

A Quantitative Analysis of the Loss of V2 in the History of English

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1. Introduction

Recent work (Kroch and Taylor (1997) (henceforth K&T (1997)); Kroch, Taylor and Ringe (1997)) (henceforth KTR (1997)) has shown that the two dialects of Middle English differed in the way they implemented the verb second (V2) constraint. In the south, V2 was observed to be of the IP-V2 type (the type found in modern Yiddish and Icelandic) whereas in the north, it was of the CP-V2 type (the type found in German, Dutch and the modern mainland Scandinavian languages).

Another well known fact is that English lost V2 at some point in its history. On the basis of a study of a northern and a southern text, KTR (1997) suggest that this began with the extensive contact between northern and southern speakers, which led to considerable mixture of some features in both the dialects, in particular the V2 constraint. Furthermore, once developed in contact, the mixed language was picked up by children, and as a case of grammar competition (Kroch (1994)), subsequently evolved in a way that drove out the syntactically more marked option (V2) over a period of time.

This paper traces the behavior of Middle English V2 from 1350 to 1500. Unlike previous studies, this paper is based on a larger number of texts (31 texts). The analysis of the data presented here shows that with respect to the implementation of the V2 constraint, there are notably distinct patterns observed in the southern region as a whole, thus necessitating its division into two subregions – one comprising the extreme south and the west midlands, and the other comprising the east midlands. I argue that the description in KTR (1997) about the nature of language contact between the northerners and southerners and its effect on verb second in the dialects of late Middle English can, in fact, be said to hold only for the north and east midlands, and that the changes in the V2 patterns observed in the south and west midlands must have been triggered by independent linguistic and/or social factors.

Section 2 gives a brief description of the verb second constraint and of the two different ways in which it was implemented in early Middle English.

* I am indebted to Anthony Kroch for suggesting this immensely interesting topic for research to me and for his valuable suggestions. I would also like to thank Chunghye Han, Beatrice Santorini and an anonymous reviewer for their comments. All errors and shortcomings are of course my own.

In Section 3, I present the data accompanied analysis of the three different dialects of late Middle English and show that the dialect of the east midlands behaved differently than those of the south and west midlands in its implementation of the V2 constraint. I argue that the changes that occurred in the south and west midlands are not a result of language contact with the north but rather of independent syntactic triggers. I also show that the effects of grammar competition and therefore the overall loss of V2 in the east midlands are not seen at least until 1500, and that the south and west midlands show this reduction quite definitely by the mid-15th century. Finally, in Section 4, I discuss an apparent contradiction with the claims made about language contact in KTR (1997) and propose that this can be explained because of the exceptional behavior of the southwestern text studied in KTR (1997).

2. The Verb-Second Constraint

The V2 constraint is a phenomenon that requires the inflected verb to be the second overt constituent of a clause (den Besten (1977)). However, as has been shown in several studies (de Haan and Weerman (1985); Santorini (1989); Diesing (1990); Vikner (1991b); Iatridou and Kroch (1992)), the languages within this family can be typologically distinguished in terms of the precise nature in which this constraint is implemented. Assuming the phrase structure description in Chomsky (1986), one group of languages (the CP-V2 languages) derives the V2 order by movement of the tensed verb to the Complementizer (C^0) position, with concomitant movement of some topicalized phrasal constituent to [Spec,CP]. Another group of languages (the IP-V2 languages) derives the V2 order by movement of the tensed verb to a lower position, namely, I^0 (Diesing (1990), Pintzuk (1991), Santorini (1992)). With regard to the position of the topicalized constituent in the IP-V2 languages, it has been argued in earlier studies (Pintzuk (1991)) that this constituent moves to [Spec,IP]. However, I shall adopt the proposal made in K&T (1997), according to which the topicalized constituent moves to [Spec,CP].

2.1 The CP-V2 and IP-V2 Dialects of Early Middle English

In this Section, I briefly describe the behavior of V2 in the two different dialects of early Middle English as the necessary background for understanding the nature of the changes that occurred in the later period.

The V2 syntax of the northern CP-V2 dialect for is the same as described above. It exhibits V2 word order in nearly all main clauses. The tensed verb moves to C^0 with concomitant movement of some topicalized constituent to [Spec,CP]. The subject, if it is not the topic itself, moves from its underlying position in [Spec,VP] to [Spec,IP]. The IP-V2 early Middle English dialects

of the south and the midlands, however, which exhibit a continuation of the Old English V2 pattern, do not show a surface V2 order consistently in main clauses, showing verb-third word order in many cases. Subject initial sentences are analyzed as V2 sentences in which the subject happens to be the topic – moving to [Spec,CP] – and the verb moves to I⁰. In sentences with non-subject topics, the first constituent is a topicalized non-pronominal complement, prepositional argument or adjunct, or an adverb. In these cases, when the subject is a non-pronominal NP, the topicalized constituent moves to [Spec,CP], the verb moves to I⁰, appearing in second position, and the subject remains in [Spec,VP]. However, the two environments described above are the only two cases in which the verb appears in the second position in the clause. In other environments, one finds the verb not in the second but in the third position. For instance, in sentences with non-subject topics and pronominal subjects, the verb appears regularly in the third position. It has been argued in Kemenade (1987) and Pintzuk (1991) that these V3 orders are not evidence of non-adherence to the V2 constraint, but rather a result of the special behavior of pronoun subjects as clitics. These pronouns move to the CP/IP boundary, like the pronouns in other West Germanic languages. For the northern dialect, the movement of these clitics to the CP/IP boundary does not affect the V2 word order since the verb is in C⁰. But in the IP-V2 dialect, this does disrupt the V2 order, since the verb is in I⁰. The second environment where the V2 order is not observed is where some *scene setting* PP adjunct or adverb appears in initial position but does not trigger inversion of the verb with the subject. These are cases which involve left-adjunction of the adjunct or adverb to CP, with some non-pronominal constituent as the topic in [Spec,CP].¹

3. V2 in the Dialects of Late Middle English (1350-1500)

Regarding the loss of V2 in Middle English, statistics from two texts (KTR (1997)) suggests that by the mid 14th century, V2 was on the decline. In particular, this decline was found to be more advanced in the north than in the south and the midlands. KTR (1997) explain this disparity in terms of the nature of the contact between the two dialects. According to them, the northern speakers in the contact region would have analyzed topicalized sentences with full NP subjects in the southern speech as involving V⁰-to-C⁰

1. This word order could potentially also obtain in the northern CP-V2 dialect but does not. The motivation for this comes from other CP-V2 languages like German, where there is a prohibition against adjunction to CP. This must be the case for the northern Middle English dialect too, for if it did not have a similar prohibition, we would easily obtain a fair number of cases with adjunct/adverb-initial verb third sentences.

movement, parallel to the structural analysis given to this V2 order in their own dialect. However, they would have treated topicalized sentences with pronoun subjects as being a violation of the V2 constraint. They further argue that this evidence of a mixed V2 grammar coupled with the tendency to accommodate linguistically with the southern speakers must have led to the production of some non-V2 sentences in the grammar of the north, crucially in sentences with both pronoun as well as full NP subjects. Learners would then have been provided with evidence of a non-V2 grammar, which would have competed with the V2 grammar, eventually driving it out over time. About the effect of contact on the V2 of the southern dialect, KTR (1997) argue that there would not be a tendency to produce non-V2 sentences, since there was ample evidence of V2 order in the speech of the north.² In fact, given this evidence, the southern speakers would have been inclined to produce more V2 sentences than they already did in their own dialect, namely, in sentences with pronoun subjects. Learners, then, would have acquired a V2 grammar with V⁰-to-C⁰ movement alongside the V⁰-to-I⁰ option.

For the northern dialects, there were only two texts available, both of which have been studied in KTR (1997). As such, I will not discuss V2 in the north beyond what I have described above (see Appendix A for these statistics). What is of interest in this paper is that, with respect to the loss of V2 in the southern region, we need to recognize a dialectal difference between the east midlands on the one hand and the south and west midlands on the other. In particular, I point out that the argument made in KTR (1997) about the nature of the loss of V2 in the IP-V2 dialect of Middle English is applicable only to the east midlands dialect. The statistics presented below suggests that the changes in the V2 patterns observed in the south and west midlands from 1350-1500 are triggered by different factors that need to be studied independently from the changes observed in the east midlands, the region in closest contact with the north.

In what follows, I discuss the observed changes in the V2 patterns for the different dialects in terms of four crucially distinguished syntactic environments: (a) sentences with preposed complements and full NP subjects, (b) sentences with preposed complements and pronoun subjects, (c) sentences with preposed PP adjuncts or adverbs and full NP subjects, and (d) sentences with preposed PP adjuncts or adverbs and pronoun subjects. For any text, if the total number of clauses for any environment was less than 4, the text was excluded from the sample for that environment. All the 31 texts used for this study (see Appendix B for details on the texts) were taken from the 1st edition of the PPCME (The Penn Helsinki Parsed Corpus of Middle English) corpus

2. Note that for KTR (1997), the term "south" includes the east midlands as well as the west midlands and the extreme south.

(Kroch & Taylor (1994)).³

3.1 Preposed Complements and Full NP Subjects

Figure 1 shows that in sentences with preposed complements and full NP subjects, the east midlands dialect continues to show very high rates of inversion (80% to 100%) up until 1500, whereas in the south and the west midlands, it is high in 1390 (82%), but is very low in 1400 (25%) and remains low in 1500 (34%).

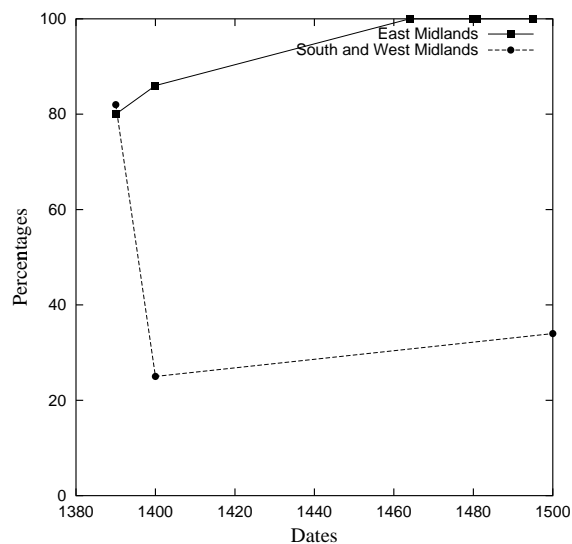


Figure 1: East midlands vs. south and west midlands (1350-1500): inversion with preposed complements and full NP subjects

Following the argument made about the nature of the language contact in KTR (1997), the continued high rates of inversion in the east midlands dialect is as expected; during language contact, an east midlands speaker would have observed numerous instances of V2 in the speech of the northerners, and though linguistic accommodation would have generated a tendency to produce more V2 sentences, as will be seen later, there would be no need to

3. The total number of available online texts for the east midlands, west midlands and the south was actually 41, but some of them were excluded due to the doubtful dates associated with the texts.

change the word order in this environment, since it already had a high incidence of V2. The lower rates of inversion in the south and west midlands is surprising, however, and provides the first indication of an independent syntactic trigger responsible for the loss of V2 in these dialects. What is most suggestive is that these low rates of inversion are seen as early as 1400, appearing much earlier than in the north (see Appendix A). KTR's (1997) hypothesis that the loss of V2 must have spread from the north, therefore cannot apply to these dialects. A final inference that can be drawn from Figure 1 arises from the continued 100% inversion seen in the east midlands texts even after 1450. This shows that grammar competition between the V2 and the non-V2 options had not set in (in the east midlands) at least until 1500. This hypothesis will receive further support in the following sections.

The precise structural nature of these changes is beyond the scope of this paper. However, given the IP-V2 syntax of the south and west midlands, the loss of V2 must have involved movement of the surface subject from [Spec,VP] to [Spec,IP].⁴

3.2 Preposed Complements and Pronoun Subjects

Figure 2 shows the percentages of inversion in the east midlands and the south and west midlands in sentences with preposed complements and pronoun subjects. Again, the variation observed in the V2 frequencies in the east midlands is as expected. In an effort to accommodate with the northern speakers, this is the environment where east midlands speakers would produce more V2 sentences by importing the northern V^0 -to- C^0 movement into their grammar. However, notice that after 1450, there are three texts with quite high rates of inversion (83%, 55%, and 100%) in these sentences, which matches with the pattern seen in the previous environment, in that there is no conclusive evidence of grammar competition in the east midlands grammar until 1500. For the south and west midlands, it is obvious from Figure 2 that the V2 percentages are nowhere close to as high as in the east midlands, never going above 20%.

It is important to note that the low frequencies seen for the south and west midlands are nevertheless higher than in the early Middle English period, thus providing evidence of some tendency to produce V2 sentences. At the same time, however, the degree of increase is quite low compared to that

4. It could be argued that it was the loss of V^0 -to- I^0 movement that was the syntactic reflex of the loss of V2 observed in the south and west midlands dialects. However, this possibility is ruled out due to independent evidence seen in Ellegård's (1953) study of the rise of the English auxiliary *do*. His statistics show that auxiliary *do*, which correlates with the loss of V^0 -to- I^0 movement in English, did not appear in affirmative declaratives until the late 15th century.

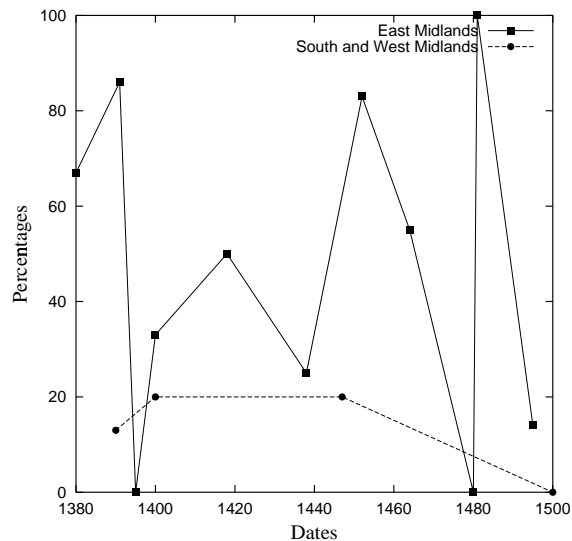


Figure 2: East midlands vs. south and west midlands (1350-1500): inversion with preposed complements and pronoun subjects

seen in the east midlands, so that it suggests the role of some other factor at play in generating these higher V2 percentages. There are two possibilities that could have led to the increase. One is that the V2 features were indeed spreading from the north to the south and the lower percentages are a result of the geographical distance in the language contact situation, so that for the same time period, we would see a higher degree of V2 in the east midlands than in the south and the west midlands. The syntactic reflex of this possibility would be the acquisition of V^0 -to- C^0 movement in the grammar of the south and west midlands also. However, this seems very unlikely because if it were so, we would not have any explanation for why the V2 percentages were consistently low after 1400 in the previous environment, i.e., with full NP subjects. The other possibility, which would need additional research for support, is that the low V2 percentages for the south and west midlands in Figure 2 is the result of a change in the clitic status of pronouns. If the clitic pronouns had begun to behave like regular pronouns, then it would generate the observed non-V2 orders because the position for pronoun subjects would be [Spec,VP] instead of the CP/IP boundary. This proposal is consistent with the known fact about the change in the status of pronouns in English and also

does not contradict the pattern seen in Figure 1.⁵

To summarize so far, I have shown that for sentences with preposed complements, the east midlands dialect displays acquisition of V⁰-to-C⁰ movement. Since it already had V2 in sentences with full NP subjects, no changes are observed in this environment during the period of language contact. With pronoun subjects, on the other hand, it shows a tendency to generate V2 sentences with the V⁰-to-C⁰ option imported from the north. I also showed that in the east midlands, there is no evidence of grammar competition between the V2 and the non-V2 options until 1500. For sentences with preposed complements in the south and west midlands, I showed that unlike in the east midlands, the rates of inversion with full NP subjects are lower than 35% after 1400, suggesting that the effects of language contact are not at play here. I proposed that syntactically, these low rates must be the reflex of the movement of the surface subject from [Spec,VP] to [Spec,IP], a feature independent of the interactions between the north and east midlands. With pronoun subjects, the rates of inversion were seen to be higher than in the earlier periods, but never higher than 20%. This, I proposed, was again the result of an independent syntactic change in these dialects, namely, the change in the clitic status of pronouns.

3.3 Preposed PP Adjuncts or Adverbs and Full NP Subjects

Recall that in the IP-V2 dialect of early Middle English, V2 word order did not appear consistently in all main clauses. V3 word order was found in sentences with some *scene setting* PP adjunct or adverb in initial position, adjoined to CP. As a result of this, the percentages of V2 were variable (see K&T (1997)) for such sentences in early Middle English. This was because in some cases, the initial constituent was itself the topic whereas in others, it was adjoined to CP. In Figure 3, we see the continuation of such variability in the east midlands, which is parallel to the effects seen for the east midlands in Section 3.1. That is, the V2 order was already obtainable in this environment for those cases where the initial PP adjunct or adverb was itself the topic. So for the east midlands speakers, the V2 grammar here was again largely identical.⁶ Another conclusion that can be drawn for the east midlands in

5. In Section 3.1, I suggested that the low rates of V2 was a reflex of the movement of the full NP subject from [Spec,VP] to [Spec,IP]. Assuming that this movement was taking place even when the pronouns were losing their clitic-like nature, we get further support for the fact that even though the V2 rates in Figure 2 are higher than in the earlier period, they are not as high as in the east midlands.

6. Of course, V2 in this environment in the north was almost 100% because of the prohibition against adjunction, and the continued variability in the east midlands raises the question of whether language contact should have instead led to an overall

this environment, and which is again consistent with what I pointed out in Section 3.1 is that the variability in V2 percentages continues till 1500, so that the effects of grammar competition are also not visible until the same time.

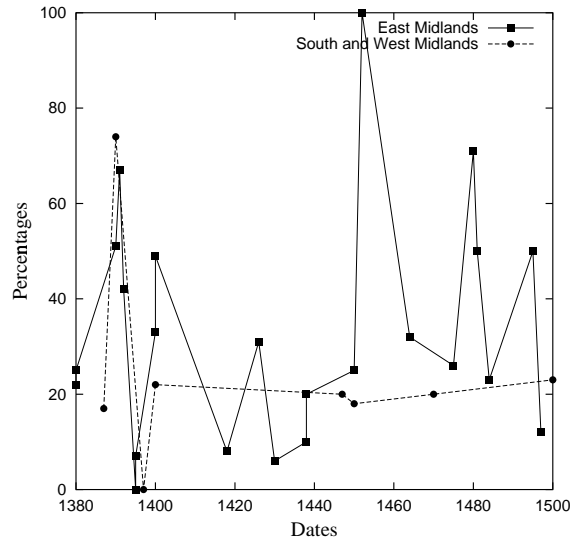


Figure 3: East midlands vs. south and west midlands (1350-1500): inversion with preposed PP adjuncts or adverbs and full NP subjects

For the south and west midlands, on the other hand, we see consistently lower rates of inversion after 1390. This pattern is expected given the proposal I made earlier about the position of the subject in these dialects. If the full NP subjects were moving to [Spec,IP], then the overall rate of inversion should, naturally, have reduced: for the cases where the initial element was adjoined, there was already a V3 order, but for the cases where the initial element was the topic in [Spec,CP], the movement of the subject to [Spec,IP] would generate the V3 order, thus leading to an overall decrease in the V2 percentages.

3.4 Preposed PP Adjuncts or Adverbs with Pronoun Subjects

Figure 4 shows the percentages of inversion for sentences with preposed PP adjuncts or adverbs and pronoun subjects. The variability observed for increase in the rates of inversion. I will not attempt to answer this question here as it requires a study of the nature of the elements that adjoined to CP in this dialect.

the east midlands contrasts sharply with the close to 0% inversion in the early Middle English period. However, assuming that the east midlands speakers were accommodating with the northerners and acquiring the V^0 -to- C^0 movement alongside the V^0 -to- I^0 option, this variability is expected, because for the cases where the initial PP adjunct or adverb was the topic, the movement of the verb to C^0 would cross the position of the clitic pronoun at the CP/IP boundary and produce the V2 order. For the south and west midlands, we see a pattern similar to that seen in Section 3.2. The rates of inversion are very low throughout the given period, suggesting the absence of a V^0 -to- C^0 option in their grammar and therefore the absence of any effects of language contact with the north.

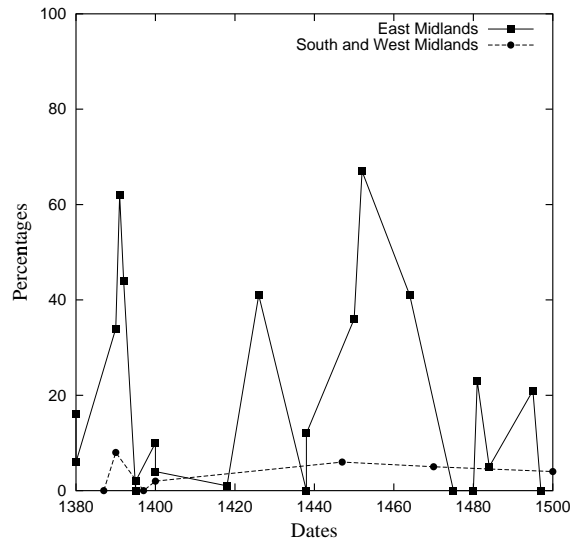


Figure 4: East midlands vs. south and west midlands (1350-1500): inversion with preposed PP adjuncts or adverbs and pronoun subjects

The V2 patterns seen in the three IP-V2 dialects distinguished here show clearly that the east midlands dialect behaved quite differently from the south and west midlands in the late Middle English period. Not only do the south and west midlands not show any effects of language contact with the north, but there also seems to be an independent syntactic process at work. While I cannot explain the observed disparity in this paper, the evidence presented above motivates further research on the behavior of V2 in the south and west midlands while at the same time providing a clearer way to think about the

syntactic changes in late Middle English that have been hitherto considered so complex.

4. Afterthought: An Apparent Contradiction?

The southern text that was used for the study of the loss of V2 in KTR (1997) was the Vernon manuscript of “The Mirror of St. Edmund”, a southwestern 14th century translation of a 13th century Latin text into English. If this text was southwestern, and if it was the basis for their argument that this text provided evidence for language contact with the north and for the spread of the loss of V2 from the north to the south, then this seems like a glaring contradiction with the conclusions that I have drawn above, namely, that the southwest was unaffected by the north. However, a closer look shows that the southern text studied by them is the only exception to the V2 patterns that I have shown in this paper. The exceptional behavior of this text (dated 1390) can be seen in Figure 1 and Figure 3, both illustrating the percentages of V2 in sentences with NP subjects: the percentage of inversion for this text is much higher than for the other texts. I will not attempt to provide an explanation for this exception in this paper. However, it may have some relation to the suggestion made in KTR (1997) that there may have been a version by a northern scribe in the genealogy of this manuscript.

5. Conclusion

In this paper, I have presented a quantitative study of the variability and the loss of the verb-second constraint in the late Middle English period (1350-1500). I have shown that there is an important dialectal distinction to be made in the behavior of V2 between the east midlands on the one hand and the south and west midlands on the other. I argued that the effects of language contact on the incidence of V2 described in KTR (1997) are applicable only to the east midlands, and that the change observed in the south and west midlands is the result of an independent syntactic trigger. I proposed that the most likely syntactic reflexes of the changes in the southwest are a change in the locus of the surface subject (from [Spec, VP] to [Spec, IP]) and a change in the clitic status of subject pronouns. I have also pointed out another difference between the two dialects, namely, that while the south and west midlands begin to show an overall reduction in V2 towards total loss by 1400, this tendency is not seen in the east midlands until 1500, suggesting that grammar competition between the V2 and the non-V2 options had not set in until this time.

Appendix A

This appendix gives the frequencies of inversion in the northern dialect from 1350 to 1500. The numbers are taken from KTR (1997).

- Inversion with preposed complements and NP subjects:
EDTHOR: 93%
BENRUL: 100%
- Inversion with preposed complements and pronoun subjects:
EDTHOR: 93%
BENRUL: 64%
- Inversion with preposed PP adjuncts or adverbs and NP subjects:
EDTHOR: 91%
BENRUL: 80%
- Inversion with preposed PP adjuncts or adverbs and pronoun subjects:
EDTHOR: 91%
BENRUL: 57%

BENRUL: THE NORTHERN PROSE RULE OF ST. BENET. 1425.

EDTHOR: THE MIRROR OF ST. EDMUND (Thornton Ms.). 1350.

Appendix B

This appendix lists the PPCME1 texts used for the present study. The texts are grouped according to the dialectal region they belong to. For each text, the date (of the manuscript) as well as the total number of matrix clauses that constituted the sample size for that text is listed (cls = no. of clauses). Note that the authors are unknown (or doubtfully known) for some of the texts and are as such not listed.

<i>West Midlands</i>
<ul style="list-style-type: none"> • THE BRUT OR THE CHRONICLES OF ENGLAND. 1400. (571 cls) • THE MIRROR OF ST. EDMUND (Vernon Ms.) 1390. (747 cls) • <i>Thomas Malory</i>. 1470. MORTE DARTHUR. (1102 cls) • THE SIEGE OF JERUSALEM. 1500. (778 clauses)

<i>South</i>
<ul style="list-style-type: none"> • A LATE MIDDLE ENGLISH TREATISE ON HORSES. 1450. (218 cls) • <i>John Trevisa</i> 1387. THE POLYCHRONICON. (420 cls) • LETTERS AND PAPERS OF JOHN SHILLINGFORD. 1447. (1217 cls) • <i>John Purvey</i>. 1397. THE PROLOGUE TO THE BIBLE. (139 cls)

<i>East Midlands</i>
<ul style="list-style-type: none"> • <i>Aelfred of Rievaulx</i>. 1450. DE INSTITUTIONE INCLUSARUM. (75 cls) • <i>Chaucer</i>. 1391. A TREATISE ON THE ASTROLABE. (240 cls) • <i>Chaucer</i>. 1380. BOETHIUS. (528 cls) • <i>Chaucer</i>. 1390. THE TALE OF MELIBEE. (484 cls) • <i>Thomas Usk</i>. 1418. APPEALS. (391 cls) • THE EQUATORIE OF THE PLANETS. 1392. (163 cls) • <i>William Gregory</i>. 1475. sc Gregory's Chronicle. (279 cls) • <i>Sir. John Mandeville (Jehan de Bourgogne)</i>. 1400. MANDEVILLE'S TRAVELS. (338 cls) • <i>John Purvey</i>. 1395. THE NEW TESTAMENT (WYCLIFFITE). (1271 cls) • SAMPLES OF OFFICIAL LETTERS. 1380. (112 cls) • PASTON LETTERS AND PAPERS. 1430. (52 cls) • <i>John Purvey</i>. 1395. THE OLD TESTAMENT. (798 cls) • <i>John Capgrave</i>. 1464. CAPGRAVE'S CHRONICLE. (432 cls) • <i>John Capgrave</i>. 1452. CAPGRAVE'S SERMON. (87 cls) • <i>William Caxton</i>. 1484. THE PROLOGUES AND EPILOGUES OF WILLIAM CAXTON. (205 cls) • THE LIFE OF ST. EDMUND. 1438. (317 cls) • <i>Richard Fitzjames</i>. 1495. SERMO DE LUNE. (246 cls) • IN DIE INNOCENCIUM. 1497. (169 cls) • <i>Margery Kempe</i>. 1438. THE BOOK OF MARGERY KEMPE. (601 cls) • A LATIN TECHNICAL PHLEBOTOMY AND ITS MIDDLE ENGLISH TRANSLATION. 1426. (157 cls) • <i>William Caxton</i>. 1481. THE HISTORY OF REYNARD THE FOX. (704 cls) • <i>Robert Reynes</i>. 1480. THE COMMONPLACE BOOK OF ROBERT REYNES. (444 cls) • ENGLISH WYCLIFFITE SERMONS. 1400. (872 cls)

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