxiliaries, as shown in (31).

(31) (a) *John not will leave
(b) John will not leave

If finite auxiliaries occupy Tp, the highest functional head for tensed clauses, and negation occurs lower than Tp, as I have assumed, then finite auxiliaries cannot follow negation as shown in (31a). Furthermore, if to also occurred in Tp, then to should not be able to follow negation. But the fact is that to can either precede or follow negation. Thus, to cannot be in Tp, and it therefore occupies a functional head lower than Tp.5 Infinitive to contributes the modality of irreals (cf. Stowell 1982 and Portner 1992). Therefore the appropriate functional head for infinitive to is Mv. The clause structure in which the tense projection is higher than the (irrealis) mood projection is consistent with Cinque’s (1999) proposal for the universal hierarchy of functional projections.

As for the lower negation, I propose that it occupies a position intermediate between MP and VP. The skeletal phrase structure assumed here for English is given in (32).

4 For a different approach in which infinitivals are tensed, see Chernisky (1981), Stowell (1982), Pollock (1981), Zanuttini (1993).

5 The clause structure assumed here for English is similar to Baltin (1993). The main difference is that in Baltin (1993), AgrP projects immediately below TP and to is placed in AgrP, whereas I do not assume the existence of AgrP. Instead, I assume that MP projects below TP and to is placed in Mv.

6 Zanuttini (1991) also argues that English has two positions for negation. The analysis proposed here differs from Zanuttini (1991) in that she assumes that the presence of the higher negation is parasitic on the presence of a tense phrase, whereas I make no such assumption. As a consequence, unlike the analysis proposed here, Zanuttini is forced to assume that infinitivals project TP.
I propose that the 'to-verb-not' order in Middle English is derived by the movement of the verb over the lower negation to an intermediate position between M' and the lower Neg', which I assume to be a head of aspect (Asp') that encodes (im)perfectivity. If infinitives move over the lower Neg', then we expect to find cases in which the infinitive verb precedes not and not in turn precedes a participle or a direct object. Such cases can be found in the PPCME, as illustrated in (33) and (34).

(33) to-verb-not-participle
(a) and said master parson, I pray you to be not displeased
and said master parson I pray you to be not displeased
(Caxton, Prologues and Epilogues 88.176)
(b) Ha! What it es mykell to he worji loving and be not liked!
ha what it is much to be worth loving and be not loved
(Rolle, Form of Living 88.52)

(34) to-verb-not-direct object
(a) to conforme not his will to God's will, to gyf noght entent till bes
to conform not his will to God's will, to give not heed to his
prayers
(Rolle, Form of Living 90.265)
(b) and to spille not oure tymne, be it short be it long at Goddis
and to waste not our time, be it short be it long at God's
ordinance
(Purvey, Prologue to the Bible I, 56.73)

A widely accepted diagnosis for verb movement is adverb placement with respect to the verb. In Middle English finite clauses, adverbs such as often and ever usually follow the tensed verb, as in (33) (repeated below as (35)). If these adverbs are VP-adjoined, then the fact that the tensed verbs precede the adverbs suggests that the verb moves over the adverb.

(35) (e) [and he] suffred euer grete penaunce for Goddis sake in
and he suffered always great penance for God's sake in
weryng of the heyre
(wearing of the hair
(Life of St Edmund 160.61)
(b) Here men vnderstonden ofte by his nyght of synne
here men understood often by this night of sin
(Wycliffite Sermons I, 477.606)

In Middle English infinitival clauses, adverbs can also follow the infinitive, as shown in (36). This suggests that in Middle English infinitive verbs can also undergo movement.

(36) (a) Monye men han a maner to eate ofte for to drynyke
many men have a manner to eat often in-order to drink
(Wycliffite Sermons I, 478.631)
(b) the other was that God would give her that grace, to her that was the
modor of God to do euer plesaunt seruyse to God
mother of God to do always pleasing service to God
(Sermons from the MS Royal 256.260)

There is some evidence from adverb placement that the head which hosts verbal aspect is located low in the clause structure. Cinque (1996) argues that different classes of adverbs each occur in a fixed position in the specifier of a different functional projections and that these functional projections are hierarchically structured. Based on this premise, he derives a universal hierarchy of functional projections. In particular, he observes that in English (just as in other languages), aspectual adverbs such as completely must follow other classes of adverbs, as shown in (37) and (38).

(37) (a) He rarely completely eats his vegetables
(b) *He completely rarely eats his vegetables
(38) (a) He hasn't yet completely ruined it
(b) *He hasn't yet completely ruined it

Based on this fact he concludes that the aspect projection in English is located quite low in the clause structure, lower than tense projection and mood projection.

In summary, I have shown that Middle English phrase structure for clauses allows two possible positions for negation based on the data from negative infinitivals. I have also argued that in Middle English, infinitive verbs move over the lower negation to an intermediate position between M' and the lower Neg'. Moreover, I have argued that infinitivals do not project TP and that to is in M', which is located lower than the higher Neg'. The phrase structure for infinitivals that I adopt is given in (39). If the proposed analysis is correct, then Middle English infinitivals are like their Present-day French counterparts in that the infinitive verb can move to an intermediate functional head (see Pollock 1989 for an account of French infinitivals). The difference is that infinitive verb movement is optional in French but it is feature-driven obligatory movement in Middle English. The phrase structure for tensed clauses in Middle English is similar to that for infinitivals, except that in tensed clauses, TP projects as the highest functional projection and the verb moves all the way up to T', as shown in (40).

(39) | [to-verb] [not] | [to] [to] | [to-verb] [V] | [to-verb] [not] |
   | [to ... to ... to ...]|

(40) | [to-verb] [not] | [to] [to] | [to-verb] [V] | [to-verb] [not] |
   | [to ... to ... to ...]|

In Middle English infinitival clauses, adverbs can also follow the infinitive, as shown in (36). This suggests that in Middle English infinitive verbs can also undergo movement.
12.4. THE DEVELOPMENT OF DO-SUPPORT IN IMPERATIVES

12.4.1. Do-support in Present-day English

At this point, I need to clarify the mechanism I am assuming for do-support in Present-day English given the clause structure in (40). The facts are: (a) do-support is required in questions (except for subject wh-questions), and negative declaratives for lexical verbs, but prohibited for be and auxiliary verbs, and (b) do-support is prohibited for affirmative declaratives. The explanations for these facts in the literature are largely based on the widely accepted assumptions that auxiliary verbs and be undergo overt movement to INFL (which is equivalent to T" in the clause structure in (40)), that lexical verbs undergo movement at LF in Present-day English, and that negation is a head that blocks this LF verb movement (cf. Chomsky 1991; Roberts 1993a).

In questions, tense features in T" must move to C" in the overt syntax. Be or auxiliary verbs in questions overtly move to T" and then they further move to C", carrying along tense features, thereby satisfying the requirement that tense features overtly move to C". On the other hand, lexical verbs are stuck in situ in the overt syntax, and so they cannot carry the tense features to C" in the overt syntax. As a last resort, do is inserted in AspP and moves through M" and T" to C" carrying along tense.

In negative declaratives, negation blocks LF verb movement, and so for lexical verbs do is inserted in AspP as a last resort and it moves through M" to T" checking verbal features. But negation does not block overt verb movement, and so be and auxiliary verbs do not require do-support (hence prohibiting it for reasons of economy). Affirmative declaratives do not require do-support for lexical verbs (as well as be and auxiliary verbs) since there is nothing that blocks LF verb movement. The question that arises is why negation blocks LF verb movement but not overt verb movement. Here, I just refer the readers to Chomsky (1991) and Roberts (1993a) for two possible accounts. For the purposes of this chapter it does not matter which particular account is adopted.

12.4.2. Verb movement in imperatives

Imperative verbs lack tense in their morphological make-up, just as infinitive verbs do. I take this to mean that TP does not project at all in imperatives, as represented in (41).

(41) \[ \{ V [ \ldots ] \} \{ [ s a p \ \{ \ldots \} \} \{ [ a s p \ \{ \ldots \} \} \{ [ a s p \ \{ \ldots \} \} \{ [ \ldots \} \} \]

\footnote{Zanuttini (1992) argues for Roussou that imperatives do not project a tense phrase.}

12.4.3. Do-support in imperatives

12.4.3.1. Negative Imperatives

As noted earlier, the standard view in the literature is that the development of do-support is a reflex of the loss of V-I movement for lexical verbs in the history of English. Under the more articulated clause structure proposed here, we are able to divide up V-I movement into M-T movement, Asp-M movement and V-Asp movement.

Recall that do-forms in negative imperatives are almost non-existent before the end of the sixteenth century, but gain ground rapidly after 1600. I propose that this is a reflex of the loss of V-Asp movement, which begins at the end of the sixteenth century. As V-Asp movement disappears, overt verb movement to C" is replaced with LF verb movement to C". But when AspP and V" are separated by negation do-support is required as a last resort device since LF verb movement is blocked by the intervening negation. Do is inserted in AspP, and then it moves to C", deriving do-(subject)-not-verb order, as represented in (42). Some examples of negative imperatives with do-support are given in (43).

(42) \[ \{ \{ V \} \{ \ldots \} \} \{ [ s a p \ \{ \ldots \} \} \{ [ a s p \ \{ \ldots \} \} \{ [ a s p \ \{ \ldots \} \} \{ [ \ldots \} \} \]

\footnote{A reviewer noted that the presence of AspP is strange in imperatives, since some have denied that perfect imperatives exist. However, perfect imperatives are indeed possible, as shown in Davies (1986).}

(i) (a) Do at least have tried it before you begin to criticize (Davies 1986, ch. 1, 38)

(b) Don't have eaten everything before the guests arrive (Davies 1986, ch. 1, 89)

Moreover, progressive imperatives and perfective imperatives are possible as well, as in (ii).

(ii) (a) Be waiting for me in front of the gate

(b) Eat up the cake!

Given these facts, positing an AspP for imperatives is not without some motivation.

\footnote{An alternative approach to why do-support is required in negative imperatives is given in Bobaljik (1992b). According to Bobaljik, do-support is triggered by a PF adjacency requirement between the morphology in INFL and the verb. Given this approach, I can say that do-support is required in negative imperatives because negation blocks PF adjacency between the morphology in the functional heads and the verb.}
The Evolution of Do-Support

12.5. Sequential Loss of Verb Movement

If we assume the articulated clause structure proposed here, we can imagine two different ways in which the loss of verb movement can proceed: (a) the loss of V-Asp movement, and M-T movement begins simultaneously; (b) the loss of M-T movement historically precedes the loss of V-Asp movement. In the rest of §12.5, I will show that possibility (b) makes the correct predictions for the overall statistical patterns shown in Figure 12.1: the loss of M-T movement begins at the beginning of the fifteenth century, and the loss of V-Asp movement begins at the end of the sixteenth century. At this point, I know of no evidence that indicates when exactly the loss of Asp-M movement begins. For the purposes of this chapter, I will simply assume that Asp-M movement is string vacuous and is lost in conjunction with the loss of M-T movement. The validity of the argument presented here does not hinge on when the loss of Asp-M movement takes place.

In a series of works on syntactic change, Kroch develops a model of change that accounts for the gradual replacement of one form by another form (Kroch 1989a, b, 1994; see also Pintzuk 1991, Santorini 1992, Taylor 1994). According to Kroch, the gradual change in the relative frequencies of two forms is a reflex of the competition between two grammars, rather than a series of grammatical reanalyses. In particular, Kroch argues that the statistical pattern in the development of do-forms reflects the competition between the old grammar that has V-I movement for lexical verbs and the new one that has lost it. In time, the grammar with V-I movement wins, at the expense of the grammar that has V-M movement.

Extending Kroch’s grammar competition model to the proposed analysis here, I make a conjecture as to how the loss of M-T and V-Asp movements proceeds. I hypothesize that at the beginning of the fifteenth century, the competition between the grammar with M-T movement and the one without such M-T movement begins. Before the grammar with M-T movement completely loses out, the competition between the grammar with V-Asp movement and the one without such V-Asp movement begins at the end of the sixteenth century. The grammar without V-Asp movement is constrained not to have M-T movement (as well as Asp-M movement), since the loss of lower verb movement prevents the verb from moving higher up. Thus, at this point, competition between three grammars is taking place: one grammar with both M-T and also V-Asp movement, a second grammar with V-Asp movement but no M-T movement, and a third grammar with neither V-Asp nor M-T movement. In what follows, I will discuss some evidence for the hypothesis that the loss of M-T movement precedes the loss of V-Asp movement in the history of English.
12.5.1. Do-support in negative imperatives and negative declaratives

As shown in Figure 12.1, by 1575, the relative frequency of do-forms in negative declaratives is almost 40 per cent, whereas the frequency of do-forms in negative imperatives is remarkably low. But at the end of the sixteenth century, the frequency of do-forms in negative imperatives suddenly rises, and around 1600, the development of do-forms in negative imperatives is roughly the same as in negative declaratives.

Given the articulated clause structure proposed here, in declaratives in Middle English, the verb moves all the way up to T, as represented in (40). Negative declaratives formed with higher negation require do-support when M-T movement is lost. Moreover, all negative declaratives, whether formed with higher or lower negation, require do-support when V-Asp movement is lost. If the loss of M-T movement begins at the beginning of the fifteenth century, we expect to find do-support in negative declaratives well before 1575. And this is indeed what we see in Figure 12.1.

On the other hand, in the proposed phrase structure for imperatives, TP does not project at all. Thus, in imperatives in Middle English, the verb moves to Asp and to M and then directly to C, as represented in (47).

\[ \text{[tr \ [t \ [\text{verb} \ [\text{neg} \text{ not} \ [\text{neg} \ [\text{aux} \ [\text{aux} \ [\text{verb} \ [\text{neg} \text{ not} \ [\text{...} \text{...} \text{...}]]]]]]]]]]}} \]

The absence of T in imperatives means that the loss of M-T movement has no consequences for the development of do-forms in negative imperatives. But the loss of V-Asp movement does. If the loss of V-Asp movement begins at the end of the sixteenth century, we do not expect to find much do-support in negative imperatives before 1600. As shown in Figure 12.1, our expectation is supported.

Another difference between negative declaratives and negative imperatives has to do with the development of do-forms with be and auxiliary have. While negative imperatives require do-support with these verbs, negative declaratives prohibit it. Ellegård’s data contain two negative imperatives with be in the seventeenth century, and both of them have do-support, as shown in (48).

\[ \text{[tr \ [t \ [\text{verb} \ [\text{neg} \text{ not} \ [\text{neg} \ [\text{aux} \ [\text{aux} \ [\text{verb} \ [\text{neg} \text{ not} \ [\text{...} \text{...} \text{...}]]]]]]]]]]}} \]

12.5.2. Do-support in questions and negative declaratives

Figure 12.1 shows that do-support was much more favoured in questions than in negative declaratives. By 1575, while the frequency of do-forms is 40 per cent in negative declaratives, it is almost 60 per cent in affirmative questions and almost 90 per cent in negative questions. The difference in the frequency of do-forms in questions and negative declaratives can be explained if the loss of M-T movement precedes the loss of V-Asp movement.

In questions, the loss of M-T movement leads to do-support, and do moves to C. On the other hand, in negative declaratives, the loss of M-T movement does not necessarily correlate with the development of do-support because negative declaratives have two possible analyses. That is, a negative declarative can be formed with negation either in the higher NegP (as in (49)) or the lower NegP position (as in (50)). During the period in which M-T movement is being lost and before the period in which the loss of V-Asp movement begins, if (49) is chosen, then do-support is required, and if (50) is chosen, then do-support is not required. This explains why the frequency of do-forms in negative declaratives is much lower than in questions before 1600. When V-Asp movement is lost after 1600, both analyses in (49) and (50) require do-support and so the frequency of do-forms in negative declaratives rises rapidly.

\[ \text{[tr \ [t \ [\text{verb} \ [\text{neg} \text{ not} \ [\text{neg} \ [\text{aux} \ [\text{aux} \ [\text{verb} \ [\text{...} \text{...} \text{...}]]]]]]]]]]}} \]

Kroch (1989a, b) has argued that the rise of do-forms is a reflex of an abstract grammatical change, the loss of V-I movement, by showing a correlation between the rise of do-forms in the various linguistic contexts up to 1575. The rates of the change in do-support were shown to be constant across these contexts using logistic regression. However, his calculation for the rate in negative declaratives is based on a set of sentences that includes both high and low negation, since he was assuming a clause structure with one NegP. According to the analysis proposed here, only high negation is relevant for the rise of do-forms in negative declaratives before 1575. What this means is that in order to get an accurate measure, sentences formed with low negation should not be counted in the calculation of the rate of rise of do-forms in negative declaratives. This distinction has implications for the constant rate effect of change in do-support discussed in Kroch. *The implications of high versus low negation towards the constant rate effect of the development of do-support is a topic of my current research."
The proposed analysis also explains why the development of do-forms in negative imperatives patterns with that of negative declaratives and not with that of negative questions after 1600. In negative questions, do-support takes place because of the requirement of overt tense-feature movement to C, and due to the presence of negation which blocks LF verb movement. When V-Asp movement is lost, the requirement for overt tense-feature movement to C does not apply in imperatives since imperatives are not tensed. The only source for do-support in negative imperatives is therefore the presence of negation, which blocks LF verb movement. We have seen that do-support in negative declaratives is also due to the presence of negation. Hence, it is not surprising that negative imperatives pattern like negative declaratives with respect to the development of do-forms after 1600.

Some questions remain: (a) Why is the frequency of do-forms in negative questions always higher than in affirmative questions prior to the completion of the loss of verb movements? (b) Why does the frequency of do-forms drop suddenly in negative questions and in negative declaratives during 1560–90? (c) Why do infinitivals and subjunctives in Present-day English not have do-support? For a possible answer to the third question, see Han (2000).

12.6. CONCLUSION

I have argued that the syntax of Middle English infinitivals can be explained if we allow two possible positions for negation and an intermediate functional projection, which I assume to be an aspect phrase (AspP), between the mood phrase (MP) and the verb phrase (VP). I was able to account for the patterns of do-support in various sentence types based on the articulated clause structure that I have proposed for Middle English. In particular, I have proposed that the development of do-support in negative imperatives is a reflex of the loss of V-Asp movement. That is, as V-Asp movement was lost, the verb in imperatives moves to C at LF. In negative imperatives, do-support is required as a last resort device because negation blocks LF verb movement. I have also argued that the differences and similarities attested in the statistical patterns of the development of do-forms between imperatives and questions, between imperatives and declaratives, and between questions and declaratives can be explained if the loss of M–T movement precedes the loss of V-Asp movement in the history of English.

APPENDIX

This appendix lists the abbreviations and their full names for the tests from Late Middle English and Early Modern English that are cited in this chapter. I refer to the tests by the abbreviations specified in Elegged (1953).