Northumbria Research Link

Citation: Wallage, Phillip (2012) Negative inversion, negative concord and sentential negation in the history of English. English Language and Linguistics, 16 (1). pp. 3-33. ISSN 1360-6743

Published by: Cambridge University Press

URL: http://dx.doi.org/10.1017/S1360674311000268 <http://dx.doi.org/10.1017/S1360674311000268>

This version was downloaded from Northumbria Research Link: https://nrl.northumbria.ac.uk/id/eprint/10665/

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: http://nrl.northumbria.ac.uk/policies.html

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

Northumbria University NEWCASTLE

University Library

English Language and Linguistics
http://journals.cambridge.org/ELL

Additional services for *English Language and Linguistics:*

Email alerts: Click here
Subscriptions: Click here
Commercial reprints: Click here
Terms of use : Click here

Negative inversion, negative concord and sentential negation in the history of English

PHILLIP WALLAGE

English Language and Linguistics / Volume 16 / Issue 01 / March 2012, pp 3 - 33
DOI: 10.1017/S1360674311000268, Published online: 17 February 2012

Link to this article: http://journals.cambridge.org/abstract_S1360674311000268

How to cite this article:
PHILLIP WALLAGE (2012). Negative inversion, negative concord and sentential negation in the history of English. English Language and Linguistics, 16, pp 3-33 doi:10.1017/S1360674311000268

Request Permissions : Click here

CAMBRIDGE JOURNALS

Downloaded from http://journals.cambridge.org/ELL, IP address: 193.63.36.30 on 17 Dec 2012

English Language and Linguistics 16.1: 3–33. © Cambridge University Press 2012
doi:10.1017/S1360674311000268

Negative inversion, negative concord and sentential negation in the history of English[1]

PHILLIP WALLAGE
Northumbria University
(Received 1 September 2008; revised 15 March 2011)

It is claimed in van Kemenade (2000: 62) that clauses with initial negative constituents are a context in which subject–verb inversion occurs throughout the history of English. However, different patterns of negative inversion are seen at different periods of English. I argue that changes in the availability of negative inversion reflect changes in the way sentential scope for negation is marked in negative concord constructions. Thus, negative concord involving Middle and Early Modern English *not* does not co-occur with negative inversion, but negative concord involving Middle English *ne* does. Changes to negative inversion can be seen to parallel changes in the way sentential scope negation is expressed at successive stages of the Middle English Jespersen Cycle. I propose that the changes to negative inversion and Jespersen's Cycle should both be analysed as changes in the ability of negative items to mark sentential scope for negation. This observation can be formalised within a Minimalist framework as variation in the LF-interpretability of negative features, following the account of Jespersen's Cycle proposed by Wallage (2008).

1 Introduction

It is claimed in van Kemenade (2000) that clause-initial negatives are a context for subject–verb inversion throughout the history of English. It is certainly easy to find examples of such inversion. (1) and (2) illustrate the two types that existed in early English. The first type involves a marker of clausal negation in initial position, as in the Early Middle English example (1). The second type involves other negative words, such as the conjunction *nor* in the Early Modern English example (2).

(1) **Ne** mei þe deofle þa sunne iwiten þa ȝet er þu habbe
NEG may the devil the sin know then yet until you have
heo idon mid þe licome
it done with the body
'The devil may not be aware of the sin nevertheless until you have committed it with your body' (thirteenth century; CMLAMBX1,21.242) [2]

(2) **Nor** did he use those obligations ill, that love had done him
(seventeenth century; BEHN-E3-H,156.13)

[1] I would like to thank the University of Manchester for financial support, in the form of a postdoctoral Research Fellowship, which allowed me to begin this research. I would also like to thank David Denison, Wim van der Wurff and two anonymous referees for their helpful comments on earlier drafts.

[2] For each example, the approximate date is given, along with the precise reference to the relevant corpus (for which see the description following in the main text). The dates are those given in the corpus documentation and are the manuscript dates, not necessarily the dates of composition.

The patterns in (1) and (2) each have distinct histories. Ingham (2005) discusses the history of the pattern in (1). This article discusses the emergence of the pattern in (2). Corpus data show that the pattern in (2) arises during the Middle English period (1150–1500). Unlike other accounts (Nevalainen 1997; Ingham 2007), I will propose an analysis that extends to negative inversion in both Middle English (1150–1500) and Early Modern English (1500–1700). Under the analysis to be proposed, changes to negative inversion follow from more general changes to the scope properties of negative items. Specifically, I propose to account for changes in negative inversion using the Minimalist distinction between LF-interpretable and LF-uninterpretable features of lexical items. As I will show, this account unifies changes to negative inversion with the account of Jespersen's Cycle proposed by Wallage (2008).

The data for this article come from a series of diachronic corpora. For the Early Modern English data I have used the *Penn–Helsinki Parsed Corpus of Early Modern English* (Kroch, Santorini & Delfs 2004) and the *Parsed Corpus of Early English Correspondence* (Taylor *et al.* 2006). The Middle English data come from the prose texts in the *Penn–Helsinki Parsed Corpus of Middle English* (2nd edition) (Kroch & Taylor 2000). The Old English data are taken from the *York Corpus of Old English Prose* (Taylor *et al.* 2002). These corpora are all tagged for parts of speech and syntactically parsed at the clause level, allowing syntactic constructions to be searched for electronically using *CorpusSearch* (Randall 2000). All examples cited and quantitative data given come from exhaustive searches of the prose texts in these corpora.

In section 2, I present corpus data showing the emergence of new patterns of negative inversion in Middle English (1150–1500) and Early Modern English (1500–1700). Section 3 turns to syntactic accounts of negative inversion in earlier English (Nevalainen 1997; Ingham 2007) and Present-day English (Haegeman 2001). Nevalainen (1997) and Ingham (2007) link the rise of new patterns of negative inversion in earlier English to the loss of negative concord. However, in section 4, I present corpus data showing that the new patterns of negative inversion do not correlate with the loss of negative concord. Instead, I propose that they result from changes in the way sentential scope for negation is marked in negative concord constructions. Sections 5 and 6 formalise this idea using the distinction between LF-interpretable and LF-uninterpretable features available in Minimalist frameworks such as Chomsky (2000). Section 7 discusses some implications of this proposal for the syntax of negative concord and the syntax of negative markers.

2 Negative inversion in early English

2.1 Distinguishing negative inversion from other types of inversion in the history of English

Since Old and Middle English had various types of inversion, it is necessary to focus the analysis on those cases in which the inversion is triggered not just by the presence

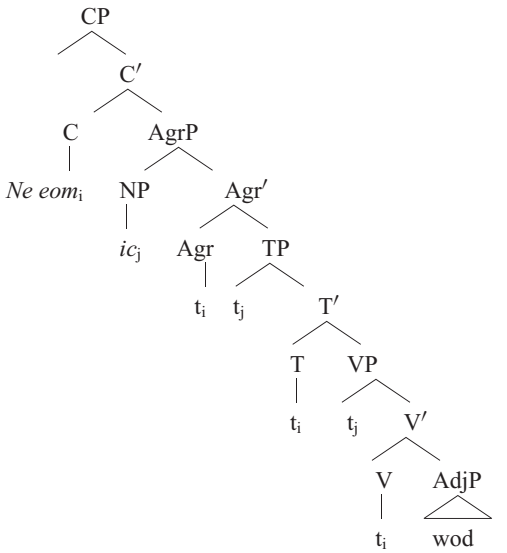
of a clause-initial element, but by the presence of an initial negative element. The two distinct types of inversion that existed in Old and Middle English are: (i) inversion of a finite verb with a full nominal subject, as in (3); (ii) inversion of the finite verb with a pronominal subject, as in (4). The subjects are in bold in (3) and (4).

(3) Ðas gifu sealde **seo ceasterwaru** on Tharsum Apollonio þam tiriscan
This gift gave the citizens in Tharsus Apollonius the Tyrian
'The citizens of Tharsus gave this gift to Apollonius the Tyrian'
(eleventh century; Apollo 16.10.16, Haeberli (2002a: 88, ex.1))

(4) Ne eom **ic** wod
NEG am I mad
'I am not mad'
(eleventh century; wsgosp,Jn_[WSCp]:8.49.6472)

To explain the difference, Haeberli (2002a,b) argues that subject pronouns and full nominal subjects occupy different positions in the clause: subject pronouns appear in spec,AgrP, while full nominals appear in a lower position, i.e. spec,TP. (5) shows the structure of the negative inversion example (4), with *ic* 'I' in spec,AgrP.

(5)



Negative inversion, as in (4), inverts a finite verb and a subject pronoun. Haeberli (2002a) and Pintzuk (1999) analyse cases like this as having the finite verb in C^0, where it precedes the subject pronoun, as shown in (5). In contrast, verb movement in affirmative main clauses, like (3), is typically to Agr^0. Such V-to-Agr movement does not invert a finite verb and pronominal subject, but it does invert a finite verb and a full nominal subject in spec, TP. [3] Therefore, in Old English and also in much of

[3] Some affirmative clauses do have inversion of a finite verb and a pronominal subject, particularly those which have the clause-initial adverbs *þa* or *þonne* 'then', or are subjunctives (see Pinztuk 1999: 90–1 for examples). Like clauses with initial negatives, these can be analysed as exhibiting V-to-C movement (Pintzuk 1999: 90–1).

Middle English, we can only distinguish negative inversion (V-to-C movement) from V-to-Agr movement in clauses with pronominal subjects. Hence this article examines only clauses with pronominal subjects.

2.2 Two patterns of negative inversion in early English

It has been claimed that there have been two broad changes to inversion during the history of English: the loss of inversion with *ne* in the thirteenth century (Ingham 2005) and the emergence of inversion with other negatives, which Nevalainen (1997) dates to the sixteenth century.

The first pattern, found in Old English and Middle English, involves the negative marker *ne* in clause-initial position, as in (4) and (6).

(6) (a) **Ne** forgife ic eow swa swa þes middaneard forgifð
NEG forgive I you so as this world forgives
'I do not forgive you as this world does'
(tenth century; aelhom,+Ahom_10:15.1413)

(b) **Ne** hafst tu næure soðe eadmodnesse on þe . . .
NEG have you never true humility in you . . .
'You never have true humility in you . . . '
(thirteenth century; VICES1,33.398)

Until the twelfth century, *ne* is the typical marker of sentential scope negation and often negates a clause on its own. Structurally, we can analyse *ne* as a head affixed or cliticised to the finite verb. It virtually always appears immediately preceding the finite verb, irrespective of the latter's position within the clause. When *ne* appears in clause-initial position, the finite verb prefixed by *ne* moves to C^0 because of its negative force.

During the thirteenth century, *not* becomes grammaticalised as a negative marker, before *ne* is lost in the fourteenth and fifteenth centuries. Ingham (2005) links the loss of the inversion pattern in (4) and (6) to the grammaticalisation of *not* as a sentential negative marker in the thirteenth century. This fits with an analysis which links negative inversion to negative force. Ingham proposes that until the thirteenth century, *ne* is sufficient to mark negative force on its own. During the thirteenth century, *not* is grammaticalised as a negative force marker. He argues that this causes *ne* to lose its negative force, so it can no longer move to C^0. In what follows, I adopt this analysis for the loss of (4)/(6).

The second pattern of negative inversion follows other clause-initial negative items, such as negative adverbs in (7a), negative NPs in (7b) and negative conjunctions in (7c).

(7) (a) **never** took he giftes of man
never took he gifts of man
'Never did he take gifts of man'
(fifteenth century; CAPHR,54.666)

Table 1. *The frequency of the negative marker* ne *preceding a subject pronoun*[4]

Period	V su	Total	% V su
850–950	305	450	67.8%
950–1050	1020	1465	69.6%
1050–1150	253	389	65.0%
1150–1250	132	511	25.8%
1250–1350	20	302	6.6%
1350–1420	12	149	8.7%
1420–1500	0	17	–

(b) and **no wepyn** coude he fynde
and no weapon could he find
'and no weapon could he find'
(fifteenth century; MALORY,64.2150)

(c) **Nor** did he use those obligations ill that love had done him
(seventeenth century; BEHN-E3-H,156.13)

This is the antecedent of the Present-day English pattern. Nevalainen (1997) and Ingham (2007) date its emergence to the sixtenth century. However, data from the PPCME2 provide evidence of this pattern as early as the thirteenth century. An example is given in (8). This pattern is discussed in detail in section 3.

(8) **for nan deofles puf** ne þurðe ye dreden
for no devil's breath NEG need you fear
'You need not fear any devil's breath'
(thirteenth century; ANCRIW,II.168.2326)

2.3 The diachrony of negative inversion in early English

In order to obtain full data on the frequency of the various types of negative inversion in main clauses from the twelfth to the seventeenth century, I carried out an exhaustive search of the corpora described in section 1. Table 1 examines the position of the negative marker *ne* in relation to the subject in main clauses with pronominal subjects. When *ne* precedes the subject pronoun, as in (9), the finite verb to which *ne* is procliticised always moves to a position preceding the subject pronoun, C^0, resulting in subject–verb inversion.

[4] The sources for this and all following tables are the historical corpora listed in section 1. Where an Early Modern example appears in both the PPCEME and PCEEC corpora, it is counted only once.

Table 2. *The frequency of inversion following different clause-initial negative items (excluding clear cases of constituent negation)*

	Negative arguments and adverbials			Negative conjunctions (*neither, ne, nor*)		
Period	V su	Total	%	V su	Total	%
850–950	2	6	33.3%	0	35	0.0%
950–1050	5	22	22.7%	2	203	1.0%
1050–1150	3	5	60.0%	2	48	4.0%
1150–1250	8	9	88.9%	9[5]	27	33.3%
1250–1350	0	0	–	1	18	5.6%
1350–1420[6]	7	14	50.0%	4	50	8.0%
1420–1500	9	11	81.8%	7	34	20.5%
1500–1570	14	23	60.9%	36	81	44.4%
1570–1640	24	31	77.4%	223	235	94.9%
1640–1710	2	3	66.7%	159	169	94.1%

(9) **ne** scealt ðu þone rihtwisan ofslean mid arleasan
NEG ought you the righteous kill with the-wicked
'You ought not kill the righteous person with the wicked'
(tenth/eleventh century; aelive,+ALS[Pr_Moses]:193.2965)

The table confirms Ingham's (2005) finding that the frequency of subject–verb inversion involving the negative marker *ne* declines steeply during the twelfth and thirteenth centuries. After the twelfth century, *ne* is most often found in a position following the subject, indicating that the position of *ne* plus finite verb is lower, Agr^0 in terms of Haeberli (2002a,b).

However, *ne* is not the only negative which may appear with subject–verb inversion in early English. Table 2 gives the frequency of inversion of a finite verb and a subject pronoun in two more environments: following a clause-initial negative argument or adverbial, as shown in (10); and following a clause-initial negative conjunction, as in (11).

[5] This relatively high number seems to be due to odd behaviour in two texts, the *Ancrene Riwle* and *St Juliana*. These examples may have subjunctives. If so, inversion in these clauses may be independent of the initial negative conjunction.

[6] Tokens from the *Rule of St Benet* are excluded. Kroch & Taylor (1997: 313) propose that this text has generalised V-to-C movement in all main clauses. It is not possible to distinguish negative inversion from generalised V-to-C movement according to the relative position of a finite verb and subject pronoun. The reason is that, in all clauses with an initial element that is not the subject, the finite verb will precede a subject pronoun.

(10) (a) and **no defaute** fond þei in hir feith . . .
and no fault found they in her faith
'No fault did they find in her faith'
(fifteenth century; CAPCHR,159.3739)
(b) and **never** shall I returne unto the courte agayne tylle I have sene
it more opynly than hit hath bene shewed here
'and never shall I return to the court again until I have seen it
more openly than it has been shown here'
(fiftheenth century; MALORY,635.3785)
(11) **nor** are they of any religion at all
(seventeenth century; VERTE-E2-P2,47.191)

Table 2 shows that inversion following negative arguments and negative adverbials appears considerably earlier than the sixteenth century, which is the period to which Nevalainen (1997) dated their emergence. There are some examples in Old English and their number increases during Middle English. Despite a certain amount of variation in their frequency in different texts and at different periods, negative inversion following negative arguments and negative adverbials seems to become established during the twelfth and thirteenth centuries. However, inversion following the negative conjunctions *ne* and *nor* does not become the norm until the late sixteenth or even seventeenth century. It is possible that a predominance of clauses with negative conjunctions in the Early Modern English data used by Nevalainen (1997) led her to propose that negative inversion of the Present-day English type emerges in the sixteenth and seventeenth centuries. Table 2 shows that the development of negative inversion involves a process of diffusion. It is established much earlier with negative arguments and negative adverbials than with negative conjunctions. Thus, the frequency of inversion at any particular date is determined by the category of the clause-initial negative item.

3 The relationship between negative inversion and negative concord

3.1 Nevalainen (1997)

Nevalainen (1997) observes that the rise of negative inversion, as in (12a), is at odds with a more general decline in inversion following clause-initial adverbs such as *yet* in affirmative declarative clauses, as in (12b).

(12) (a) Nor never longed I since I came hether to set my fote in mine owne howse.
'Nor never longed I since I came here to set my foot in my own house'
(CEEC, THOMAS MORE 543, Nevalainen (1997, 206, ex.11))
(b) yet will I forbear till it shall please god in mearcy to scease it
'yet will I forbear till it shall please God in his mercy to make it cease'
(CEEC, KATHERINE PASTON 84, Nevalainen (1997, 206, ex. 6))

Nevalainen (1997: 212) claims that the establishment of the pattern in (12a) is a consequence of the loss of negative concord. Until the sixteenth century, English is a

negative concord language: a clause has a sentential negative reading irrespective of how many negative words it contains, as shown in example (13).

(13) We might **not** make **no** **sale** in Christmasse week
We might not make no sale in Christmas week
'We might not make any sale in Christmas week'
(sixteenth century; TORKINGT-E1-H,58.328)

(13) contains two negative words: *not* and *no*, but until the sixteenth century such a clause would have negative force as a whole. In contrast, a Present-day standard English interpretation of the clause would be that we *will* make a sale in Christmas week ('it is not possible that we will not'), where the force of each negative word cancels out the other to give an affirmative reading. According to Nevalainen (1996), the loss of negative concord largely took place in the sixteenth century. Nevalainen (1997: 212) capitalises on this fact by proposing that negative concord and negative inversion are mutually exclusive ways to mark sentential scope for negation in the sixteenth-century data. This would mean that the loss of negative concord allowed negative inversion to establish itself.

3.2 Ingham (2007)

Ingham (2007: 380) makes a similar observation, that negative inversion and negative concord are incompatible. He accounts for this incompatibility by adopting Zeijlstra's (2004) idea that negative concord requires the functional projection NegP. Specifically, Ingham (2007) proposes that negative concord between *not* in spec,NegP and a negative item within VP blocks movement of the negative item to spec,CP across spec,NegP *not*. In earlier periods, we find negative concord between a negative item and the negative head *ne*, as in (14).

(14) he **ne** cnaweð **nan** **mon**
he NEG knows no man
'He knows no man'
(thirteenth century; ANCRIW,II.97.1168)

In such clauses Ingham (2007: 380) claims that spec,NegP is occupied by a null negative operator which licenses *ne* in Neg_0 and marks sentential scope for negation. Just as in clauses with the negative operator *not,* the null negative operator in spec,NegP blocks the movement of a negative item to spec,CP, as shown in (15).

(15) $[_{NegP}$ *not*/NegOp NEG^0 $[_{VP}$ … negXP …]]

←——X——┘

Ingham (2007) therefore predicts that negative inversion will be absent from all stages of English which have negative concord. However, this prediction is not correct:

Table 3. *Frequency of inversion and negative concord in clauses with an initial negative element in Early Modern English (1500–1710)*[7]

	Negative inversion	Total	% negative inversion
Negative concord with *not*	3	39	7.7%
Without negative concord	455	484	94.0%
TOTAL	458	523	87.6%

data from Middle English show that negative inversion and negative concord are not always in complementary distribution.

3.3 Negative inversion and negative concord in corpus data

Both Nevalainen (1997) and Ingham (2007) propose that the loss of negative concord is a prerequisite for the establishment of negative inversion. However, negative inversion following negative arguments and negative adverbials becomes established during the twelfth and thirteenth centuries while negative concord is still productive and frequent. Figures for the period 1250–1350 show that in 90 per cent (n = 127/141) of clauses involving a negative argument in this period, the negative argument is in negative concord with *ne.* One example from among many is given in (16).

(16) Uor **non** **ne** may habbe uoryeuenesse wyþ-oute zoþe ssrifte
For none NEG may have forgiveness without true shrift
'For none may have forgiveness without true shrift'
(fourteenth century; AYENBI,33.541)

More careful analysis shows that there are two different kinds of negative concord in English. One of these co-occurs with negative inversion from the thirteenth century onwards, but the other does not. First, I present data from the Early Modern English period. Table 3 takes all main clauses with initial negative constituents (conjunctions, arguments and adverbials). It compares the frequency of negative inversion in clauses which have negative concord involving *not*, such as (17), against clauses without negative concord, like (18).

(17) (a) No more we shan't indeed
'No more shall we indeed'
(seventeenth century; VANBR-E3-H,62.623)
(b) Nor it were not best for themselves
'Nor were it best for themselves'
(sixteenth century; LATIMER-E1-H,37L.340)

[7] These data are a subset of the data in table 2. Both the PPCEME and PCEEC corpora are used, but clauses which have negative concord that involves negative items other than *not* – for example between two negative arguments or a negative argument and a negative adverb – are excluded here.

(18) nor can I by any means say against it
'nor can I by any means speak against it'
(seventeenth century; BOETHPR-E3-H, 135.108)

These data show a clear opposition between negative inversion and negative concord: they co-occur in only three instances, one of which is given in (19), accounting for 7.7 per cent of all clauses with negative concord.

(19) no more would not I if I was your wife
'no more would I if I was your wife'
(seventeenth century; PENNY-E3-H,267.501)

Thus, where the clause-initial negative enters into negative concord with *not*, inversion typically does not occur, as shown in (17). In clauses without negative concord, on the other hand, inversion is frequent, as in (18).

While we find that negative concord is largely incompatible with negative inversion in Early Modern English, the same is not true in Middle English clauses with initial negative arguments or adverbials. In this period, inversion following these negatives typically occurs whether or not the clause also exhibits negative concord, as shown in (20), without negative concord, and (21), with negative concord.

(20) (a) and **never** schal he seese for to do it
and never shall he cease for to do it
'and never shall he cease to do it'
(fifteenth century; CLOUD,19.102)

(b) and **no defaute** fond þei in hir feith . . .
and no fault found they in her faith
'and they found no fault in her faith'
(fifteenth century; CAPCHR,159.3739)

(21) (a) **never ouer .xii. monþe nis** hit undon
never over 12 months NEG-is it undone
'it is never undone over 12 months'
(thirteenth century; LAMBX1,5.32)

(b) **Nouther hwit ne blac ne** nemmet he in his ordre
Neither white nor black NEG names he in his order
'He does not name in his order either white or black'
(thirteenth century; ANCRIW,I.48.84)

(c) and **nothing ne** shal they fynden in hir handes of all hir tresor
and nothing NEG shall they find in their hands of all their treasure
'and they shall find none of their treasure in their hands'
(fourteenth century; CTPARS,292.C1.156)

In this period, there is a high frequency of inversion following a clause-initial negative argument such as *nothing* or a negative adverbial such as *never*, irrespective of the presence or absence of negative concord with a negative marker like *ne* or *not*. Full figures are given in table 4.

In Middle English, negative concord typically involves the negative marker *ne*. Table 5 shows that in all but one of the Middle English main clauses in which inversion

Table 4. *Inversion following a clause-initial negative argument or adverbial in the prose texts in the PPCME2 corpus (Middle English, 1150–1500)*

	Negative inversion	Total	% negative inversion
Negative concord	10	15	66.7%
Without negative concord	13	17	76.5%
TOTAL	23	32	71.9%

Table 5. *Negative inversion with different types of negative concord in Middle English (1150–1500)*

		Negative inversion	Total	% negative inversion
Negative Concord with:	*ne*	9	13	69.2%
	ne and *not*	0	0	–
	not	1	2	50.0%
Without negative concord		13	17	76.5%
Total		23	32	71.9%

and negative concord co-occur, the negative concord is between a clause-initial negative item and the word *ne*, as illustrated by all three examples in (21). The only example in which negative inversion co-occurs with *not* is given in (22).

(22) and for **non oþer þing** is it **not** good
and for no other thing is it not good
'and it is not good for anything else'
(fifteenth century; CMMANDEV,83.2101)

In Old English, whenever we have a clause-initial negative argument or adverbial, it always appears in multiple negation with *ne*. However, Old English *ne* and Middle English *ne* differ with respect to inversion. While negative inversion may follow initial negative items which are in concord with Old English *ne*, as in (23), it is only found in 30.3 per cent (n = 10/33) of all cases. Hence non-inversion, as in (24), is more typical.

(23) & **nan þing ne** spræc he butan bigspellum
and no thing NEG spoke he except stories
'And he uttered nothing except stories'
(eleventh century; wsgosp,Mt_[WSCp]:13.35.870)

(24) (a) **nan þing** he **ne** answarode
no thing he NEG answered
'he did not give any answer'
(eleventh century; wsgosp,Mt_[WSCp]:27.12.2014)

(b) **nænne** he **ne** fordemde
none he NEG judged
'he judged none'
(tenth/eleventh century; aelive,+ALS_[Martin]:302.6153)

This section has shown that there are two types of negative concord in early English. When negative concord involves the Middle English and Early Modern English negative

marker *not*, there is typically no inversion following a clause-initial negative. The Old English negative marker *ne* behaves in a way similar to *not* with respect to negative inversion. However, when negative concord involves the negative marker *ne* in Middle English, a clause-initial negative typically triggers subject–verb inversion. In section 5, I will argue that these differences correspond to changes in the scope properties of negative items at successive stages of Jespersen's Cycle. But before turning to this, it is first necessary to present some of the formal devices that have been argued to play a role in negative inversion in general.

4 Negative inversion and scope

A very influential analysis of negative inversion in Present-day English was proposed in Haegeman (1995). She presents a formal analysis of inversion facts and, importantly, also points out that initial negatives do not always trigger inversion. She links this to differences in the scope of the initial negative item. After discussing some of the details of her analysis, I will argue that the presence or absence of negative inversion in earlier English provides a useful clue to the nature of negative elements in the relevant periods.

4.1 Negative inversion and scope in Present-day English

A central component of Haegeman's (1995) analysis is the Neg-criterion, given in (25). Basically, it states that a negative operator in a specifier position requires a negative element in the associated head position and vice versa.

(25) *The Neg-criterion (Haegeman 1995: 106)*
  (a) A NEG-operator must be in a Spec-Head configuration with an X-[NEG].
  (b) An X-[NEG] must be in a Spec-Head configuration with a NEG-operator.

As negative operators, negatives in spec,CP are subject to the Neg-criterion. This means that an X-[NEG] must appear in C^0. According to Haegeman (1995: 180–1), this is the reason why the verb has to move to C^0 when there is a clause-initial negative operator. However, it is clear that in Present-day English not all clause-initial negative constituents trigger inversion. Haegeman (1995, 2001) links the ability of initial negatives to trigger subject–verb inversion to their scope. Negatives whose negation takes sentential scope trigger subject–verb inversion, as in (26a), but those whose negation takes constituent scope, as in (26b), do not.

(26) (a) With no job would Mary be happy
  (= Mary wouldn't be happy with any job)
  (Haegeman 2001: 21, ex. 1a)
  (b) With no job, Mary would be happy
  (= Mary would be happy without a job)
  (Haegeman 2001: 21, ex. 1b)

Haegeman (2001: 31–2) shows that the examples in (26) contrast in other ways which indicate differences in the scope of their negation (sentential scope in (26a), constituent scope in (26b)). Thus, sentential negative clauses take positive tags, while clauses with

constituent negation take negative tags, as (27) shows. Furthermore, sentential scope negation licenses the polarity items *ever, any*, but constituent scope negation does not, as shown in (28).

(27) (a) Mary would be happy with no job, would she?
(b) With no job, Mary would be happy, wouldn't she?
(28) (a) With no job would she ever be happy
(Haegeman 2001: 32, ex. 35b)
(b) *With no job, she would ever be happy
(Haegeman 2001: 32, ex. 35b)

Haegeman (2001: 21) proposes that clause-initial sentential scope negatives are focus-operators while clause-initial constituent scope negatives are topics. She adopts a split CP structure: topicalisation is movement to spec,TopicP and focalisation movement to spec,FocusP. The clause-initial negative is subject to the Focus-criterion when it is a focus operator, but not when it is a topic. Haegeman claims that the finite verb is an X-[focus], and therefore the focus criterion, (29), results in subject–verb inversion since the finite verb moves to the head of FocusP, a position higher than the subject, which occupies spec,TP. In contrast, topicalisation does not trigger movement of T^0 to $Topic^0$.

(29) *The focus-criterion (Haegeman 2001: 23)*
(a) A FOCUS-operator must be in a spec-head configuration with an X-[FOCUS]
(b) An X-[FOCUS] must be in a spec-head configuration with a focus operator.

Clearly, we need to maintain a distinction between the behaviour of negatives with and without sentential scope. However, it is difficult to express this in terms of topic/focus, since clause-initial negatives behave differently from other clause-initial focalised constituents. In English, a clause-initial negative is followed by subject–verb inversion, as in (26a), but other clause-initial focalised constituents like *Your book* in (30a) are not. The focalised constituent *Your book* in (30a) is only distinguished from the topic *Your book* in (30b) by intonation, not the position of the verb.[8]

(30) (a) YOUR $BOOK_i$ you should give t_i to Paul, (not mine)
(Haegeman 2001: 33, ex. 41a)
(b) Your $book_i$, you should give t_i to Paul, (not to Bill)
(Haegeman 2001: 33, ex. 41b)

In addition, Ingham (2007) points out that the movement of sentential scope negative phrases to spec,CP is not likely to involve focalisation since contrastive focus in English 'falls towards the end of the clause' (Ingham 2007: 380). Hence, he concludes that clause-initial negatives are not focus operators in English. Instead, he proposes that clause-initial sentential scope negatives move to spec,CP to check a force feature on C^0. This force feature is optionally available to mark strongly emphatic negative force.

[8] This intonational difference is represented in (30a) by capitalisation of the focalised constituent, indicating that it bears heavy stress.

4.2 Negative inversion and the scope properties of negative markers in earlier English

If Haegeman (2001) is right in proposing that negative inversion only follows an initial negative item when it marks sentential scope negation, then negative inversion can be used as a diagnostic for the nature of negative elements. In particular, an inversion-inducing initial negative has sentential scope, hence any further negative elements in the clause are concordant negatives rather than negative scope-markers themselves. For Middle English and Early Modern English, this means that the occurrence of negative inversion can tell us something about the words *ne* and *not*. For example, since (31) has negative inversion, the clause-initial negative constituent *naure* 'never' must mark sentential scope for negation. The fact that *ne* appears in negative concord with it indicates that *ne* lacks negative force of its own.

(31) Ac naure ne geseige we manne þæt hadde þese hali mihte mid
But never NEG saw we man that had this holy virtue with
him, þat he aure misferde
him, that he ever fared-badly
'But we never saw that a man who had this holy virtue with him ever fared badly'
(thirteenth century; CMVICES1,149.1871)

In (32), on the other hand, the clause-initial negative item does not mark sentential scope negation, hence the lack of negative inversion following it. Instead, it is the negative marker *not* that endows the clause with negative force.

(32) nor I do not care
'nor do I care'
(seventeenth century; LISLE-E3-H,IV,123C1.502)

In this way, the presence or absence of negative inversion can be used to argue that *ne* and *not* do not have the same status in Middle English. There is in fact other evidence to distinguish *ne* and *not* in Middle English in terms of negative force. This can be found in the Middle English change in sentential negation known as Jespersen's Cycle (Jespersen 1917), in which the negator *ne* comes to be supplemented by *not* in early Middle English, as in (33), before *ne* is lost. Wallage (2008) interprets the existence of sentences like (33) as evidence that *ne* often lacks negative force from the twelfth century onwards. Thus, Middle English *ne* is no longer sufficient to mark negative force at LF on its own, hence its co-occurrence with *not*.

(33) Thou ne hast nat doon to hym swich honour and reverence as thee
You NEG have not done to him such honour and reverence as you
oughte
ought
'You have not shown him such honour and reverence as you ought to have'
(fourteenth century; CMCTMELI,229.C2.477)

Sections 5 and 6 account for the changes to negative inversion described in section 3 using the same mechanism of morphosyntactic feature change that Wallage (2008) proposed to account for Jespersen's Cycle. Section 5 outlines the syntactic assumptions.

Section 6 describes the hypothesis and its application to the early English negative inversion data.

5 Preliminaries to a syntactic hypothesis

5.1 Syntactic assumptions

I will argue that changes in negative inversion arise from differences in the scope properties of negative items in negative concord with *ne* and *not*. The changes will be formalised within a Minimalist syntactic framework. In this framework (Chomsky 1999, 2000), lexical items are specified in the lexicon with morphosyntactic features, which drive syntactic operations. Features are either semantically interpretable [*i*F] or semantically uninterpretable [*u*F]. Interpretable features are semantically interpreted at LF and contribute meaning to the clause. Thus, at LF, an interpretable [*i*Neg] feature will mark the scope of negation.

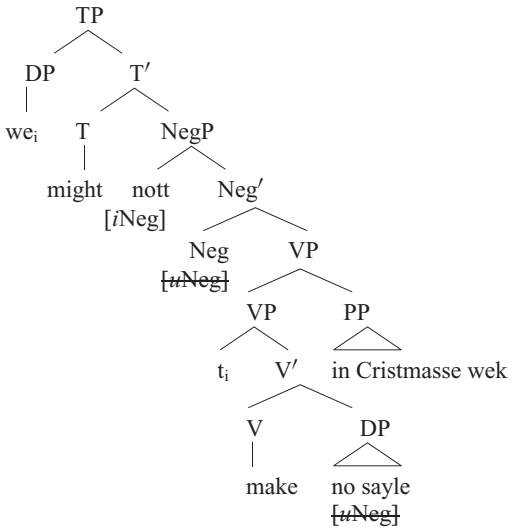
Uninterpretable features [*u*F] have a purely formal role in triggering syntactic operations. They must be checked by External or Internal Merge, or by Agree and then must be deleted prior to LF. External merge takes a lexical item from the lexicon and adds it to the derivation. Internal merge and Agree establish relationships between a head with [*u*F] and an element already in the syntactic derivation with a matching [*i*F]. A feature [*u*F] on the head will be checked by a matching feature that it c-commands. Applying this to negation, a [*u*Neg] feature will probe for an [*i*Neg] feature within the already constructed derivation. In the case of internal merge, the item bearing the [*i*Neg] feature will move to become the specifier of the head which bears the [*u*Neg] feature. If C^0 has an uninterpretable negative feature [*u*Neg] checked by internal merge, an item with an interpretable [*i*Neg] feature will move to spec,CP. In the case of Agree, the [*u*Neg] feature of the head will be checked without any movement.

5.2 Deriving negative concord and negative inversion

Zeijlstra (2004) and Wallage (2005) derive negative concord using the mechanism of Multiple Agree proposed by Hiraiwa (2001). The uninterpretable formal features on negative items are valued by multiple agreement during the syntactic derivation by a negative marker which has a semantically interpretable negative feature. When a uninterpretable [*u*Neg] feature on a functional head such as Neg^0 or C^0 is checked against a semantically interpretable [*i*Neg], Multiple Agree will simultaneously check and delete all the matching uninterpretable [*u*Neg] features c-commanded by that head within the clause. An example can be seen in (35), which is part of the derivation for the sentence in (34). [*u*Neg] on the negative head Neg_0 is the probe. Merge of *not* [*i*Neg] in spec,NegP checks and deletes all the [*u*Neg] features in the clause, on both Neg^0 and on the DP *no sayle*. In (35) and all the derivations that follow, deleted features are distinguished by the use of strike-through.

(34) we myght nott make no sayle in Cristmasse wek
we might not make no sale in Christmas week
'We might not make any sale in Christmas week'
(sixteenth century; TORKINGT-E1-H,58.328)

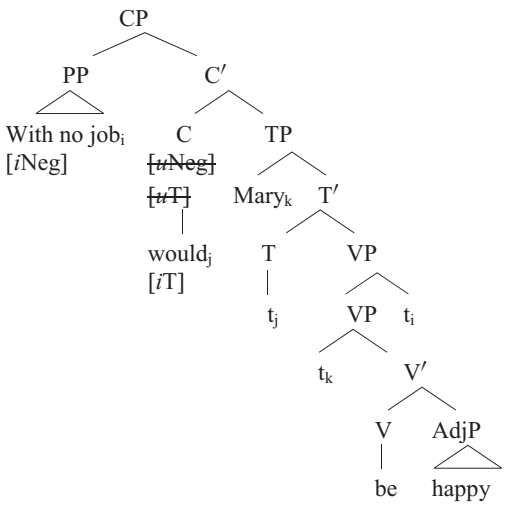
(35)



In general terms, Zeijstra (2004: 243ff.) argues negative concord languages must have an uninterpetable [*u*Neg] feature on a functional head in order to establish Multiple Agreement. He proposes this head is Neg^0. By extension, he argues that the presence of Neg^0 distinguishes languages which allow negative concord from those which do not. I adopt this analysis here.

Turning now to the derivation of examples with negative inversion, (36) shows an example derivation of the Present-day English sentence given earlier as (26a). *With no job* starts out as a VP-adjoined adverbial and moves to spec,CP to check the [*u*Neg] feature on C^0.

(36)



In a feature-driven syntax, we are required to say that overt movement of a negative phrase to spec,CP is triggered by the presence of the feature [*u*Neg] in C^0. When there is a negative operator in spec,CP, there must be a finite verb in C^0. Hence overt T-to-C movement takes place. In (36), I postulate the presence of a [*u*T] feature on C^0 that will trigger this T-to-C movement.[9]

6 Syntactic hypothesis: the relationship between inversion, negative concord and sentential negation

Adopting the analysis sketched above, I now turn to the relation between negative inversion and the morphosyntactic feature specification of negative items in the history of English. I propose that negative items undergo change in their specification during Middle English. This affects both their ability to co-occur with negative inversion and their ability to appear in negative concord with different negative markers. The difference between historical stages of English with and without negative inversion reduces to the semantic interface interpretability of the negative features on the clause-initial negative items. Only negative items with a semantically interpretable [*i*Neg] feature count as negative operators, so only these spec,CP negative operators require a finite verb to move to C^0. Negative items with uninterpretable [*u*Neg] features I analyse as topics in spec,CP. This follows Haegeman's (2001: 34) analysis of non-inversion following clause-initial negatives in Present-day English. Negatives which have [*u*Neg] features can move to spec,CP but cannot check a [*u*Neg] feature on C^0 because they lack inherent negative force.

Clause-initial concordant negatives may appear with another negative item which is itself the semantically interpretable marker of sentential scope negation within the clause. In these cases, the clause-initial negative item lacks negative force, and has an uninterpretable [*u*Neg] feature. As a consequence, such concordant negative items are not negative operators and will not trigger negative inversion. This analysis predicts different frequencies of negative inversion in clauses with and without negative concord. The frequency of negative inversion should be lower in negative clauses which have negative concord than it is elsewhere, since it is possible that the clause-initial negative item in negative concord constructions is not a marker of sentential scope negation. In the next subsection, I propose to refine this analysis by distinguishing two types of negative concord, one involving Middle English *ne* which co-occurs with negative inversion, the other involving Middle English and Early Modern English *not* which does not.

[9] Unlike the Neg-criterion approach (Haegeman 1995: 106), I do not assume that there is spec–head agreement between two negative elements in CP. It is not clear in Present-day English that the finite verb in a negative clause is in any sense negative (an X-[neg], in Haegeman's terms). It must be admitted that the approach I postulate here involving the [*u*T] feature is also stipulative. Clearly further work on the syntax of this type of construction is needed.

6.1 The relationship between negative inversion and changes in marking sentential scope negation

Wallage (2008) argues for a change in the morphosyntactic features associated with negative markers in the Middle English period. Negative marking undergoes a three-stage development in Middle English, an example of Jespersen's Cycle. Wallage (2008) characterises the syntax of the stages of Jespersen's Cycle as follows:

Stage 1: sentential negation is morphologically marked by a prefix *ne* on the finite verb, as in (37). The word *ne* is associated with a semantically interpretable negative feature [*i*Neg]

(37) we **ne** mugen þat don
We NEG can that do
'We cannot do that'
(thirteenth century; TRINIT,108.1370)

Stage 2: sentential negation is morphologically marked by two elements: a syntactic head *ne* with a semantically uninterpretable feature [*u*Neg], and a phrasal (specifier) element *not* which has a semantically interpretable feature [*i*Neg]. This feature checks the [*u*Neg] feature of the negative head. An example is given in (38).

(38) I **ne** may **nat** denye it
I NEG may not deny it
'I may not deny it'
(fourteenth century; BOETH,435.C1.262)

Stage 3: sentential negation is morphologically marked on the phrasal element *not*, which has a semantically interpretable [*i*Neg], as in example (39).

(39) I know **nat** the cause
'I do not know the cause'
(fifteenth century; MALORY,627.3549)

The element which marks the scope of negation at LF changes in the transition from stage 1 to stage 2. At stage 1, *ne* has the [*i*Neg] feature necessary to mark sentential scope. At stage 2 it does not, but has a [*u*Neg] feature. At stages 2 and 3, *not* has an [*i*Neg] feature and is the marker of sentential scope negation at LF.

For negative inversion to occur, sentential scope must be marked on the clause-initial negative item, i.e. the clause-initial negative item must have an [*i*Neg] feature. Since a negative clause can contain only one [*i*Neg] feature, Old English *ne* at stage 1 and Middle English *not* at stages 2 and 3, which both have an [*i*Neg] feature, cannot appear in clauses with negative inversion unless the negative marker is itself in clause-initial position. However, at stage 2 of Jespersen's Cycle, it is possible for *ne* to appear in clauses where negative inversion follows some other clause-initial negative item because stage 2 *ne* has an uninterpretable [*u*Neg] feature. Hence examples like (40) are found.

(40) and nothing ne shal they fynden in hir hands of all hir tresor
and nothing NEG shall they find in their hands of all their treasure
'and they shall find none of their treasure in their hands'
(fourteenth century; CTPARS,292.C1.156)

Next, I show how clauses with initial negative items are syntactically derived at each stage of Jespersen's Cycle, starting with stage 3 and working back through stages 2 and 1.

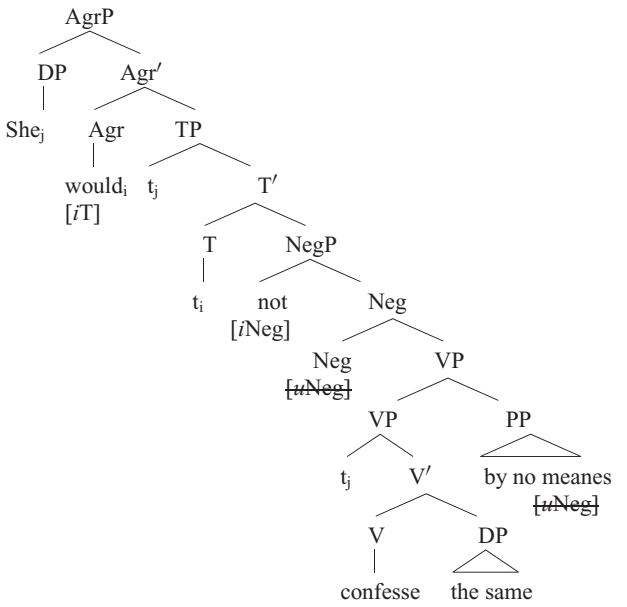
6.2 *Clause-initial negatives in negative concord with Middle English and Early Modern English* not

When the negative marker *not* has an [*i*Neg] feature, all other negative items in the clause are concordant elements bearing [*u*Neg] features which agree with *not*. In such clauses, like (41), any clause-initial negative is in negative concord with *not*, and not itself a marker of sentential scope negation.

(41) but by no meanes she would not confesse the same
but by no means she would not confess he same
'but by no means would she confess the same'
(sixteenth century; ORIGIN2,287.030.461, PCEEC)

At the point before C^0 is merged, the structure is as in (42). I assume V-to-Agr movement for early English following Haeberli (2002a).[10] The negative marker *not* [*i*Neg] is merged in spec,NegP and checks [*u*Neg] features on Neg^0 and on *by no meanes* by multiple agreement. After being checked against the [*i*Neg] feature on *not*, the [*u*Neg] features on Neg^0 and on *by no meanes* are deleted.

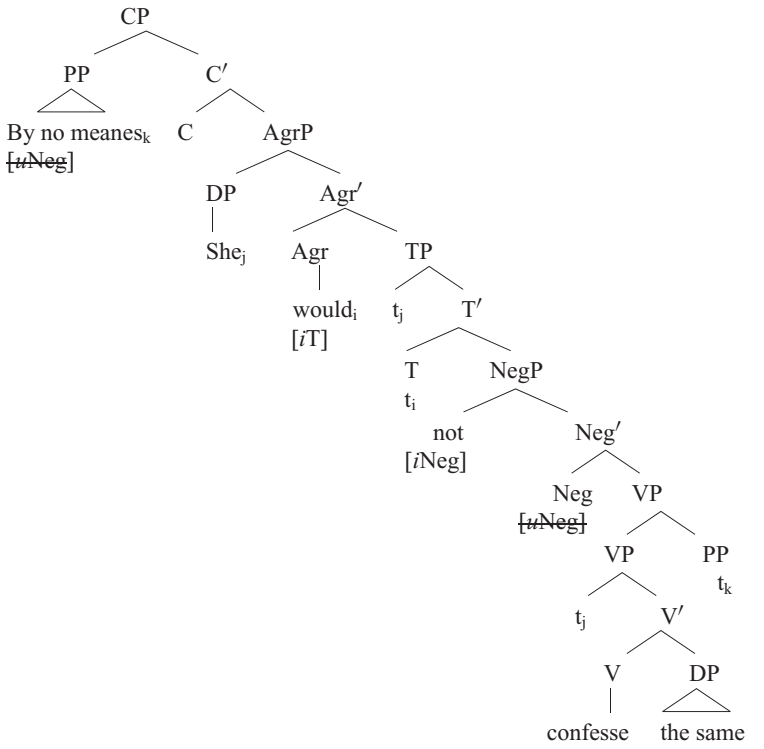
(42)



[10] The [*i*T] feature on the verb or auxiliary marks it as finite or tensed.

(43) shows the complete CP for the sentence in (41). *By no meanes* has moved to spec,CP, but this movement is independent of the need to check [*u*Neg] features on the phrase *by no meanes* or on C^0. *By no meanes* does not have the semantically interpretable [*i*Neg] feature associated with negative force, so does not check a [*u*Neg] feature on C^0. Since it lacks semantically interpretable negative features, *by no meanes* also does not trigger negative inversion under the Neg-criterion. *By no meanes* may be a topic or focus in spec,CP.

(43)



6.3 *Clause-initial negatives in negative concord with Middle English* ne

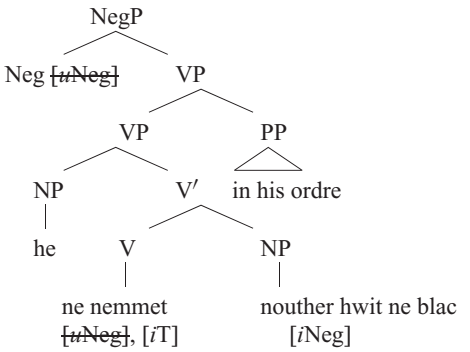
At stage 2 of Jespersen's Cycle, the negative marker *ne* has a semantically uninterpretable [*u*Neg] feature, so it can co-occur with a clause-initial negative which has an [*i*Neg] feature. As a result, *ne* at stage 2 is compatible with negative inversion. The derivation for an example like (21b), repeated here as (44), is shown in three stages, (45)–(47).

(44) Nouther hwit ne blac ne nemmet he in his ordre
Neither white nor black NEG names he in his order
'He does not name in his order either white or black'
(thirteenth century; ANCRIW,I.48.84)

(45) shows the first stage in the derivation of (44). *Ne* is a clitic prefixed to the finite verb in V. The [*u*Neg] feature on the negative head Neg^0 probes for a matching

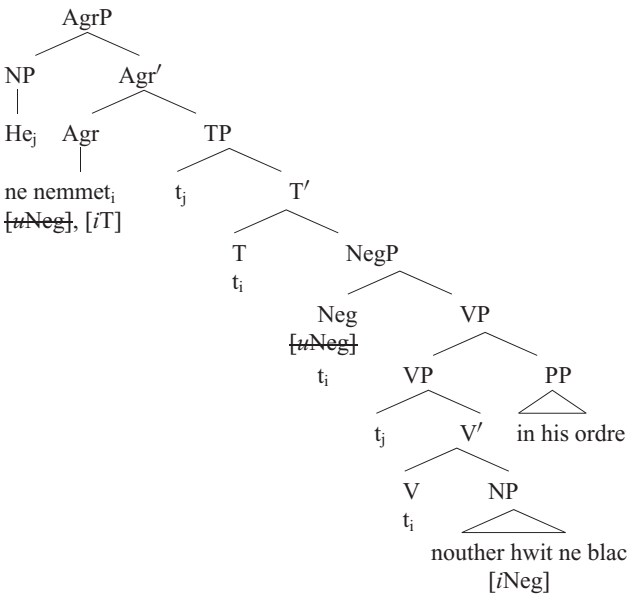
interpretable feature and is checked by agreement with the [*i*Neg] on *nouther hwit ne blac*. Under Multiple Agree, this operation also checks the [*u*Neg] feature on the finite verb *ne nemmet*.

(45)



At the point before C^0 is merged, the structure looks like (46), with the subject in spec,AgrP and movement of the finite verb to Agr^0.

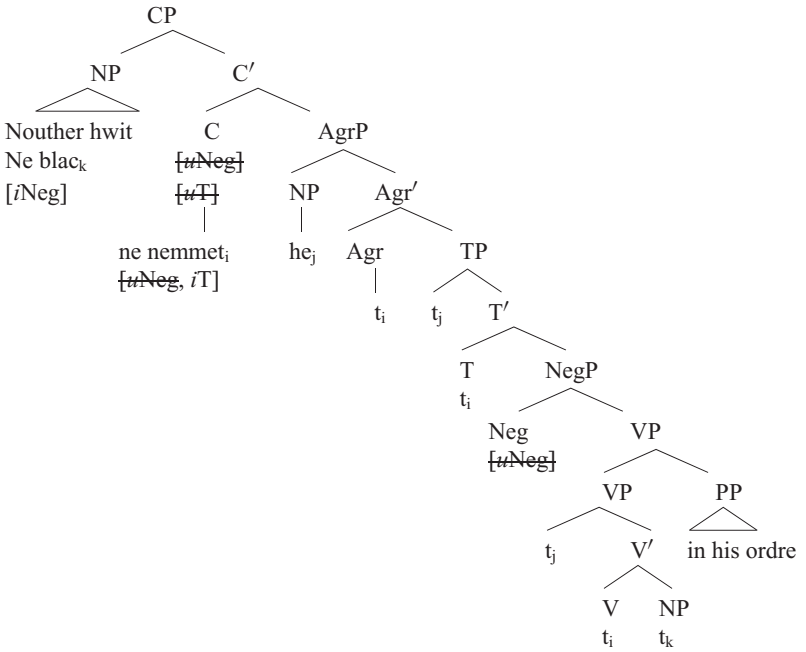
(46)



The complete CP is given in (47). C^0 has a [*u*Neg] feature checked by agreement with the [*i*Neg] feature on the NP *nouther hwit ne blac*, which moves to spec,CP. Since *nouther hwit ne blac* has an [*i*Neg] feature, it is a negative operator. Where there is an operator in spec,CP the finite verb moves to C^0. So I postulate that when C^0 has a [*u*Neg] feature, it also has a [*u*T] feature which ensures overt movement takes place. Alternatively, we could adopt a modified Neg-criterion analysis in which only negative

items with [*i*Neg] features count as negative operators, but see note 9 for some problems with this approach.

(47)



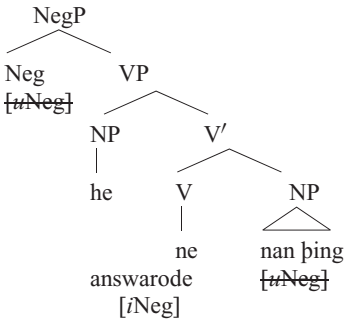
6.4 Clause-initial negatives in negative concord with Old English ne

At stage 1 of Jespersen's Cycle, i.e. Old English, *ne* has an interpretable [*i*Neg] feature, and so marks sentential scope negation. Any negative items which co-occur with it will be concordant items, without negative force. Hence at stage 1, there will be no negative inversion when the clause-initial negative is in negative concord with *ne*. (24a) gives an example of this type, repeated here as (48).

(48) nan þing he ne answarode
no thing he NEG answered
'he did not give any answer'
(eleventh century; wsgosp,Mt_[WSCp]:27.12.2014)

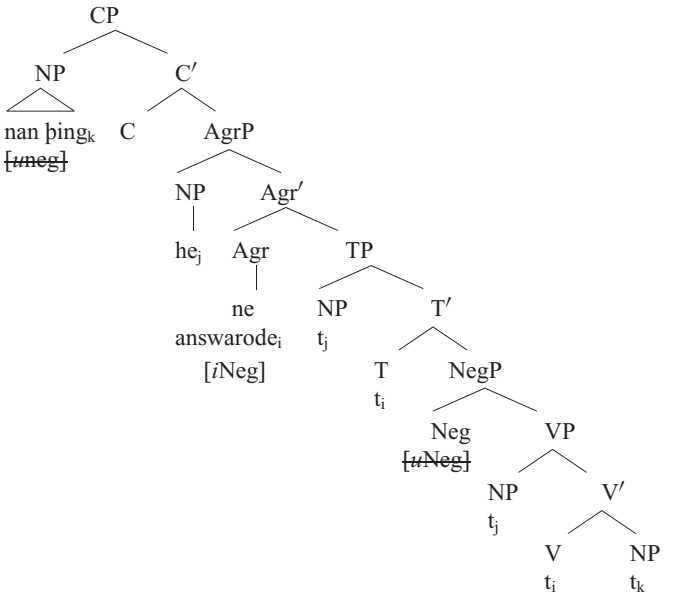
(49) shows the structure at the point where the negative head Neg^0 is merged. Negative *ne* is prefixed on the finite verb in V^0 and has an interpretable [*i*Neg] feature. *Nan þing*, the noun phrase in object position, has a [*u*Neg] feature. The [*u*Neg] feature on Neg^0 agrees with all matching features within the derivation under Multiple Agree. As a result, the [*u*Neg] features on Neg^0 and on *nan þing* are checked by multiple agreement with the [*i*Neg] feature on the verb *ne answarode*. This means that the [*u*Neg] feature on *nan þing* is deleted at this point in the derivation.

(49)



The complete CP looks like (50) when spelled out. Since *nan þing* does not have an [*i*Neg] feature, it cannot check [*u*Neg] features on C^0. Instead, its movement to spec,CP is independent of any need to check neg-features.

(50)



6.5 Summary

The co-occurrence of negative inversion and negative concord is a consequence of the morphosyntactic features of the negative marker in the negative concord construction. Variation in negative inversion can be explained using the same syntactic mechanism that Wallage (2008) argues operates within Jespersen's Cycle. Change in the interpretability of the negative feature on *ne* is implicated in the grammaticalisation of *not*, and in the development of negative arguments and adverbials as negative operators with the feature [*i*Neg], which leads to new patterns of negative inversion. For negative inversion to take place, the clause-initial negative item must have an [*i*Neg] feature.

Only one [*i*Neg] feature is allowed per negative clause, so clause-initial negatives with [*i*Neg] are incompatible with negative markers which also have [*i*Neg] features, i.e. incompatible with *ne* at stage 1of Jespersen's Cycle and *not* at stages 2 and 3. At stage 2 of Jespersen's Cycle, however, *ne* has a [*u*Neg] feature so is compatible with negative inversion.

7 Implications

7.1 The semantic representation of negative concord

The account sketched above has implications for the question of how negative concord is to be represented. Zeijlstra (2004: 243ff.) adopts an operator-variable binding approach to the semantics of negative concord. His account requires that the negative operator [*i*Neg] c-commands and therefore binds all the concordant [*u*Neg] items. Zeijlstra (2004: 243ff.) argues that this binding requirement operates at S-structure. However, this analysis predicts that examples like (41) with Early Modern English *not*, repeated here as (51), should not occur.

(51) but by **no meanes** she would **not** confesse the same
'but by no means would she confess the same'
(sixteenth century; ORIGIN2,287.030.461, PCEEC)

It is generally accepted that Early Modern English *not* is fully grammaticalised as a marker of negative force (with an [*i*Neg] feature), yet the concordant negative *by no meanes* in (51) precedes *not*. Also in cases of negative concord involving a negative subject, like (52), the concordant negative subject precedes the negative marker *not*.

(52) but **no Cristen man** ys **not** suffered for to come ny it
'but no Christian man is permitted to come near it'
(sixteenth century; TORKINGT-E1-H,30.117)

If we are to maintain the distinction between negative concord with *ne* and negative concord with *not* proposed on the basis of changes to negative inversion, then an account of negative concord as operator-variable binding at S-structure cannot be maintained. Instead we have to say either that the negative operator *not* raises to the left-periphery at LF, from where it c-commands all concordant negative items, or that the negative concord relation is based on syntactic licensing via morphosyntactic feature checking rather than a particular configuration at LF.

7.2 The loss of negative concord in the fourteenth and fifteenth centuries

The analysis I propose provides a plausible link between Jespersen's Cycle and the loss of certain kinds of negative concord in the fourteenth and fifteenth centuries. Frisch (1997: 33) claims that clauses with negative arguments – subjects or objects involving the negative quantifier *no* or negative pronouns like *nothing* – or negative adverbials like

never, *by no means*, *in no way* should be excluded from accounts of the Middle English Jespersen Cycle because the distribution of *ne*, *ne . . . not* and *not* in these clauses differs from their distribution elsewhere. However, the analysis proposed in section 6 points to an explanation for the anomalous behaviour of these cases. Examination of all the negative arguments in the PPCME2 corpus shows that negative arguments usually appear in negative concord with the negative marker *ne* until the fourteenth century. This is shown by the fact that sentences like (53a) are frequent. However, Jack (1978) finds that the negative markers *ne . . . not* or *not* rarely appear in negative concord with a negative argument or a negative adverbial even in the fourteenth and fifteenth centuries, when *not* is firmly established as the default negative marker elsewhere. This means that the patterns in (53b) and (53c) are rare. Instead, negative arguments tend not to enter into negative concord with either the negative markers *ne* or *not* in the fourteenth or fifteenth centuries, but are the only negative word in their clause, as shown in (53d).

(53) (a) he **ne** may **noþing** wel conne
he NEG may nothing well know
'He may not know anything well'
(fourteenth century; AYENBI,117.2247)

(b) Thou **ne** shalt **nat** eek make **no lesynges** in thy confessioun . . .
You NEG shall not also make no falsehoods in your confession . . .
'You shall also not tell any lies in your confession . . . '
(fourteenth century; CMCTPARS,325.C1a.1581)

(c) and he wolde **not** make **noo confession** unto **no pryste** . . .
and he would not make no confession to no priest
'and he would not make any confession to any priest . . . '
(fifteenth century; GREGOR,233.2474)

(d) They coude **no council** gyve
They could no advice give
'They could give no advice'
(fifteenth century; CMMALORY,14.421)

Table 6 presents figures for all clauses that contain a negative argument, distinguished according to whether the clause, in addition, contains the negative marker *ne*, *ne . . . not*, *not* or no negative marker at all. For comparison, it also gives the frequencies of clauses with *ne*, *ne . . . not* and *not* but without negative arguments or negative adverbials – that is, clauses in which the only negative words are either *ne*, *not* or both *ne* and *not*. In these clauses, *ne . . . not* or *not* are the most frequent ways of marking negation even as early as the thirteenth and fourteenth centuries. (54) is an early example.

(54) for hij **ne** vnder-stode **nout** þe werkes of our Lord
For they NEG understood not the works of our Lord
'For they did not understand the works of our Lord'
(fourteenth century; EARLPS,31.1280)

Table 6 shows that as the frequency of negative concord with *ne* declines, there is no corresponding increase in the frequency of negative concord with *not*. Instead, the loss

Table 6. *The frequency of* ne, ne . . . not *and* not *in clauses with and without negative arguments in Middle English (1150–1500)*

	Clauses with a negative argument					Clauses without a negative argument/adverbial			
	Negative marker			No negative marker					
Period	*ne*	*ne . . . not*	*not*		Total	*ne*	*ne . . . not*	*not*	Total
1150–1250	91.2% (n = 394)	– (n = 0)	– (n = 0)	8.8% (n = 38)	432	60.6% (n = 436)	38.5% (n = 277)	1.0% (n = 7)	720
1250–1350	90.0% (n = 127)	0.7% (n = 1)	– (n = 0)	9.3% (n = 13)	141	22.9% (n = 166)	67.7% (n = 490)	9.4% (n = 68)	724
1350–1420	8.7% (n = 77)	0.7% (n = 6)	1.6% (n = 14)	89.1% (n = 793)	890	1.9% (n = 43)	10.5% (n = 236)	87.5% (n = 1959)	2238
1420–1500	0.3% (n = 2)	– (n = 0)	2.0% (n = 17)	97.8% 849	868	0.7% (n = 14)	1.0% (n = 18)	98.3% (n = 1842)	1874

of *ne* leads to an overall decline in negative concord involving a negative marker (*ne*, *ne* . . . *not* or *not*). This means that if a clause has a negative argument, it is increasingly often the sole negative item in the clause, as in (53d).

In section 6, I argued that there could be negative inversion in Middle English following a clause-initial negative argument because negative arguments at that point were markers of sentential scope negation, bearing [*i*Neg] features. I proposed that the incompatibility of *not* and negative inversion follows because there cannot be two [*i*Neg] features in a negative clause. Put differently, *not* is not required to introduce an [*i*Neg] feature to the clause when [*i*Neg] has already been introduced by the negative argument. In fact, since a negative clause can contain only one [*i*Neg] feature, it follows that *not* is not allowed in these cases. Extending this analysis to negative arguments in non-clause-initial positions derives the more general incompatibility between *not* and negative arguments seen in table 6. In contrast, *ne* is able to appear in negative concord with negative arguments in Middle English because it has an uninterpretable [*u*Neg] feature.

There is one further infrequent pattern to note. Negative arguments and adverbials sometimes enter into negative concord with each other in clauses without the negative markers *ne* or *not* (55) (n = 6 in the PPCME2).

(55) but he was so hard, þat **no begger** might gete **no good** of hym by **no**
but he was so hard that no beggar might get no good of him in no
maner wyse
manner way
'But he was so hard-hearted that no beggar might get any good of him in any kind of way'
(fifteenth century; MIRK,104.2825)

A possible analysis of such clauses is that one negative argument has an [*i*Neg] feature, and the others have [*u*Neg] features. The negative argument with the [*i*Neg] feature licenses the negative arguments which have [*u*Neg] features by agreement. This would mean that the loss of negative concord from Standard English involves the loss of negative arguments or negative adverbials with [*u*Neg] features. Once every negative item has an [*i*Neg] feature, there can only be one negative word in each negative clause.

7.3 Inversion facts as evidence for dating the grammaticalisation of not

The analysis of negative inversion presented here makes predictions about the grammaticalisation of *not* in Middle English. Once *not* is grammaticalised as a marker of negative force with an [*i*Neg] feature, I predict that when it appears in negative concord with a clause-initial negative item there will be no negative inversion. Indeed, in later Middle English and Early Modern English (1350–1700), *not* rarely appears in clauses with negative inversion. Within this extended period, only 9.7 per cent (n = 3/31) of clauses with negative inversion also have *not*. One of these three examples is (19), repeated here as (56).

(56) no more would not I if I was your wife
'no more would I if I were your wife'
(seventeenth century; PENNY-E3-H,267.501)

However, in Early Middle English (1150–1250), 76.5 per cent (n = 13/17) of clauses with negative inversion have *not*. Two examples can be seen in (57).

(57) (a) Ne understandeð hie **naht** þat alswa michel senne hit is to
NEG understand they not that also much sin it is to
breken fasten . . .
break fast . . .
'They do not understand that it is also much sin to break the fast . . . '
(thirteenth century; VICES1,137.1701)

(b) Nis hit **naht** riht þat we hie forlaten
NEG-is it not right that we them abandon
'It is not right that we abandon them'
(thirteenth century; VICES1,141.1753)

Negative inversion following *ne*, as in these examples, requires that *ne* has an [*i*Neg] feature, so in order to co-occur with initial *ne* in these clauses, *not* must have a [*u*Neg] feature.[11] These differences between the ability of *not* to co-occur with inversion at different periods allow us to date the grammaticalisation of *not* as an LF-interpretable marker of negation with an [*i*Neg] feature to the thirteenth century. After this date, examples like (57) are no longer found. This corresponds with the date Haeberli & Ingham (2007) propose on the basis of positional facts.

In clauses which have non-initial *ne* and *not*, it is possible to analyse the co-occurrence of *ne* and *not* in two ways, with sentential scope negation being marked either by *ne*, as in (60a), or by *not*, as in (60b). However, only the first option (60a) is available in clauses which have initial *ne* and negative inversion, since *ne* must have an [*i*Neg] feature in order to move to C^0. Hence, once *not* begins to grammaticalise as a negative marker, its frequency should be lower in clauses with initial *ne*.

(60) (a) ne [*i*Neg] . . . .*not* [*u*Neg] (older pattern, *not* is in negative concord with *ne*)
(b) ne [*u*Neg] . . . *not* [*i*Neg] (newer pattern, *not* is a negative marker; *ne* is in negative concord with *not*)

Early Middle English data from the period 1150–1250 bear out this prediction: *not* is more common in clauses with non-initial *ne* (91.3 per cent, n = 21/23) than in clauses with initial *ne* (76.5 per cent, n = 13/17). The almost categorical use of *not* in clauses where *ne* appears non-initially indicates its incipient grammaticalisation in these clauses.

[11] It is noteworthy that many examples of the type in (57) occur in translations of Latin texts or passages. However, since Latin does not have multiple negation, such examples cannot be due to direct Latin influence.

8 Conclusion

In this article, I have argued that changing patterns of subject–verb inversion following clause-initial negatives are linked to changes in the scope associated with negative items.[12] As I have shown, the history of negative inversion, changes to negative concord and the grammaticalisation of new sentential negative markers receive a unified explanation, which follows from changes in the scope properties of negative items during the Middle English period. The availability of negative inversion in negative concord constructions follows a cycle which is linked to changes in the way sentential negation is marked at the various stages of Jespersen's Cycle. The data presented here provide further support for the analysis of Jespersen's Cycle in Wallage (2008), which distinguished *ne* [*i*Neg] at stage 1 of Jespersen's Cycle from *ne* [*u*Neg] at stage 2 of Jespersen's Cycle in terms of LF-interpretability of negative features.

The replacement of *ne* [*i*Neg] by *ne* [*u*Neg] in the twelfth to thirteenth century co-occurs with a reanalysis of clause-initial negative items as negative operators with [*i*Neg] features of their own. The two structural analyses of clause-initial negative items given in (61) were only distinguished by the non-occurrence of negative inversion in (61a) and its occurrence in (61b).

(61) (a) Negative argument [*u*Neg] . . . *ne* V [*i*Neg]
(no negative inversion)
(b) Negative argument [*i*Neg] . . . *ne* V [*u*Neg]
(negative inversion)

Once language learners learned that *ne* had [*u*Neg] features, clauses with initial negative items would have the structure (61b) instead of (61a). It is this change that gave rise to new patterns of negative inversion.

Author's address:
Department of Humanities
School of Arts and Social Sciences
Northumbria University
Ellison Road
Newcastle upon Tyne
NE1 8ST
United Kingdom
phillip.wallage@northumbria.ac.uk

[12] Although I argue that changes in scope marking for negation play a crucial role in enabling new patterns of negative inversion to emerge, negative inversion is not categorical in Middle English or Early Modern English, even in clauses which have only one (clause-initial) negative item. For Present-day English, Haegeman (2001) argues that some clause-initial negatives, especially adverbials, do not function as operators but appear initially as topics without negative inversion. Similar examples with initial negative adverbials and no inversion appear in Middle English and Early Modern English.

References

Chomsky, Noam. 1999. Derivation by phrase. *MIT Occasional Papers in Linguistics* 18.

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Roger Martin, David Michaels & Juan Urigereka (eds.), *Step by step: Essays on Minimalist syntax in honor of Howard Lasnik*, 89–156. Cambridge, MA: MIT Press.

Frisch, Stefan. 1997. The change in negation in Middle English: A NegP licensing account. *Lingua* 101, 21–64.

Haeberli, Eric. 2002a. Inflectional morphology and the loss of verb-second in English. In David W. Lightfoot (ed.), *Syntactic effects of morphological change*, 88–106. Oxford: Oxford University Press.

Haeberli, Eric. 2002b. Observations on the loss of verb-second in the history of English. In Jan-Wouter Zwart and Werner Abraham (eds.), *Studies in comparative Germanic syntax*, 245–72. Amsterdam: John Benjamins.

Haeberli, Eric & Richard Ingham. 2007. The position of negation and adverbs in Early Middle English. *Lingua* 117, 1–25.

Haegeman, Liliane. 1995. *The syntax of negation*. Cambridge: Cambridge University Press.

Haegeman, Liliane. 2001. Negative preposing, negative inversion and the split CP. In Laurence R. Horn & Yashiko Kato (eds.), *Negation and polarity: Syntactic and semantic perspectives*, 21–61. Oxford: Oxford University Press.

Hiraiwa, Ken. 2001. Multiple Agree and the defective intervention constraint in Japanese. *MIT Working Papers in Linguistics* 40, 67–80.

Ingham, Richard. 2005. The loss of Neg V-to-C in Middle English. *Linguistische Berichte* 202, 171–206.

Ingham, Richard. 2007. NegP and negated constituent movement in the history of English. *Transactions of the Philological Society* 105, 365–97.

Jack, George B. 1978. Negation in later Middle English prose. *Archivum Linguisticum* 9, 58–72.

Jespersen, Otto. 1917. *Negation in English and other languages*. Copenhagen: Ejnar Munksgaard.

Kemenade, Ans van. 2000. Jespersen's Cycle revisited: Formal properties of grammaticalisation. In Susan Pintzuk, George Tsoulas & Anthony Warner (eds.), *Diachronic syntax: Models and mechanisms*, 51–74. Oxford: Oxford University Press.

Kroch, Anthony S. & Ann Taylor. 1997. Verb movement in Old and Middle English: Dialect variation and language contact. In Ans van Kemenade & Nigel Vincent (eds.), *Parameters of morphosyntactic change*, 297–325. Cambridge: Cambridge University Press.

Kroch, Anthony S. & Ann Taylor (eds.). 2000. *Penn–Helsinki Parsed Corpus of Middle English*, 2nd edition. Philadelphia: University of Pennsylvania.

Kroch, Anthony S., Beatrice Santorini & Lauren Delfs (eds.). 2004. *Penn–Helsinki Parsed Corpus of Early Modern English*. Philadelphia: University of Pennsylvania. Available at: www.ling.upenn.edu/hist-corpora/PPCEME-RELEASE-1/

Nevalainen, Terttu. 1996. Social mobility and the decline of multiple negation in Early Modern English. In Jacek Fisiak & Marcin Krygier (eds.), *Advances in English historical linguistics*, 263–92. Berlin: Mouton de Gruyter.

Nevalainen, Terttu. 1997. Recycling inversion: The case of initial adverbs and negators in Early Modern English. *Studia Anglia Posnaniensia* 31, 203–14.

Pintzuk, Susan. 1999. *Phrase structures in competition: Variation and change in Old English word order*. New York: Garland.

Randall, Beth. 2000. *CorpusSearch*. Philadelphia: University of Pennsylvania.

Taylor, Ann, Anthony Warner, Susan Pintzuk & Frank Beths (eds.). 2002. *The York–Toronto–Helsinki Parsed Corpus of Old English Prose*. York: Department of Language and Linguistic Science, University of York. Distributed through the Oxford Text Archive.

Taylor, Ann, Arja Nurmi, Anthony Warner, Susan Pintzuk & Terttu Nevalainen (eds.). 2006. *Parsed Corpus of Early English Correspondence*. Compiled by the CEEC Project Team. York: University of York and Helsinki: University of Helsinki. Distributed through the Oxford Text Archive.

Wallage, Phillip W. 2005. Negation in Early English: Parametric variation and grammatical competition. PhD dissertation, University of York.

Wallage, Phillip W. 2008. Jespersen's Cycle in Middle English: Parametric variation and grammatical competition. *Lingua* 118, 643–74.

Zeijlstra, Hedde H. 2004. Sentential negation and negative concord. PhD dissertation, University of Amsterdam.