

DO NOTHING BUT + V: From parallel form to bare infinitive*

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Abstract

This paper examines the development of sentences featuring the sequence *do nothing but* followed by a lexical verb, as in *He has done nothing but improve all season*. Data are presented which show that, before 1500, the lexical verb in the construction always had a form parallel to that of *do* but after 1700, it nearly always takes the form of a bare infinitive. The reason for the change is identified as a convergence of several factors promoting reanalysis of a base form lexical verb as an infinitive.

1 Introduction

In this paper, I examine certain aspects of the history of what –for want of a better term– I call the DO NOTHING BUT construction. Two Present-Day English (PDE) examples can be seen in (1)–(2).

- (1) By the time that one of his profession (Tony Armstrong-Jones) married the Queen's sister in 1960, the status of photographer was assured –and films like *Blow Up*, not to mention the antics of David Bailey and Patrick Lichfield in the 1960s, did nothing but enhance it.
(*The Guardian*, 24 January 2004, 18)

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- (2) Even Sir John Stevens (David Blunkett's least favourite top cop) can do nothing but grovel: 'We must be grateful it was an attention-seeker, not an intruder with more sinister purposes.' Indeed, how true.
(*The Guardian*, 18 August 2003, 17)

Here the verb *do* is followed by the sequence *nothing but* and another verb, which takes the bare infinitive form (*enhance*, *grovel*). The meaning of the combination is roughly equivalent to that of *only* ('such films and antics only enhanced it'/'he can only grovel').

Although the behaviour and structure of this construction have not attracted a great deal of scholarly attention, a proposal for an analysis of it is found in Huddleston and Pullum (2002: 1263). They suggest that the bare infinitive in the construction should be viewed as an example of a 'matrix-licensed complement', entailing that its form is determined not by the word *but* (which Huddleston and Pullum take to be a preposition) but by elements of the clause containing *but*. The more descriptively oriented grammar of PDE by Quirk, Greenbaum, Leech, and Svartvik (1985) does not mention the existence of the construction as such. However, Quirk et al. (1985: 1067) provide a description of the few contexts outside modal verb groups that license the use of a bare infinitive, and these contexts are said to include prepositions of exception such as *but*; the example sentence given is *She did everything but make the bed*. This seems to imply that sentences like (1) and (2) should also be analysed in this way.

A further piece of information about DO NOTHING BUT can be found in several historical grammars of the language (Jespersen 1940: 215; Visser 1969: 1493 fn.2) and also in the *Oxford English Dictionary* (OED; Simpson 2004, s.v. *nothing* A II.9). There it is noted that the construction has undergone a change through time. In earlier English, the construction sometimes featured a second verb that was not a bare infinitive but a finite form, as in examples (3)-(4).¹

- (3) For þan se ðe wel spricð & þa word na gelæst, he ne deð nan
For that he who well speaks and the words not carries-out, he not does no
þingc buton **fordemþ** hine sylfne.
thing but condemns him self.
'Because anyone that speaks well and does not carry out those words, he does
nothing but condemns himself.'
(*ÆLet* 4 (SigewardZ) B1.8.4.4; OED s.v. *nothing* A II.9.a (b))
- (4) They found but vi. children, to whome they did nothing but **tooke** away
They found only six children, to whom they did nothing but took away
theyr chaines that was about their neckes wherby incontinent thei were
their chains that were around their necks wherby immediately they were
mued in white swannes.
transformed into white swans.

'They found only six children, to whom they did nothing but took away their chains, as a result of which they were immediately transformed into white swans.'
(1512 *Helyas* in W. J. Thoms *Coll. Early Prose Romances* (1828) 76, vi; OED s.v. *nothing* A. II.9.a (b))

In what follows, I will address the causes for the change in the nature of the second verb as exemplified in (1)-(2) vs. (3)-(4). In doing so, I will suggest that it would be misguided to take the data at face value and focus only on the element in the construction that undergoes visible change. Rather, it is necessary to view the visible change in the context of the syntax and semantics of the construction as a whole. More careful inspection of this context reveals that the construction does not remain static while only the verbal form changes: the change in the verbal form is a consequence of a change in the status of the construction itself. To model this change in status, which is plausibly taken to be an instance of grammaticalisation, I will make use of the concept of zero semantics (Postma 1995). The central idea will be that, while each of the elements in historical examples like (3)-(4) has its ordinary full lexical meaning, this is different in modern examples like (1)-(2), where two of the elements have reduced or null meaning. This semantic difference is also reflected in the syntactic structure of the sentences at the different periods.

2 Earlier studies: a review

For the DO NOTHING BUT construction in PDE, Huddleston and Pullum (2002: 641-643, 1263) propose an analysis whereby the word *but* is a preposition with the meaning 'except'. Noting the exceptionally wide array of complement types that can follow *but* and its synonyms (*except*, *bar*, *save*), they suggest that such prepositions of exception take a complement which is licensed not directly by the preposition but by an element of the clause containing the PP. Among the examples that Huddleston and Pullum (2002: 642) give to illustrate this notion of 'matrix-licensed complements' are sentences (5)-(7).

- (5) I can't think what to advise [_{PP} *except staying at home*].
(6) I don't intend to do anything [_{PP} *except to wait for news*].
(7) There's nothing any of us can do [_{PP} *except be cautious*].

Use of the gerund in (5), the *to*-infinitive in (6) and the bare infinitive in (7) is sanctioned by elements in the matrix clause: *advise* in (5), *intend* in (6) and *can* in (7), which can be seen to license these forms in sentences (8)-(10) (Huddleston and Pullum 2002: 642).

- (8) I advise staying at home.

¹In these and all following examples, the second verb is given in bold type.

- (9) I intend to wait for news.
 (10) We can be cautious.

This analysis, which in a sense makes the prepositional phrase transparent to complement selection, seems successful in accounting for the wide variety of complement types found after the relevant prepositions. Apart from various verbal forms, these also include NPs as in *We invited everyone [except John]*, PPs as in *He works here all days [except on Friday]*, adverb phrases as in *This thesis treats the topic in every way [except competently]*, and others. It also captures the intuition that the complement of P in these cases needs to be interpreted as being part of the matrix clause, i.e. the semantics of the sentence at some level includes constituents such as the underlined groups of words in (8)-(10) and *invite John*, *work here on Friday*, and *treat the topic competently* in the sentences just given.

Huddleston and Pullum also apply this type of analysis to the DO NOTHING BUT construction. However, the way they do this is problematic. The example they give is shown in (11).

- (11) He does nothing but **waste** people's time.

They suggest that 'the bare infinitival is licensed by *do nothing* + the preposition of exception' (Huddleston and Pullum 2002: 1263). This would make selection of the verbal form in (11) rather different from the cases in (5)-(7), where it is one specific lexical item rather than a phrase that is responsible for the form selected. In (5), for example, the choice for *staying* (rather than *(to) stay*, *stays*, or *stayed*) is determined by the verb *advise*, but not by the combination of *advise* and its object (the fronted element *what*).

For the sentence in (11), it is also difficult to see in what sense *do nothing* can be said to select a specific verbal form, let alone to understand why this should be the bare infinitive rather than any other form. Claiming that it nevertheless does, amounts to considering the construction to be a grammatical idiom, in which use of the bare infinitive does not follow from any general principle. This also appears to be the way Quirk et al. (1985: 1067) view the facts, since they state that the bare infinitive may follow prepositions of exception, but do not further comment on the reasons why this context should be hospitable to this form. Fortunately, as we shall see in what follows, it may not be necessary to accept the conclusion that selection of the bare infinitive in (11) is entirely unmotivated. As we shall also see, the Huddleston-Pullum analysis can be used, but it applies to historical examples like (3)-(4) rather than modern ones such as (1)-(2). For the latter, a different analysis seems to be called for.

An important descriptive point about the construction in PDE is made in the *OED* (s.v. *nothing* A II.9.a (b)). Here, we are told that, when following the verb *to do*, the combination of *nothing* and the 'limiting particle' *but* is usually followed by the bare

infinitive, but when *to do* itself takes the form *doing*, it is followed by the gerund. An example illustrating this second possibility can be seen in (12).

- (12) Indeed, I seem to be doing nothing but **waving** goodbye at the moment.
 (*The Guardian*, 11 April 2003, 10)

This option of having a parallel form after *doing* (but not after other forms of *do*) is not mentioned by Huddleston and Pullum (2002). However, it is clear that it represents a further obstacle to their analysis of the construction, as well as a challenge to any alternative for it. A further descriptive point about the construction made in the *OED* concerns the change already identified in §1 above: we are told that DO NOTHING BUT was 'formerly followed by a verb in the corresponding inflected form' (s.v. *nothing* A II 9). Examples given to illustrate this former usage include (3), (4) and (13).

- (13) The doulphyn dyd nothyng, ny3t ne day, but admoneshed hys daughter.
 The dauphin did nothing night nor day but admonished his daughter.
 'The dauphin did nothing, at night or by day, but admonished his daughter.'
 (1485 CAXTON tr. *Paris & Vienne*(1868) 61; *OED* s.v. *nothing* A. II.9.a (b))

Historical examples given in the *OED* to illustrate the use of the bare infinitive include (14) and (15).

- (14) Þou schalt... do noþing but occupie þe wiþ hure in preieres.
 You shall... do nothing but occupy ye with her in prayers.
 'You shall... do nothing but occupy yourself with her in prayers.'
 (c1400 *Bk. to Mother* (Bodl.) 68; *OED* s.v. *nothing* A. II.9.a (b))
- (15) He do's nothing but stabbe the slaue.
 He does nothing but stab the slave.
 'He does nothing but stab the slave.'
 (1601 B. Jonson *Fountain of Selfe-love* III.ii.sig.F; *OED* s.v. *nothing* A. II.9.a (b))

Use of a finite form in (14), i.e. *occupies* instead of *occupie*, might be unlikely on account of the fact that *do* itself is an infinitive. But pairs like (13) and (15) show that there was apparently variation in Middle English (ME; i.e. the period 1100-1500) and early Modern English (EModE; i.e. the period 1500-1700) between a finite form and the bare infinitive for the verb following *does/did nothing but*. However, no information about the frequencies of the two forms (and other ones) is given in the *OED*, nor is anything said about the precise diachrony of the variation, or the reasons for its genesis and apparent subsequent demise.

In Visser (1969: 1493f), the existence of the two variants is also noted, but this is done in the context of a discussion of the origins of periphrastic *do*. Visser suggests

that sentences like (15) might originally have had 'factive' *do*, i.e. a use of *do* in the generalized meaning of 'carrying out, acting in some way'. Later, such sentences might have been reinterpreted in such a way that *do* came to be viewed as a periphrastic verb governing the following infinitive. Visser's focus is therefore not on the origins of the pattern in (15) (or the loss of that in (13)), but on the way use of the infinitive might act as a trigger for further change. Nevertheless, his idea of a development from factitive to empty *do* will turn out to be a useful one in §4. Trying to make somewhat more explicit its structural implications, I will propose there that it can form the basis of an analysis of modern DO NOTHING BUT.

In Jespersen (1940: 214f), it is suggested that in examples with finite forms such as (3), (4) and (13), the word *but* is simply an adversative conjunction. This would mean that these examples all have clausal coordination, with the rule of conjunction reduction being responsible for the non-overt nature of the subject in the second clause. This in itself is a plausible suggestion, which we shall also make use of in §4. However, it can not apply to any OE examples, such as (3), since *but(on)* only developed into an adversative conjunction after the OE period. If the clausal coordination analysis is correct for ME examples like (4) and (13), it must represent an innovation and the question then arises what the earlier structure of sentences like this was. Moreover, Jespersen also does not discuss the factors responsible for the rise of the now standard bare infinitive in the construction, or provide quantitative data on the use of the construction in its various forms through time.

The upshot of this review of earlier work on DO NOTHING BUT is that it makes available certain interesting facts and ideas. The factual information, however, is somewhat patchy and does not add up to any detailed picture of the behaviour of the construction through the centuries. The ideas that are available (*but* as a preposition that is transparent to complement selection; *do* as a potentially periphrastic verb; and *but* as an adversative conjunction) all have a certain plausibility but they are not fully compatible with each other and need to be revised, extended and integrated in order to come to an adequate analysis of the construction at its various historical stages. Moreover, what is also missing is an account of the reasons for the transition from one stage to another. The somewhat daunting task that the above review thus leads us to confront will be addressed in the next two sections.

3 Further explorations: characterising and describing the change

Since the firmest conclusion emerging from §2 was that there is a shortage of descriptive data on the construction, this is the issue that we turn to first. However, before pre-

senting the data, we need to establish what the significant categories are that should be distinguished. In other words, what are we really looking for? To come to a decision on this, it is necessary to reflect a little on the exact nature of the change that we have identified in §1 and discussed in some more detail in §2.

From the account given above, it may seem as if the change was one from the use of finite verbs to the use of bare infinitives after the sequence *nothing but*. However, even a modest amount of data gathering reveals that this may not be the best characterisation of the change. Thus, consider the sentence pairs in (16)-(17) and (18)-(19), all taken from the *OED* s.v. *nothing* A II.9.a (b).

- (16) I haue... done nothing else but **digged** a pit.
(1554-5 RIDLEY *Wks.* (Parker Soc.) 14)
- (17) I ha' mark'd him all this meale, he has done nothing But **mocke**, with scurvy faces, all wee said.
(1625 B. JONSON *Staple of N.* IV. i)
- (18) He could tend to do nothing but to **find** out how to be clothed in purple and fine-linen.
(1682 BUNYAN *Greatness Soul* Wks. 1853 I. 136)
- (19) When I was the size of that monkey there, who knows how to do nothing but **gnaw** hard tack.
(1836 *Knickerbocker* VIII. 203)

In (16), *nothing but* appears to be followed by a past participle, under the influence of the past participle *done*. This does not seem to be possible anymore, and the form now used is the bare infinitive, as in (17). Similarly, (18) has a *to*-infinitive for the verb *do* as well as the second verb, while (19) represents the now usual form, with the second verb appearing as a bare infinitive. A proper characterisation of the historical development should cover not only the change from finite to bare infinitive discussed and exemplified in §§1 and 2 but also the shift shown in (16)-(19). Since the relevant property shared by these various historical correspondences appears to crucially involve the notion of parallelism, I offer (20) as a description of the entire process.

- (20) *Historical shift in the second verb in the DO NOTHING BUT construction:*

Earlier instances of DO NOTHING BUT show parallelism between the form of *do* and that of the second verb; later instances have the second form in the bare infinitive, regardless of the form taken by *do*.

The parallelism of earlier times was responsible for sequences such as those in (21).

- | | | | |
|------|----------------|---------------------------|------------------|
| (21) | a. deð 'does' | – fordemð 'condemns' | (OE ex. (3)) |
| | b. did 'did' | – tooke 'took' | (ME ex. (4)) |
| | c. dyd 'did' | – admoneshed 'admonished' | (ME ex. (13)) |
| | d. (haue) done | – digged 'dug' | (EModE ex. (16)) |
| | e. to do | – to find | (EModE ex. (18)) |

To be added to this list is the sequence *doing* – *V-ing*, as in PDE (12) (*doing*– *waving*). Such examples are perhaps somewhat exceptional in being rather late instances of the parallel pattern. Otherwise, it appears that from ME onwards, the predominant pattern shows a bare infinitive on the second verb, leading to sequences such as those in (22).

- | | | | |
|------|----------------|-----------------|--------------------|
| (22) | a. do's 'does' | – stabbe 'stab' | (EModE ex. (15)) |
| | b. (has) done | – mocke | (EModE ex. (17)) |
| | c. to do | – gnaw | (19th c. ex. (19)) |
| | d. did | – enhance | (PDE ex. (2)) |
| | e. does | – waste | (PDE ex. (11)) |

While the sequences given in (21) and (22) are unambiguous examples of their respective patterns, there is also a host of examples that allow both interpretations, since they feature the verb *do* in its base form. In (14), repeated here as (23), this base form is the bare infinitive, while in (24), it is a (non-3rd person) present tense of *do*.

- (23) Pou schalt... do noþing but occupie þe wip hure in preieres.
'You shall do nothing but occupy yourself with her in prayers.'
- (24) You do nothing but soak with the guests all day long, whereas... I never touch a drop.
(1766 GOLDSM. Vic. W. xxi)

All sentences of this type have a base form on the second verb as well, which in principle could be an instance of parallelism (making them identical to the examples in (21)) or an instance of use of the bare infinitive (making them identical to the examples in (22)). In collecting and classifying the data, this category is obviously one to pay close attention to, since the ambiguous status of the relevant sentences means that they could have facilitated the transition from the older to the newer pattern. That is, adopting the idea that syntactic change initially often consists in a structural reanalysis of a particular sentence type, without any surface change taking place as yet, it could be hypothesised that a sentence such as (24) might have undergone syntactic reinterpretation. Its original structure would have been as in (25a) but it might later have been reanalysed as in (25b).

- | | |
|------|------------------------|
| (25) | a. do-PRES – soak-PRES |
| | b. do-PRES – soak-INF |

That this reanalysis could proceed without surface change is due to the formal identity of the (non-3rd person) present tense and the infinitive in English verbs: for both, the base form is used. Once this reanalysis had invisibly taken place, the new pattern would also come to express itself in sentences that did not originally have a base form, leading to surface innovations such as those in (22). Although such a scenario for the change is at this point entirely hypothetical, it is obviously a possibility that can be used to inform (and thus inject meaning into) the search for descriptive data. From a theoretical diachronic perspective, at any rate, it is striking to see how closely such a development would conform to the classic generative view of linguistic change, which has language acquirers re-interpret existing utterances –this would be the reanalysis shown in (25)– and then go on to play out the new interpretation also in utterances not existing before –this would be the generalisation or actualisation of the new pattern to yield examples like (22).²

To test this idea, as well as the ideas reviewed in §2, data have been collected for the entire period from OE to PDE. For OE, the online *Old English Dictionary Corpus* (Healey 2004) has been investigated.³ It was searched for any clauses containing the verb *don* 'do' (or its close synonym *wyrcean* 'do, perform'), the form *na þing* 'nothing' or *nawiht/nowiht* 'nothing' and the word *butan* 'but, except, without' (all of them in any form or spelling imaginable). The result is therefore close to an exhaustive collection of all instances of the construction that can be found in the OE record. Surprisingly, this collection contains no more than one item, which is the sentence given in (3).

No similar exhaustive coverage could be achieved for ME. The material used for this period consisted of the online version of all the quotations used in the *Middle English Dictionary* (Lewis 2001). This is a respectably sized corpus, but of course much less than the total available for ME. Nevertheless, some thirty examples were identified; two of these were from the period 1100-1300, twenty-six from 1300-1500. The method used in the search was the same as that for the OE period, making allowance for changes in form of the relevant words (and excluding any verb but *do*).

For the period 1500-1900, the corpus investigated consisted of the quotations used for these centuries in the online *OED*. Figures given by Mair (2001: 607-608) suggest that this corpus contains ca. 17 million words. It yielded nearly 100 tokens, distributed fairly evenly over the centuries (with one exception, to be discussed below). For PDE, a search was made in the online *Guardian-Observer Archive*, which makes available the text of articles that have appeared in the *Guardian* since 1990 and the *Observer* since 1994.⁴

²For some further discussion of this view of change, first developed for sound change in Halle (1962) and applied to syntactic change by Langacker (1977) and Timberlake (1977), see van der Wurff (1990: 17-26) and references given there.

³The search of this and the other online materials described below was carried out in March 2004.

⁴Material is added to this corpus every single weekday and its total size can only be estimated. A comparison with the figures for the *British National Corpus* (100 million words, containing 145 tokens

This corpus was found to contain a vast number of relevant sentences (798, to be precise). To prevent the figures from getting out of all proportion compared with those for earlier centuries, only one sixth (133 tokens) of all the examples in *Guardian-Observer* corpus was used for the analysis that follows. Selection was based on the date of publication of the relevant text: the 133 tokens are the most recent examples in the material. Care was taken to ensure that the relative frequency of the different types of the construction found among the 133 tokens should reflect their relative frequency in the corpus as a whole as closely as possible. This was achieved by making the number of hits examined for each type (i.e. forms like *does nothing but*, *did nothing but*, *done nothing but*, etc.) exactly one sixth of the total number of hits for that type.

In view of the obvious lack of comparability and representativeness of the various collections of texts examined, the following data must be regarded as forming no more than a first approximation to an adequate descriptive picture of the history of the DO NOTHING BUT construction. Nevertheless, the relatively low absolute frequency of the construction means that it may be difficult to improve the picture, especially for the historical periods. In the *OED* quotations, for example, there are no more than six tokens of the construction per one million words. This means that only huge corpora will yield a sufficient number of examples for analysis and interpretation to be feasible. For the present time, this is of course much less of an obstacle to progress, and further descriptive work on the construction in modern gigacorpora may be expected to yield more refined insight into its behaviour today.

A first classification of the data from OE to modern times is given in Table 1. The categories distinguished are 'parallel form', which stands for examples of the type given in (21); 'bare infinitive', containing all sentences of the type given in (22); and 'base form after *do*', covering examples such as (23) and (24), where the second verb of the construction cannot be unambiguously classified as being either a parallel form or a bare infinitive.

From the data in Table 1, it appears that the construction was rather infrequent before 1300, but then gained in prominence. A more precise idea of the increase may be derived from the fact that in OE there are 0.5 examples per 1 million words (the size of the OE corpus, excluding glosses, being roughly 2 million words) while the period 1500-1900 has about six examples per 1 million words. In PDE, however, the frequency of DO NOTHING BUT is lower again, at about 1.5 examples per million words (cf. footnote 4). From Table 1 it may look as if this decrease is already anticipated in the 18th century

of DO NOTHING BUT) suggests that the *Guardian-Observer* corpus may contain half a billion words. This very tentative estimate receives some support from figures of lexical frequency for a subpart of the *Guardian-Observer Archive*. Takami (2004: 124) found that, in the *Guardian* material for the year 1995 (20 million words), the adverb *desperately* occurs 27.4 times per one million words. The 12,328 tokens of this word in the *Guardian-Observer* corpus as a whole yield an estimated size of 450 million words.

	OE	EME	LME	16 th C	17 th C	18 th C	19 th C	PDE
Frequency (N)	1	2	26	26	28	13	31	133
parallel form	1 100 %	2 100%	17 65%	5 19%	2 8%			14 11%
base form after <i>do</i>			9 35%	8 31%	8 29%	4 31%	13 42%	55 41%
bare infinitive				13 50%	18 63%	9 69%	18 58%	64 48%

Table 1: DO NOTHING BUT: frequency of different forms of the second verb for each period.

(which has only half of the total number of attestations of the preceding and following centuries). However, the 18th-century dip must be at least partly due to the uneven distribution of quotations in the *OED*. Data given by Brewer (2000: 48-49) Mair (2001: 607) and Hoffmann (2004: 24-25) show that the 18th century in particular has been somewhat poorly served by the *OED* readers and editors. This is easily confirmed for the case at hand by a frequency count of the words *nothing* and *but*, forms that may not be expected to have undergone major upswings and downswings in frequency in the period 1600-1900. Table 2 gives data on the number of occurrences for these two words, and –for the sake of comparison– also for the sequence *nothing but*, which is known to have undergone a considerable decrease in frequency after the 17th century (a development chronicled in Nevalainen (1999)).

	17 th C	18 th C	19 th C
nothing	2610	1526	3134
but	18901	9191	20295
nothing but	1711	297	444

Table 2: *Nothing*, *but*, and *nothing but*: absolute frequencies of occurrence in *OED* quotations 1600-1900.

These figures show all three forms undergoing a major decrease in the 18th century. In the case of *nothing* and *but*, this is followed by a strong resurgence in the 19th century. The sequence *nothing but* also reasserts itself in the 19th century, but does not reach 17th-century levels any more by a long margin. Its very low frequency in the 18th-century quotations is accounted for well if we view it as the outcome of two independent factors: the comparatively small amount of 18th-century material included in the *OED* (this factor also causes the low frequencies of *nothing* and *but* in this century) and the general decline that *nothing but* itself was undergoing at the time, as it was becoming restricted to fewer and fewer contexts. As we have seen, one of these contexts was the DO NOTHING BUT construction.

When it comes to the relative frequencies of the three types of DO NOTHING BUT

across the centuries, Table 1 shows that use of parallel forms is the rule until 1500 but then drops steeply and disappears by 1700 (except for a number of present-day attestations, which we discuss later). Around 1500, use of the bare infinitive establishes itself, and then continues to account for some 50-60% of all cases in each of the following centuries (with the exception of the 18th century, for which the low total number of examples may act as a distorting factor). Ambiguous cases (with *do nothing but* followed by a base form for the second verb, which may either form a parallel to *do* or be the bare infinitive) are first found in late ME and from that point on account for about 30-40% of all cases in every century. Simplifying things somewhat, it could be said that the data thus show a rather neat picture of the change from parallel form to bare infinitive, with a period of overlap lasting some 200 years. It is also to be noted that the ambiguous cases arose well before the overlap set in, which supports the idea that they may have acted as a bridge between the other two patterns.

A more detailed representation of the data is given in Table 3, where the frequency of each individual combination of forms of *do* and the second verb is tabulated. In every case, the forms are paired, in such a way that the first combination instantiates the parallel pattern and the second one the bare infinitive pattern. The only exception is the combination *do* + BASE, which is the ambiguous pattern (the 'base form after *do*' of Table 1).

For the most part, the data in Table 3 show the development already observable in Table 1, now being played out on a smaller scale. But there are some points at which the higher resolution of the image enables us to see things not visible in Table 1. One of these is a gap in the data that may help us to identify more exactly the initial locus of the change from parallel to bare infinitive form. The gap lies in the absence of parallel forms after *does* in the 16th century. Thirty-eight per cent of all instances of the construction in this century (N=26) contain the sequence *does/doth nothing but*, and not a single one of them is followed by a second verb in the present tense – they are all like example (26) in having a bare infinitive.

- (26) He doth nothing... but... **quarrel** like a dogbolt lawyer.
(1580 FULKE Answers (1848) 212)

The sequence *did nothing but* is somewhat less frequent (27% of all cases), but four of them are like (27) in being followed by a past tense.

- (27) He dyd noughte but **made** his kyn ryche.
'He did nothing but made his family rich.'
(1529 Rastell, *Pastyme* (1811) 52)

Table 3 shows that there is an example of *does nothing but* followed by a finite (present tense) form in the 17th century again, but the clear discrepancy between *does nothing but*

	OE	EME	LME	16 th C	17 th C	18 th C	19 th C	PDE
Frequency (N)	1	2	26	26	28	13	31	133
	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)	(100%)
does + -S	100%	50%	38%		4%			1%
does + BARE INF				38%	29%	23%	16%	8%
did + -ED		50%	19%	15%				1%
did + BARE INF				12%	29%	31%	23%	16%
to do + to INF			8%		4%			
do + BASE			35%	31%	29%	31%	42%	41%
done + -EN				4%	4%			
done + BARE INF					4%	8%	13%	20%
doing + -ING								9%
doing + BARE INF						8%	6%	5%

Table 3: DO NOTHING BUT + V: frequency of individual form sequences as a percentage of N for each period.

and *did nothing but* in the 16th century suggests that the shift to use of the bare infinitive was initially somewhat more pronounced in sentences with the present tense *does/doth* rather than the past tense *did*. If this is correct, it forms one further piece of support for the idea that the ambiguous pattern played an instrumental role in the change. This is because this pattern contained examples not of past tense *did* but of present tense *do* followed by a base form. After such base forms had been reanalysed as bare infinitives, this structure might be expected to generalise first to other forms of the present tense (i.e. instances with *does/doth nothing but*) and only later to the past tense (i.e. instances with *did nothing but*).⁵

Table 3 also shows that the sequence (*has/have done nothing but*) is non-existent before 1500. However, once it has started being used, it behaves in the expected fashion, initially showing use of a parallel form but shifting to the use of a bare infinitive by 1700. An even later arrival is the sequence *doing nothing but*, which is first attested after 1700. For two centuries, the data then show exclusive use of the bare infinitive after this sequence, but in PDE, there are also examples that are followed by *V-ing*. The bare infinitive is still possible, and some present-day examples, such as (28), show alternation of the two forms in successive clauses.

- (28) The mother who wants a year doing nothing but looking after her baby, and the next 17 doing nothing but work, is a beast that exists nowhere outside Labour's women's unit.
(*The Guardian*, 03 May 2001, 7)

The parallel pattern (*doing -V-ing*) is twice as frequent as the bare infinitive pattern in the contemporary material examined. This suggests that there is some specific factor at work that promotes its use, causing *doing nothing but* to (partly) resist the general diachronic trend described in (20). Whether this factor already existed in the 18th and 19th centuries is difficult to say, since there are very few instances of *doing nothing but* from these centuries (1 and 2 respectively, both followed by the bare infinitive).

Present-day parallel examples are also found after *does/did nothing but*, but there are no more than two of these. They are given in (29) and (30).

- (29) 'Oh Lordy. You're slower than Earl Spencer at a creative writing class today.

⁵The empirical facts thus make it unlikely that the bare infinitive pattern has its roots in past tense forms. Although the process of T/D deletion (Romaine 1984) might conceivably be appealed to in order to turn examples like (i) (=13) into (ii), such an account would only get the forms right, not their diachronic patterning (nor, obviously, their stylistic distribution).

- (i) The doulphyn dyd nothyng, ny3t ne day, but admoneshed hys daughter.
(ii) The doulphyn dyd nothyng, ny3t ne day, but admonesh hys daughter.

We're talking about Robert, son of Lord James, millionaire jetsetter and posh boy about town.' 'Don't tell me. I can guess the story already: toff does nothing but gets lots of attention from the press shocker.'

(27 November 1997, *The Guardian*, 03)

- (30) I now suffer the minute by minute torture of life imprisonment knowing, as I accept only I could know, that I did not harm my little boys, and did nothing but loved them.
(15 July 2001, *The Observer*, 8).

For these cases, an analysis in terms of coordination seems most plausible, with *does/did nothing but* being a run of the mill VP, which is followed by another VP (or reduced clause) introduced by the adversative conjunction *but*. These examples are therefore similar to cases like (31), which are not frequent but clearly have *but* as a clausal coordinator.

- (31) The escape code... by itself... does nothing but it causes the code following it to be treated as a control code.
(1986 *Your Computer* Oct. 33/2)

This analysis makes (29) and (30) instances of a freely available coordination option, rather than of the DO NOTHING BUT construction (whose structure, though, we still need to establish). What is surprising about (29) and (30), and also (31), is not their existence as such, but the fact that they are so rare. It appears that the sequence *do nothing but* in PDE (and the two or three preceding centuries) strongly triggers activation of the DO NOTHING BUT construction, thus discouraging the use of this sequence in any other type of structure. Note that this implies that (most) cases with the sequence *doing nothing but V-ing*, which are much more frequent than *does/did nothing but V-s/-ed*, are indeed bona-fide examples of the DO NOTHING BUT construction rather than of any simple coordination structure.

The descriptive findings of this section can be summarised as follows:

- Instances of DO NOTHING BUT are rare in Old and early Middle English.
- After 1300, they gradually become more common: there are ca. 6 instances per 1 million words in the period 1500-1900.
- In PDE, the frequency has gone down again, to ca. 1.5 per million words.
- From OE until 1700, the second verb regularly appears in a form parallel to that of *do* (*he does nothing but condemns himself*).
- After 1500, the second verb also appears in the bare infinitive form, regardless of the form of *do* (*he does nothing but condemn himself*).

- The introduction of such bare infinitives seems to affect instances with present tense *does/doth* first and then spread to past tense *did*.
- From late ME onward, about one third of all instances have the base form for both *do* and the second verb (*they (can) do nothing but condemn themselves*).
- With the exception of *doing nothing but V-ing*, use of parallel forms in PDE is quite rare.

Overall, in spite of the absence of any careful matching of styles, varieties or even amounts of material examined for the various periods, the data present a fairly neat picture. First, there is exclusive use of the older forms, then a 200-year period of variation between the old and the new, and this is followed by virtually exclusive use of the new form. However, there are some exceptions that need to be accounted for, and the causes of the change – as well as the structure of the relevant sentences at the various periods – still need to be established. These are the matters that we turn to now.

4 An analysis: DO NOTHING BUT as a grammaticalised construction

The data presented in the preceding section tend to support the idea that the diachronic development undergone by the DO NOTHING BUT construction conforms to a well-established scenario for syntactic change. It can be viewed as initially involving reanalysis of existing sentences, with generalisation to new utterances taking place later and in a gradual fashion. However, while this scenario may yield a description of the change, it does not in itself answer the question what exactly it was that triggered the crucial reanalysis of *do nothing but* sentences. In concrete terms, this question takes the following form: what was there about sentences like (32) that, from the beginning of the 16th century onwards, would lead language learners to assign them a structure in which *hunte* was an infinitive, rather than a present tense, as it had been for earlier generations?

- (32) Yo do nought... but hunte after the hare thourgh the feldes.
 ‘You do nothing but chase after hares through the fields.’
 (c1450 *Merlin* 183)

Since the question concerns a specific construction, defined by the presence of the verb that undergoes recategorisation, and also by the presence of the verb *do* and the words *nothing* and *but*, an obvious strategy is to inquire more closely into any changes in form and/or status that any of these elements may have undergone in the relevant period. It then turns out that each of them has indeed undergone change. Examining

the history of these elements may therefore be expected to shed light on the structure of DO NOTHING BUT before and after 1500 and on the factors responsible for the change.

The historical shifts undergone by the word *but* are investigated by Nevalainen (1990). Since she includes data from OE up to Modern English, her findings allow us not only to determine the status of the word *but* in the DO NOTHING BUT construction around the year 1500, but also in earlier and later examples. From Nevalainen’s data and discussion, it becomes clear that the word *but* started out in OE as a locative adverb-cum-preposition, *buton*, with the meaning ‘outside’. From this relatively concrete source, it rather rapidly developed several more abstract senses and uses. In OE, *buton* is also used as a preposition with the meanings ‘without’, and ‘except’ and it functions as a subordinating conjunction with the meaning ‘unless’. Examples of all three of these meanings can actually be found in OE clauses which have *don* (or its synonym *gewyrcean*) as their verb and *nan þing* (or *naht/noht*) as their object, as shown in (33)-(35).

- (33) For þan ðe crist cwæð: ne mage ge nan þing don buton me.
 For that that Christ said: not can you no thing do without me.
 ‘Because Christ said: ‘You can do nothing without (BUT) me.’
 (ÆCHom I, 21 B1.1.23)
- (34) Soð ic eow secge, ne mæg se sunu nan þing don buton þæt he gesyhþ his
 Truth I you tell, not can the son no thing do except what he sees his
 Fæder don; ða þing þe he wyrçþ se sunu wyrçð gelice.
 Father do; the things that he does the son does in the same way.
 ‘I tell you truly: the son can do nothing except (BUT) what he sees his Father
 do; the things that he does, the son does in the same way.’
 (Jn (WSCp) B8.4.3.4)
- (35) Forþon se mann ne mæg naht gewyrcean, buton hit sy ær fram Gode
 Because the man not can nothing do, unless hit is first by God
 gyfen.
 given.
 ‘Because man can do nothing unless (BUT) it is first given by God.’
 (GD 1 (C) B9.5.2)

These OE data can be usefully compared with the situation in PDE. There, the sequence *do/does/did/done nothing but* should in theory be freely available as a productive combination of separate lexical items (a verb, a direct object, and a conjunction introducing a following coordinate VP or clause). However, we have seen that in practice, it is instantiated overwhelmingly by examples of the DO NOTHING BUT construction, which accounts for some 99% of all tokens of the linear sequence *do/does/did/done nothing but* (see the discussion of examples (29) and (30) in §3). In OE, there is no sign of such specialisation yet.

There is one more function that the word *butan* can have in OE: it can be a conjunction with the meaning 'except that', as in (36). This use too can be found after a VP in which the verb is *don* and the object is *nan þing*. The example instantiating this is the single apparent instance of the DO NOTHING BUT construction attested in the OE record, which was given as (3) and repeated here (with some more context) as (37).

- (36) He sæde þeah <þæt> þæt land sie swiþe lang norþ þonan, ac hit is
He said however that the land is very long north from there, but it is
eal weste, buton on feawum stowum stycemælum wiciað Finnas, on
all waste except that in few places here and there camp Lapps, in
huntoðe on wintra & on sumera on fiscaþe be þære sæ.
hunting in winter and in summer in fishing by the sea.

'He said, however, that the country extends a very long way to the north from there but it is all wasteland, except that (BUT) in a few places here and there, some Lapps have their camps, hunting in winter and fishing by the seaside in summer.'

(Or 1 B9.2.2)

- (37) Ac man mot on eornost motian wið his Drihten, se þe wyle
But one must in earnest address-oneself with one's Lord, he who wants
þæt we sprecon mid weorcum wið hine; for þan se ðe wel spricð & þa
that we speak with deeds with him; for that he who well speaks and the
word na gelæst, he ne deð nan þingc buton forðemð hine sylfne.
words not carries out, he not does no thing except that condemns him self.

'But one must address oneself seriously to one's Lord, who want us to speak to him by means of deeds; because anyone that speaks well and does not carry out those words, he does nothing except that (BUT) he condemns himself.'

(ÆLet 4 (SigewardZ) B1.8.4.4)

What the OE data show is a complete absence of any sign of grammaticalisation of the sequences *don/dest/deþ/doh/dyde/dydon/gedon nan þing/nawiht/naht/noht buton*. The verb *don* has the well attested meaning of 'carry out/perform' and its object *nan þing/nawiht/naht/noht* seems to have its ordinary quantifier meaning of 'nothing'. The meaning/function of the word *butan* does not seem to be determined by the fact that it follows (or is part of) a VP containing *don* and *nan þing* (or *nawiht/naht/noht*). It can have any of the functions that it can also have in other clauses: it can be a preposition meaning 'without' or 'except', and a conjunction meaning 'unless' or 'except that'. None of these uses has a particularly high frequency in this sequence, and none of the resulting combinations appears to have any semantic or syntactic characteristics that would not be predictable from the composition of the separate items in them. The only noticeable feature about the sentence in (37) is the presence of a non-overt subject in the clause following *buton*. It will of course be interpreted as being identical to the subject of the

matrix clause *he*, due to the parallelism obtaining between the matrix and subordinate clauses in sentences of this type.

To explain the parallelism, we can make use of the analysis that Huddleston and Pullum (2002) propose to account for the syntax of PPs headed by a preposition of exclusion in PDE. As discussed in §2, they derive the wide variety of complement types found after the preposition *except* and its synonyms from a process of matrix-licensing, whereby it is not the preposition but the matrix predicate that determines the category of the complement. In a formal analysis, this might be achieved by positing a PP containing zero elements which are interpreted as being identical to the relevant elements in the matrix clause. For an example such as (38a), in which it is the matrix verb *intend* that appears to be responsible for selection of the *to*-infinitival complement inside the *except*-PP, the fuller structure would then be (38b).

- (38) a. I don't intend to do anything [except to wait for news].
b. I_i don't intend_j to do anything [except e_i e_j to wait for news].

Here, the *except*-PP is in effect an elliptical construction, for concreteness sake taken to be a clause (though analysis as a VP would yield similar results).

This type of analysis can also be applied to prepositions of exclusion in OE. Thus, the relevant part of sentence (34), given here as (39a), would have the structure shown in (39b), where the NP *þæt he gesyhþ his Fæder don* 'what he sees his Father do' is selected not by *buton* but by e_k, a copy of the verb *don*.

- (39) a. Ne mæg se sunu nan þing don buton þæt he gesyhþ his Fæder don.
Not can the son no thing do except what he sees his Father do.
'The son can do nothing except (BUT) what he sees his Father do.'
b. Ne mæg_i se sunu_i nan þing don_k [buton e_i e_j e_k þæt he gesyhþ his Fæder don].

Applying the same analysis to the OE example (37), the only apparent instance of DO NOTHING BUT in OE, would give a representation as in (40b).

- (40) a. He ne deð nan þingc buton forðemð hine sylfne.
He not does no thing except-that condemns him self.
'He does nothing except that (BUT) he condemns himself.'
b. he_i ne deð nan þingc [buton e_i forðemð hine sylfne].

The ellipsis in this case affects only the subject. It could therefore be said that OE *buton* 'except' in all cases introduces a clause, which semantically parallels the matrix clause and serves to exclude part of its extension from whatever is being asserted. If the parallelism manifests itself also in identity of specific syntactic constituents in matrix clause and *except*-clause, they can be ellipted in the *except*-clause. In (36) there is no such parallelism of constituents, hence the *except*-clause is non-elliptical. In (39), there

is parallelism of subject, modal and main verb, and these are all ellipted. In (40), only the subject is parallel and ellipted.

Note that this analysis makes (37)/(40a) into a sentence in which each element behaves just as it does in other sentences. Beyond the normal interaction between subject, object, verb and other constituents that will be found in any clause, there is a special dependency between elements of the *except*-constituent and elements of the matrix clause. To be precise, there is a semantic relation of exclusion involving the assertion made in the matrix clause and the elements contained in the *except*-constituent and there is a syntactic relation of ellipsis involving the subjects of the matrix and *except*-constituent. However, these relations do not depend in any way on the identity of the matrix verb (*deð*) or object (*nan ðingc*) –they are solely due to the properties of the element *except*. For OE, therefore, it makes little sense to speak of a distinctive DO NOTHING BUT construction. The relevant words could of course combine in individual sentences, but they do not do so very often. When they do, there is no sign of any non-predictable interaction between them, and they behave as they do also in other combinations. The word *but(on)*, in particular, can carry any of its various possible functions/senses: 'without', 'unless', and 'except/except that'. In the last of these uses, it imposes a rather distinctive meaning on the sentence as a whole, but it does so also in sentences lacking *do* and/or *nothing*.

A partial representation of the semantics of (40), loosely based on von Fintel's (1997) analysis of PDE *only*, is given in (41).

- (41) Meaning of clauses with *do*, *nothing*, and a *but*-constituent with subject ellipsis in OE

R
.y

NP does nothing but y
'NP does nothing except y'

where R is the set of possibly relevant events,
 $y \in R$
 $S = R - \{y\}$

Meaning of the sentence: for $y, y \in R$, y is true & for all $x, x \in S$, x is not true

In simple terms, the sentence asserts that, among the set of relevant events (R) that could conceivably be the case, there is one and only one (y) that is true. The parallelism obtaining between the verb forms in (40) results from the fact that the sentence defines

a set of relevant events ('NP INFL do something', with INFL being fully specified), of which y is one. Such a situation could not obtain if the *except*-clause differed in tense, mood, or aspect, and this is what makes sentences like (42) weird.

- (42) ??He does nothing except that he condemned/will condemn himself.

This type of analysis seems reasonable not only for OE but also for the early ME cases. The combination of the three specific elements in one sentence remains rare, which is not surprising since, in the account given, each is selected from the lexicon independently of the others. The verbal forms continue to show parallelism, for the reasons just given.

As the ME period unfolds, however, the word *but* undergoes change, and this appears to have had an effect also on the sentences that we are interested in. Nevalainen (1990) describes how, in ME, *but* starts to acquire its modern function as an adversative coordinating conjunction. The source probably lies in uses where it had the meaning 'except that', i.e. under the analysis proposed above, in uses where it was followed by a clause without any ellipsis. An example could be sentence (36), where the word *buton* is indeed also interpretable as adversative 'but', as shown by means of the modern English renderings in (43).

- (43) a. It is all wasteland EXCEPT THAT in a few places here and there, some Lapps have their camps.
b. It is all wasteland BUT in a few places here and there, some Lapps have their camps.

As the discussion in Nevalainen (1990) and the data in the *OED* (sv. *but C*) make clear, the change seems to have been a gradual one, with *but* first acquiring the specific contradictory sense ('on the contrary', like Modern German *sonder* 'but, on the contrary') and later the general contrastive sense ('however/ yet', like Modern German *aber* 'but, however, yet'). The result was that by the 15th century, adversative *but* was well established in the language. For the sentences we are focussing on, this would entail the emergence of a possible alternative structure, such that the second verb was viewed as being part of a coordinated adversative clause, rather than a subordinated exclusion clause. What would remain the same was the elliptical nature of the subject of the second clause; it would of course also still be interpreted as being coreferential with the overt subject of the first clause. The semantics, however, would be subtly different, since it would be not as in (41), but as in (44).

- (44) Possible meaning of clauses with *do*, *nothing*, and a *but*-constituent with subject ellipsis in late ME

$$\boxed{R} .y$$

NP does nothing but *y*

'NP does nothing but *y*'

where *R* is the set of possibly relevant events,
 $y \notin R$

Meaning of the sentence: for all x , $x \in R$, x is not true & for y , $y \notin R$, y is true

The crucial difference lies in the relation between the various events x that are asserted not to be true and event y , which is true. Both (41) and (44) identify a set of relevant events, characterisable by the assertion that 'NP does/did/has done something'. In (41), y is one of these events, but in (44) it is not. Although the difference is subtle, the effect is that in (44), x and y are more clearly set apart from each other, not in their truth values, but in the types of events they are presented as being.

The effect would be that, by 1500, the relevant surface strings (NP *do nothing but V...*) would have two possible structures, as in (45a)-(45b). The former would be a continuation of the OE/early ME pattern; its semantics would be that of (41). The latter was an innovation, due to the rise of *but* as an adversative conjunction; its semantics would be that of (44).

- (45) a. NP₁ [_{VP} do nothing [_{PP} but e_i VP]]
 b. [_{IP} NP₁ [_{VP} do nothing]] but [_{IP} e_i VP]

In both cases, parallelism would be expected between the verb *do* and the second verb. In (45a), this would be for the reasons discussed in connection with the non-parallel example (42). In (45b), parallelism would be expected on the basis of the adversative meaning of *but*. Given that *but* signals a contrast in lexical meaning between *do* (*nothing*) and the second VP, a difference in tense and/or aspect would have the effect of distracting attention from that contrast, and result in incoherence or at least pragmatic implausibility (e.g. ??*He did nothing but will talk to them tomorrow*).⁶ Even if such examples were somehow used, there seems to be no sense in which they could be said to promote use of the bare infinitive of the second verb. For this reason, the introduction of the option

⁶An exception might be where the second verb is also *do* (possible in principle, but without attestations in the material examined; an invented example might be *I may so far have done nothing but will do a lot from now on*).

in (44)/(45b), although it represents a real change, cannot be held responsible for the shift from parallel form to bare infinitive in the DO NOTHING BUT construction in the period 1500-1700. If anything, the emergence of (44)/(45b) would strengthen the parallel pattern: as argued in §3, the few examples of parallelism without an *ing*-form found in the PDE material (i.e. (29) and (30)) feature the adversative conjunction *but*.

In the shift to the bare infinitive, an essential role seems to be played by a different development affecting the word *but* in the period 1400-1700. This is the increasing use of *but* as an exclusive adverb with the meaning 'only'. Nevalainen (1990, 1991, 1999), who discusses this development in detail, shows that the frequency of exclusive adverbial *but* (which she argues derives from earlier *ne... but* 'not... except') increases quite spectacularly during the period 1420-1630. Some figures are given in Table 4.

Period	Frequency
1350-1420	13.3
1420-1500	43.6
1500-1560	59.4
1570-1630	104.2
1640-1700	68.3

Table 4: Frequency of *but* 'only' in the Helsinki Corpus, expressed in number of tokens per 100,000 words (from Nevalainen 1999: 171, 174).

The result of this quantitative development was that around 1600, *but* had become the most common exclusive adverb in the language. Children acquiring English at this period that were confronted with sentences containing *but* might therefore be expected to entertain an analysis of them in which *but* had the meaning 'only'. This was one factor that played a role in the change undergone by the DO NOTHING BUT construction at this time.

Another factor was the rapid spread of the periphrastic use of the verb *do*, which likewise took place from the late ME period onwards. Whatever the precise details and causes of this development (see Warner 2004 and Boulonnais 2004 for some recent accounts, with references to the most significant earlier work among the multitude of studies on this topic), it is clear that, for speakers of English before 1500, *do* in most of its uses (in terms of both types and tokens) was a lexical verb, while for speakers of English after 1500, *do* in addition functioned increasingly often as a periphrastic auxiliary, especially in contexts where it was followed by the base form of the verb. It may be noted that the new periphrastic use was not limited to tensed forms of *do* in negative and interrogative sentences, as it is in PDE –it also occurred in clauses with other auxiliaries, such as (46a)-(46b), and in positive declarative clauses, such as (46c).⁷

⁷On non-finite forms of periphrastic *do*, see Denison (1993: 269-270) and Miller and Leffel (1994: 188-191). On (non-emphatic) *do* in positive declaratives, see Rissanen (1999: 240-243).

- (46) a. The parson wyth yow shall do well sort my maister evidenses.
 'The person with you certainly will sort (will DO sort) my master's evidence for him.'
 (?1456 *Paston* 558.12; Denison 1993: 270)
- b. And þis 3e knowe now All and haue don here þat it stant in þe lond of galeye.
 'And you all know this now and have heard (have DONE hear) that it stands in the land of Galilee.'
 (?a1475 *Ludus* C. 283.339; Denison 1993: 270)
- c. Evil Men, who as thou didst complain went unpunished.
 'Evil men, who –as you complained (DID complain) – went unpunished.'
 (1695, R. Preston *Boethius* 181; Rissanen 1999: 241)

For children acquiring English and being confronted with specific sentences containing *do* and a following base verb, this whole development would make available an analysis where *do* lacked lexical meaning. This, I will suggest, also contributed to the change of DO NOTHING BUT.

A third factor that may have played a role is the increase in the number of tokens of DO NOTHING BUT in which the second verb was a present tense but had the same form as the infinitive.⁸ By 1500, the earlier infinitival ending *-e(n)* had been lost, as had the present tense inflectional suffixes except in the 3rd and 2nd person singular (as in *he comes/cometh* and *thou comest*). By 1700, the *-est* form had become infrequent, leading to formal identity of the infinitive and all forms of the present tense except the 3rd person singular. For the DO NOTHING BUT construction this would result in an increase in the number of instances featuring what we have above called the base form.

The upshot of these three independent changes was that learners of EModE would consider specific instances of the DO NOTHING BUT construction in their primary language data in a very different light from learners of ME. We may take sentence (24), the relevant part of which is repeated here as (47), as a concrete example.

- (47) You do nothing but *soak* with the guests all day long

As argued above (see the discussion of (40)), a medieval learner would analyse this as in (48):

	you	do	nothing	but	soak
(48)	CATEGORY	lexical V	negative indefinite	preposition	V _{present}
	SEMANTICS	'perform'	'nothing'	'except'	

Here, *do* was what it normally was, a verb with full lexical meaning; the word *but* had its well-established sense of a preposition of exclusion, rather than its as yet only

⁸I would like to thank Anthony Warner for pointing out to me the relevance of this factor.

emergent adverbial meaning of negative exclusive; and the actual forms of the verbs *do* and *soak* might still show they were both present tenses. In fact, the specific sentence in (47) –and similar ones– would be likely to have not *you* but *thou* as a subject, and thus to feature not the verbal forms *do(n)...* *soak(e(n))* but *do(st)...* *soakst*, in which case there would be no scope at all for reanalysis of the second verb as an infinitive.

An early Modern learner hearing (47) would assign it a completely different analysis. For her, it would be a sentence featuring periphrastic *do*, the exclusive adverb *but*, and infinitival *soak*. This is shown in (49).

		you	do	nothing	but	soak
(49)	CATEGORY		dummy aux	dummy	adverb	V _{infinitive}
	SEMANTICS		<i>zero</i>	<i>zero</i>	'only'	

In (49), the semantic content of the clause is borne by the subject, the adverb *but* and the infinitival verb. Dummy *do* is devoid of lexical meaning and the word *nothing* makes no contribution either –it literally means nothing. Support for this aspect of the analysis comes from the fact, discussed by Nevalainen (1999), that during the late Middle and early Modern period, the sequence *nothing but* showed incipient signs of developing into a negative exclusive with the meaning 'only'. As a result, *nothing but* and *but* would become synonyms, which implies that in this specific combination the word *nothing* had null semantics. Nevalainen finds that, in the end, *nothing but* failed to establish itself as a negative exclusive, but it appears that the DO NOTHING BUT construction was an exception. Here, *nothing but* became firmly entrenched, a development no doubt aided by the fact that during this period the whole construction was taking on a more or less idiomatic character and was becoming steadily more frequent.⁹

⁹A further factor that may have helped turn DO NOTHING BUT into a tightly bonded constitute is the fixing of the order of its elements after 1500. Earlier examples sometimes show preverbal positioning of *nothing*, as in (i):

- (i) He can no thing do but flater thee.
 He can no thing do but flatter you.
 'He can do nothing but flatter you.'
 (c1450 *Pilgr.LM* (Cmb Ff.5.30) 91)

This word order was common until ca. 1550 in various kinds of clauses with negative objects (Moerenhout and van der Wurff 2000, 2005). The loss of this option meant increasing fixation of DO NOTHING BUT. Other types of word order variation also disappear: after ca. 1500, the data no longer contain instances of topicalisation of *nothing*, as in (ii):

- (ii) Wolde god that nou3t elles we had to do but oonly to praise our lorde.
 would God that nothing else we had to do but only to praise our Lord.
 'God would wish us to have nothing else to do except to praise our Lord.'
 (a1500 *Imit.Chr.*(Dub 678) 38/6).

The change from (48) to (49) fits in rather neatly with current conceptions of the process of grammaticalisation. As Postma (1995), Beths (1999), Roberts and Roussou (2002, 2003), and others have argued, grammaticalisation often involves what would be upward movement in the syntactic phrase marker. In the older structure, some element is generated inside a lexical projection, from where it may move to a higher functional slot. In the innovating structure, the element in question is generated directly in the functional domain. It thus loses its association with a lexical category, and typically sheds (much of) its earlier lexical meaning. In the case at hand, this development arguably affects all three of the elements *do*, *nothing*, and *but*, which change respectively from being generated as the head of a lexical VP to being generated as an otherwise empty carrier of tense/agreement information; from being a NP functioning as complement inside a lexical VP to being a semantically null element, possibly occupying a specifier position in a Focus Phrase; and from being the head of a prepositional phrase to being the head of a Focus Phrase.

But the development of the DO NOTHING BUT construction also differs from the cases described within this framework so far. This is because the change in the construction feeds on earlier independent changes affecting each of the three relevant elements –DO NOTHING BUT is not the locus where these changes find their origin but an arena where their effects are played out. Moreover, the elements to a certain extent get frozen in the process. Thus, the word *do* in DO NOTHING BUT retains the option of occurring in non-finite forms, a property lost by other instances of periphrastic *do*, and the sequence *nothing but* in this specific construction appears to be insulated from the general decline that it undergoes in other contexts (compare the data in Table 2).

After present tense–present tense sequences as in (48) had thus been reinterpreted as present tense–infinitive sequences as in (49), the new structure also came to be instantiated in other sentences with DO NOTHING BUT, following the order in (50).

(50) $do_{\text{present}} > \text{does} > \text{did} > \text{done} > \text{doing}$

At a descriptive level, (50) makes visible the progress of the change through the data in Table 3. Accounting for this progress involves recognition of the conservativeness of language users: rather than simply adopt the bare infinitive across the board in the construction, they extended its use piecemeal, from non-3rd person present tense to 3rd-person present tense to past tense to past participle to present participle. Each of these steps represents an increase in grammaticalisation of the construction, which is thus expressed here in quite precise structural terms.

It may be noted that the adoption of a new structure did not affect the basic meaning of the relevant sentences. The semantics expressed by (49) would be as in (41): out of several possibly relevant events or situations, one and only one is asserted to be true. Still, while earlier instances expressed that meaning through a biclausal structure, modern

instances have a monoclausal structure. Furthermore, while the semantics of (41) implies that the second verb must be agentive (since it is included in the set of possibly relevant events characterisable as ‘NP do something’), this is no longer the case in (49), where a set of possibly relevant situations is implied to exist but otherwise left completely unspecified. One of the consequences is that the subject of the construction is no longer thematically marked by the (agentive) verb *do* but by the second verb and this second verb itself need no longer be agentive. As a result, we might expect non-agentive subjects and verbs also to become licensed, and there are indeed examples like that among the instances of the construction after 1700. In (50), the subject is weather-*it*, an element that would be unacceptable if combined with a lexical predicate *do nothing* (cf. ?? *It did nothing in the afternoon but it rained in the evening*, with *but* as a straightforward coordinator), and in (51)–(55), we see a stative predicate (*be honest*), experiencer verbs (*dream* and *impress*), and unaccusatives (*improve* and *deteriorate*).

- (51) It's bone-crackingly cold in the winter, and it does nothing but **rain** for the rest of the year.
(British National Corpus, ABS 1060)
- (52) We've done nothing but **be honest** about the dark and the light of it.
(*The Observer*, 27 July 2003, 5)
- (53) I did nothing but **dream** I saw my late lady's ghost.
(1794 Mrs. Radcliffe, *Myst. Udolpho* xxv)
- (54) 'I'm just delighted it's done and dusted,' said Fowler. 'There were a few problems along the way but from the first moment I met Kevin Keegan he has done nothing but **impress** me.'
(*The Guardian*, 30 January 2003, 33)
- (55) 'I've had worse weeks,' Meehan said. 'This is a nice colt and we have more or less laid him out for this race. He has done nothing but **improve** all season and if he had been drawn high, he would have won very impressively.'
(*The Guardian*, 11 September 2003, 33)
- (56) But the main reason why he needs time to improve his team is that it has done nothing but **deteriorate** since the cup treble of 2001.
(*The Guardian*, 20 October 2003, 14)

The appearance of these and other non-agentive predicates can be viewed as a further result of the adoption of the mono-clausal structure in (49).

A final point arising from the data in Table 3 is the nature and causes of the use of a parallel form after *doing*, found in present-day sentences like (12), repeated here as (57).

- (57) Indeed, I seem to be doing nothing but **waving** goodbye at the moment.

Use of the form *waving* goes counter to the general development, which should favour the bare infinitive *wave* (a form that is sometimes used, but not exclusively). A possible explanation for this might be based on the idea that in (57), it is the progressive auxiliary *be* that selects the form *waving*. This idea would take us back to the Huddleston-Pullum analysis, which views *but* as the head of a prepositional phrase, the complement of which is selected by an element in the matrix clause. It could then be said that the selecting element could be either *be*, yielding *waving*, or *doing*, yielding *wave*. This would appear to account well for the variation existing in PDE, where examples like (57) can be found side by side with examples like (58).

- (58) Literary London, in its characteristically solipsistic way, is doing nothing but talk about me.

(*The Guardian*, 20 September 1996, 17)

Although the Huddleston-Pullum analysis might explain these special cases, it cannot easily be extended to certain other data. Thus, Table 3 shows that, in the PDE material examined, the sequence *has/have done nothing but* is always followed by the bare infinitive and never by a past participle. But if the second verb can be selected by the progressive auxiliary *be*, yielding sentences like (57), the question arises why it couldn't also be selected by the perfect auxiliary *have*, yielding unattested sentences like (59).

- (59) He had done nothing but waved goodbye.

Besides this problem of overgeneration, application of the Huddleston-Pullum analysis to the modern data also faces a problem of undergeneration. This concerns sentences like (60).

- (60) To cast Michael as a juvenile lead and leave him to do nothing but singing, as the past was on stage, would have been crazy.

(British National Corpus, *HRF* 620)

Here, *nothing but* is followed by *V-ing*, but there is no preceding auxiliary *be*, and *do* itself is in the infinitival form. This pattern is not frequent, but sporadic instances do occur. If the use of *V-ing* in the general case is attributed to selection by the progressive auxiliary, as it would be under the Huddleston-Pullum analysis, (60) would not be expected to exist at all.¹⁰

For these reasons, it may be concluded that the Huddleston-Pullum idea of 'matrix-licensing' cannot account adequately for the modern data. As an alternative, I propose that, besides the structure in (49), where *do* is the periphrastic auxiliary selecting an

¹⁰A further problem in applying the Huddleston-Pullum analysis to the modern data is that it entails that only agentive subjects and verbs should be expected in the construction. But this expectation is not fulfilled: as shown in (51)-(56), Modern English also allows non-agentives.

infinitive, *do* in DO NOTHING BUT can also be a lexical verb selecting a nominal complement; the structure would be as in (61).

		you	do	nothing	but	NP
(61)	CATEGORY		lexical V	dummy	adverb	NP
	SEMANTICS		'perform'	zero	'only'	

This option is clearly needed to account for cases like (62) and (63), which are well represented in the data.

- (62) This is a gross and needless waste of public funds which could have been used to make sick people better. What's more, the bureaucratic stonewalling does nothing but damage to an institution meant to be in the business of caring.

(*The Observer*, 12 October 1997, 30)

- (63) You've got to sacrifice painting, sculpture, heads and everything else, and limit yourself to staying in a room, in front of the same table, the same cloth, the same chair and do nothing but that.

(*The Guardian*, 21 June 2003, 18)

These sentences have quite simple NPs following *but*. However, just as in the case of NPs in other configurations, the nominal constituent can also be realised by a gerund phrase, and this would yield sentences like (57) and (60). Here, then, use of the *ing*-form is not a result of selection by any auxiliary, but a result of the fact that the whole phrase is nominal in nature, which itself is determined by it being a complement to the lexical verb *do*. The function of the sequence *nothing but* in this type of sentence is just as in sentences with periphrastic *do*: *but* is a negative exclusive adverbial and the word *nothing* is a dummy attendant to it.

5 Conclusions

What I have argued in this paper is that the modern English DO NOTHING BUT construction derives from an unremarkable clause type in OE, in which each of the elements had its ordinary syntactic and semantic function and formed part of a transitive clause with an adjunct PP headed by *but* 'except'. General properties of *but* 'except' meant that this PP could contain a predicate paralleling the predicate of the matrix clause in verbal form. This clause type persisted until ca. 1700. By the 16th century, however, an alternative analysis of some of the relevant surface forms had become available. In the new structure, *do* was no longer a transitive lexical verb but a periphrastic auxiliary, *nothing* was no longer a negative indefinite object but had zero semantics, and *but* functioned not as a preposition but as a negative exclusive adverb. This meant that the

second verb in the construction was no longer part of a PP but had become the main verb of the clause.

This new structure originated in those sentences that happened to be amenable to such analysis without any change in surface form, i.e. in sentences having the base form of *do*. Due to the parallelism imposed by the meaning of the construction, the second verb would also be in the base form. The number of such sentences had increased compared to earlier centuries, due to the reduction in inflectional marking. Moreover, independent changes affecting the words *do*, *but*, and the combination *nothing but* meant that learners of English in the period 1500-1700 could come to an analysis of DO NOTHING BUT in which the earlier biclausal structure was replaced by a monoclausal one. The difference between the two could be expressed as a shift towards a higher position in the hierarchical structure of each of the elements *do* (from lexical verb heading VP to periphrastic auxiliary in I), *but* (from head of a PP adjunct inside a VP to head of a Focus Phrase containing a VP) and *nothing* (from object of a lexical verb inside VP to specifier of the Focus Phrase headed by *but*). Each of these changes thus represents a case of grammaticalisation.

After the new structure had established itself in sentences already having a base form for the second verb (i.e. after the reanalysis proper) it also manifested itself in sentences that originally would have had not a base form but an unambiguously inflected verb form (i.e. the new analysis became generalised or actualised). This resulted in the emergence of novel instances of the construction, where *do* was not in the base form but the second verb was. This working out of the new structure took place in orderly fashion, affecting first present tense forms, then past tense forms, followed by past participles and finally present participles. This process of shift, characterised by orderly variability across and within these specific grammatical categories, lasted about 200 years. During and after this development, the elements making up the construction acquired a more or less frozen character and became immune to further changes affecting each of them separately, such as the restriction of periphrastic *do* to tensed forms in negative and interrogative clauses, and the gradual ousting of (*nothing*) *but* by the negative exclusives *only* and *just*. This could be captured by describing the whole construction as having grammaticalised. Due to the resultant increase in bondedness, the construction acquired an idiomatic flavour and became more frequent, something that would not be expected if it consisted of individual items joined together in a completely compositional manner.

Next to instances of the construction in which *do* is a periphrastic auxiliary, selecting a VP headed by a bare infinitive, there are also ones in which it is a full lexical verb, selecting a nominal complement. This nominal complement can take the form of a regular NP, but also of a gerund construction. For reasons still needing to be further explored, the latter option has become especially prominent in sentences where *do* itself also takes the *ing*-form, resulting in the sequence *doing nothing but V-ing*. However, the sequence

doing nothing but can also be followed by a bare infinitive, suggesting that *do* in this construction indeed wavers between lexical and auxiliary status.

Finally, how do the data and analysis presented here fit into the larger scheme of things? As far as the history of English syntax is concerned, it may be noted that the DO NOTHING BUT construction goes counter to general developments, by virtue of the fact that it shows a bare infinitive emerging in contexts where previously it was not used. Since the OE period, the bare infinitive in other contexts has undergone a reduction in usage, being replaced by the *to*-infinitive and various other constructions (Fischer 1995, 1996; Los 2005). The end result of this development can be seen in PDE, where incidence of the bare infinitive outside modal verb groups is severely restricted.¹¹ However, the analysis proposed in §4 implies that it may actually be misguided to attach too much importance to what can loosely be described as 'general trends' or 'overall developments'. If the history of DO NOTHING BUT is anything to go by, a form appears to emerge (or recede) not on the basis of general trends but on the basis of specific structural factors present in the syntactic environment. If these factors are shared by a wide variety of configurations, the effect will be what looks like a general development; however, specific elements in specific environments may work in some other direction. The challenge is to identify these elements and to determine their implications, without relying on standard views of what is or is not significant. Thus, for the bare infinitive, the standard view is that its use is closely tied to the modals and a handful of perception and causation verbs. The story of DO NOTHING BUT may serve as a reminder of the importance also of periphrastic *do* as a selector of bare infinitives.

Another result obtained in this study has been the demonstration that the various elements of DO NOTHING BUT behave in a manner fully determined by their meanings and structural positions but that combining them results in a construction quite unlike any other in the language. In other words, the DO NOTHING BUT construction shows patterned individuality. This is true at the synchronic level of PDE, where the construction shows alternation between a following bare infinitive, *ing*-form and straightforward NP. It turns out that accounting for this variability does not necessitate the assumption of any ad-hoc differences between the various options. Instead, the simple observation that *do* can be either a periphrastic auxiliary or a transitive lexical verb leads directly to the expectation that this might also be the case in this construction, and to the postulation of two distinct analyses of the sequence *do nothing but*. A further twist –but again one that follows from the existence of an obvious option in the language– is that DO NOTHING BUT has a pseudo-Doppelgänger, in which *do nothing* is a regular verb-object constitute and *but* the ordinary adversative conjunction. Interestingly, this double appears to be much less frequent than the grammaticalised DO NOTHING BUT construction.

¹¹An inventory and analysis of the main uses of the infinitive in PDE is provided by Duffley (1992); but he does not deal with the use of the bare infinitive after DO NOTHING BUT.

Further patterned individuality has been shown to exist in the development of the construction during the period 1500-1700. This result ties in well with the increasing interest in recent years in the (apparently) idiosyncratic properties of specific constructions. Much work along these lines is descriptive in orientation and has been driven by the growth in availability of large computer corpora of spoken and written texts (see publications like Kirk 2000; McEnery and Wilson 2001; Tognini-Bonelli 2001; Saito, Nakamura, and Yamazaki 2002; Aijmer and Altenberg 2004; Nakamura, Inoue, and Tabata 2004). However, awareness of the existence of patterned individuality in the behaviour of lexical items, phrases, and constructions has also led to more theoretically informed work, such as the development of Construction Grammar (Goldberg 1995; Croft 2001 and work cited there) and Pattern Grammar (Hunston and Francis 2000). With it has come a realisation that sweeping generalisations across a wide array of phenomena, whereby specific constructions are regarded as mere epiphenomena of the operation of deep-seated principles, may need to be supplemented (or even substituted) by more fine-grained work on specific properties of (groups of) individual lexical items and the phrases that they form. Adopting this general perspective on the nature of grammar, it seems worthwhile to also apply it to diachronic data, as has been done above. This makes all the more sense in view of the inevitable dependence of diachronic work on the investigation of corpora of texts. Given the absence of historical intuitions (*pace* Lightfoot 1979: 6), there is an ever-present need in diachronic studies to guard against overgeneralisations based on data that reflect properties of particular collocations or constructions rather than characteristics of the grammatical system as a whole.

A third general issue that the present study bears upon lies in the relation between synchrony and diachrony. Since periphrastic *do* has become limited to occurring in finite forms in non-declarative clauses and since negative exclusive (*nothing*) *but* is now only a minor exponent of its category, study of the DO NOTHING BUT construction in its modern guise does not immediately suggest that it contains these elements. Study of the historical data, however, makes clear that, at the genesis of the construction, these two elements had a wider range of occurrence and that their present restrictions are due to a gradual process by which they acquired a peculiar frozen character. In this way, diachronic study of the construction finds further justification in the better understanding that it yields of the nature of the present-day data. This case thus provides one more illustration of the well-known idea that synchrony recapitulates –or is even determined by– diachrony.¹²

¹²For some other examples of synchronic data viewed from this perspective, see Hurford (1987); Mithun (1991); Bybee and Newman (1995); McMahan (1996). For general discussion, see McMahan (1994: 10-11); Lass (1997: 14-17) and van der Wurff (1999).

References

- Aijmer, K. and B. Altenberg (Eds.) (2004). *Advances in Corpus Linguistics: Papers from the 23rd International Conference on English Language Research on Computerized Corpora (ICAME 23), Göteborg 22-26 May 2002*. Amsterdam: Rodopi.
- Beths, F. (1999). The history of *dare* and the status of unidirectionality. *Linguistics* 37, 1069–1110.
- Boulonnais, D. (2004). Auxiliary *do* and the periphrastic strategy. Paper read at the 13th International Conference on English Historical Linguistics, Vienna, August 2004.
- Brewer, C. (2000). OED sources. In L. Mugglestone (Ed.), *Lexicography and the OED: Pioneers in the Untrodden Forest*, pp. 40–58. Oxford: Oxford University Press.
- Bybee, J. and J. Newman (1995). Are stem changes as natural as affixes? *Linguistics* 33, 633–654.
- Croft, W. (2001). *Radical Construction Grammar: Syntactic Theory in Typological Perspective*. Oxford: Oxford University Press.
- Denison, D. (1993). *English Historical Syntax: Verbal Constructions*. London: Longman.
- Duffley, P. (1992). *The English Infinitive*. Harlow: Longman.
- Fintel, K. von (1997). Bare plurals, bare conditionals, and *only*. *Journal of Semantics* 14, 1–56.
- Fischer, O. C. M. (1995). The distinction between *to* and bare infinitival complements in late Middle English. *Diachronica* 12, 1–30.
- Fischer, O. C. M. (1996). Verbal complementation in early Middle English: how do the infinitives fit in? In D. Britton (Ed.), *English Historical Linguistics 1994*, pp. 247–270. Amsterdam: John Benjamins.
- Goldberg, A. (1995). *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: Chicago University Press.
- Halle, M. (1962). Phonology in generative grammar. *Word* 18, 54–72.
- Healey, A. (Ed.) (2004). *The Dictionary of Old English Corpus in Electronic Form*. Toronto: Dictionary of Old English Project. Centre for Medieval Studies, University of Toronto. Accessible at <http://ets.umdl.umich.edu/o/oec/>.
- Hoffmann, S. (2004). Using the OED quotations database as a corpus: A linguistic appraisal. *ICAME Journal* 28, 17–30.

- Huddleston, R. and G. Pullum (2002). *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Hunston, S. and G. Francis (2000). *Pattern Grammar: A Corpus-Driven Approach to the Lexical Grammar of English*. Amsterdam: Benjamins.
- Hurford, J. R. (1987). *Language and Number: The Emergence of a Cognitive System*. Oxford: Blackwell.
- Jespersen, O. (1940). *A Modern English Grammar on Historical Principles*, Part V: *Syntax*, Fourth Volume. Copenhagen: Ejnar Munksgaard.
- Kirk, J. (Ed.) (2000). *Corpora Galore: Analyses and Techniques in Describing English*. Amsterdam: Rodopi.
- Langacker, R. W. (1977). Syntactic reanalysis. In C. N. Li (Ed.), *Mechanisms of Syntactic Change*, pp. 57–139. Austin: University of Texas Press.
- Lass, R. (1997). *Historical Linguistics and Language Change*. Cambridge: Cambridge University Press.
- Lewis, R. E. (Ed.) (2001). *Middle English Dictionary*. Ann Arbor: University of Michigan Press. Accessible at http://ets.umdl.umich.edu/m/med/med_quot_search.html.
- Lightfoot, D. W. (1979). *Principles of Diachronic Syntax*. Cambridge: Cambridge University Press.
- Los, B. (2005). *The Rise of the To-infinitive*. Oxford: Oxford University Press.
- Mair, C. (2001). Early or late origin for *begin* + *V-ing*? Using the OED on CD-ROM to settle a dispute between Visser and Jespersen. *Anglia* 119, 606–610.
- McEnery, T. and A. Wilson (2001). *Corpus Linguistics*. [Second edition]. Edinburgh: Edinburgh University Press.
- McMahon, A. M. (1994). *Understanding Language Change*. Cambridge: Cambridge University Press.
- McMahon, A. M. S. (1996). On the use of the past to explain the present: the history of /r/ in English and Scots. In D. Britton (Ed.), *English Historical Linguistics 1994*, pp. 73–89. Amsterdam: Benjamins.
- Miller, D. G. and K. Leffel (1994). The Middle English reanalysis of *do*. *Diachronica* 11, 171–198.

- Mithun, M. (1991). The role of motivation in the emergence of grammatical categories: the grammaticization of subjects. In E. C. Traugott and B. Heine (Eds.), *Approaches to Grammaticalization*, Vol. 2: *Focus on Types of Grammatical Markers*, pp. 159–184. Amsterdam: Benjamins.
- Moerenhout, M. and W. van der Wurff (2000). Remnants of the old order: OV in the Paston Letters. *English Studies* 81, 513–530.
- Moerenhout, M. and W. van der Wurff (2005). Object-verb order in early sixteenth-century English prose: An exploratory study. *English Language and Linguistics* 9, 83–114.
- Nakamura, J., N. Inoue, and T. Tabata (Eds.) (2004). *English Corpora under Japanese Eyes*. Amsterdam: Rodopi.
- Nevalainen, T. (1990). Modelling functional variation and function loss: The case of *But*. In S. Adamson, V. Law, N. Vincent, and S. Wright (Eds.), *Papers from the Fifth International Conference on English Historical Linguistics*, pp. 337–355. Amsterdam: John Benjamins.
- Nevalainen, T. (1991). *But, Only, Just: Focusing Adverbial Change in Modern English 1500-1900*. Helsinki: Société Néophilologique.
- Nevalainen, T. (1999). The facts and nothing but: the (non-)grammaticalisation of negative exclusives in English. In G. Tottie, I. Tiekens-Boon van Ostade, and W. van der Wurff (Eds.), *Negation in the History of English*, pp. 167–187. Berlin: Mouton de Gruyter.
- Postma, G. (1995). *Zero Semantics: A Study of the Syntactic Conception of Quantificational Meaning*. PhD thesis, University of Leiden.
- Quirk, R., S. Greenbaum, G. Leech, and J. Svartvik (1985). *A Comprehensive Grammar of the English Language*. London: Longman.
- Rissanen, M. (1999). Syntax. In R. Lass (Ed.), *The Cambridge History of the English Language*, Volume 3: *1476 to 1776*, pp. 187–331. Cambridge: Cambridge University Press.
- Roberts, I. G. and A. Roussou (2002). The history of the future. In D. W. Lightfoot (Ed.), *Syntactic Effects of Morphological Change*, pp. 23–56. Oxford: Oxford University Press.
- Roberts, I. G. and A. Roussou (2003). *Syntactic Change: A Minimalist Approach to Grammaticalisation*. Cambridge: Cambridge University Press.

- Romaine, S. (1984). The sociolinguistic history of t/d deletion. *Folia Linguistica Historica* 5, 221–255.
- Saito, T., J. Nakamura, and S. Yamazaki (Eds.) (2002). *English Corpus Linguistics in Japan*. Amsterdam: Rodopi.
- Simpson, J. (Ed.) (2004). *Oxford English Dictionary*. Oxford: Oxford University Press. Accessible at <http://www.oed.com>.
- Takami, S. (2004). A corpus-driven identification of distinctive words: “tabloid adjectives” and “broadsheet adjectives” in the *Bank of English*. In J. Nakamura, N. Inoue, and T. Tabata (Eds.), *English Corpora under Japanese Eyes*, pp. 115–135. Amsterdam: Rodopi.
- Timberlake, A. (1977). Reanalysis and actualization in syntactic change. In C. N. Li (Ed.), *Mechanisms of Syntactic Change*, pp. 141–177. Austin: University of Texas Press.
- Tognini-Bonelli, E. (2001). *Corpus Linguistics at Work*. Amsterdam: Benjamins.
- Visser, F. T. (1969). *An Historical Syntax of the English Language*, Part 3, 1st half: *Syntactical Units with Two Verbs*. Leiden: Brill.
- Warner, A. (2004). What drove DO? In C. Kay, S. Horobin, and J. Smith (Eds.), *New Perspectives on English Historical Linguistics: Selected Papers from 12 ICEHL, Glasgow 21–26 August 2002*, Vol 1: *Syntax and Morphology*, pp. 229–242. Amsterdam: John Benjamins.
- Wurff, W. van der (1990). *Diffusion and Reanalysis in Syntax*. PhD thesis, University of Amsterdam.
- Wurff, W. van der (1999). Objects and verbs in modern Icelandic and fifteenth-century English: a word order parallel and its causes. *Lingua* 109, 237–265.