

Types of Inversion in Middle English*

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Abstract

Inversion in Middle English is known to reflect the weight or informational prominence of the subject and the syntactic properties of the context in which inversion occurs or fails (see, e.g., Kohonen 1978). This paper sets out to disentangle and clarify the contribution of such properties in a database of fourteenth and fifteenth century prose. Inversion is taken here to include clause types where the subject follows the finite verb at some distance. A set of factors is shown to correlate with the presence or absence of different types of inversion. It is further argued that clauses in which a post-verbal subject is final or a pre-verbal subject is followed only by the finite verb behave differently from other contexts, both in terms both of the incidence of inversion and of the rate of ongoing change shown in the database.

1 Introduction

English has lost the general V2 order of Germanic which was present in Old English, but it still shows 'residual V2' in interrogatives, after initial negatives, and in some other restricted contexts. It also retains inverted orders with other verbs (and verb groups) in specific sets of conditions, where inversions perform pragmatic functions and typically show a strong contextual appropriacy. In some cases inversion is obligatory, in others it is optional.

- (1) a. At issue is Section 1401(a) of the Controlled Substances Act.

*At issue Section 1401(a) of the Controlled Substances Act is.

(ex. from Stockwell 1984; Green 1980)

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- b. In the year 1748 died one of the most powerful of the new masters of India.
In the year 1748 one of the most powerful of the new masters of India died.
(ex. from Green 1980; Poutsma 1928)
- c. Outside stood a little angel.
Outside a little angel stood.
(ex. from Stockwell 1984; Green 1980)
- d. With success would come wealth.
With success wealth would come.

In today's English the choice of order in such clause types clearly involves the structuring of information. Birner (1994: 233) claimed that inversion in a Present-Day corpus 'depends on the relative discourse-familiarity of the information represented by the proposed and postposed constituents', so that information that is more familiar precedes information that is less familiar. Others have noted the importance of sentence final position for the introduction of new or focussed information, or pointed to the relevance of syntactic conditions. See Culicover and Levine (2001) for recent discussion and analysis, Green (1980) and Stockwell (1984) for earlier discussion. The conditions clearly include at least:

- the nature and informativeness of the introductory element,
- whether or not the verb is unaccusative, and
- the weight or informativeness of the subject.

Stockwell (1984) noted that obligatory inversion after a predicative (as in 1a) is largely a post Middle English innovation (and see Brinton and Stein 1995). He also pointed out that when general V2 is lost in English, it is not only the residual V2 that survives (or has its use extended, Nevalainen 1997), but that there is also continuity between a general class of examples with optional inversion after some adverbial constituent like those in (1b), (1c) and similar examples in Middle and Old English.

It is clear that information structuring also had considerable importance in earlier English, as previous workers (Kohonen 1978; Schmidt 1980; Bækken 1998; Bech 2001 and others) have variously noted. This provides historians of English with an interesting series of questions about the characterisation of inversions in earlier English. In particular we might ask: What are the most significant parameters controlling the incidence of inversion? And how do considerations of weight and information structuring interact with grammatical possibilities in determining the distribution of different types of inversion? Or, what is the interface between information and syntax in determining inversion? Answers to such questions clearly form a necessary preliminary to any attempt to track the

history of the loss of V2, or the development of further kinds of V2 in English. Bækken (1998) has provided a detailed treatment of inversion in the Early Modern period, and there are partial answers to some of these questions elsewhere, particularly in Schmidt (1980) who claims that there is a functional distinction between different types of inversion in late Middle English, but we have no general and systematic picture for this period when the loss of V2 was in full swing. This is what I intend to provide here.

2 Database

The database which underlies this study was collected from 33 prose texts belonging to the fourteenth and fifteenth centuries, broadly instructional or narrative in genre, with some personal letters. These texts are listed in the appendix following this paper. I omitted verse to reduce the range of variation. The aim in the first instance was to put together a database which would illuminate the dialectal distribution of V2. For each text I collected about 120 main clause instances with an initial element liable to occur with inversion, where there was enough text for this, as is not always the case. This yielded a corpus of over 3,800 examples of contexts which contain or lack inversion. Examples where inversion is not variable were omitted, so questions were not included. In the interests of economy, some other constructions were also omitted, in particular, those introduced by epistemic adverbials, since previous work (like that by Breivik and Swan 1994) had shown the occurrence of inversion to be extremely low. The data was coded for a range of properties, and investigated using GoldVarb (Rand and Sankoff 1990) and DataDesk (Velleman 1995).

3 General view of inversion in the database

Overall the verb precedes the subject in roughly 40% of main clause instances where there is some clause initial non-subject element, and individual texts show a wide range of variation. Both facts are consistent with English being mid-change, where the change is the overall loss of V2. This fits neatly enough with what we know about the preceding and following periods. Bækken (1998: 60) presents overall percentage figures for inversion drawn from her results and from Kohonen's (1978) and these are given in Table 1. A figure of some 40% for 1400 fits reasonably enough into this sequence.

1000	1200	1500	1600	1700
80%	60%	20%	18.5%	8.5%

Table 1: Overall percentage results for inversion

Examples with a non-subject introductory element are given in (2). In (2a) the subject precedes the finite verb, in (2b) the subject follows the finite verb directly, and

in (2c) the subject follows the finite verb and some material intervenes (the subject often being clause final). In these and subsequent examples the subject and the finite verb are underlined. I shall call these three types 'uninverted', 'inverted' and 'late subject'.¹

(2) a. **uninverted order**

And then the deuilles seiden to ham ...

'and then the devils said to them ...'

(RevPurg line 482)

b. **inverted order**

And then seid the deuilles to ham ...

'and then the devils said to them ...'

(RevPurg line 534)

c. **late subject order**

i. In here hous was nevere i-herde crye nother noyse;

'In their house (neither) cry nor noise was ever heard'

(Trevisa Polychronicon 331.6)

ii. Thanne wente out to Ion the puple of Ierusalem

'Then the people of Jerusalem went out to John'

(Wyclifite sermons vol III 124.29)

It is useful to start from an idealization of the situation which held in Old English, essentially following Haerberli (2001, 2002a, b), and earlier work by van Kemenade (1987); Pintzuk (1999) and others. In this idealised view, a finite verb may occur in one of two positions in clause structure: high (in C) or low (in T or AgrS). After *then* and a small number of adverbs (here called 'the *then* group') the finite verb is usually high, and in this position it precedes all subjects. After other introductory elements the verb may be low. In this case it may be preceded by a pronominal or nominal subject, and this results in an uninverted surface order. Alternatively, it may be preceded by an empty expletive subject (Haerberli 2002a,b) in which case the full subject (which is typically nominal) follows, and there is inversion in surface order. Haerberli's analyses of the low position of the finite verb are summarised in (3); for him the verb's 'low' position is in AgrS.

- (3) $\text{AgrSP}[\text{PRN} - \text{V}_f - \text{TP}[t]$
 $\text{AgrSP}[\text{EXP} - \text{V}_f - \text{TP}[\text{DP}]$
 $\text{AgrSP}[\text{DP} - \text{V}_f - \text{TP}[t]$

¹There is a small number of instances where adverbials or personal pronouns intervene between a finite verb and its following subject. These have not been counted as intervening elements providing evidence of a 'late subject' construction, following the analysis of Haerberli (2000). Note that personal pronouns are arguably clitics in such constructions.

Haerberli argues that the decline of V2 in this latter clause type is the loss of the expletive subject (which parallels the loss of expletive subjects elsewhere). To this general view, based in the facts of Old English, we need to add an account of the decline of inversion after members of the *then* group in later Middle English; and some account of sentences in which the subject follows the finite verb, but does not do so directly, that is, of my 'late subject' type. Where nonfinite verb forms or other major elements intervene, it seems clear that there must be some mechanism for checking subject case in situ, so that the subject remains within VP (as suggested by van Kemenade 1997, following Hulk and van Kemenade 1993).² At all events it is clear that this type cannot simply be collapsed with either of the other types and that some separate account of it must be given. A similar analysis might also hold for unaccusatives, whose subject is commonly taken to occupy an underlying complement or object position. Thus we seem to have an initial set up which includes the distinctions of Table 2.

Introducer	verb	subject	
Member of <i>then</i> group	high (C)	–	inverted
	low (T, AgrS)	–	inverted or uninverted
Other element	low (T, AgrS)	above VP	uninverted
Other element	low (T, AgrS)	expletive, above VP	inverted
Any element	high or low	in VP	late subject

Table 2: Abstract positions corresponding to major word order types.

This grammatical set up raises an important question for analysis: How should the data be grouped for interpretation? What is the most pertinent set of comparisons here? It seems that 'late subject' clauses have properties distinct from the other clause types, in both syntax (the subject remains in VP) and in terms of information structuring. This implies that one relevant comparison will be that between late subject clauses on the one hand and uninverted and inverted clauses taken together on the other. Then in comparing inverted and uninverted clauses it seems appropriate to set aside the group of late subject clauses, since they do not clearly belong with either partner in this opposition. The difference between clauses introduced by the *then* group and by other elements also needs to be respected, and the data of these distinct clause types may also need to be separated for meaningful comparisons to be drawn.

4 Late subject clauses

Most of the late subject clauses contain a verbal group: ordinarily with a passive participle (as in 4a, 4b, 4c) or an unaccusative verb, that is a verb (typically of motion or change

²Unless there is some mechanism of extraposition or of verb-remnant raising, so that the subject is effectively 'extraposed' in resulting structure. But such alternative possibilities will not be discussed here.

of state: *come, go, die, fall*, etc.) whose surface subject is analysed at a more abstract level as a verbal object, as in (4d, 4e). But there are other possibilities too, as in (4f, 4g).

- (4) **late subject:** finite verbs with subordinate V or other complement material between verb and subject.
- Aftir hem were ysette hondslinges and stafslynges.
'Behind them were placed handslings and stick slings.'
(Vegetius De Re Militari 91.23)
 - And in this bataile was slayne Nemion, that was Cassibalanus brother, ...
'And in this battle, Nemion, who was Cassibalanus' brother was killed, ...'
(Brut 32.14)
 - And in that same tyme were sent onto him be the clergi of this lond the archbishop of 3ork and the bischop of London, ...
'And at the same time the Archbishop of York and the Bishop of London were sent to him by the clergy of this land, ...'
(Capgrave Chronicle 203.18)
 - Out of hevene schal come the kyng that lest evermore; ...
'Out of heaven shall come the king who lasts for evermore ...'
(Trevisa Polychronicon 299.8)
 - Than entered onto the castell on Jon Butler.
'Then one John Butler entered into the castle.'
(Capgrave Chronicle 239.43)
 - Than sent to the erl of Dorcet this message the erl Armenak: 'Now art thou so streyted ...'
'Then the Earl Armenak sent this message to the Earl of Dorset. "Now you are so beset ..." '
(Capgrave Chronicle 246.26)
 - As white ..., so whit makis mi sowle the sorw of on hour e the sith of God.
'The sorrow of an hour in the sight of God makes my soul that white.'
(Hugo Legat's Sermon 20.64)

Comparison with the other clause types was restricted to the most numerous set of combinations showing late subject order, that is, to clauses containing BE with a passive participle, or a modal with an infinitive. This was because these combinations allow for a three-way contrast between inverted, uninverted and late subject types, as illustrated in (5), and do not pose problems of the neutralization of these contrasts. The results of this comparison are set out in Table 3.

- (5) a. And that mut God hymself do.
'And God himself may do that.'
(Wyclifite Sermons 123.86)
- b. And herfore Crist mut nedis be priour of al mankynde.
'And for this reason, Christ must necessarily be first of all mankind.'
(Wyclifite Sermons 126.16)
- c. For therof wole growe moch profite to the body.
'For from that will grow much profit to the body.'
(Secretum Secretorum 52.35)

	% inverted and uninverted order	% late subject order	coefficient
overall percent input	78	22	0.882
subject long (7+ wds)	44	56	0.096
subject medium (4-6 wds)	63	37	0.289
subject short (1-3 wds)	87	13	0.637
indef subject	67	33	0.288
def subject	86	14	0.657
unaccusative/passive	73	27	0.319
other verb	98	2	0.934
initial element			
subcategorised	59	41	0.177
not subcategorised	82	18	0.566
introducer long (4+ wds)	82	18	
introducer short (1-3 wds)	77	23	
then group	91	9	
other	76	24	
n	426	118	=544

Table 3: Auxiliary + infinitive/participle: incidence of 'late subject' construction versus other categories. In the table, factor groups which are not significant are emboldened.

The dependent variable here is whether or not the subject is 'late', occurring after the verbal group, or earlier in the clause. The table gives the percentage of instances for each factor which have the subject above VP (showing inverted or uninverted order) or within VP (showing late subject order), so that the figures for each line total to 100%. The coefficients are those estimated in Goldvarb. Comparison was restricted to full NP subjects, since the late subject is never a personal pronoun. Three things are immediately clear: firstly, that the late subject construction is overall considerably less common than the other orders at 22%. Secondly, the late subject construction is favoured with longer subjects, disfavoured with shorter subjects: where the subject is 7 or more words in length, it is late in 56% of instances; where it is one, two or three words long, it is late in

only 13% of cases. Thirdly, indefinite subjects show a similar result. The average of 22% late subject is compounded of 33% of instances with an indefinite subject, but only 14% of instances where the subject is definite, that is, where it has a definite determiner, or demonstrative, or is a proper name. The two factors of length in words and indefiniteness have been chosen for their practicality. Arnold, Wasow, Losongco, and Ginstrom (2000) argue that informational structure and complexity both function as independent factors having an impact on constituent ordering in Present-Day English, but note that any comparison is 'complicated by the high correlation between them' (Arnold et al. 2000: 34). Here advantage will be taken of this correlation, by using one measure of complexity to stand for the wider set of considerations; see also Wasow (1997) for some discussion of measures of the length and complexity of phrases. The regression coefficients of length and indefiniteness have substantial ranges. As just discussed, these factors clearly reflect the informational functions of late placement, which can often involve the introduction of an entity into the discourse (and be presentational in function), e.g. the position of sling throwers in a line of battle (4a) or the introduction of one John Butler (4e). There are also instances which instead re-present an individual, and for which Birner's characterization in terms of moving from the more familiar to the less familiar seems appropriate; so, (4f) re-presents an individual (*the erl Armenak*) found in the earlier context.

A passive participle, or an unaccusative infinitive after the modal, also favours the late subject, with 27% rather than the overall 22% of instances. Correspondingly, other instances of modal plus infinitive disfavour the late subject, with 2% rather than 22%. In this case, there is also a wide range between the regression coefficients. The contrast is not unexpected from a grammatical point of view, given that passives and unaccusatives have been so commonly analysed with the subject in an underlying postverbal position.

The next three contrasts involve properties of the initial element. When this element is subcategorised for, that is, when it has clearly moved, then the late subject construction is favoured, occurring in 41% of instances rather than the overall 22%. The length of this initial element is, however, not a significant factor: a traditional claim has been that a long introducer is inimical to inversion (Bækken 1998: 414-5); but this is not shown for late subjects. More striking however, is the irrelevance of introduction by the *then* group. This inversion context has special properties in Old English, as noted above, and these clearly continue into Middle English. The clearest members of this group in my Middle English database are *now*, *then*, *thus*. When one of these words is initial, then inversion of a noun phrase subject across a modal or an auxiliary is more frequent. But you can see that there is no effect for late placement of the subject: if anything it is dispreferred, but it is far from significance. So members of this group are not distinguished from other introductory contexts in their effect on late placement of the subject. This is also a result which accords with syntactic analyses of the status of the *then* group. Their special property in promoting inversion depends on the fact that they attract the finite verb to

a high position. But this fact is irrelevant to the late placement of the subject.

5 Inverted and uninverted clauses

Now we will turn to the distinction between inverted and uninverted types, where nothing intervenes between verb and subject in the inverted cases. These will be considered in opposition to each other, omitting instances of the late subject construction, in accordance with the discussion above.

They need, however, to be subdivided into two groups. First we have examples like (6) where either the inverted subject or the verb is final. Here some examples introduce new information, as in (6b), which means roughly: 'there are three things that preserve purity...'; for others, Birner's characterization of moving from more given to less given seems appropriate, as in (6d). We might reasonably suppose (given the possible importance of final position for new, or less given, information) that these might differ in their properties from clauses of the second type, illustrated in (7), where a complement or other closely integrated constituent follows the subject and verb. For convenience, this second type where inversion either takes place or fails within the clause will be called an 'internal context' for inversion. The first type, where inverted instances are subject final, and uninverted instances are verb final, so that inversion either takes place or fails clause finally, will be referred to as a 'final context' for inversion. The contrast is restricted to instances which contain a finite full verb, omitting examples with a modal or auxiliaries plus nonfinite, since they do not occur in the type with subject final.

- (6) final context: finite verb+subject / subject+finite verb without following complement or adverbial.
 - a. Clennes of hert, thre thynges kepes.
'Three things preserve purity of heart.'
(Rolle, The Form of Living. p25)
 - b. Alswa, clennes of mouth kepes thre thynges.
'Three things preserve purity of mouth.'
(Rolle, The Form of Living. p25)
 - c. At the byriyng was the bischop of Chestir, the abbot of Seynt Albones, ...
'At the funeral were the bishop of Chester, the Abbot of S. Albans, ...'
(Capgrave 217.13)
 - d. & than went kyng dauid & enquirid...
'And then King David went and asked ...'
(Lavenham 4.39)
 - e. The Tewesday tofore the Ascencioun his deeth neighede,

- 'The Tuesday before Ascension day his death drew near,'
(Trevisa 225.10)
- f. Thanne olde wyfes mette,
'Then old women gathered,'
(Trevisa 91.6)
- g. And soo sche dyd.
'And so she did.'
(Mirk 38.17)
- h. And so did I.
'And so did I.'
(Revelation 55)
- (7) internal context: finite verb+subject / subject+finite verb precedes closely related NP/PP/VP/AvP.
- a. And so Gilbert gate Thomas of this woman.
'And so Gilbert begot Thomas by this woman.'
(Mirk 38.21)
- b. & thus gat kyng acab the vine3ard.
'And thus King Achab obtained the vineyard.'
(Lavenham 9.37)
- c. And now y shal telle 3ow of the noble Erl ...
'And now I shal tell you about the noble earl ...'
(Brut 221.8)
- d. Now shal 3e haue the reward that...
'Now you shall have the reward that ...'
(Brut 221.11)

One immediate difference is that with the verb BE inversion is categorical with NPs when it makes the subject final. So I have omitted examples with BE from the results for the 'final' context; also examples with 'say' and 'speak', which are likewise categorical for inversion with nominal subjects. But restoring these two contexts gives me very much the same results.

The comparison of these two types shows some interesting differences. The results of two separate Goldvarb runs are given in Table 4. Here the dependent variable is whether the subject and verb are inverted or uninverted, and the percentages give the amount of inversion for each factor. Immediately striking is the huge disparity in inversion rates between the two contexts: 24% versus 85%.

	'internal' V-S-X or S-V-X		'final' V-S-# or S-V-#	
	% inversion	coefficient	% inversion	coefficient
overall percent	24		85	0.927
input		0.213		
unaccusative	32	0.658	88	
intransitive	34	0.572	80	
transitive	15	0.358	79	
initial element				
not subcategorised	39	0.758	91	0.837
subject long (4+ wds)	23	0.478	79	0.209
subject short (1-3 wds)	10	0.277	97	0.778
then group	28	0.560	75	0.280
other	34	0.648	78	
indef subject	20	0.437	86	
def subject	24		83	
introducer long (4+ wds)	24		86	
introducer short (1-3 wds)	22		89	
n =	24		84	
	437		156	

Table 4: Inversion of full NP subject in two contexts: (1) 'internal': verb plus complement. (2) 'final': subject is final when inverted or immediately before final verb when not inverted (omitting BE, SAIE and SPEKE). In the heading to this table, S = subject and V = finite verb. In the table, factor groups which are not significant are emboldened.

There is also a difference in the role of the length of the subject, which reverses between the two contexts. In internal contexts, a longer subject tends not to be inverted. In final contexts, it does tend to be. The range in the final type is large, so that this is the strongest effect. In this respect inversion in final contexts parallels the 'late subject' construction, and one might suppose that some of the information structuring considerations that we assumed were relevant there are also relevant here. It is not quite the same though. There is no sign that indefinite subjects are more likely to occur in this final position. In fact the definite - indefinite contrast is simply irrelevant to the occurrence of inversion in both the contexts of Table 4. There is a relatively high proportion of proper names among the definites here, and this may suggest that this inversion tends to reintroduce a previously evoked referent rather than having a full presentative function.

There are two other factors besides length of subject whose impact on inversion differs between internal and final contexts, as you can see from Table 4. In an 'internal' context an introductory member of the *then* group promotes inversion. This is the historically stable situation inherited from Old English. But in a 'final' context the impact of the *then* group is absent: the effect is seriously nonsignificant throughout the derivation, and in this respect inversion with a final subject is behaving like the late subject construction. There is also a difference concerning verb type. In internal contexts, transitives which have a following object clearly avoid inversion, whereas in final contexts there seems to be no important effect of verb type. Here, however, the late subject construction is distinct, since here it is the presence of an unaccusative verb (or passive participle) which promotes the late subject. Finally, there is one factor which promotes both internal and final inversion and also promotes the late subject type, and that is the presence of an initial element which is subcategorized. This is a group of topics for which we can be confident that there is movement.

So we have distributional differences between inversion in internal and final contexts, some of which may reflect differences of use and function between these types of inversion, and there are also some interesting parallels between inversion in final contexts and the occurrence of the late subject construction.

6 Distribution of nominal and pronominal subjects

These distributional differences between internal and final contexts also show up in a contrast in distribution between full NPs and personal pronouns in subject position. See the figures in Table 5.³ Full NPs and pronoun subjects show a parallel distribution where

³These figures include instances introduced by members of the *then* group, although they show a different relationship between nominal and pronominal subjects from that found with other introducers, because the patterning of the distribution is essentially similar with respect to the point being made here. If members of the *then* group are omitted, the point holds with similar figures.

the central internal contexts are concerned: that is, those involving modals, auxiliaries (*be* and *have*), and verbs with a following complement (including *be* but not unaccusatives in general). A controlling factor is the class of the finite verb, and the relevant contexts march together, showing the same ranking for NP and pronoun subjects. So the ordering modal > auxiliary > verb is found for both nominals and pronominals, and the ordering nominal > pronominal is found for each type of verbal. The table is orderly.

Construction	NP % inv	PRN % inv
Modal-subject-infinitive	51	43
Subject-modal-infinitive		
Auxiliary-subject-participle	40	27
Subject-auxiliary-participle		
Verb-subject-complement	24	17
Subject-verb-complement		
n=2603.	845	1758

Table 5: Percentage of inversion with subject NP and subject personal pronouns following the finite verb directly.

But with unaccusative verbs or where the syntactic connection between the verb and the material which follows it is less close, the distribution of full NPs and pronouns diverges, and the table is disorderly. See Table 6. This is most dramatic in the case where there is no following material and the subject is final (SV-VS #); this has 90% inversion with nominal subject, beside 5% with a pronoun subject; see the first and last lines of the table. But large contrasts are seen in a series of intermediate cases. To show the contrast with the contexts of Table 5 more clearly, Table 6 includes the information of Table 5, which is emboldened to make it readily identifiable. It can readily be seen that the other contexts all show a more substantial divergence between nominal and pronominal inversion.

The contexts under consideration here are in some ways like the initial case with no following material. Reported direct speech can be intonationally detached from what precedes it, as can subordinate clauses; and the category SV-VS + adverbial includes adverbials which are not complements as in (8a)-(8b). This may reflect the differential value of a less fully integrated or near final position for the later placement of the subject, for reasons of weight or the distribution of information (remember the contrasts of Table 4). Unaccusatives, as in (8c), (8d), and (8e) may have a relevant special syntactic property (as noted above), but pragmatic properties may also be involved, given the typical availability of verbs of existence and appearance for a function of presentation (as analysed by Firbas 1992: 86f, 57ff). One factor that might be thought to play a role here is a retention of the historical contrast between weak pronouns which occupy a restricted range of positions and full NPs. This contrast is familiar from Old English, and

it clearly continued into late Middle English; it is presumably implicated in the distributional differences between pronouns and NPs shown in Table 5. But it was diminishing in importance, and it cannot have borne prime responsibility for the substantial differences shown in Table 6.

(8) finite verb+subject / subject+finite verb precedes adverbial

- a. And this affermes the angel with athe.
'And this the angel affirms with an oath.'
(Arundel 25)
- b. And her of spekith Daud in the sawter bok.
'And about this David speaks in the Psalter book.'
(Lavenham 3.28)
- c. Bi enuye of the deuyl come deeth into this world.
'Through the devil's envy death came into the world.'
(Vices and Vertues 14)
- d. Aboute the fest of Pentecost the kyng went into Yrland.
'Near the feast of Pentecost, the king went into Ireland.'
(Capgrave 211.21)
- e. So cam thei to Bristow.
'So they came to Bristol.'
(Capgrave 212.24)

So on numerical grounds we can clearly distinguish the importance of final position in conditioning the occurrence of inversions in Middle English. In terms of their quantitative behaviour we have three broad classes of 'inversion': the late subject type of (4); the central internal type of Table 5; and the intermediate types which are the first four listed in Table 6.

7 Rates of change

Another perspective on this data is provided by rates of change in the different contexts isolated in this paper where these have a nominal subject. These have been measured in the logistic regression programme DataDesk (Velleman 1995), since GoldVarb does not allow for a continuous variable such as time.

The late subject type with which this paper started, in which the subject follows a verbal group or verb + complements, is stable. The rate of change across the period is entirely nonsignificant, being very small and (as it happens) positive. Here (as in Table

Construction	NP % inv	PRN % inv	
SV-VS #	90		
SV-VS + direct speech	70		
SV-VS + adverbial	64		
SV-VS + clause	60		
Unaccusative SV-VS + adverbial	51		
	43	43	
	40	27	
	24	21	SV-VS + direct speech
		21	unaccusative SV-VS
		19	+adverbial
		17	SV-VS +adverbial
		14	SV-VS + clause
		5	SV-VS-#
n=3488	1325	2163	

Table 6: Percentage of inversion with subject NP and subject personal pronoun following the finite verb directly. In this table, 'SV-VS' stands for 'subject + finite verb or finite verb + subject'. SV-VS + adverbial excludes unaccusative verbs.

3) the rate of the incidence of this type out of all clauses with relevant initial material was examined.

In contrast, the central internal contexts of Table 5 show a significant rate of loss across the period. So the late subject type and the internal context type are behaving quite differently across time: the first is stable, the second is declining fairly rapidly.

What about the intermediate, final context type? When the NP subject is potentially final (in SV-VS #), there is a nonsignificant, small rate of loss. So it seems that the presence of a surface position which has specific discourse functions is protecting the inverted construction from loss. If the analysis is extended to all the contexts in which NP differs in distribution from pronouns in Table 5, then there is a (significant) intermediate rate of loss overall. So we seem to have a situation in which the constructions with intermediate, overlapping properties are changing in a way which reflects this status.

This clearly shows English developing differentially as V2 is lost: inversion in internal contexts is declining rapidly, but constructions in which the subject is final or virtually so show much reduced rates of change. These, of course, include contexts such as those of (1a) which have survived into Present-Day English. This means that different contexts must be distinguished in any investigation of the decline of English V2, and the implication is that examining the central internal contexts of Table 5 will give us the clearest picture of the general construction, and of its decline.

8 Conclusions

Perhaps the most interesting conclusion here is the demonstration for a substantial late Middle English database of the systematic importance of final (or near final) position in Middle English sentences, both for levels of occurrence and for rates of change. It is clear that where some element that is not the subject introduces the clause, and the subject is nominal:

- A long subject increases the likelihood of the occurrence of a late subject construction, or of inversion in a final context.
- An indefinite subject increases the likelihood of the occurrence of a late subject construction.
- A short subject increases the likelihood of the occurrence of inversion in an internal context.

Beyond this:

- An unaccusative verb or passive participle increases the likelihood of the occurrence of a late subject construction.

- An introductory element which is subcategorised increases the likelihood of the choice of the late subject construction, or inversion in any context.
- An introductory member of the *then*-group increases the likelihood of inversion in an internal context.

Overall it is clear that considerations of weight (and presumably therefore of degree of informativeness) play a considerable role in the patterning of inversions, alongside considerations which are clearly syntactic. The intermediate position of contexts allowing final inversion is striking.

There is an important methodological corollary for investigations into the history of V2. It is important to make clear distinctions between different surface construction types in assessing the development of V2. Haeberli (2002b) undertook this when he set aside construction types which have survived into Present-Day English, giving examples like those cited in (1). But the different behaviour of internal and final inversion contexts implies that an account of the loss of V2 which attempts to deal fully with informational factors should at least distinguish the various contexts defined in this paper.

8.1 Appendix A

This appendix contains the references for the texts used in this study.

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