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## The diachronic syntax of negated adjuncts in English

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#### Abstract

In this paper we investigate the diachronic changes in negation and Emphatic Focus that are responsible for the distribution of negated adjuncts in Present Day English. These can occur clause-medially and clause-initially, but generally not clause-finally. While clause-initial negated adjuncts move to the left-periphery triggering Negative Inversion for emphasis, clause-medial negated adjuncts are argued to occur in their first-merged position as vP-adjuncts. We relate the inability of clause-final negated adjuncts to express sentential negation to the loss of Prosodic-movement and Negative Concord in the transition from Late Middle English to Early Modern English. The eventual loss of Negative Concord is related to the reanalysis of negative words from non-negative (i.e. [uNeg]) to negative (i.e. [iNeg]). Upon loss of Prosodic-movement, reanalysis of negative words as [iNeg] results in the rise of Negative Inversion to express Focus.

**Keywords:** negated adjuncts, Negative Inversion, Negative Concord, Prosodic-movement, Focus, Late Middle English

#### 1. Introduction

In contemporary English, negated adjuncts that express sentential negation (as diagnosed by Klima's 1964 tests for sentential negation) appear in a clause-initial position with Negative Inversion (NI) (Büring 2004; De Clercq 2010):

- (1) At no time were they left alone, were they?
- (2) Under no circumstances can she refuse the job, not even if it's in a different country.
- (3) In no way would this be acceptable behaviour, and neither is his attitude.

They can also occur clause-medially without NI, and are judged as degraded if they occur clause-finally, (4a'-c'):

- (4) a. They were at no time left alone.
  - a'. ??They were left alone at no time.
  - b. She can under no circumstances refuse the job.
  - b'. ??She can refuse the job under no circumstances.
  - c. This would in no way be acceptable behaviour.
  - c'. ??This would be acceptable behaviour in no way.

Yet this has clearly not always been so, as in earlier English negated adjuncts appeared commonly in postverbal position, e.g. these 15<sup>th</sup> century instances in (5) and (6):

(5) Thei sholde not meve thens in no maner. they should not move from-there in no manner 'They should in no way go away from there'

Merlin, 658

(6) I woll not do hit by no wey. I will not do it by no way 'In no way will I do it'

Gesta Romanorum §32

Evidently a change has taken place in the syntax of English negation: the present study seeks to capture the syntactic and semantic elements of this diachronic process, investigating the syntax of negated adjunct

prepositional phrases (PPs) from Middle English (1150-1500) to Early Modern English (1500-1700) and onwards until Present Day English.

The article is organised as follows. In Section 2, we compare the syntactic distribution of negated adjuncts in contemporary English and in medieval English. In Section 3, we discuss the theoretical assumptions that have been made to later provide a syntactic analysis that can explain the distribution of negated adjuncts in Late Middle English (LME) and beyond. These assumptions include the possibility of expressing Emphatic Focus by means of Prosodic-movement (Zubizarreta 1998), Zeijlstra's (2004) account of Negative Concord (NC), and Haegeman's (1995, 2001) account of NI. In Section 4, the background to negative clause syntax in Middle and Early Modern English is provided, with a brief description of the loss of NC and the rise of NI, the two main diachronic changes that affect negation in the transition from LME to Early Modern English (EMnE). Section 5 presents the results of an empirical analysis of clauses with negated adjuncts in LME. Section 6 contains a syntactic analysis of their distribution, associating the shift in the locus of expression of negation in English with some changes in the expression of Emphatic Focus. Section 7 summarises and concludes the study.

## 2. The status of negated adjuncts in contemporary and medieval English

It should be noted that some studies have claimed that sentence-final negated adjuncts are at least marginally acceptable in contemporary English (e.g. De Clercq 2010). Such judgments are not shared by the British native-speaker author of the present paper, but it is recognised that there may be some idiolectal or dialectal variation in the matter, conceivably offering more variability in non-British varieties. However that may be, in the present research we shall not rely on grammaticality judgement data, since from historical periods these are not available, and neither are medieval non-British varieties of English. From the period contributing data such as (5) and (6), only corpus data are extant, and only native-speaker material from the British Isles. Accordingly, to investigate the diachrony of negated adjunct PPs on a like-for-like basis, we shall take as our contemporary point of comparison data from the late 20<sup>th</sup> century British National Corpus. The syntax of negated adjuncts in this corpus was investigated using as search terms the nouns way, time, account and circumstances in the PP. The results are shown in Table 1.

in no way	475
at no time	126
on no account	84
under no circumstances	50
in no circumstances	43
TOTAL	778

Table 1. Negated adjunct PPs in the British National Corpus, late 20<sup>th</sup> century

Of 778 hits, none was in final position, with the single exception of (7):

(7) Does my hon. Friend agree that any extra tax on the self-employed without benefits in return would damage the country's chances of growth, and would help it in no way whatsoever?

(Hansard (Parliament) extracts 1991-1992)

Its very exceptional status may be explained by the presence here of *whatsoever*, which is clearly an emphatic expression typically bearing tonic stress. Otherwise negated adjuncts are uniformly positioned medially or initially in contemporary British English.

As will be seen below, clause-final negated adjunct PPs were very common in LME even when they lacked any such emphatic expression as *whatsoever*. A change has thus taken place in the distribution of negated adjuncts in British English since the late medieval period that has seen little previous discussion in the theoretical and diachronic literatures. In earlier times, negated adjuncts were common in clause-final position. The loss of this option appears to have interacted in a significant way with the loss in the EMnE period of NC (Nevalainen & Raumolin-Brunberg 2003; Kallel 2007), which is

defined as the co-occurrence in the same clause of negatively marked items yielding a single negation reading (Jespersen 1922; Baker 1970; Labov 1972; among others).

In Middle English (ME), unlike in the modern language, final negated adjuncts were common, cooccurring with the clause negator *not*, as in (5) and (6) above. Our initial observations of this
phenomenon suggested that in final position negated adjuncts did not seem to occur without the clause
negator *not*, whereas in other negative clause contexts in ME, *not* was optional in the presence of a
formally negative constituent such as *none* or *never* (Jack 1978a, b). It will be shown below that in an
analysis of negated adjuncts in a large database of LME, the ME compendium, available on-line, this
distinctive pattern is confirmed. It will further be argued that the special behaviour of clause-final
negated adjuncts in LME can be related to the need to guarantee that negation has sentential scope at a
time when negative words are transitioning from syntactically non-negative (i.e. specified as [*u*Neg]) to
negative (i.e. [*i*Neg]) (cf. Zeijlstra 2004), and Emphatic Focus can be expressed by means of Prosodicmovement (Zubizarreta 1998). Once NC is lost, Prosodic-movement stops being a suitable option to
express Emphatic Focus, and fronting to initial position is required. NI for an interpretation of negation as
sentential is required once the reanalysis of negative words as negative ([*i*Neg]) has taken place (Ingham
2005a, b).

# 3. Theoretical Assumptions

Four main approaches to NC can be found in the research literature, which differ with respect to (i) whether the elements that participate in NC constructions (neg-words, cf. Laka 1990) are semantically negative, and (ii) the quantificational status of neg-words. For Zanuttini (1991) and Haegeman & Zanuttini (1991), neg-words are negative quantifiers that need to be in a Specifier-Head configuration with a negative head. A mechanism of Neg-factorisation that applies at the interface of grammar with the conceptual-intentional system is assumed to conflate into one the two negative meanings (the one conveyed by the neg-words, and the one conveyed by the negative head).

For Bosque (1980) and Laka (1990), by contrast, neg-words are negative polarity items licensed by negation: the fact that neg-words seem to convey negative meaning when occurring in a preverbal position or in isolation as an answer to a wh-question is explained by postulating the presence of a null operator that is semantically negative. A third approach is that of Herburger (2001), where neg-words are assumed to be shifting from negative polarity items to negative quantifiers and are, hence, lexically ambiguous. Finally, neg-words are taken to be indefinites (Ladusaw 1992, 1994; Giannakidou & Quer 1997; Zeijlstra 2004) needing to be bound by a non-veridical operator (with not, an antiveridical operator, being a subtype of non-veridical operators). Zeijlstra (2004), in particular, makes a distinction between semantic and syntactic negation that determines whether elements that occur in negative constructions hold a one-to-one correspondence to negative operators or not. In contemporary English, for example, items such as nobody, nothing or negated adjuncts such as in no way or by no means are negative operators (i.e., negation is semantic) and, therefore, if more than one occurs in a clause, or if they cooccur with the sentential negative marker (not / -n't), Double Negation (DN) arises, i.e. two negative meanings negate each other and, hence, result in a positive reading. By contrast, negated adjuncts can cooccur with not under a single negation reading in ME. Therefore, it can be assumed that ME had NC and negated adjuncts contained neg-words, which are assumed in Zeijlstra (2004) to carry an uninterpretable negative (formal) feature, [uNeg]. Such feature marks them as semantically non-negative, but as syntactically dependent on negation. In other words, neg-words must be licensed by an element with a matching interpretable feature, [iNeg]. Zeijlstra (2004) further claims that languages with lexical items specified as [uNeg] may project Neg(ation) P(hrase), a functional projection dedicated to the expression of negation (Pollock 1989). As will be seen in Section 5, where we use Zeijlstra's (2004) theoretical apparatus to account for the syntax of negated adjuncts in LME, the nature of the NegP projection will be relevant to our proposal, as for negation to be sentential, we assume that it must scope over the entire vP (cf. Zeijlstra 2004, Penka 2007). Such negation can be TP-internal, (8), or expressed on a D(eterminer) (cf. Biberauer & Roberts 2011: 37) that will later undergo Quantifier Raising, (9). Notice that in (8b) the any-DP is not considered to be negative; rather, it has to be bound by a non-veridical operator (Biberauer & Roberts 2011: 38).

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(8) a. I didn't see any ships.
b. [CP [TP I didn't_{\neg} [_{\nu P} see [DP any ships]]]]
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<sup>&</sup>lt;sup>1</sup> Accessible at http://quod.lib.umich.edu/m/mec/.

(9) a. I saw no ships.b. [<sub>CP</sub> [<sub>TP</sub> I [<sub>νP</sub> saw [<sub>DP</sub> no¬∃ ships]]]]

In a NC language (or variety), by contrast, neg-words indefinites, which are non-negative (i.e. specified as [uNeg]) despite bearing negative morphology, are able to form an Agree chain with the clausal negator in the TP-domain, specified with the formal feature [iNeg] (Zeijlstra 2004 and ff), (10b). In Standard English, by contrast, (10a) is only possible with a DN reading, as two instances of logical negation cancel each other out, (10c).

As pointed out in Biberauer & Roberts (2011: 40), though, it seems that the DN reading in (10c) only obtains if the negated object is focused. Although we do not push the discussion of such fact further in this paper –as exploring the constraints on the expression of DN in Standard English is beyond its scope–, we cannot but note that negated adjuncts such as *in no way, by no means, under no circumstances*, etc. typically serve to emphasise the negative polarity of the clause. It will, therefore, be taken here that a negated adjunct constituent may hold a relation with Focus. Diachronic differences in the expression of sentential negation but also in the expression of Emphatic Focus are then predicted to result in diachronic differences in the syntax of negated adjuncts.

In the remainder of the paper we assume that it was possible for LME speakers to use Prosodic-movement (Zubizarreta 1998) to reorder constituents for discourse purposes, though this is no longer a possibility in contemporary English. Prosodic-movement shifts unfocused constituents leftwards so that a focused constituent occurs clause-finally and becomes prosodically prominent. An example of Prosodic-movement in Spanish, for instance, is given in (11b).

(11) a. Encontró el libro en casa.
found.3SG the book at home
'S/he found the book at home.'
b. Encontró en casa el libro.
found.3SG at home the book

To the question 'What did she find at home?' only (11b) is an appropriate answer, with the focused answering constituent occurring clause-finally.

In Zubizarreta (1998: 139-140), the operation of Prosodic-movement is described as follows. If focus prominence (FP) and nuclear stress (NS) do not coincide on the same constituent, a contradictory situation arises, shown below, where 'ph' represents the phonological material of a metrical constituent, such as *el libro* ('the book') and *en casa* ('at home') in (11):

Prosodic-movement operates by left-adjoining the unfocused right-hand constituent to the left-hand constituent, thus:

$$FP + NS$$
(13)  $\begin{bmatrix} \delta & \delta & \delta & \delta \\ \delta & \delta & \delta & \delta \end{bmatrix} \begin{bmatrix} \delta & \delta & \delta \\ \delta & \delta & \delta \end{bmatrix} \begin{bmatrix} \delta & \delta & \delta \\ \delta & \delta & \delta \end{bmatrix} \begin{bmatrix} \delta & \delta & \delta \\ \delta & \delta & \delta \end{bmatrix}$ 

'S/he found the book at home.'

<sup>2</sup> Throughout the paper, we adopt Zeijlstra's (2012) notion of Agree, also known as Reverse Agree. Unlike Chomsky's (2000, 2001) Agree, where Probes scan their c-command domain for a Goal that can value (and thus check) an uninterpretable unvalued formal feature that the Probe carries, Zeijlstra assumes Agree to be upwards, i.e. with a Goal c-commanding the Probe. In the specific case of NC, this amounts to a Goal with an [iNeg] feature c-commanding a Probe with a [uNeg] feature, as shown in (10b).

In (11a), the Nuclear Stress principle assigns nuclear stress to the rightmost constituent, i.e. *en casa* ('at home'). If the object *el libro* ('the book') were focused, the Focus Prominence principle would assign prominence to it, hence conflicting with the Nuclear Stress principle. Prosodic-movement, resulting in (11b), reorders material so that the focused constituent receiving prominence is also rightmost in the sentence.<sup>3</sup> The focused direct object constituent *el libro* ('the book') is placed in clause-final position where its informational and prosodic prominence coincide, which would not be the case if it stood in immediate postverbal position, as in (11a).<sup>4</sup>

In Modern English focus prominence is not located clause-finally, so Prosodic-movement does not apply. It appears, however, that in ME rearrangement of internal arguments took place so as to allow the clause-final positioning of informationally salient constituents, as illustrated in (14)-(18):

(14) ... & eauer habbe sar care... & bringe [PP on his moder] sorhe. and always have-SUBJ3sg pain grief and bringe-SUBJ-3sg on his mother sorrow '... and always have painful grief... and bring sorrow on his mother'

Hali Medhhad p. 155 (c. 1220)

Oure Fadir Jacob, that ghaf [PP to vs] the pit. our father Jacob that gave to us the pit 'Our father Jacob that gave us the pit'

NT Purvey ch 4 (c. 1388)

(16) ...ghif ... he have paid [PP to the almes box] his afferaunt. if he have-SUBJ-3sg pay-PPT to the alms box his share '... if... he has paid his share to the alms box'

London Guilds p. 53 (1389)

(17) And then my nevewe ... had [PP unto the pore man] manasyng wordes. and then my nephew had to the poor man threatening words 'And then my nephew had threatening words with the poor man'

Stonor 118 (?1471)

(18) ...that y shold deliver [PP to Thomas Baylegh] wode and timber. that I should deliver to Thomas Baylegh wood and timber '...that I should deliver wood and timber to Thomas Baylegh.'

Stonor, 222 (1473)

In each case, the verb's direct internal argument is separated from it by an indirect argument. It should be noted that the final constituents are not relatively 'heavy' NPs, i.e. the modern English stylistic Heavy-NP rule does not account for the syntactic surface pattern illustrated here.

On this basis, we propose that the structure of ME clauses featuring emphatic final negated adjuncts, such as (6) above, was also derived by Prosodic-movement, as shown using Zubizarreta's (1998) terms:

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(19) I woll not [_{\delta} \ [_{\alpha} \ by \ no \ wey] [_{\beta} \ do \ hit ] ]
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(20) I woll not  $\begin{bmatrix} \delta & \delta & \delta \\ \delta & \delta & \delta \end{bmatrix}$  do hit  $\begin{bmatrix} \delta & \delta \\ \delta & \delta \end{bmatrix}$  by no wey  $\begin{bmatrix} \delta & \delta \\ \delta & \delta \end{bmatrix}$ 

We take  $\delta$  here to be vP:

(21) I woll not [ $\nu$ P [ $_{\beta}$  do hit ] [ $\nu$ P [ $_{\alpha}$  by no wey] [ $_{\beta}$  ] ]

 $^3$  Whereas other kinds of movement (e.g. wh-movement, DP-raising, etc.) are feature-driven, Prosodic-movement takes place for prosodic reasons. Other types of movement, e.g. Müller's (2004) Edge Domain Pied Piping evacuation  $\nu$ P-movement (which has been argued to result in V2 structures in German), are also claimed not to be motivated by formal features. See also Richards (2016) for a critical discussion on the role of formal features as triggers of movement, and of the interaction of prosody and syntax.

<sup>&</sup>lt;sup>4</sup> Unlike English, Spanish does not have the option of placing nuclear stress in clause internal-positions to coincide with informational focus (Zubizarreta 1998).

It should be noted that in (21) the adjunct by no wey does not c-command vP. By contrast, a negated adjunct in medial position, as in (22a), c-commands one segment of vP (cf. 22b):

(22) a. Thou shalt in no maner falle out of the shippe.

Gesta Romanorum, 303

'You will in no way fall out of the ship'

b. Thou shalt [vP in no maner [vP falle out of the shippe ]]

Here, no Prosodic-movement has taken place.

The differing c-command relationships in which the neg-words stood in these clausal structures, with and without Prosodic-movement, will have an important bearing on the account set out below of the diachronic change presented in Section 1. We first need, however, to consider more closely the development of negative syntax in the late medieval and early modern eras in which the phenomena described above are to be situated.

#### 4. Diachronic changes in English negative syntax

The main changes in clausal negation in the history of English have been much studied and are descriptively well-established (e.g. Jack 1978a, Mazzon 2004, Nevalainen 1997, Ingham 2013, among others). In LME the Old English clausal negator *ne* was lost, replaced as the sole negator by *not*. The NC system operating in Early Middle English, by which indefinites under negation had to be neg-items such as *none* or *never*, weakened from around 1400 onwards, as the negator *ne* was lost; in the EMnE period NC as a constraint on indefinites in negative clauses gave way to a non-NC grammar, at least in educated writing (Kallel 2011). Kallel's (2011) study of a corpus of private correspondence extending from 1450 to 1599 showed that NC progressively dropped from 78% in the period between 1475-1499 to 48% in the period between 1500-1524. Likewise, NC dropped from 48% in 1500-1524 to 43% between 1525-1549. Strikingly, an almost complete abandonment of NC can be seen between 1525-1549 and 1550-1574, when NC drops from 43% to 3% and, finally, to 0.6% in the period between 1575-1600.

These and certain other negation phenomena were related by Ingham (2013) to the role played in earlier English syntax of a NegP constituent hosting a Neg Operator, associated by Zeijlstra (2004) with a NC grammar. The disappearance of this element of the clausal negation structure in the EMnE period was seen as the underlying factor in the various changes that occurred. In this study we also consider the rise of NI, a further development in the syntax of negation, which became visible at the end of the medieval period, and is seen in the following examples:<sup>5</sup>

(23) No Thisby do I see. 'I see no Thisby'

Shakespeare MND 5.01.179

(24) And no way canst thou turn thee for redress.

'And you can turn nowhere for redress'

Shakespeare 1Henr.VI 4.02.25

In ME, subject and verb were not usually inverted in such cases, as shown in (25) and (26) (Ingham 2007). This is not surprising, though, as negative items in NC constructions are specified as [uNeg], and although they can raise to CP (as Topics, for example, cf. Haegeman 2001; Wallage 2012), they cannot trigger NI in not being specified as [iNeg].

(25) Nothing he ne founde in all the nighte nothing he not found in all the night 'Nothing did he find in all night.'

Vox in Well 111 (13th c.)

(26) Neuer ich in helle ne com never I in hell not come 'Never will I come to hell.'

Moral Ode 46 (c. 1200)

<sup>&</sup>lt;sup>5</sup> Word-forms in post-medieval examples are taken not to require glossing to be comprehensible.

The question then arises of the reason for this evident diachronic change in the syntax of negation in English. Jacobsson (1951) highlighted an important correlation in early modern literary texts between non-inversion following an initial negative element such as *nor*, and the availability of NC. If inversion did not take place, NC was possible, e.g. (27); if it did take place, NC was excluded, e.g. (28) (Ingham 2007). This is consistent with Wallage's (2012) claim that only [*i*Neg]-specified fronted negative elements can trigger NI. As *ne* is assumed to be specified as [*u*Neg], the clause-initial negative argument or adverbial triggers NI; in the presence of *not*, which is specified as [*i*Neg], the fronted negative is [*u*Neg] and, hence, not an NI-triggering operator.

(27) Nor a man cannot make him laugh 'Nor a man can make him laugh.'

Shakespeare 2H4 4.03.88

(28) Nor needst thou much importune me nor need you much bother me 'Nor do you need to bother me much.'

Shakespeare TGV 1.03.17

As illustrated in (29a, b), initial negative constituents in earlier English with NC generally did not require NI, and some, such as (29c), had initial negative constituents without NC and without NI.

(29) a. And in no wyse I kwd not getyn no grawnth of here and in no way I can-PRET NEG get-INF no allowance of her 'And in no way could I could get an allowance from her'

Paston 128, 25

b. In no manner he would not suffer no man... 'In no manner would he suffer any man...'

Lisle Letters 4, 1078 (1538)

c. No more I wryte to yow at this tyme. 'No more do I write to you at this time.'

Paston 216, 2

However, from the EMnE period onwards NI becomes a productive option when a negative constituent occurs clause-initially (Nevalainen 1997) and no NC is attested (Ingham 2007). The rise of NI can thus be related to the decline of NC visible in the textual record in the decades around 1500.

## 5. Negated adjuncts in late Middle English: data analysis

Initial observation of LME negative syntax data such as (5) and (6), repeated for convenience as (30) and (31) below, not only showed that negated adjuncts often stood in clause-final position, but also suggested that when they did so they required the co-presence of the clause negator *not*.

(30) Thei sholde not meve thens in no maner. they should not move from-there in no manner 'They should in no way go away from there'

Merlin, 658

(31) I woll not do hit by no wey. I will not do it by no way 'In no way will I do it.'

Gesta Romanorum §32

<sup>6</sup> Such correlation is also discussed in Wallage (2012). Both Ingham (2007) and Wallage (2012) observe that in Middle English subject-verb inversion following clause-initial negated arguments and adverbials takes place regardless of whether there is NC or not. When NC involves *not* in ME and EMnE, no inversion is attested with clause-initial negative elements, but when NC involves *ne*, NI is attested with a clause-initial negative element.

In other words, NC appeared to be obligatory with clause-final negated adjuncts. On the other hand, negated arguments regularly appeared clause-finally without a preceding negative element, including the sentence negator, as shown in (32a, b):

(32) a. Sche kowth haf no money. she could have no money 'She could have no money.'

Stonor I, 58 (1462)

b. I can send your ladischipe no deyntees.
I can send your ladyship no delicacies
'I cannot send your ladyship any delicacies.'

Stonor II, 53 (1478)

To address this apparent contrast empirically, an investigation was conducted through an analysis of negated adjuncts retrieved from the LME prose works in the Middle English Compendium textbase (see footnote 1).<sup>7</sup> The aim was to establish to what extent the negated adjunct co-occurred with the sentence negator *not* in particular syntactic positions. The sources comprised by this textbase were quite varied, including correspondence, fictional and non-fictional prose. The search terms used were various attested ME spellings of the English lemmas *way, manner, means* and *time*, which were common expressions in negated adjuncts appearing to favour an emphatic interpretation.

The results of this investigation are shown in Table 2 below. It was found that, of a total of 129 negated adjuncts, 73 occurred in absolute clause-final position (i.e. with no more lexical material following the negated manner adjunct), and of those all but one co-occurred with *not*. In only 11 of the 56 clause-initial and clause-medial cases did the negated adjunct co-occur with the negative marker *not*. 8

	+ not	- not	TOTAL
clause-final	72	1	73
clause-medial	7	36	43
clause-initial	4	9	13
TOTAL	83	46	129

*Table 2.* Position of negated manner adjuncts in auxiliated clauses in Late Middle English prose texts (source: prose texts in Middle English Compendium, c. 1350-1500)

Examples of the results obtained for clause-medial and clause-initial cases are shown below in (33) and (34).

(33) Thou shalt in no maner falle out of the shippe. you shall in no manner fall out of the ship 'You shall in no manner fall out of the ship.'

(clause-medial negated adjunct)

(34) ...that in no manere he sholde not se me a-lyve. that in no manner he should not see me alive

Gesta Romanorum, 303 (clause-initial negated adjunct)

'... that in no manner should he see me alive.'

Merlin, 31

As illustrated by the examples in (35), it was found that negated adjuncts could co-occur with *not* in all positions. As illustrated by the examples in (36), they could also occur without *not*, if clause-medial or clause-initial:

<sup>7</sup> Verse texts were excluded because the exigencies of versification could have affected the use of NC.

<sup>&</sup>lt;sup>8</sup> When an exceptional phenomenon is so rare in historical data, where grammaticality intuitions are not available, accidental error must be considered a likely explanation. We henceforth assume that the co-occurrence with *not* finding elsewhere indicates grammatical regularity.

(35) a. She wull not leas it in no wyse. She will not lease it in no way 'She will not lease it in any way.' (clause-final negated adjunct)

b. He woll not in no maner wise lese your favour he will not in no way way lose your favour

Paston 217, 12 (clause-medial negated adjunct)

'He does not wish to lose your favour in any way.'

Stonor, 153

c. ...that in no manere he sholde not se me a-lyve. that in no manner he should not see me alive

(clause-initial negated adjunct)

"... that in no manner should he see me alive."

'I cannot entreat him in any other way as yet.'

Merlin, 31

a. I kan entrete hym noon other wyse as yit I can entreat him no other way as yet (clause-medial negated adjunct)

b. For in no manere bou shalt on hym tryste. for in no manner you shall on him trust

'For in no manner shall you trust him.'

Paston 477 (clause-initial negated adjunct)

Prose Secreta Secretorum, 303

But when clause-final, negated adjuncts almost never lacked co-occurring not, cf:

(37) a. Ye wolde nott have to do with hytt in no wyse. you would not have to do with it in no wise 'In no wise would you have to do with it.'

Stonor, 52

b. Thei sholde not meve thens in no maner they should not move from there in no manner 'They should in no way go away from there.'

Merlin, 658

c. I woll not do hit by no wey. I will not do it in no way 'In no way will I do it.'

Gesta Romanorum §32

d. He might not be hole by no meanes. He was-able-PRET.sg not be whole by no way 'He could not recover in any way.'

Morte D'Arthur §35

This was the case even when the other VP material was phonologically quite light, perhaps only two syllables as in examples (38b-d), so the requirement to introduce not with a final negated adjunct cannot plausibly be explained as a processing matter influenced by its 'late' occurrence in the surface string. Negated direct objects where not was lacking can be found in VPs with more phonological substance, e.g. (32a, b). Thus regular co-occurrence with not when the negated adjunct stood clause-finally appears to have been a structural matter, rather than one explicable in surface terms. The only exception observed to the empirical generalisation was:

He ansuerde that he wolde ther-of medle in no manere before Doo of Cardoel. He answer-PRET-3sg that he will-PRET-3sg of-it interfere in no way before Doo of Cardoel 'He answered that he would in no way interfere with it before the Doo of Cardoel.'

Example (38) is the single example of clause-final negated adjunct lacking not found in the corpus searches. Note that, unlike the other examples, it is an instance of reported speech. This would make it possible for us to entertain the idea that it may be closer to an ordinary manner adjunct. Alternatively, given that the data come from a written corpus, we cannot entirely discard that the example is lacking not by scribal error.

Evidently, then, in all positions except clause-final, a negatively marked adjunct was freely able to negate the clause, strongly contrasting with those in clause-final position. In the next section, an account is provided of the key properties of the distribution of LME negated adjuncts found in these data, i.e.:

- (39) Negated adjuncts in LME:
  - a. can occur clause-finally, clause-medially and clause-initially.
  - b. can optionally co-occur with *not* clause-medially and clause-initially, and in a clause-late but not absolute clause-final position.
  - c. must co-occur with *not* when they are absolutely clause-final.
  - d. do not trigger NI when occurring clause-initially.

The relevant diachronic changes that resulted in the contemporary English distribution of negated adjuncts, outlined in Section 1, displaying the characteristics listed in (39), will also be discussed.

# 6. The distribution of negated adjuncts: a syntactic analysis

We begin this section by considering the structure of clause-medial negated adjuncts. This possibility is straightforward if within a Minimalist syntactic framework negated adjuncts are first-merged at the edge of the  $\nu P$ , as shown in (40) for LME and (41) for contemporary English.

- (40) Thou shalt  $[\nu_P]$  in no maner  $[\nu_P]$  falle out of the shippe]]
- (41) They will  $[_{\nu P}$  on no account  $[_{\nu P}$  help you]]

Negated adjuncts in clause-medial position could, as we saw, optionally co-occur with the sentential negative marker *not* in LME, as in (35b) above, repeated here as (42). This is due to the fact that LME allowed (though did not require) NC.

(42) He woll not in no maner wise lese you favour.

Therefore, following Zeijlstra's (2004) account, outlined in Section 2, we analyse the example in (42) as in (43a). The relevant feature-checking is indicated in (43b) with strikethroughs.

```
(43) a. He woll [NegP not_{[iNeg]} [Neg^o[uNeg]] [vP in no_{[uNeg]} maner wise [vP lese you favour]]]
b. He woll [NegP not_{[iNeg]} [Neg^o[uNeg]] [vP in no_{[uNeg]} maner wise [vP lese you favour]]]
```

There is NC in the clause (not and the negated adjunct in no maner wise co-occur, but the clause expresses single negation), and we assume that NegP projects, hosting the sentential negative marker not in its Specifier and a [uNeg]-specified operator in Neg°. Not is semantically negative and hence a carrier of an interpretable negative feature, [iNeg] at this stage of the language (Ingham 2007). The negated adjunct, by contrast, is specified as [uNeg], as it does not introduce negation, but is syntactically flagged to participate in a dependency-chain with an element that does. As indicated by the strikethroughs, the [iNeg] feature of not licenses the [uNeg] feature of the head Neg° and the [uNeg] feature of the negated adjunct in no maner wise.

At this point, an important question arises. If the negated manner adjunct *in no maner* in (42) is not semantically negative and needs to be licensed by a negative element, why can it occur in the absence of *not*, as happens, for example, in (40)? The answer to this question is that, as argued in Tubau and Ingham (2015), progressive loss of NC resulted in a period of competition between NC and non-NC structures which, in turn, led to reanalysis of neg-words such as *nothing*, *nobody* and negated adjuncts from [uNeg] to [iNeg]. According to these authors, neg-words in LME developed a new lexical entry specified as [iNeg]. Hence, we postulate that as long as sentences like (40) and (42) co-existed in English, the negated manner adjunct *in no maner* had the two representations in (44), while by the end of the  $16^{th}$  century, when NC effectively disappears from the written record (Kallel 2011), negated adjuncts were reanalysed as negative, i.e. (44b):

(44) a. *in no*<sub>1</sub> *maner*: non-negative, specified as [*u*Neg] b. *in no*<sub>2</sub> *maner*: negative, specified as [*i*Neg]

We claim here that only negated adjuncts specified as [uNeg] (i.e. those that co-occur with an [iNeg] negative marker not) can occur clause-finally as a consequence of Prosodic-movement (Zubizarreta 1998) for emphasis. Those specified as [iNeg] (i.e. those that negate the clause on their own in the absence of a sentential negative marker) block the occurrence of Prosodic-movement and, hence, cannot occur clause-finally. In line with Ingham's (2007) observations, we claim that this is due to the scope properties of this kind of negated adjuncts: being [iNeg]-specified negative items, for them to

negate the entire clause, they must scope over the vP (cf. Zeijlstra 2004, Penka 2007), which is not possible if they end up displaced to the right of the clause after Prosodic-movement of part of the vP. This accounts for the third property of LME negated adjuncts in (39c).

In short, we propose that a sentence such as (35a), with a clause-final negative adjunct, would be derived as shown in (45). The negated adjunct *in no wyse* is first-merged in a vP-adjunct position (45a), then in (45b) Prosodic-movement applies to the vP (as indicated by the strikethrough). As a result, the negated adjunct surfaces in clause-final position, where it receives Emphatic Focus. Notice that in (45) NegP projects, as shown by the presence of *not*, and the neg-words *no* is specified as [uNeg].

```
(45) a. She wull not [\nu_P] in no wyse [\nu_P] leas it]] (merge at the edge of the \nu_P) b. She wull not [\nu_P] leas it] [\nu_P] in no wyse] [\nu_P] lease it]] (Prosodic-movement)
```

But why did negated adjuncts almost never occur clause-finally without the presence of the negative marker *not*? This was the intriguing question posed by the data summarised in Table 2 and illustrated in (37). In other words, why is the invented (46a) good, with lexis modernised for convenience, whereas data of the kind in (46b, c) are not attested?

- (46) a. I will not lease the property in no wise.
  - b. \*I will lease the property in no wise.
  - c. \*In no wise will I not lease the property. (\* with single negation interpretation)

The answer is found by comparing the syntax of (46a), which can be successfully derived, to the syntax of (46b, c), which are unattested. The derivation of (46a) is as follows. As shown in (47), NegP projects and hosts *not*, specified as [*i*Neg]. The negated adjunct *in no wise*, by contrast, contains the negword *no* which is specified as [*u*Neg]. The negated adjunct is first merged as a *v*P-adjunct, as in (48a). It then undergoes Prosodic-movement, (48b), and NegP is merged with the clause, the [*i*Neg] feature of *not* licensing the [*u*Neg] feature in *in no wise*.

- $(47) \quad \left[ _{CP} C \left[ _{TP} T \left[ _{NegP} not_{[\mathit{i}Neg]} \left[ _{Neg[\mathit{u}Neg]} \right] \left[ _{\mathit{v}P} in \ no_{[\mathit{u}Neg]} \ wise \left[ _{\mathit{v}P} \ lease \ the \ property \right] \right] \right] \right]$
- (48) a.  $[_{\nu P}[_{PP} \text{ in } no_{[uNeg]} \text{ wise}][_{\nu P} \dots \text{ lease the property}]]$ 
  - b.  $[N_{\text{egP}} \text{ not}_{[iNeg]}] [N_{\text{eg}[uNeg]}] [N_{\text{P}} \dots ]$  lease the property  $[N_{\text{P}} \text{ in } \text{no}_{[uNeg]}]$  wise  $[N_{\text{egP}} \text{ in } \text{no}_{[uNeg]}]$
  - c.  $[CPC]_{TP} T [NegP not_{[iNeg]} [Neg[uNeg]]] [vP]$  ... lease the property  $[vP]_{vP}$  in  $no_{[uNeg]}$  wise  $[vP]_{vP}$  ... lease the property  $[vP]_{vP}$  in  $no_{[uNeg]}_{uNeg}$  wise  $[vP]_{vP}$  ... lease the property  $[vP]_{uNeg}$

In (46b), by contrast, the neg-word is specified as [iNeg]. If the  $\nu$ P were to be Prosodically-moved, the [iNeg] feature would no longer scope over it, but this is required for negation to be sentential.

(49) \*[CPC [TPT [ $\nu$ P ... lease the property] [PP in no[iNeg] wise] [ $\nu$ P ... lease the property]]]

In (46c), what makes the derivation crash is simply that such a structure can only be derived by means of NI which, as discussed earlier, is typically not attested when the clause-initial negated adjunct is in a NC relation with the negative marker *not* and, hence, specified as [uNeg]. As the language transitions into EMnE (with loss of NC and Prosodic-movement), NI becomes available, with the paradigm in (46) changing into (50).

- (50) a. \*I will not lease the property in no wise.
  - b. I will in no wise lease the property.
  - c. In no wise will I (\*not) lease the property.

The ungrammaticality of (50a) is straightforward: neither Prosodic-movement nor NC are available any more in the EMnE period. Hence, the negator *not* and the neg-word in the negated adjunct cannot co-occur without yielding DN. (50b) is a possible derivation but with a non-emphatic reading (and with word order reflecting the position where the negated adjunct has been base-generated), and (50c) the

<sup>&</sup>lt;sup>9</sup> The conflict between the result of Prosodic-movement and the requirement of sentential negation to have scope over the  $\nu$ P can be envisaged as resulting from one of these constraints being ranked higher than the other (as in Optimality Theory): if assumed that the scope requirement of sentential negation is ranked higher than prosodic/informational alignment, Prosodic-movement will only apply if its output does not violate the higher-ranked constraint.

only possibility if the sentence is to be interpreted as conveying sentential negation with the negated adjunct *in no wise* expressing emphatic Focus. In short, in the NC grammar of ME, [uNeg] negated adjuncts were required to be c-commanded by an [iNeg] item, so movement to a dedicated Focus projection in the CP domain (cf. Haegeman 1995, 2001) was ruled out. In EMnE, by contrast, negated adjuncts were no longer specified as [uNeg] and, hence, became free to move to the left-periphery of the clause for Emphatic Focus.

Further research into NC varieties of later modern English, as witnessed in Old Bailey trials corpus (OBC), shows that the medieval syntax of clause-final negated adjuncts can still be observed around 1800, (51) and (52), very significantly together with NC.

(51) But whether it was to Lane, Esq. or Mr. Lane, you do not recollect? - I do not recollect. Now this other note of 15 l. you never saw at all? - No, I never saw that at all at no time.

OBC JOSEPH SLACK, forgery, 7th May 1788.

(52) Mr. Knapp. 'You know nothing of the prisoner - A. I do not; I never was in company with the prisoner at all at no time.

OBC AMES RIPLEY, murder 5th April 1815.

In addition, the contemporary colloquial preference for ANY negation (Tottie 1991) is by no means the rule in the Old Bailey data. As late as 1750-1800, *nobody* was preferred in Object function to *not... anybody*. This was also the case with indefinites in Prepositional Object function, (53)-(55). These are examples of a non-NC grammar where *nobody* is to be treated as a negative quantifier rather than as a neg-word.

- (53) He told me, he smelt a Snitch, and would come out for no Body. OBC 1737
- (54) We went into the upper Part of the House, and met with no body. OBC 1742
- (55) I staid with my beer in my hand, and concerned myself with no-body. OBC 1761

By inspecting the OBC, however, we conclude that there are still vestiges of a NC grammar in 18<sup>th</sup> century English. This can be seen in (56) and (57), where two neg-words co-occur yielding a single negation reading.<sup>10</sup>

(56) Tedman. I said nothing to no Body.

**OBC 1747** 

(57) Charles Brown . While I was at the Orchard-house, the Prisoner went out and said nothing to nobody. OBC 1747

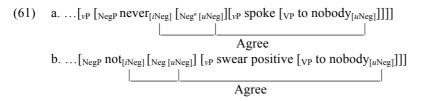
In these data, one of the neg-words is specified as [iNeg] and can Agree with the other neg-word, specified as [uNeg].

(58) ... 
$$[_{vP} \text{ said } [_{VP} [_{NegP} \text{ nothing}_{[iNeg]} [_{Neg^{\circ}[uNeg]}]] [ \text{ to nobody}_{[uNeg]}]]]$$

$$| \underline{\qquad \qquad }$$
Agree

The data in (59) and (60), which contain the adverb *never* and the negator *not*, respectively, can receive a similar treatment, as shown in (61a, b).

- (59) I never spoke to no body about it as I know of. 1768
- (60) I will not be positive, I saw one, there was a cutlass in a sheath and a blunderbuss, one in a sheath and one out; I would not swear positive to no body. 1784



Within such an analysis, it is also plausible to assume that the negated adjuncts that are clause-final in (51) and (52) are specified as [uNeg] (as they co-occur with [iNeg]-specified never, and there are also other examples where they co-occur with not). Hence, nothing prevents Prosodic-movement (to the

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<sup>&</sup>lt;sup>10</sup> Similar data are discussed in Tubau (2016) for Traditional Dialects of British English.

extent that, like NC, this is a vestige in the grammar of some 18<sup>th</sup> century speakers) from displacing them to the right-periphery for emphatic Focus. Recall that in our analysis, Prosodic-movement is disallowed with [*i*Neg] negated adjuncts because it bleeds the possibility of negation to have sentential scope. We expect it, therefore, to be an option as long as NC is preserved and negated adjuncts analysed as [*u*Neg]. 11

To summarise, the  $18^{th}$  century data is important as it indicates that by this period negated adjunct PPs had become ungrammatical in a non-NC grammar, while negated direct objects and prepositional objects had not. It seems, then, that reanalysis of neg-words from non-negative ([uNeg]) to negative ([iNeg]) in a NC grammar, and finally into negative quantifiers ( $\neg \exists$ ) in a non-NC grammar must have started with negated objects and prepositional objects, which could express sentential negation (e.g. (53)-(55)). This situation later extended to negated adjuncts, which were excluded from clause-final positions upon loss of NC and reanalysis of neg-words as [iNeg] (and later as negative quantifiers). Prosodic-movement, we have claimed, could not apply to vPs containing [iNeg] neg-words for scope reasons: for negation to be sentential, an [iNeg] feature should scope over vP, and Prosodic-movement would result in the [iNeg] feature scoping under the vP. The process rendering clause-final negated adjuncts ungrammatical therefore appears to have been part of the shift away from NC – at least in the written record – in the  $16^{th}$  century (Kallel 2007).

In the case of the prepositional objects in (53)-(55), and negated direct objects in (56) and (57), their [iNeg] feature takes scope over vP. Notice that [iNeg] features can form a syntactic chain with [uNeg] features, but that the latter can only be postulated when there is evidence that NC is still available (i.e. when two co-occurring neg-words are attested, or when the sentential negative marker *not* co-occurs with one or more neg-words). Given that no such evidence exists for the examples in (53)-(55) (as nobody is the only negative item in the clause), their grammar must be considered to be a non-NC one, and the reanalysis of nobody to a negative quantifier completed. As a negative quantifier, nobody in (53)-(55) meets its scope requirements by means of covert Quantifier Raising to a position above vP.

Only negated adjuncts specified as [uNeg] can occur clause-finally, as any kind of rightward displacement of [iNeg]-specified negated adjuncts would result in them scoping below the vP and, hence, failing to express sentential negation. Furthermore, in the case of negated adjuncts containing a negative quantifier, economy would prevent rightward displacement caused by leftward movement of the vP (e.g. Prosodic-movement) from being repaired by Quantifier Raising (i.e. further movement). Rather, Present-Day English negated adjuncts are only allowed to occur clause-medially (because this is the position they are first-merged), or clause-initially (with NI) for emphasis. In both cases, sentential negation is expressed by a negative item scoping over the vP.

# 7. Summary and conclusion

In this paper the syntax of negated adjuncts that occur under sentential negation, such as *in no manner*, has been investigated from a diachronic perspective. In an attempt to account for the contemporary English distribution of these negated adjuncts we have looked at LME and EMnE data, with special emphasis on the changes that have taken place not only in the expression of negation in English, but also in the expression of Emphatic Focus. We have shown that negated adjuncts that express sentential

An anonymous reviewer points out that our analysis makes the testable prediction that those varieties of English that allow NC as part of their grammar should mirror ME in permitting clause-final negated adjuncts. While the 18<sup>th</sup> century data confirm such prediction, so do contemporary data, (i).

(i) The shit ain't funny in no way.

<sup>(</sup>Retrieved from http://www.bluelight.org/vb/archive/index.php/t-496656.html. Originally posted in 2010).

Whether examples such as (i) are derived by means of Prosodic-movement or else contain the negated adjunct in a VP-adjoined position is an open question that must be left for further research. To answer such a question it would be necessary to investigate whether Prosodic-movement is observed in other contexts in contemporary varieties of English that allow NC. No such research is known to us.

<sup>&</sup>lt;sup>12</sup> Reanalysis of neg-words and the sentential negative marker from [iNeg] to  $\neg \exists$  (neg-words) and to  $\neg$  (negative marker) is assumed to have taken place after reanalysis of [uNeg]-neg-words to [iNeg]-specified lexical items not engaging in Agree chains with [uNeg]-specified lexical items. We assume that this would lead the formal feature [iNeg] to be reanalysed as semantic negation (cf. Zeijlstra 2004).

negation in contemporary English can occur clause-medially because, as was also shown to be the case in LME and EMnE, this is their first-merged position. Negated adjuncts merge in a  $\nu$ P-adjoined position and can thus occur clause-medially. In addition, given that they are inherently negative, they trigger NI when expressing Focus and occurring clause-initially. They cannot, however, occur clause-finally. We have argued that this is the consequence of loss of NC, which results in reanalysis of these elements as inherently negative. When this is the case in the transition from LME to EMnE, Prosodic-movement, which used to be a possible mechanism for the expression of emphatic Focus, can no longer apply, as it conflicts with the scope requirements of negated adjuncts.

In short, the observation that clause-final negated adjuncts must co-occur with the sentential negative *not* in LME receives a principled explanation in that a NC grammar provided for a negative element (i.e. the negative marker *not*, specified as [iNeg]) to take scope over the entire vP and thus allows negation to be sentential. Prosodic-movement in LME displaced the negated adjunct constituent to a right-peripheral position without scope over the vP, but only as long as it was [uNeg]. For a negated adjunct containing the clause's only [iNeg] item to be left on the right-periphery after leftwards movement of the vP would have violated the [iNeg]-negated adjunct scope requirement. Hence the construction disappeared once (standard) English became non-NC, though surviving in non-standard varieties down to modern times.

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