

Word order in Old English and
Middle English subordinate clauses

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Abbreviations

For the abbreviations used for the corpus texts, see section 1.2.1.

AdjP	adjective phrase
AdvP	adverb phrase
CD	communicative dynamism
D	dative
DOE	Dictionary of Old English corpus
eME	early Middle English
eModE	early Modern English
eOE	early Old English
fn	footnote
FSP	Functional Sentence Perspective
G	genitive
INF	infinitive
IV	information value
lME	late Middle English
lOE	late Old English
ME	Middle English
misc	category of miscellaneous clauses
NP	noun phrase
O	object
OE	Old English
OHG	Old High German
<i>p</i>	error probability
PDE	Present-day English
PL	plural
PP	prepositional phrase
S	subject
2SG	second person singular
<i>v</i>	finite verb in complex verb phrases
V	verb; finite verb; main verb in complex verb phrases
V1	verb first
V2	verb second
V3	verb third
VP	verb phrase
X	clause element other than subject and finite verb
χ^2	chi square

1 Introduction

1.1 Aim, scope and theoretical background

The study is concerned with surface word order in Old English (OE) and Middle English (ME) subordinate clauses. Word order in earlier English has received considerable attention in the scholarly literature, both from a quantitative and theoretical point of view, but the primary focus has been on main clauses. Subordinate clauses have only to some extent been investigated empirically, and not over a long time period on a variety of text sources. Thus, it is hoped that the thesis will contribute to filling a gap in the research on word order in OE and ME.

The existing literature concerned with OE subordinate clauses to a great extent concentrates on the alleged tendency for the finite verb to occupy final position in the clause. However, a pilot study conducted on a limited OE corpus (Heggelund 2007) indicates that word order patterns with the finite verb immediately following the subject, and complements following the verb, henceforth called SV order, are as common as verb-final order in such clauses. Present-day English (PDE) is an SV language in which the subject is identified by its position immediately in front of the finite verb, whereas OE may be described as a language with a V2 tendency in main clauses and a mix between SV and verb-final order in subordinate clauses.

The present investigation aims to follow up the pilot project by studying subordinate clause word order synchronically and diachronically based on a comprehensive corpus, focusing on both syntactic and pragmatic aspects. The former entails the distribution of word order patterns and the weight distribution of elements in those patterns. The pragmatic aspect, on the other hand, is concerned with how information is structured in the clause. Previous studies have indicated that the informational load of elements influences word order in OE and ME, and one of the aims of this study is to find out whether information structure is an independent determining factor.

Diachronically, the thesis investigates to what extent the various word order patterns change their syntactic and pragmatic properties over time. Moreover, the

possible role of subordinate clauses in the shift to SV order is assessed, with reference to previous controversy in the literature. It should be noted that although subordinate clauses are the main object of investigation, the corpus also includes main clauses, which on occasion are compared with the subordinate clauses both synchronically and diachronically.

According to Warner (1982:8), ‘any account of the grammar of a dead language must necessarily present and discuss the surface syntax and only rather cautiously attempt more abstract analyses’. The present approach is partly descriptive and partly more theoretically inclined. The syntactic analysis is first and foremost descriptive in the sense that it is concerned with surface word orders, whereas the analysis of information value is by nature more theoretical and evaluative. That, too, however, takes surface word order as its starting point. In other words, I do not adhere to transformational generative theories, but rather see myself as a proponent of a data-oriented approach to word order, in combination with a functional understanding of the mechanisms at work.

The reason I choose to make such an explicit disclaimer is that a great deal of the work concerned with earlier English word order is written within a generative framework, and that consequently many of the references throughout this thesis are to scholars belonging to various generative traditions. An attempt has been made throughout to link those theories to my own data where a comparison is feasible and can be achieved without talking at cross purposes. There is little doubt that scholars from different frameworks which may at times seem incompatible, will benefit from lending an ear and an eye to each other, but only if it is done with great caution and without too much terminological mix-up which may serve to confuse rather than clarify.

The methodological approach chosen in this thesis owes a great deal to the work of Bech (2001), especially with respect to the method of analysis of information value.

The major research questions to be answered may be summed up as follows:

- How are word order patterns distributed in OE and ME subordinate clauses?
- How much variation is there between contemporaneous texts?

- To what extent can the weight and information value of elements explain the observed word orders?
- To what extent does the distribution of weight and information value change over time in the various patterns?
- Is it possible that subordinate clauses may have been involved in the change to SV order?
- How does word order change over time, and does it develop differently in subordinate and main clauses?

This work is an attempt to answer these questions based on the findings in the OE and ME corpus, described below.

1.2 The corpus

A total of 9,600 clauses form the basis of the present investigation, and the data are drawn from a total of 14 texts from early Old English (eOE), late Old English (IOE), early Middle English (eME) and late Middle English (IME). An equal number of subordinate and main clauses have been excerpted from each text, although it must be emphasised that subordinate clauses are the primary object of study, while main clauses serve as a point of comparison in certain sections. The texts have primarily been extracted from electronic sources, first and foremost the *Dictionary of Old English corpus* (DOE) as made available by the Oxford Text Archive, and the *Helsinki Corpus*. Some texts, however, have been scanned from the text edition, while one had to be transcribed manually. The corpus comprises 1,200 subordinate clauses from each of the four periods, equally divided among religious and non-religious prose. Only declarative clauses with an overt subject have been included, and the 1,200 clauses from each period do not include those that were initially sampled but later discarded for various reasons (cf section 3.2). The individual texts of each period are described in some detail below.

The sampling technique can best be described as random. Clauses were excerpted consecutively from the available text sources until the desired number from each text

had been reached. As will be seen below, the sampling does not always start from the first possible page of a text, for various reasons. In some cases, I wanted to avoid stretches of text already analysed by others, while the texts made available in the *Helsinki Corpus* are rarely complete but rather consist of samples.

1.2.1 Early Old English

Early Old English is here defined as the period from 800–950 A.D., and the two eOE texts used in this investigation are both from around 900.

The Old English Orosius (Or)

Edition: Bately (1980). Reference is to page and line in the ed.

Mss: Ms L, British Library, Additional 47967 (=Lauderdale), dated to the first quarter of the tenth century (Ker 1957:164). The language is post-Alfredian WS (Bately 1980:xxxix). Ms C, British Library, Cotton Tiberius B.i, dated to the second part of the 11th century (Ker 1957:251). Most of the vernacular accounts of Ohthere and Wulfstan's journeys are included in ms C.¹ The manuscript is only used for 15,1–28,11 in the Bately ed, and only for 15,1–21,22 in this investigation. The language is mostly standard IWS (Bately 1980:xlix).

Composition: The text is based on the 5th century text *Historiarum adversum Paganus Libri septem* by the Spanish priest Paulus Orosius. It is assumed that the whole work was translated from Latin into Anglo-Saxon during the reign of King Alfred (871–899). The translation was formerly attributed to Alfred himself (eg Brown 1970), but this view has now been abandoned (Bately 1980:lxixiii).

Passages: 8,5–21,22, 35,28–46,5 and 56,20–63,17. 483 subordinate and 440 main clauses are excerpted from ms L, and 117 subordinate and 160 main clauses from ms C. The passages were extracted from the *Dictionary of Old English corpus*.

Text type: Non-religious (history).

Translation: Bosworth (1858).

¹ The translated and non-translated parts of the *Orosius* are compared in Table 4.7 in section 4.2.2.

Alfred's *Cura Pastoralis* (CP)

- Edition: Sweet (1871). Reference is to page and line in the ed.
- Ms: Ms Oxford, Bodleian, Hatton 20, dated to the very end of the 9th century (Ker 1957:384). The language is WS (Sweet 1871:v). A second manuscript (British Museum, Cotton Tiberius B. xi) is also reproduced in Sweet's edition, but not used here.
- Composition: The text is believed to have been translated from Latin by king Alfred himself, and the method of translation is accounted for in his well-known preface (Sweet 1871:3ff). The *Cura Pastoralis* is claimed to be more faithful to its source text than many other works of the Alfredian period, but nevertheless shows little trace of the Latin original because it is the sense that is translated rather than the literal, word by word meaning (Sweet 1871:xli; Haugland 2007:12).
- Passage: 600 subordinate and 600 main clauses from pp 23,9–83,21. Source: DOE.
- Text type: Religious (religious treatise).
- Translation: Sweet (1871).

1.2.2 Late Old English

The late Old English period extends from 950 to 1100 A.D. Four texts have been included from this period.

***Ælfric's Catholic Homilies, Second Series* (ÆCHom II)**

- Edition: Godden (1979). Reference is to homily no. and line in the ed.
- Ms: *Ælfric's Catholic Homilies* exist in various mss; the Godden edition is based on ms K, Cambridge University Library Gg 3.28, dated to c1000 (Ker 1957:13). The language is IWS.
- Composition: These homilies were translated c995 (Godden 1979:xciii). If *Ælfric's* own preface to the Second Series of the homilies is to be used as evidence, he was more conscious of a 'simple' and brief style than the average homily writer (Hurt 1972:121). On the other hand, this 'simplicity' may only have been superficial, and *Ælfric* has been praised as an accomplished writer who made conscious use of various stylistic devices (Hurt 1972:122).

Passages: Homilies II, VII and X. 300 subordinate and 300 main clauses. Source: DOE.

Text type: Religious (homilies).

Translation: Thorpe (1846).

The Blickling Homilies (BIHom)

Edition: Morris (1874–1880). Reference is to homily no. and line in the ed.

Ms: Ms William H. Scheide, Titusville, USA, dated to the late 10th century (Ker 1957:451). Although the manuscript is preserved at Blickling Hall in Norfolk, it does not necessarily originate from that area, and the dialect has not been established with certainty. Menner (1949:56) describes it as ‘chiefly Late West Saxon, with considerable traces of Anglian spellings’.

Composition: The translator of BIHom from Latin is not known, and there is some uncertainty connected to the date of composition as well. Traditionally, the homilies are dated to the second half of the 10th century (Morris 1874–1880:v; Ward and Waller 1907:20), but they may have been composed earlier (Menner 1949:63). The vocabulary is more archaic than in eg Ælfric’s writings (Morris 1874–1880:vi).

Passages: Homilies III and IV. 300 subordinate and 300 main clauses. Source: DOE.

Text type: Religious (homilies).

Translation: Morris (1874–1880).

The Old English Apollonius of Tyre (ApT)

Edition: Goolden (1958). Reference is to page and line in the ed.

Ms: Ms Corpus Christi College 201, dated to the early or middle parts of the 11th century (Ker 1957:82). The language is IWS (Goolden 1958:xxvii).

Composition: The ApT may be considered the first English novel, translated from Latin by an unknown writer. It was probably written c1000 (Goolden 1958:xxxiv).

Passage: First 300 subordinate and 300 main clauses, constituting almost the complete text. Source: DOE.

Text type: Non-religious (fiction).

Translation: Thorpe (1834).

The C-text of the *Anglo-Saxon Chronicle* (ChronC)

Edition: Rositzke (1940). Reference is to page and line in the ed.

Ms: Ms Cotton Tiberius B.i, dated to the second part of the 11th century (Ker 1957:251). The manuscript is generally written in late West Saxon, but contains some early WS and Kentish elements (O'Keeffe 2001:xcii ff).

Composition: Several different hands appear in the ms, all from around the middle of the 11th century, and the annals for 1049–1066 were probably written contemporaneously with the events described (Rositzke 1940:1).

Passages: 300 subordinate and 300 main clauses were excerpted from the annals for the years 1001–1016 and 1049–1066. Most of the annals between 1016 and 1049 are short and repetitious and contain few subordinate clauses. Source: DOE.

Text type: Non-religious (history).

Translation: <http://omacl.org/Anglo/>

1.2.3 Early Middle English

According to Sweet (1892:211), late OE ended c1100, and early ME started c1200. The intermittent period is labelled “Transitional Old English”. Sweet is supported by Kitson (1997:250), who dismisses the frequent assumption that eME started around or a little after 1100 (eg Hogg 1992:9). Kitson bases his argument primarily on the levelling of inflections or lack thereof.

Most would agree that it is impossible to pinpoint a specific time for when one language period ends and another begins. Rather, language periods are artificial constructs whose definition to a large extent depends on what aspects of language one focuses on. The dividing line has been set to 1100 in the present investigation, but that is more down to custom than anything else. Moreover, early ME is so called more due to convention than because it necessarily represents a new language compared to OE, and a more appropriate name would perhaps be ‘transition period’, as suggested by

Sweet. Indeed, the earliest of the eME texts, *Kentish Homilies*, does not at first sight strike the reader as markedly different from IOE documents.

The eME data are drawn from the following six texts,² three of which are religious and three non-religious:

The Peterborough Chronicle Continuations (PC)

Editions: Earle and Plummer (1892–99) and Clark (1958). Reference is to year and line in the eds.

Ms: Both editions used are based on Ms E, Laud Misc. 636, Bodleian Library, Oxford, dated to the middle of the 12th century (Ker 1957:424). The language is East Midlands (Clark 1958:xxx).

Composition: The First and Final Continuations of the PC cover the period 1122–1154. According to Clark (1958:xxx), these annals were composed at Peterborough. Thus, the Continuations are written in a different dialect than the entries up to 1121 in ms E, which are described by Clark (1958:xxxix) as ‘Standard West Saxon’.

Passage: First 225 subordinate and 225 main clauses. Clauses from the First Continuation (1122–1131) were excerpted from the DOE, while the *Helsinki Corpus* is the source for the Final Continuation (1132–1154).

Text type: Non-religious (history).

Translation: <http://omacl.org/Anglo/>

Kentish Homilies (Kentish)

Edition: Warner (1917). Reference is to page and line in the ed.

Ms: Ms Cotton Vespasian D xiv, British Library, London, dated to the mid-12th century (Ker 1957:251). The sermons included here are from the Kentish dialect area.

Composition: The majority of the homilies in the ms are copies of ÆCHom, but the three included in the present corpus are translations from Latin, composed in the early 12th century. Sermon XLIII, *Sermo in Festis Sancte Marie Virginis*, is sometimes considered ‘the earliest ME document’ (Clark 1958:xl).

² Problems connected with text selection in eME are discussed in section 3.2.1.

Passages: Sermons XLIII, XLV and XLVI. 200 subordinate and 200 main clauses were manually transcribed since no electronic version exists.

Text type: Religious (homilies).

Translation: None available.

Katherine and Margaret

Edition: D'Ardenne (1977). Reference is to page and line in the ed.

Ms: Ms Bodley 34, Bodleian Library, Oxford, dated to the early 13th century. The language is West Midlands (Savage and Watson 1991:7).

Composition: The vernacular *Katherine* and *Margaret* texts, belonging to the so-called 'Katherine group', were composed a little after 1200 (Savage and Watson 1991:8). Although these texts are classified as biographies in the *Helsinki Corpus*, it is worth noting that religious elements are strongly present in both.

Passages: Clauses were excerpted from pp 17–40 (*Katherine*), 62–73 and 81–90 (*Margaret*), corresponding to the extracts provided by the *Helsinki Corpus*. 175 subordinate and 175 main clauses from *Katherine*, 200 subordinate and 200 main clauses from *Margaret*.

Text type: Non-religious (biography, lives).

Translation: Savage and Watson (1991).

Vices and Virtues (VV)

Edition: Holthausen (1888–1921). Reference is to page and line in the ed.

Ms: Ms Stowe 240, British Library, London, dated to the early 13th century. It is written in the East Midlands dialect (Laing 1993:106).

Composition: The text was probably translated from Latin c1200 (Holthausen 1888–1921).

Passage: 200 subordinate and 200 main clauses were excerpted from pp 17–35. Source: *Corpus of Middle English*.

Text type: Religious (religious treatise).

Translation: Holthausen (1888–1921).

***Ancrene Wisse* (AW)**

- Edition: Tolkien (1962). Reference is to page and line in the ed.
- Ms: Ms Corpus Christi College, Cambridge 402, dated to c1225 (Tolkien 1962:xv). The language is West Midlands (Savage and Watson 1991:7).
- Composition: The *Ancrene Wisse*, or rule for anchoresses, is a ‘deliberately anonymous work’ (Dobson 1976:1). It was written in the early 13th century, and later translated into both Latin and French.
- Passages: 200 subordinate and 200 main clauses were excerpted from pp 29–35, 43–48 and 86–90, corresponding to the extracts provided by the *Helsinki Corpus*.
- Text type: Religious (religious treatise).
- Translation: Savage and Watson (1991).

1.2.4 Late Middle English

The (obviously arbitrary) dividing line between eME and lME has been set to 1300, and the two texts used here are both from the 15th century.

***Mandeville’s Travels* (Mandeville)**

- Edition: Hamelius (1919). Reference is to page and line in the ed.
- Ms: Ms Cotton Titus C xvi, British Library, London, dated to 1410–1420 (Hamelius 1923:19). It is written in the East Midlands dialect, according to the text file in the *Helsinki Corpus*.
- Composition: This fictitious travelogue exists in two independent English translations, one from Latin, the other from French. The Cotton manuscript is based on the translation from French, but it is not certain exactly when this translation was performed. Hamelius (1923:14) suggests the year 1366.
- Passage: 600 subordinate and 600 main clauses were partly manually transcribed, partly scanned, from pp 21–59.

Text type: Non-religious (travelogue).

Translation: None available.

Middle English Sermons (MES)

Edition: Ross (1940). Reference is to page and line in the ed.

Ms: Ms Royal 18 B. xxiii, British Museum, London, dated to the mid 15th century (Ross 1940:xl). The language is from Oxford (East Midlands), but includes some northern features (Ross 1940:xxxii).

Composition: The sermons were composed c1400 (Ross 1940:xxxviii).

Passages: Sermons 1–8. 600 subordinate and 600 main clauses were scanned from the text edition.

Text type: Religious (sermons).

Translation: None available.

1.3 Organisation

The thesis is organised as follows: chapter 2 presents the previous research regarded as most pertinent to the subject matter. I have attempted to keep the focus firmly on subordinate clauses, although reference is of course made to the voluminous literature on main clauses in both OE and ME. In chapter 3, each word order pattern is defined and exemplified, and the method of analysis is accounted for. Special attention is devoted to the concept of information value. The largest chapter is number 4, in which the word order distribution is presented. Central topics are intertextual variation, the frequency of OV and VO order, as well as the distribution of elements according to weight. Information value is treated in chapter 5, with special emphasis on the changing pragmatic properties of the major word order patterns, and the degree of independent influence of information structuring principles. Finally, chapter 6 sums up the most important findings.

2 Previous research

2.1 Introduction

There is an abundance of literature on word order in Old and Middle English, and it is of course not possible to cover every study pertaining to the subject matter here. The much-debated V2 constraint in Old and Middle English main clauses will only be treated relatively briefly, since V2 is not typically associated with subordinate clauses, our main object of research. Word order in Old English is treated in section 2.2, while the development from OE to ME is outlined in section 2.3, with special emphasis on the role of subordinate clauses in the change to SV order.

Previous studies of the pragmatics of word order, both generally and concerning OE and ME, have been described fairly elaborately in section 2.4. Special attention is given to the theories that serve as points of departure for the method outlined in chapter 3.

2.2 Word order in Old English

Many early works on Old English word order tend to advocate the idea that it was relatively free (Sweet 1898; Dahlstedt 1901; Fries 1940; Quirk and Wrenn 1957). After Greenberg's (1963) pioneering article on universals of grammar, however, more attention was given to the regularities in the language. Greenberg presents a number of universals with the main aim of classifying languages according to the relative order of subject (S), verb (V) and object (O) in declarative main clauses. The universals, which are based on samples of 30 different languages, are mostly implicational with the form 'given x in a particular language, we always find y' (1963:58). Greenberg's first universal is:

Universal 1: In declarative sentences with nominal subject and object, the dominant order is almost always one in which the subject precedes the object. (1963:61)

This universal implies that there are three dominant orders, SVO, SOV and VSO, and Greenberg's claim is that although most languages may have several different orders,

they usually have one of these three as their dominant one (1963:61). It should be noted that Greenberg is very cautious, emphasising that his universals ‘are to be viewed as no more than suggestive’ (1963:82).¹ Greenberg’s work led to an upsurge in typological studies, and it has become customary to classify languages according to the dominant order of the major constituents in declarative main clauses.

The most controversial and debated issue of Old English word order is precisely the typological status of the language. Despite the plethora of literature on the subject, no consensus has been reached as to whether or to what extent Old English main clauses can be classified as V2. Much depends on what the defining characteristics of a V2 language should be, which varies according to theoretical framework. Moreover, the inclusion or exclusion of syntactic clitics in one’s analysis is crucial for the status of OE: application of a clitic analysis (cf section 3.2.6) helps account for many of the potential counterexamples to V2 order. Nonetheless, independent of theory there appears to be general agreement that OE is not a consistent V2 language like Modern German, Dutch or Norwegian, but rather a language with a strong V2 constraint.² Inversion is near-obligatory after certain initial elements, such as *þa*, *þonne* and *ne*, but the relatively high proportion of clauses with the XSV order typical of SV languages (cf section 2.4.3.3) is an important reason why OE is not usually considered a ‘true’ V2 language. Moreover, clauses with SXV and SXVX order also occur with some frequency. Some transformational generative accounts analyse OE as a language with base generated SXV order in all clauses, and verb seconding in main clauses (eg Koopman 1985; van Kemenade 1987).

¹ Others have been less careful: Watkins (1976:306) claims that Greenberg’s universal tendencies have been elevated ‘to the dubious status of an intellectual strait-jacket, into which the facts of various Indo-European languages must be fitted, willy-nilly, rightly or wrongly’.

² Among the proponents of this view are Vennemann (1974, 1984), Stockwell (1977, 1984), Kohonen (1978), Gerritsen (1984), van Kemenade (1987), Breivik (1990), Lightfoot (1991), Stockwell and Minkova (1991), Fischer (1992), Kiparsky (1995), Pintzuk (1995, 1999) and Bech (2001). For more details on the V2 constraint and the development of main clause word order in both Old and Middle English, the reader is referred to the primary sources given here, as well as a number of studies providing useful overviews; see eg Denison (1993), Haukenes (1998), Bækken (1998), Davis and Bernhardt (2002), Trips (2002), Clark (2004), Fischer and van der Wurff (2006), Haugland (2007).

It has been noted by a number of scholars that the syntax of Old English conjunct clauses³ differs from that of other main clauses. Mitchell points to the ‘tendency of *ond* and *ac* to send a verb to the end of the clause’ (1964:118), while Kohonen finds that the conjunctions *and/ac* tended to ‘cause a dependent clause word order (SXV), i.e., they shared properties of subordinating conjunctions’ (1978:154). Bech (2001:89ff) questions the established ‘truth’ about conjunct clauses, and finds that in her data, conjunct clauses do not strongly favour SXV order.⁴ However, the converse is the case: SXV clauses are typically conjunct clauses. It is this latter state of affairs, Bech argues, which may have led to the belief that conjunct clauses are typically verb-final. All in all, it seems fair to say that conjunct clause word order needs to be further investigated. The present investigation is primarily concerned with subordinate clause word order, and a distinction between conjunct clauses and other main clauses has consequently not been made.

The literature on Old English word order contains numerous references to OE subordinate clause word order, most of which point to a strong tendency for subordinate clauses to display verb-final order, ie final position for the finite verb.⁵ However, the variation between verb-final and other orders, especially SV, is frequently commented on as well (eg Allen 1980:50, as well as the empirical studies mentioned below). It is nevertheless the verb-final tendency rather than the variation which generally receives most attention.⁶ This tendency is usually seen as a remnant of the reconstructed distant ancestor of Old English, Proto-Indo-European, which was an XV language (Vennemann 1974:350f).

³ The term *conjunct clause* is taken to refer to clauses introduced by the coordinating conjunctions *and*, *but*, *or* and *for* which have an overt subject. Some scholars, eg Bean (1983), use the term *conjunct clause* about coordinated clauses without an overt subject.

⁴ The same conclusion was reached in Heggelund (2002:44) on the basis of data from *Orosius* and *Mandeville’s Travels*.

⁵ See eg Smith (1893), Sweet (1898), Quirk and Wrenn (1957), Mitchell (1964, 1985), Vennemann (1974, 1984), Lightfoot (1991, 2006), Traugott (1992), Fischer and Van der Wurff (2006). Other students of OE subordinate clauses include Andrew (1940), Fries (1940), Magers (1943), Bacquet (1962), Strang (1970) and Brown (1970).

⁶ According to the standard account in generative grammar, OE subordinate clauses have not only a verb-final tendency but are uniformly verb-final, and elements occurring to the right of the verb are explained on the basis of three right-movement rules: extraposition, heavy NP shift and right dislocation (van Kemenade 1987:39f).

Despite all the claims made in the literature about subordinate clause order, large-scale empirical studies are few and far between. One is carried out by Gorrell (1895), who followed up the work of Smith (1893) with a comprehensive study of subordinate clauses in a number of OE texts. His investigation is interesting due to its size and methodological thoroughness, but has certain limitations as a reference point for the present study. Gorrell looks at word order in a limited set of subordinate clauses, so-called ‘indirect discourse’, ie clauses after verbs of saying, knowing, believing etc. These chiefly include nominal *that*- or interrogative clauses (1895:2).⁷ He operates with a number of word order categories adopted from Smith, but distinguishes principally between ‘normal order’, ie subject–verb–complement, and ‘transposed order’, ie clauses with the finite verb in final position. In more than 5,000 clauses from early to late OE, Gorrell finds that transposed order is slightly predominant in the earlier texts, but that normal order increases gradually and is in the ascendancy by the early 11th century. The findings should be interpreted with some caution since not all subordinate clauses are considered, and also because Gorrell’s word order categories do not appear to encompass SXVX clauses⁸ with a postverbal object, or SvXV clauses with a non-object X element between the finite and non-finite verb. Moreover, some of the categories explicitly contain objects, whereas the biggest group of verb-final clauses have an unspecified element before the verb. As a consequence, the relative proportion of OV and VO structures cannot be calculated without considerable guesswork (cf section 4.3). Nevertheless, Gorrell’s data give a clear indication that verb-final order may not have been as dominant in subordinate clauses as is often claimed, and also that SV order gradually increased from eOE to IOE.

There are a number of other studies which are empirical in character, but which tend either to be based on only one or two texts, or to be made up of relatively small samples, or both. Barrett (1952) looks at about 1,800 subordinate clauses in Ælfric’s *Catholic Homilies* (ÆCHom) and *Lives of Saints*, and finds that verb-final order occurs in between 35% and 44% of all clauses. So-called ‘direct order’, ie SV syntax, constitutes between 38% and 44%. An intermediate category of ‘verb-medial’,

⁷ Different subtypes of nominal clauses in the present corpus are treated in section 4.2.4.1.

⁸ All the word order patterns are described and exemplified in section 3.3.

corresponding roughly to SXVX order, makes up the rest of his data (1952:85). Barrett's account includes some interesting word order frequencies in different types of subordinate clauses (cf section 4.2.4).

Kohonen's (1978) OE data consist of approximately 800 clauses from *ÆCHom* and show a rate of 55% for the combination SXV/SXVX and 42% for SV.⁹ Unfortunately, no separate statistics are provided for SXV clauses,¹⁰ which makes utilisation of Kohonen's work for purposes of comparison difficult as far as verb-final order is concerned.

Bean's (1983) data consist of a fairly low number of subordinate clauses, around 480 in total, and is thus arguably of limited use as empirical evidence. Nevertheless, the emerging picture is one of a mix between SV and verb-final order (1983:102ff), which fits well with the findings of the investigations treated above.

The only recent quantitative study of OE subordinate clauses is Davis and Bernhardt (2002), where OE and Old High German (OHG) word order is compared. One of the main aims of the investigation is to prove wrong the idea that word order in Old English is free. The analysis of in excess of 11,500 clauses from *ÆCHom* and *Supplementary Homilies* and a corresponding number from the OHG Tatian Gospels shows that word order in neither language is free, but adheres to a limited number of patterns, partly depending on object type and the weight of elements. Davis and Bernhardt present evidence that OE and OHG had remarkably similar word order, both overall and according to clause types, and argue that the two should be regarded as dialects of one Old West Germanic language rather than two discrete languages (2002:178). The main focus is on objects and complements, while adverbials are mostly disregarded, unfortunately. In addition, the statistics provided are scarce and at times incomplete, and on occasion represent combined rather than individual figures for OE and OHG. Nonetheless, the findings indicate considerable variation between pre- and postverbal position for objects and complements, as well as differences between subtypes of subordinate clauses.

⁹ Kohonen's work is discussed further in section 2.4.3.2, with special emphasis on information structure.

¹⁰ Kohonen (1978:89) says that separate statistics are given in section 4.3.5. However, no such section exists, and I have not been able to find these statistics elsewhere in the book.

One generative study, based on extensive empirical evidence, also deserves mention here. The novelty in Pintzuk's (1995, 1999) work compared to most other formalist approaches lies in her assumption of a double base in OE, ie synchronic variation in phrase structure in both main and subordinate clauses. The theory was first formulated by Kroch (1989), and is tested by Pintzuk in both main and subordinate clauses from numerous texts,¹¹ the database consisting of a little over 1,000 clauses of each type.

The main goal of the study, which is carried out in the Principles and Parameters framework, is to investigate the underlying position of INFL both synchronically and diachronically in OE. Pintzuk finds that her data supports the double base hypothesis, ie that there is variation between INFL-medial and INFL-final phrase structure in both main and subordinate clauses: 'Main clauses and subordinate clauses are alike in structure and syntax' (1995:254). The variation occurs not only in the speech community as a whole, but also at the level of the individual. Moreover, she argues that INFL-medial structure increases with the same rate in main and subordinate clauses during the OE period (1999:235), in accordance with Kroch's (1989) Constant Rate Hypothesis. In contrast to the standard generative account of OE word order (van Kemenade 1987; Lightfoot 1991), Pintzuk assumes that OE was a symmetric V2 language with verb movement to INFL in both superordinate and embedded settings, as a general rule (1999:118).¹²

It must be strongly emphasised that Pintzuk's findings are not truly comparable with either the empirical studies mentioned above or my own findings, since a number of assumptions about underlying structure and movement operations are part of her theory. Also, clauses with a finite main verb are seen as ambiguous between INFL-medial and INFL-final, and as a consequence only clauses with auxiliary verbs and non-finite complements are included in her study (1999:196). In my own data, such clauses make up a minority of the total. Nevertheless, the *idea* of synchronic variation

¹¹ Prose texts constitute most of the material in Pintzuk's database, but the poetic texts *Beowulf* and *The Battle of Maldon* are also included.

¹² Other works on synchronic variation and grammatical competition in Old and Middle English include Haeberli (2000) and Kroch and Taylor (2000).

is appealing and part of the motivation behind the present investigation, as pointed out in chapter 1.

In sum, the empirical studies of word order in OE subordinate clauses only partly confirm the impression given in the non-empirical literature. Final position for the finite verb is no doubt a characteristic feature of subordinate clauses, but the same can be said about SV order, which appears to be almost equally as common. Thus, verb-final order is really only ‘dominant’ in subordinate clauses in comparison with main clause order, but not internally, where the overall picture is one of considerable variation. It is not inconceivable that the verb-final tendency in subordinate clauses is often somewhat exaggerated, precisely because of the main clause–subordinate clause contrast, and that other aspects of subordinate clause order are consequently overlooked.

The general impression is that very few of the empirical investigations of OE subordinate clause word order are truly large-scale in character with respect to the number of clauses included and the range and number of texts chosen. As will be shown in chapter 4, there may be considerable word order variation between contemporaneous texts. Arguably, therefore, there is a lack of research carried out on extensive amounts of data extracted from a variety of text sources.

2.3 The change from OE to ME

We have seen that the word order status of main and subordinate clauses in OE is a controversial and much debated topic. Less controversial is it to state that word order changed considerably during the Middle English period, and that around the year 1500 English had largely become an SV language like PDE in both main and subordinate settings. Yet the nature and speed of the transformation in Middle English are not agreed upon, nor **why** English word order changed.

One fact that seems indisputable is that the main clause V2 constraint remained fairly strong in ME, at least early in the period. Haukenes (1998:359) finds that V2 was the most frequent order in early ME, but that it was markedly reduced in the second half of the 14th century, especially after adverbial FCs (=fronted constituents).

Bech's (2001) data show that while XSV clauses take over as the unmarked, productive order, XVS is still frequent, but more pragmatically motivated than in OE, in the sense that it is found primarily in existential clauses with informationally new subjects. Both Haukenes and Bech show that V2 clauses in ME were typically associated with verbs of appearance or existence, also called existential verbs.¹³ Even in the 16th and 17th centuries did V2 order occur with a relatively high frequency and in syntactic contexts which are not permitted in PDE, as proved by Bækken (1998:413). She suggests that the fixation of SV order was not completed until sometime in the 17th century, and is supported by Haukenes (1998:360). The fact that V2 syntax was kept so long has led many to postulate that the change to SV order and the loss of V2 were two separate processes (see eg Kohonen 1978:133; van Kemenade 1987:175).

The change in subordinate clause word order from OE to ME has often been described as rapid, and Canale (1978),¹⁴ Lightfoot (1979) and van Kemenade (1987) all suggest a dramatic fall in the rate of verb-final order in the course of the 12th century. Hiltunen's (1983) study of verb-particle ordering in OE and ME also indicates that subordinate clause order changed more quickly than main clause order. Others, such as Strang (1970:212), date the change in both main and subordinate clauses to the 14th and 15th century. Unfortunately, there exist few quantitative studies of general aspects of word order in ME subordinate clauses, most notably Swieczkowski (1962) and Kohonen (1978). The latter is limited in scope and includes some 800 clauses from *Vices and Virtues* (VV) and *Sawles Warde* (SW), written around 1200. The rate of the combination SXV/SXVX is reduced in comparison with Kohonen's OE findings (see above), from 55% in ÆCHom to 40% in VV and 24% in SW. SV order, on the other hand, increases from 42% in ÆCHom to 58% in VV and 70% in SW. In sum, Kohonen's data show that SV order has become predominant in

¹³ Sections 2.4.3.3 and 2.4.3.4 provide a more detailed outline of Haukenes (1998) and Bech (2001) and their findings concerning information structure.

¹⁴ Denison (1993:47) points out that there are various weaknesses in Canale's theory and data interpretation. His findings have nevertheless been very influential for others working in the generative field.

early ME, while verb-late and verb-final orders still constitute a considerable proportion of the total.

Swieczkowski (1962) studies more than 6,000 clauses in two late 14th century texts, *Middle English Sermons* (prose) and *Piers Plowman* (poetry). In the latter, verb-late (SXVX) and verb-final (SXV) orders are still very frequent in subordinate clauses, and constitute more than half of the total (1962:53). The prose text, however, has the predicate immediately following the subject in 97% of all clauses (1962:75), which suggests completion or near-completion of the shift to SV order.¹⁵ Requirements of meter are of course likely to have influenced the word order in *Piers Plowman*, but it is nevertheless interesting that the gap between the prose text and the poetic text is so immense.¹⁶

Various explanations have been attempted for the change to SV order in English. The weakening and subsequent loss of inflectional morphology is frequently cited as a contributing factor (Strang 1970:212; Vennemann 1974:359; Bean 1983:139), while others focus on discourse-pragmatic explanations, for instance the increasing tendency to place new elements in post-verbal position (Kohonen 1978:191). Two of the most influential generative accounts, those of Lightfoot (1991) and van Kemenade (1987), focus on how changes in primary linguistic data children were exposed to led to a resetting of the XV/VX parameter.¹⁷ A different type of argument is raised by Sapir (1921:55), who sees both the levelling of inflections and the fixation of word order in English as part of a general drift in Indo-European languages.¹⁸

The explanations mentioned so far tend to be of an indirect nature. The levelling of inflections is not necessarily explained in itself, nor is it clear why the tendency to place new elements to the right of the verb increased at the time when it did and not earlier or later in the history of English. Similarly, the two generative accounts referred to do not clarify why the primary linguistic data would change in the first place. There

¹⁵ A similar result is reported for the *Middle English Sermons* in the present study (section 4.2).

¹⁶ Similar observations are made by van der Wurff (1995) and Fischer et al (2000) for OV order. See section 4.3.

¹⁷ The two theories differ with regard to how the resetting came about: Lightfoot (1991:72) assumes leftward verb movement, whereas van Kemenade (1987:177) posits rightward movement of complements.

¹⁸ Lass (1987:186) questions the explanatory validity of the notion of drift in linguistics, and argues that drift is something which should be explained itself.

have been attempts at attributing word order change in English to external factors, most notably by Kroch and Taylor (1997) and Trips (2002). The latter builds on the former and suggests that the change from object–verb to verb–object order took place earlier in the regions where Scandinavian settlement was widespread, and that it was therefore at least partly a result of syntactic borrowing resulting from language contact.¹⁹ A more radical result of language contact is proposed in the so-called ‘creole hypothesis’. In its strongest version, as proposed by eg Bailey and Maroldt (1977:24), the creole hypothesis posits a fundamental discontinuity between OE and ME as a result of French influence after the Norman Conquest.²⁰ Poussa (1982:84), on the other hand, claims that Middle English was only a partly creolised language, and then mainly as a result of influence from Old Scandinavian in the OE period. Creole explanations of the word order shift in English have been widely criticised (eg Gerritsen 1984; Danchev 1991) on the basis of our insufficient knowledge of the sociolinguistic context in OE and ME.

As the research questions formulated in chapter 1 suggest, the present investigation is not so much concerned with **why** English word order changed as with **how** it changed.

2.3.1 The role of subordinate clauses in the shift to SV order

It is normally the word order of main declarative clauses that is considered relevant in studies dealing with word order typology and word order change. According to Givón (1984:220), ‘word-order change tends to start at the simple, main clause-level’. Fischer (1992:371) refers to ‘the by now generally accepted theory that changes take place in

¹⁹ The possibility of direct syntactic borrowing is controversial, but is proposed by eg Thomason and Kaufman (1988) and Campbell (1993). Others, such as Prince (1988) and King (2000), view direct syntactic borrowing as unlikely, but suggest indirect change via lexical, morphological or pragmatic influence.

Trips is criticised by Clark (2003) because she ‘uncritically adopts the assumption that early Scandinavian was (predominantly) VO (...), thus obscuring the fact that there is little consensus on the internal structure of the VP in early Scandinavian’. A similar point is made by Svenonius (2005:254).

²⁰ According to Vance (1997:326), the transition in French from V2 to non-V2 did not take place until the 14th and 15th centuries. Bailey and Maroldt’s creole hypothesis thus appears to have little credibility, at least with respect to word order change.

root sentences before they percolate into subordinate clauses'.²¹ The same assumption is frequently made within English historical linguistics. For instance, Hock (1986:332) claims that there is a widely noted tendency for subordinate clauses to be more conservative than main clauses in syntactic change, and that subordinate clauses have a 'relative resistance to change'. Hock uses the typological shift in English from SXV to SVX as an example of how subordinate clauses 'lag behind' main clauses, and is supported by Vennemann (1974:362), Canale (1978:iii) and Kohonen (1978:132f). The assumption that main clauses are innovative in syntactic change is not always backed up by either theoretical reflection or empirical evidence, although some explanations have been attempted. Givón (1979:48f) links syntactic conservatism in subordinate clauses to discourse-pragmatic properties, more specifically to the higher presuppositional complexity found in such clauses than in main declaratives. Various explanations are explored by Matsuda (1998), including syntactic, discourse-pragmatic and processing-based ones, and the latter is claimed to have greater credibility. For instance, psycholinguistic research has shown that main clauses are processed more quickly than subordinate clauses by both children and adults. Matsuda's conclusion, however, is that different types of changes may call for different explanations, but also that discourse-pragmatic and processing-based factors overlap to a considerable extent (1998:265).

Lightfoot (1991, 2006) formulates a whole theory based on the role of main and subordinate clauses in processes of language change. In his cue-based approach, Lightfoot assumes that children are so-called 'degree-0 learners', indicating that they only use the grammatical input from main clauses when learning a new language and constructing their grammar, while subordinate clauses are ignored.

The hypothesis is partly based on the history of English word order, in particular the studies performed by Gorrell (1895), Bean (1983) and Hiltunen (1983). For the Old English period, Lightfoot posits underlying object-verb/verb-final/XP-V order,²²

²¹ Other references to the conservatism of subordinate clauses in processes of language change include Schwartz (1975) and Mallinson and Blake (1981).

²² Lightfoot appears to use the term 'object-verb' to refer not only to objects' position but in a more general sense of verb-final, since 'object-verb' is used interchangeably with 'verb-final' and 'XP-V' (1991:64ff; 2006:132ff).

whose surface realisation is most readily observed in subordinate clauses. Main clauses had the option of verb-seconding by moving the finite verb to C (2006:29). Using Gorrell's (1895) study as evidence, Lightfoot argues that 'embedded clauses showed verbs in final position 80–90 per cent of the time in all prose texts examined and there seems to be no change at work in this regard' (2006:132). It must be noted that these numbers do not correspond either to my own interpretation and count of Gorrell's data, or to the conclusion Gorrell reaches himself (see section 2.2 above).

Verb-final order is not found to a great extent in main clauses, due to the optional V2 rule. Lightfoot interprets Bean's (1983) data as indicating that V-XP orders increased gradually in frequency in main clauses throughout the Old English period, whereas subordinate clauses experienced a sudden and catastrophic drop of XP-V orders around 1100. This is taken as evidence that children must have relied on data from main clauses when their internal grammar changed from XP-V to V-XP. As Lightfoot puts it: 'The mere fact that the change took place strongly suggests degree-0 learning' (1991:76).

To sum up, the degree-0 hypothesis suggests that there exists a language-internal constraint governing the locus of syntactic change. The constraint works in such a way that change can only take place based on linguistic input from main clauses. Conversely, the constraint excludes the involvement of subordinate clauses in syntactic change.

The idea that main clauses were necessarily the locus of the change to SV order in English is challenged by Stockwell and Minkova (1991), Jucker (1990) and Allen (2000). Stockwell and Minkova argue that SVX order was first established in subordinate clauses, and later transferred to main clauses by analogy. According to their analysis, OE clauses changed from underlying SXV to SVX around 1200, but main clauses remained V2 up to 1400. Subordinate clauses, on the other hand, largely had complementiser–subject–verb order after 1200, on analogy with V2 main clauses with the subject as topic, ie clauses which happened to have surface SVX order. Later subject–verb order in subordinate clauses, where both nominal and pronominal subjects were in preverbal position, was transferred to main clauses by analogy. This,

according to Stockwell and Minkova, helps explain why main clauses seem to lag behind in the completion of SVX syntax (1991:399f).

Jucker (1990) picks up the thread from Stockwell and Minkova, and claims that main clauses were unlikely to have been the leading domain in the change to SV order. It is the large proportion of V2 in main clauses in the early 13th century text *Ancrene Wisse* that leads Jucker to conclude that subordinate clauses, where ‘the hard and fast evidence for verb-last was disappearing fast’, must instead have been instrumental in the change (1990:42).

Allen (2000) argues against the idea of a ‘sudden death’ of verb-final order in subordinate clauses. Her own data show that ‘verb-final order was still robust in subordinate clauses in southern early Middle English, although decreasing in frequency’, and she thus concludes that there is no evidence for ‘degree-0 learnability’ (2000:18f). Allen criticises Lightfoot for his choice of data, especially the fact that part of the evidence from both Hiltunen (1983) and Bean (1983) stem from different dialect areas, a fact which Lightfoot fails to take into account. For instance, the sharp drop in XP-V order observed between sections seven and eight of the *Anglo-Saxon Chronicle* in Bean’s study could be down to dialectal differences rather than a change in grammar (cf section 4.2.2 for further discussion of early Middle English texts and dialectal variation). It is also noteworthy that Bean (1983) herself comes to a different conclusion than Lightfoot. According to Bean, the data from the *Anglo-Saxon Chronicle* show that ‘the regularization of order [=SVX order] in dependent clauses (...) precedes regularization in M[ain] C[lause]s’ (1983:109). The fact that Lightfoot uses Bean’s data as evidence for the opposite view, viz that the change took place in main clauses first and later entered the embedded domain, is thus somewhat puzzling. Anyway, as was mentioned above, the small size of Bean’s corpus renders the study of limited value as evidence of word order and word order change in OE and ME.

Considering the controversy surrounding the alleged conservatism of subordinate clauses, this aspect of the word order change in English deserves another look.

2.4 Information structure

According to Gundel (2003:124), ‘information structure is a cover label for a number of different, though partly overlapping, concepts that have often been conflated in the literature’. She argues that although the concepts normally involved all relate to the distinction between given and new information in one way or another, one must distinguish between two senses of givenness–newness, viz *referential* on the one hand and *relational* on the other. The former is what the present investigation is primarily concerned with, and it is defined in the following way by Gundel:

a relation between a linguistic expression and a corresponding non-linguistic (conceptual) entity in (a model of) the speaker/hearer’s mind, the discourse, or some real or possible world, depending on where the referents or corresponding meanings of these linguistic expressions are assumed to reside (2003:125)

Relational givenness–newness, on the other hand, has to do with the division of a sentence into two parts, one representing what the sentence is about, and one adding to what the sentence is about. The parts in this two-way division have received a myriad of names in the literature, including the pairs theme/rheme, topic/focus, presupposition/focus and topic/comment. These are extensively covered and also variously defined; to mention but a few studies, Firbas (1966, 1992), Halliday (1967) and Daneš (1974) discuss theme/rheme, while topic and/or focus are treated in Chomsky (1971), Jackendoff (1972), various articles in Li (1976), Comrie (1981), Gundel (1985), Quirk et al (1985), Lambrecht (1994), Birner and Ward (1998) and Erteschik-Shir (2007), among others. Although the two-way division of clauses implied in these pairs is intrinsically connected with a more general aspect of givenness/newness at clause element level, it is the referential aspect which has most relevance for the approach chosen here.

The idea that pragmatic factors may influence word order has existed for a long time. Weil (1978 [1887]:29) distinguishes between a sentence’s point of departure, ie the speaker’s and hearer’s common ground, and its goal of discourse, where new, important information is presented. Weil compares the movement from the first to the second part of the sentence with the movement of ideas in the mind of the speaker.

Another early statement on discourse and word order is found in Behaghel's (1932:5) second law, which predicts that old concepts precede new ones. This tendency in language to arrange a clause so that given information precedes information which is new is often referred to as the *information principle* (Halliday 1967:205; 2004:89; Breivik 1989:31; Biber et al 1999:896), or *the principle of end focus* (eg Quirk et al 1985:1357).²³ Various definitions of given and new information are found in the literature,²⁴ but the one used by Clark and Haviland (1977:4) nicely captures two important aspects of givenness/newness. They define given information as 'information the speaker considers given – information he believes the listener already knows and accepts as true'. In opposition to this stands 'information the speaker considers new – information he believes the listener does not yet know'. We see that givenness is decided by the speaker, but that there may be a difference between what *the speaker* considers given/new and what the speaker thinks *the listener* considers given/new. The concepts of given and new information are further discussed in section 2.4.2 below.

Studies of the relationship between discourse factors and syntax have until recently mostly been performed within a 'functionalist' framework rather than a 'formal' one. This is perhaps not surprising, given the strong belief in the autonomy of syntax that has been characteristic of the generative branch since its inception. As pointed out by Erteschik-Shir (2007:72), 'much functionalist work is not easily accessible to formal syntacticians of the generative persuasion and vice versa'. That is not to say that there is an unbridgeable gap between these two broadly categorised camps, and studies such as Lambrecht (1994), Darnell et al (1998), Westergaard (2005, 2009a, 2009b), Erteschik-Shir (2007) and van Kemenade et al (2008) all attempt to combine communicative and syntactic aspects of language. It is also noteworthy that notions such as topic and focus have received some treatment in generative grammar (eg

²³ The so-called *principle of end focus*, used eg by Quirk et al (1985:1357), is normally connected to prosodic prominence, and the intonation nucleus does not necessarily entail new information. However, even though there is no one-to-one correspondence between focus in the sense of intonation nucleus, and new information, the two normally match in unmarked clauses in English, and the principle of end focus and the information principle thus typically converge. This may explain why the two terms are sometimes used synonymously.

²⁴ Some of the most central ones include Halliday (1967), Chafe (1976, 1994), Kohonen (1978), Prince (1981, 1992) and Firbas (1992).

Chomsky 1971; Rizzi 1997). However, their possible function in the overall discourse has largely been neglected. All in all, generative studies of discourse-pragmatic phenomena usually centre around highly marked constructions like focus-presupposition (*it*-clefts, *wh*-clefts, topicalisations), while general principles of information structure have been given little heed (Lambrecht 1994:9). A fairly recent theoretical school which treats morphology, syntax, semantics and discourse-pragmatics as integrated aspects of grammatical constructions is construction grammar.²⁵ This branch of cognitive linguistics has the potential to bring valuable new insights to the study of information structure, as already evidenced in the work by Lambrecht (1994).

2.4.1 Weight versus information structure

It is well known that the weight of an element may influence that element's position in the clause, as pointed out already by Behaghel (1909). The principle of end weight may be defined as 'the tendency for long and complex elements to be placed towards the end of the clause' (Biber et al 1999:898). The implication is then that short and structurally simple elements will tend to be placed early in the clause. The definition by Biber et al suggests that both length and complexity are related to weight, and length, in terms of the number of syllables or words, is fairly unproblematic. Grammatical complexity, on the other hand, is in itself a hazy concept (see eg Dahl 2004). On any account, it is important to keep in mind that weight is a relative and not an absolute concept (Wasow and Arnold 2003:121).²⁶

We have seen that various aspects of information structure are extensively treated in the literature. However, the relationship between weight and information structure has not received a lot of attention,²⁷ despite the fact that morphosyntactic and discourse-functional factors are to a certain extent interdependent and very difficult to

²⁵ As pointed out by Croft and Cruse (2004:265ff), *construction grammar* is a cover label for several different branches of cognitive linguistics, represented by eg Lakoff (1987), Fillmore and Kay (1993), Goldberg (1995) and Langacker (1987).

²⁶ Weight is further discussed in section 4.4.

²⁷ In the words of Wasow and Arnold (2003), '[i]t is surprising that, despite the voluminous literatures on both weight and information structure, those two literatures are nearly disjoint'.

keep apart. For instance, the well-known tendency for object pronouns to occur preverbally in OE may either be due to the fact that they are light elements, or to low information value (cf section 3.4) in their capacity as contextually given elements, or to a combination of the two.²⁸ The same can be said about full noun phrases, even though the correlation between information value and weight for full NPs is not as straight-forward as for pronouns; many full NPs have high information value, but a considerable proportion are contextually given (cf chapter 5). Nor can every full NP be said to be particularly heavy. It thus seems fair to assume that a strict distinction between informational weight and formal weight cannot be upheld in the practical analysis of data. The information principle and the principle of end weight tend to work in conjunction in the formation of clauses, together with syntactic constraints, as well as other factors like prosody and rhythm. The potential coextensiveness of the two principles no doubt complicates matters. According to Wasow and Arnold (2003:129), it may be difficult to tell whether the two are distinct factors, or whether ‘one of them only looks like a causal factor because of its high correlation with the other one’.

Not everyone would agree that the information principle has a place in word order studies. Hawkins (1991, 1994) posits that elements are ordered for maximally easy recognition of syntactic structures. Among other things, Hawkins looks at modern English ordering of verb–object–particle in order to find out whether the dimensions short/long (morphosyntactic) or given/new (pragmatic) most affect word ordering. According to Hawkins, ‘pragmatics appears to play no role whatsoever. The [pragmatic] theories proposed add nothing to the syntactically based predictions of EIC [=Early Immediate Constituents]’ (1994:240-241). Siewierska (1988) also looks at the relationship between the information principle and weight considerations, but comes to a different conclusion than Hawkins. Based on examples from numerous languages and language families, she contends that ‘[t]he data (...) clearly support the superordinate nature of the familiarity hierarchies over the dominance and formal

²⁸ Rybarkiewicz (1977:89) discusses the relationship between and coextensiveness of what he labels ‘the heaviness principle’ and Firbas’ Functional Sentence Perspective with respect to pronominal placement in OE, and concludes that the position of pronouns is equally well accounted for by both principles.

hierarchies on a cross-linguistic basis' (1988:83). Siewierska somewhat modifies her stance in a 1993 article, where she looks at Polish and the relationship between short/long and given/new. Although she states that short/long is not as powerful as Hawkins argues, the conclusion is that one cannot really say which of the two principles is stronger (1993:263). In this connection, Gries (2003:149f) makes an interesting observation: even in cases when morphosyntax seems to have the strongest effect on word ordering, discourse-functional variables must play at least an indirect part, since an element's givenness/newness influences morphosyntax. Morphosyntactic and discourse-functional variables, as well as phonological and semantic ones are strongly interrelated, Gries argues, and one can therefore never assign no role whatsoever to discourse-functional factors. Gries is supported by Wasow and Arnold (2003:129), who through psycholinguistic experimentation in combination with a corpus study found that 'neither the length nor the discourse status (...) could account for constituent ordering as well as the two combined'.

2.4.2 General theories on information structure

2.4.2.1 Firbas

Firbas represents the Prague School of Linguistics, whose theory of Functional Sentence Perspective (FSP) is concerned with language from a communicative point of view. Inspired by the works of Mathesius (1941, 1942), Firbas states that the principle of FSP predicts that 'sentence elements follow each other according to the amount (degree) of communicative dynamism (CD) they convey, starting with the lowest and gradually passing on to the highest' (1966:240). In turn, communicative dynamism is described in the following way:

the extent to which the sentence element contributes to the development of the communication, to which, as it were, it 'pushes' the communication forward. The elements carrying the lowest degrees of CD constitute the theme, those carrying the highest degrees, the rheme ... In addition to the theme and the rheme, there is the transition, which in regard to CD carried ranks above the former on the one hand, and below the latter on the other (1966:240)

Therefore the basic distribution of CD is ‘a consistent theme–transition–rheme sequence’ (1966:240). The prototypical transitional elements are what Firbas labels TMEs, ie ‘temporal and modal exponents’, most often in the form of verbs (1992:70). There are no restrictions on the types of elements that may constitute the theme and the rheme.²⁹

According to Firbas, three factors determine an element’s degree of CD: the contextual factor, the semantic factor, and linear modification (1992:10). The contextual factor in FSP has to do with ‘the retrievability/irretrievability from the immediately relevant context’ (1992:21), ie whether an element is contextually dependent or not. A contextually dependent element carries a lower degree of CD than an element which is contextually independent. Firbas makes no attempt of defining the length of an element’s retrievability span, but states that the span is generally very short (1992:24) (see section 3.4 for more on retrievability). Firbas distinguishes between two types of shared knowledge: one is knowledge occurring in the immediately relevant verbal and situational context as described above, and this is regarded as carrying a low degree of CD. The other is knowledge which is shared by the interlocutors on the basis of the wider context, but which nevertheless ‘must be considered unknown in regard to the immediately relevant communicative step’ (1992:22). The latter category, typically represented by proper names, is regarded as context-independent with a subsequent high degree of CD.

The semantic factor concerns ‘the impact that the semantic character of a linguistic element, as well as the character of its semantic relations, has on the distribution of degrees of CD’ (1992:41). Firbas’ main concern here is the semantic strength of the verb compared to the other clause elements. Very often, he argues, the verb is exceeded in CD by ‘dynamically stronger’ elements which carry more semantic content than the verb (1992:41). This is particularly evident with verbs that have a presentative function, labelled by Firbas as verbs that express ‘appearance or existence on the scene’. Examples of such verbs are *exist*, *appear*, *arrive*, *emerge*, *happen*, *occur*, which are seen as semantically weaker than other verbs, thus carrying a lower

²⁹ Dyvik (1980:60ff) criticises Firbas’ use of the terms *theme* and *rheme*, among other things because Firbas claims that the use of the definite article presupposes thematicity.

degree of CD. In clauses with a verb of appearance or existence, it is the dynamically stronger, context-independent subject that ‘completes the development of the communication’ (1992:65).

Linear modification means that the communicative dynamism of an element is indicated by its position in the linear arrangement of a clause. An element occurring very early in the clause is taken to carry a low degree of CD, and vice versa. Thus, linear modification corresponds to the basic distribution of CD. It is important to keep in mind, however, that linear modification is a determining factor only if ‘no other factors work counter to it’ (1992:10).

Firbas points out that the susceptibility to the principle of FSP may vary between languages (1992:117). The relative strength of two principles, the ‘grammatical principle’ and the ‘emotive principle’, is the most important determining factor. The grammatical principle entails that the position of a sentence element is determined by its syntactic function, whereas the emotive principle ‘orders words in a way that strikes the recipient as more or less out of the ordinary’ (1992:118). The relationship between these two principles is further discussed in section 2.4.3.1, where a comparison is made between Old English and Present-day English.

Firbas’ theory implies that the referential and the relational dimension of givenness/newness are impossible to keep strictly apart, since he posits not only a theme–rheme division of clauses but also a more fine-grained analysis of elements according to their degree of CD.

2.4.2.2 Chafe

Chafe (1976, 1994) focuses on the spoken language, but his theories have enough general validity to be relevant for the written language as well. Chafe’s starting point is that ‘we can never really understand language without understanding the human mind’ (1994:ix); thus the concept of consciousness holds a central place in Chafe’s theory. The idea is that messages are packaged in certain ways, depending on ‘the speaker’s assessment of how the addressee is able to process what he is saying against the background of a particular context’ (1976:27). Many different packaging

phenomena are discussed, including definiteness, subject status, topic status and the given–new dichotomy. Chafe, following Halliday (1967), thus makes a binary distinction between given and new information, and defines these notions as follows:

Given (or old) information is that knowledge which the speaker assumes to be in the consciousness of the addressee at the time of the utterance. So-called new information is what the speaker assumes he is introducing into the addressee's consciousness by what he says (1976:30)

Importantly, it is up to the speaker to decide what should be regarded as given or new information. The decision must be made on the basis of either the linguistic or extralinguistic context, the latter involving the possibility of some shared knowledge which is not explicitly expressed in the context (1976:31). Chafe discusses Firbas' concept of communicative dynamism and the possibility that there exist intermediate degrees of given and new information, but finds that 'it has not been demonstrated linguistically that given vs. new is anything more than a discrete dichotomy' (1976:33).

In his 1994 book, however, Chafe extends his definition of givenness into a three-way distinction between given, accessible and new information (1994:72). The term *accessible* is used about information which is on the periphery of the consciousness, but which still has not left the consciousness and is thus recoverable. To illustrate the relevance of this three-way distinction, Chafe discusses the cognitive cost for the listener of bringing an element to an active state in the mind. The smallest activation cost is associated with given elements, since these are already active. The transition of accessible, also called 'semi-active', information is naturally more costly, while new information requires the greatest amount of mental effort to bring into an active state (1994:73). Both the two-way and three-way approaches of Chafe differ from Firbas' theory, which focuses more on degrees of givenness. Chafe's 'semi-active' category appears to be difficult to operationalise in the analysis of information value, and a more traditional two-way distinction has been opted for in the present investigation (cf section 3.4).

2.4.2.3 Prince

Prince (1981:225) points out the need for a taxonomy of the terminology used to describe information structure, since she finds that previous attempts at defining terms like *given* and *new* and their synonyms have not succeeded in creating any kind of consensus as to what information structure really entails. She discusses different levels at which the given–new distinction can be found – the sentence, the discourse, and the participants’ discourse model – but emphasises that regardless of level, the crucial factor is ‘the sender’s hypotheses about the receiver’s assumptions and beliefs and strategies’ (1981:224). In line with Chafe’s view above, therefore, Prince argues that the viewpoint of the speaker/writer must lie at the bottom of any theory of information structure.

In Prince (1992), information structure is further discussed and defined. Unlike Firbas and Chafe, Prince only considers referents evoked by noun phrases, but her observations are arguably applicable on a more general level, too. She does not find the simple dichotomy between given and new information entirely satisfactory, and makes a distinction between context-dependency and hearer-dependency, which captures the fact that context-independent information is not necessarily new to the hearer/writer. Thus, an item that has not been mentioned in the previous context is labelled discourse-new, but may nevertheless be hearer-old, eg if the referent is a person or some other item of which the hearer already has knowledge. In other words, an entity’s discourse-new status does not reveal anything about its hearer-status. On the other hand, a discourse-old entity is by necessity hearer-old, ‘since hearers are expected to remember what they have been told’ (1992:303). Prince does not make entirely clear how long an entity keeps its discourse-old status, except that it is expected to be remembered by the hearer ‘for the duration of the discourse’ (1992:309).³⁰ As regards linguistic form, Prince points out that although old/given entities are often definite, while new entities tend to be indefinite, there is by no means a perfect match. Indeed, definite NPs may evoke new information, eg *the same people* in a *there*-sentence like *there were the same people at both conferences* (1992:302).

³⁰ The lack of a definition of the notion of *discourse* makes it difficult to see what practical consequences Prince’s stance may have. See also section 3.4.

Based on their discourse and hearer status, Prince classifies entities as either brand-new, unused or evoked, in the following way:

	Discourse-new	Discourse-old
Hearer-new	Brand-new	X
Hearer-old	Unused	Evoked

The combination in the upper right corner of the diagram is not possible, since an entity cannot be both hearer-new and discourse-old. The traditional categories *given* and *new* are captured by the *evoked* and *brand-new* labels, respectively. *Unused*, on the other hand, falls somewhere in between. It is not clear from Prince's discussion how familiar an item must be to the hearer to be classified as hearer-old, although it is stated that hearer-old typically includes both definite entities and generic indefinite entities (1992:303). Prince's example of unused information is a personal name familiar to both speaker and hearer. The category appears to be rather comprehensive, at least potentially. It also seems to correspond well with Firbas' notion of knowledge shared through a wider context.

Another category of information status has to do with whether entities are inferrable or not. In the former case, a piece of information is 'assumed to be inferrable by the hearer on the basis of some trigger entity, itself discourse-old, in combination with some belief the hearer is assumed to have which says that entities like the trigger have associated with them entities like the Inferrable' (1992:307). Prince uses the following example to illustrate this:

(2.1) He passed by the Bastille and *the door* was painted purple

Initially, *the door* appears to be both discourse-new and hearer-new, but it may be classified as inferrable if the hearer is assumed to infer the existence of the door from the basis that buildings are generally associated with a particular door. It needs to be emphasised that *inferrable*, as was the case with hearer-old/hearer-new, is a category which rests upon the speaker's assumptions about the hearer's knowledge (cf Chafe

above) and reasoning ability, not the hearer's actual knowledge and reasoning ability. Thus, *the door* is treated 'as though it were already known to the hearer' (1992:305). Prince discusses whether inferrable entities, having qualities associated with both old and new information, should be collapsed with one of the other categories, but decides to keep it as a separate one. As will be seen in chapter 3, the notion of inferrability is incorporated in the present analysis, although not as a separate category.

2.4.3 Information structure in OE and ME

2.4.3.1 Firbas

Firbas (1957, 1992) discusses the word order of OE and Present-day English (PDE) in relation to the principle of FSP. According to Firbas, OE word order is relatively free (1992:127ff). Therefore, Firbas claims, OE is very susceptible to the principle of FSP, more so than PDE, where word order to a larger extent is determined by grammatical principles. In other words, the clause elements in OE are typically arranged in accordance with the basic distribution of CD. OE clauses that are arranged in a theme–before–rheme perspective are unmarked and non-emotive, while clauses that deviate from the theme–rheme perspective are said to be 'vehicles of emotion' (1957:78). Emotiveness is defined as 'not only the speaker's/writer's feeling but also his appeal to the listener/reader' (1957:81). Since word order in PDE is more grammaticised and fixed than in OE, Firbas argues that there has been a reduction of word order emotiveness from OE to the present. However, he suggests that whereas emotiveness in OE was expressed by deviation from the principle of FSP, emotiveness in PDE may be expressed by deviation from what Firbas labels 'the grammatical principle' (1957:93), ie the principle of grammatical function. The historical development is thus viewed as a gradual replacement of the principle of FSP by the grammatical principle. Firbas does not fully agree with his predecessor Mathesius (1942:187), who claims that PDE has a negligible susceptibility to the requirements of FSP. Firbas instead concludes that '[t]he lesser mobility of elements within a present-day English sentence limits the use of present-day English word order as a vehicle of emotion' (1992:134).

Thus, according to Firbas, FSP requirements do have some impact on word order also in PDE, but to a lesser degree than in Old English.

2.4.3.2 Kohonen

Kohonen (1978) looks at the word order of three different religious prose texts from around 1000 (OE) and 1200 (eME). In Kohonen's opinion, too little attention has been given to 'contextual aspects' of English word order (1978:33), and his investigation is a systematic study of the interplay between syntactic and pragmatic factors.

Kohonen distinguishes between given and new information, and defines the former as 'items mentioned in the preceding context, or derivable from the verbal, situational or pragmatic context' (1978:67). The 'pragmatic context' includes unique referents such as 'sun' and 'moon', the main biblical characters, and the four evangelists. These are all seen as part of the 'total contemporary world picture' (1978:67). However, Kohonen admits that it is problematic to operate with such a concept, given our limited actual knowledge about the world at the time when the texts were written. A number of subcategories of givenness are proposed, among which 'hyponymy and indexal reference' is of special interest here, since it appears to correspond well to Prince's inferrable group. Together with the 'pragmatic context', this category is probably the one that leaves most room for subjective interpretation of how much the hearer/reader knows or is able to infer. The problem will be further discussed and exemplified in section 3.4.4. Kohonen defines new information as 'items not mentioned before' (1978:67). In his discussion of givenness, Kohonen draws on the term consciousness, and concludes, like Chafe (1976) and Prince (1992) that givenness is 'a status decided by the speaker' (1978:66).

Kohonen looks at word order patterns in general, but pays particular attention to the shift 'from SXV to SVX syntax' (1978:123). He finds that the shift began in main clauses and spread to dependent clauses by analogy. However, SVX order became established more quickly in subordinate clauses, while main clauses continued to display a relatively high frequency of XVS order. Kohonen finds that while the SXV-SVX shift was completed by 1200, 'the XVS-(X)SVX change seems to have

taken place after the period covered in the present study' (1978:133). In other words, Kohonen makes a distinction between two syntactic developments: on the one hand, the loss of verb-final order with resultant SVX syntax, and on the other, the loss of the V2-constraint.

The shift from SXV to SVX is explained as the outcome of a number of factors, including the pragmatic principles of end focus and end weight. As far as givenness is concerned, Kohonen's data indicate 'an increasing tendency for the new elements to occur to the right of the verb' (1978:149). Since subjects typically convey given information, while objects and adverbials are typically new elements, SVX order is produced to an increasing extent (1978:201). However, a closer look at the tables presented on pp 144–147 and 235–236 in Kohonen's book reveals that it is not only new elements which increasingly shift to postverbal position, but also given elements, especially in subordinate clauses. The results are not clear-cut across element type and clause type, but the overall impression given by Kohonen's data is that the proportion of new elements to the right of the verb does not increase significantly more than the proportion of given elements. On condition that the tables are correctly interpreted, Kohonen's proposal that the information principle was involved in the shift to SVX is therefore weakened.

Kohonen finds that the principle of end weight is also involved in the shift, in particular with regard to copular clauses: SVX syntax is most advanced in clauses with subject complements, probably because the copula verb is too light to occur in final position (1978:125). Due to analogical pressure, clauses with objects and adverbials also conformed to SVX syntax (1978:200). On a more general level, 'informational weight tended to correlate with the length of the constituents' (1978:201). There was thus an increasing tendency to place short and light elements early in the clause and long and heavy elements late in the clause.

Kohonen also considers some other factors that may have contributed to the SXV–SVX shift, viz ambiguity avoidance, the afterthought phenomenon and clause length. He argues that Vennemann (1974) overestimates the importance of ambiguity avoidance, ie distinguishing the subject and the object, since 'the difference between the S and O constituents was usually clear from the total pragmatic context'

(1978:200). In Kohonen's own data there are no instances of real ambiguity. Nevertheless, he admits that ambiguity avoidance may have been involved in the SXV–SVX shift, as SVX order first appeared in clauses where both the subject and the object are nominal (1978:128).

2.4.3.3 Bech

Bech's (2001) doctoral dissertation investigates word order in Old and Middle English main clauses from a pragmatic perspective, more specifically, whether and to what extent pragmatic factors played a role in the typological shift that English underwent. Bech's point of departure is that Old English had some kind of V2 constraint, but that pragmatic factors could override this constraint.

Pragmatic factors is described as a 'cover term to refer to the fact that at any given time, some clause elements are more important informationally than others' (2001:2). Bech uses the term information value (IV) (cf Quirk et al 1985:1357), which is based primarily on the theories of Firbas and Chafe. She supports Chafe's (1994) three-way distinction between given, accessible and new information, and suggests that there might even be a 'continuum' of givenness (2001:152), in line with Firbas' idea of degrees of CD. However, Bech finds that in the practical analysis of data it would be close to impossible to operate with a scale of givenness, and she therefore makes a binary distinction between elements with low and high information value. In order to determine the IV of an element, Bech uses two of Firbas' three main factors: the context and the semantic structure. She does not consider linear modification (cf section 2.4.2.1) a determining factor, and points to weaknesses in Firbas' argumentation: 'instead of regarding the linear placement of elements in a sentence as a cause ... linearity should rather be regarded as a result, with the degree of CD determining whether a clause element is found towards the beginning or the end of a clause' (2001:157).

Bech's results show that although there are a large number of V2 clauses in OE, the word order in this period is quite heterogeneous. Her ME data reveal a much more homogeneous situation, with SVX and XSV as the dominant patterns. There are still a

significant number of XVS clauses in ME, albeit fewer than in OE. Bech thus concludes that ‘verb-medial syntax to a great extent had become established by this period’ (2001:141). The greater heterogeneity in OE is taken to be a result of competition between syntactic and pragmatic factors. Evidence for this is found particularly in the XSV pattern, which is pragmatically motivated since the majority of subjects in this pattern have low information value. In the XVS pattern, on the other hand, the IV of the subjects is more variable, signalling that this word order is motivated both by syntactic and pragmatic principles.

In the ME period, Bech argues, XSV word order has become the unmarked, productive pattern, governed increasingly by syntactic constraints. The relatively large number of V2 clauses is explained as a result of pragmatic constraints: ‘XVS order becomes used in environments where pragmatic pressure is so strong as to force the subject into post-verbal position, ie, primarily in existential sentences’ (2001:195). Since existential sentences typically have the function of introducing new subjects with high information value, XVS order makes such sentences adhere to the principle of end focus.

Bech’s final conclusion is that pragmatic factors did have an impact on the shift from V2 to V3: ‘the hypothesis that V2 syntax could be overridden by pragmatic factors in OE, and that this in turn contributed to English becoming a verb-medial language, for example by reanalysis of preverbal position as the subject position, is, in my opinion, a likely one’ (2001:197). Her study demonstrates that a functional approach can shed light on the unusual development that English has undergone with respect to word order.

2.4.3.4 Haukenes

Haukenes (1998) studies word order and information structure in English texts from a 500-year period, 1200–1700. Focusing on the variation between V2 and V3 in clauses with an initial fronted constituent, Haukenes finds that the information status of subjects strongly influences word order. Throughout ME, inversion is clearly preferred with new subjects. From eME to lME, this correlation is strengthened, at the same

time as the rate of inversion drops markedly, especially in clauses with initial adverbials (1998:204). Thus, Haukenes' and Bech's results show roughly the same development in the ME period.

Interestingly, Haukenes' data show an increase in the inversion rate in the 16th century, across constructions and texts. She interprets this as 'a genuine reversal of the development towards SVO order in English', and finds that the XSV order gains new momentum only well into the 17th century. At that stage, inverted structures become increasingly restricted to presentative constructions with copular verbs and new subjects. As was mentioned in section 2.3, the relative strength of inversion in the 16th century is confirmed by Bækken (1998:413).

2.4.3.5 Petrova

The relationship between information structure and verb placement in Early West-Germanic is discussed in Petrova (2006). Although the main focus is on Old High German, a sample of Old Saxon as well as the OE *Beowulf* is analysed. The novelty in Petrova's approach as compared to most other students of information structure lies in her analysis of properties of the discourse organisation as a whole, not just sentence elements and their place in that discourse. Taking main declarative clauses as a point of departure, Petrova chiefly looks at the different functions V2 and V1 orders may have. It is shown, for instance, that V1 structures not only serve the purpose of highlighting a new or surprising subject, as argued by Stockwell (1984:576), but also that of focusing the entire proposition. Typically, this word order is found at episode onsets, where the plot enters a new stage, or the narration needs to be pushed forward (2006:168). Petrova briefly comments on the other main deviation from V2, viz verb-final, and finds that it is not restricted to foregrounding, as suggested by Hopper (1979:221), but is also used for background clauses providing supportive information (Petrova 2006:173).

2.4.3.6 Westergaard

Westergaard (2005, 2009a) takes a cue-based approach (cf Lightfoot 1991, 1999) to language change, in which principles of information structure in language acquisition are linked to the word order development in OE and ME. In order to account for the development from V2 to non-V2 in English, Westergaard uses child language data indicating that children are sensitive to information structure when learning to speak. Her data from the Norwegian Tromsø dialect cover both spontaneous adult speech and the speech of two to three-year-old children acquiring their mother tongue, and suggest that the choice of word order in WH-questions is dependent on the information value of the subject. V2 (XVS) is preferred with new subjects and full noun phrases, while non-V2 (XSV) usually occurs with given subjects and pronouns. The children also produce ungrammatical V3-clauses in certain topicalisation constructions, apparently motivated by information structure. Westergaard thus concludes that children are highly sensitive to the information structure of subjects, as well as other clause elements, from a very early age (2005:298, 2009a:83).

Westergaard draws a parallel between the Tromsø dialect and Old and Middle English, on the basis of data analysed in Haukenes (1998) and Bech (2001) (see above). Under the assumption that the distribution of full NPs vs pronouns usually reflects information structure, Westergaard claims that the syntax of OE and ME topicalisations is very similar to WH-questions in the Tromsø dialect (2005:302). The word order change in English is then partly explained by verb movement to a Focus Phrase (FocP) in the presence of informationally new subjects: ‘Children acquiring OE must have been (...) inclined to build clause structures which adhere to the principles of information structure, and could thus be assumed to have developed an adult grammar where there is verb movement to FocP only’ (2005:305). As a consequence of the fact that subjects are usually given, more and more V3 clauses would be produced, gradually leading to a drop in the ‘cues’ for V2 order, to a level where it would no longer be incorporated in the grammar of children.

The link between Norwegian child language data and the development in OE and ME is both innovative and compelling, but it is my belief that Westergaard’s theory would benefit from more statistics on the information status of full NPs. The syntactic

behaviour of pronominal vs full NP subjects is strongly emphasised throughout, both with respect to Westergaard's own Tromsø data and Bech's (2001) figures for OE and ME, while it is at times taken for granted that the two subject types have different information status. Since full NPs may be either given or new, it would be very interesting to know their actual information status in both V2 and V3 clauses. Without those statistics, it remains possible that Westergaard's findings illustrate different placement of subjects according to weight more than to information status. As we saw in section 2.4.1, the two dimensions are very closely linked and often impossible to keep apart.

3 Method

3.1 Introduction

The present chapter aims to provide the reader with a thorough understanding of the methodological approach chosen, in order to make the analysis and its results as transparent as possible. This is perceived to be especially important in a study of an empirical character, where the outcome depends on a number of choices made prior to and during the actual analysis of clauses. Section 3.2 deals first with general issues pertaining to the use of older, written material as evidence of synchronic and diachronic features of English, and next, with specific grammatical structures which are problematic or potentially ambiguous in one way or another. In the next section the word order patterns are presented. Since the definitions of the word order patterns are essential for the analysis performed in chapters 4 and 5, and in turn for the conclusions to be drawn from this investigation, each pattern has been presented and exemplified elaborately. Section 3.4 draws on the discussion of theories of information structure in chapter 2, and outlines the way the most relevant theories are applied to the present data, more specifically how the concept of information value is defined and operationalised. Finally, sections 3.5 and 3.6 deal with the intersubjectivity test and statistics testing, respectively.

3.2 Problems of analysis

3.2.1 Introduction

There are a number of problems connected with the study and analysis of historical linguistic material. First, we must ask the question of how representative the written material is of the spoken language in the earlier periods. We only have access to written records in Old and Middle English, and thus cannot with any certainty estimate the relationship between the spoken and written language. Since the great majority of linguistic changes originate in the spoken language, literary language tends to be more

conservative; the dating of changes found in writing is therefore bound to be inaccurate.

Second, there are clear limitations with respect to the diversity of the available material. While the collection of extant Old and Middle English texts is relatively comprehensive in terms of volume, a fairly limited number of authors, text types and dialects are represented. The dominance in Old English of certain authors, such as Alfred and Ælfric,¹ means that individual style may influence the results of linguistic investigations. Also, as pointed out by Pintzuk (1999:14), there may be some intervals of time within a given period that are not represented at all. Such time gaps naturally pose problems for diachronic linguists.

Another methodological issue concerning representativity is the use of text samples rather than whole texts as the basis for linguistic analysis. We must ask ourselves not only whether the sample is representative of the language as such, but whether it accurately represents the language of the text it appears in. In her study of the *Old English Orosius*, Liggins (1986) presents evidence that book VI stands out from the other books that make up the *Orosius* in many respects, also as regards word order. For instance, it turns out that book VI contains more clauses with verb-final order, both in main and subordinate clauses. One possible explanation is that books I-V and VI were not translated by the same person (1986:266). In investigations that attempt to cover a number of different periods, texts and genres, sampling is more often than not an absolute necessity. One way of minimizing the problem of sample reliability is to make sure samples constitute a reasonable percentage of the complete text.

Fourth, there is a methodological problem concerning writing conventions such as punctuation and capitalisation. Since these conventions were rather inconsistent and much less formalised than today, it is often difficult to decide where a clause begins and ends. According to Mitchell (1985 I:770), 'punctuation in OE manuscripts cannot be a reliable guide to the grammatical nature or function of individual clauses'. This

¹ How much of the so-called Alfredian material was actually produced by the king is a matter of controversy (see eg Haugland 2007:10). There is nonetheless little doubt that king Alfred was an influential character in the production of early Old English texts.

investigation is based on texts in their modern editions, and therefore reflects the choices made by the editor.

Next, there is the question of possible word order differences between translated and non-translated works. A number of the texts under investigation are translations, in particular texts from the Old English period, and it is not inconceivable that they are influenced by the language of the original. Thus one might expect to find characteristics of Latin syntax in translated texts like the *Pastoral Care* and *the Old English Apollonius of Tyre*. Sweet (1871:xxxix ff) finds that OE translations of Latin source texts are generally idiomatic and represent the translator's native tongue, and that writers developed their own, native historical prose. Haugland (2007:13) notes that the Alfredian translations 'do not generally strike the reader as slavish, gloss-like latinised renderings'. As regards the Old English *Orosius*, Bately (1980:xciii) remarks that it is more of a paraphrase than a translation, 'a rendering of sense for sense not word for word.' This is confirmed by Vanderbilt (1998:379f), who regards the translation of *Orosius* and other works from the Alfredian period as relatively free in character. All in all, it appears that Latin influence on the word order of OE translations is relatively insignificant. As far as the late Middle English translation of *Mandeville's Travels* is concerned, one cannot rule out a certain degree of word order dependency on the French original.

Finally, there is the issue of the dating of texts. Few surviving works from Old and Middle English exist in the form of original manuscripts, which is what the researcher ideally should have available. Rather, one must often rely on copies of the original manuscript, and the time gap between such copies and the date of composition varies greatly, from a few years to several centuries. Linguistic investigations of Old and Middle English texts differ with respect to the criteria used for the dating of texts. If one relies solely on the manuscript date, without any consideration of the presumed date of composition, all homilies found in eg the Bodley 343 ms, dating from the latter part of the 12th century, would have to be regarded as belonging to early Middle English. However, most of these homilies are in fact copies of texts written by Ælfric nearly 200 years earlier. As shown by Irvine (1993:lv), the language of the homilies in Bodley 343 'shows many features of the late West-Saxon standard literary language'.

The scribe is said to mix old and new forms, and is described as ‘remarkably conservative linguistically’ for his time. Interestingly, McPherson’s (1996) comparison between one of the 12th century *Lambeth Homilies* and an earlier OE version of the same homily shows that word order remained largely unchanged, although there were some changes in lexis. Thus, Kohonen (1978:75) may be right in his claim that 12th century modernisations of OE homilies are unsatisfactory ‘because they do not reliably reflect the developments of the 12th century, but are variously dependent on the originals’.

The case of the Bodley 343 and other 12th century copies of OE texts shows that very late manuscripts must be used extremely carefully as evidence of how and when language change takes place, since there really is no water-proof way of determining if and to what extent the language of the original has been modernised by the scribe. Ultimately, one runs the risk of generalizing over samples that are not representative of the time in which they were produced. Comparisons between early and late copies of the same text have shown that there existed different scribal traditions; some would copy their exemplar letter by letter, word by word, others would make extensive revisions to the text. Robinson (1994:38f) suggests that the medieval scribe had a certain professional pride, which included a legitimate right to make alterations, and even claims that only a dullard would reproduce the original slavishly. According to Horgan (1986:120), who has studied a number of mss of Alfred’s *Cura Pastoralis*, scribes often took on the role of editor rather than mechanical copyist.

As to the nature of scribes’ modifications, there is little doubt that spelling, punctuation and morphology were more readily affected than syntax. Nevertheless, word order has also been proven to differ considerably between mss of the same text, and Horgan’s (1986:120) investigation shows that word order, as well as other syntactic properties, was extensively modernised in one of the later manuscripts of the *Cura Pastoralis*.

In the cases where a considerable period of time separates the original manuscript and the extant manuscript, there does not appear to be any methodologically satisfactory way of dating the language of the manuscript. By using the original date of composition as a starting point, one may end up dating a given change far earlier than

is actually the case, since the copy may have been considerably modified and modernised. Moreover, the time of composition can in many cases not be set without a great deal of uncertainty. On the other hand, dating by manuscript composition is equally hazardous, given our knowledge about scribes' differing practice.

In this investigation I have chosen to use the date of the manuscript, not the date of composition, as the criterion for the dating of any particular text.² To the extent that it is possible, however, an attempt has been made to include in my database manuscripts that were written in close chronological proximity to their originals. This is the case, for instance, with Old English texts such as *Orosius*³ and Ælfric's *Catholic Homilies*, as well as the late ME *Mandeville's Travels*.

Early ME proved to be the most difficult period with respect to the representativity issue, especially regarding texts from the 12th century. As mentioned above, a number of the extant mss from this period are copies of older compositions from the 10th or 11th centuries, in particular in religious prose. However, none of the texts used in this investigation have a gap between composition date and manuscript date of more than 60 years, and these gaps do not cross the boundaries set for the four periods. In other words, manuscript date and composition date belong to the same period throughout. For a detailed survey of the texts chosen for the present study, see section 1.2.

Sections 3.2.2 through 3.2.8 present specific linguistic structures that were problematic in the syntactic analysis. It should be pointed out that not all problems have been deemed important enough to be included in this discussion. The ones that are left out are generally too infrequent for the solutions to have any consequences for the statistics presented in the tables.

3.2.2 The notion of subordination

In the words of Bruce Mitchell, in Old English 'there are no infallible criteria for distinguishing principal from subordinate clauses' (1985 I:773). In the earliest periods of English the whole question of coordination vs subordination is certainly tricky, and

² The same approach is taken for the dating of texts in the Helsinki Corpus (Rissanen, Kytö, and Palander-Collin 1993:22).

³ Parts of *Orosius* stem from a later manuscript. Cf section 1.2.

it is in many cases difficult to make a sharp distinction between the two phenomena. Mitchell points to the context as the most helpful disambiguating factor, and he also mentions the order of clauses and elements as useful guides (1985 I:773). However, students of word order should of course refrain from using word order as a classifying criterion, to avoid circularity. Sometimes mood can provide important clues, whereas intonation is not available to us. Punctuation is by no means a reliable indicator, nor is the original source of translated texts (cf Mitchell 1985 I:769ff for further discussion).

In many cases the introductory word alone does not tell us whether we are dealing with a subordinate or a main clause. The most frequent and problematic cases are discussed in subsequent sections, viz *for* (3.2.3), relative/demonstrative *se* (3.2.5) and the combination *þat is* (3.2.8). Moreover, there are a number of correlative forms, most commonly *þa*, *þonne*, *nu*, *þær* and *sipþan*, which may be used either as adverbs or subordinating conjunctions. With these, the main and subordinate clause can usually be identified without problems, based on context and meaning. In sum, very few clauses have been excluded for reasons of ambiguity.

3.2.2.1 Type and function of subordinate clauses

Subordinate clauses in OE and ME are not always easily defined as belonging to any particular subtype, since subordinating conjunctions were not as developed and specialised as they are in the modern language. Although PDE also has subjunctives with multiple functions, such as *while*, *since* and *if*, the phenomenon is much more pronounced in earlier periods. Most conspicuous in this respect is the word *þæt*. It is by far the most frequent subjunctive in OE, and can introduce a whole range of different clause types, primarily nominal clauses and a number of adverbial clauses. A nominal *þæt*-clause is given in (3.1), while (3.2) and (3.3) illustrate *þæt* introducing adverbial clauses of purpose and reason, respectively.

- (3.1) wite eac **þæt antiochus se cyngc me aflimed hæfð of minum eared**
 know also that Antiochus the king me driven has from my home
 [ApT 14,22]

(3.2) Smiriað eowre eagan mid sealfe **ðæt ge mægen geseon**

anoint your eyes with salve so-that you may see
[CP 69,10]

(3.3) Ða wearð heo mid micelre sarnysse ðurhslegen. **þæt heo swa micel man gefremode**

then was she with great sorrow penetrated. because she so great crime perpetrated
[ÆCHom II,119]

In OE and particularly ME, *þæt* may also function as a relative pronoun. In a similar vein, *þa/þonne*, apart from being potentially ambiguous between subjunction and adverb, may denote both temporality and condition in adverbial clauses. Semantic considerations, both within the clause itself and in the surrounding context, must necessarily play an important role in the classification of potentially ambiguous subordinate clauses.

3.2.3 *For*

There are a large number of ME clauses beginning with *for* in my data, two of which are exemplified below.

(3.4) On þis kinges time wes al unfrið & yfel & ræflac, **for agenes him risen sona þa rice men þe wæron swikes**

in this king's time was all dissention and evil and rapine, for against him rose soon
the rich men who were traitors
[PC 1135,18]

(3.5) For who so kutte hem with jron it wolde destroye his vertue t his nature

for who so cut them with iron it would destroy his virtue and his nature
'For if anyone cut them with iron, it would destroy his virtue and his nature'
[Mandeville 32,19]

Scholars do not agree on the status of *for*: Quirk et al (1985:90) regard PDE *for* as a peripheral subordinator which shares some characteristics with coordinating conjunctions, whereas Beal (1988:63) considers the word to be a coordinating conjunction. Rissanen (1989) investigates the longitudinal development of *for* in detail, and finds that it 'has probably always contained (...) characteristics both of a coordinating and a subordinating conjunction' (1989:3). However, Rissanen believes

that *for* has undergone a shift towards the function of a coordinator, and that the word had lost its main subordinator features in Early Modern English. It is noteworthy that of the 108 eME *for*-clauses in my database, only 2% have SXV order,⁴ while inversion of subject and verb occurs in 18% of the cases. This distribution is much closer to that of main clauses in this period than to that found in subordinate clauses (cf Tables 4.1 and 4.2). Conjunctions should of course not be classified according to the word order in the clause they introduce, since such an approach would be circular. Nevertheless, based on the uncertain status of *for* in earlier English, and to minimise the risk of skewing my subordinate clause data, I have chosen to regard *for* as a coordinating conjunction in all ME texts.

3.2.4 OE *man* and ME *men*: full NP or pronoun?

The OE indefinite subject *man/mon*, as illustrated in (3.6), is sometimes treated as nominal (see van Kemenade 1987; Pintzuk 1999), sometimes as pronominal (Rissanen 1997:517). It basically corresponds to the PDE indefinite ‘one’.

- (3.6) Norðdene habbað be norþan him þone ilcan sæs earm **þe mon hætt Ostsæ**
 North-Danes have by north-of them the same sea’s arm which one calls the Baltic
 [Or 13,19]

Other findings, such as Haugland’s (2006:143f) examination of OE *gif*-clauses, indicate that *man/mon* has a vacillating status between nominal and pronominal, but that the word never inverts with the verb after a topicalised constituent. Haugland’s study by and large confirms van Bergen’s (2000) quantitative evidence that *man* cannot be grouped with the nominals, and must thus be analysed as a pronominal element. Van Bergen finds that in non-negated, indicative clauses with a topicalised constituent, *man* behaves like a pronominal subject and does not normally invert with the finite verb (2000:115). There are exceptions, for example when the verb is negated, and when the topicalised constituent is *þa* or *þonne*. However, these elements typically

⁴ See section 3.3 for a description of the various word order patterns.

trigger inversion regardless of the type of subject. I have chosen to classify *man* as a pronoun in this investigation.

In the course of eME, *man* weakens into *me*, although a more noun-like indefinite with the meaning ‘human being’ survives. *Me* is gradually replaced by the plural *men*, described by Rissanen as ‘a new lexical item expressing indefinite person’ (1997:521). Rissanen says that both *man* meaning ‘human being’ and the plural *men* were ‘pronominalised to some extent’, but they were never completely grammaticalised (1997:521). Moreover, there are some instances in my own data where *men* is preceded by a determiner, as in (3.7).

- (3.7) Summe men taken the see at Gene, Somme at Venyse
some men take the see at Geneva, some at Venice
[Mandeville 35,17]

The context and meaning of such phrases do not appear to differ from the instances of *men* used alone, an indication that the word is a nominal. Thus, in the present investigation *men* is treated as such. It occurs almost exclusively in the *Mandeville* text.

3.2.5 Old English relative *þe*

Relative clauses constitute a substantial part of my subordinate clause data, and the analysis of the OE relative *þe* therefore has implications for the results presented in chapters 4 and 5. If the word is viewed as a complementiser, which is the most common analysis in generative grammar, it is not considered part of the clause structure.⁵ Then all relative clauses with a ‘subject’ relative, such as (3.8) below, would be left out of the investigation, since only clauses with an overt subject are taken into consideration. Such an analysis would exclude the majority of relative clauses.

⁵ See eg Grimshaw (1975), Allen (1980:108ff) and Traugott (1992:226–8) for this type of analysis.

- (3.8) Ne bið on hlafe anum mannes lif, ac of eallum þæm worde **þe gaþ of Godes muþe**
 not is in bread alone man's life, but in every the word that proceeds from God's mouth
 'Man's life exists not on bread alone, but in every word that proceeds from God's mouth'
 [BlHom III,6]

On the other hand, it is possible to analyse *þe* as a relative pronoun or relative adverb, which is the traditional view taken by nineteenth-century grammarians and also the analysis adopted by Seppänen (2004). To be more precise, Seppänen distinguishes between *þe* as a mere subordinating particle in combination with relative adverbs, eg *þær þe*, *þider þe*, and its function as a relative pronoun with the regular nominal functions of subject, object and preposition complement. A third function of *þe*, though limited in frequency, is as a relative adverb. Seppänen sees the subordinator function as more basic, and the one from which the other uses originally developed (2004:99f). Mitchell (1985 II:87) opts for the middle road, and argues that *þe* standing alone may serve both as subordinating particle and relative pronoun. In the present account, *þe* is analysed as a relative pronoun.

It must be added that the forms *se*, *seo* and *þæt* can function both as demonstrative pronouns and as relatives, and that individual examples can be ambiguous.⁶ As demonstrated by Mitchell (1985 II:89), neither translation nor punctuation can be fully trusted in these matters. The context is often helpful in distinguishing between the two uses and thus between main and subordinate clauses. Ambiguous cases have been left out of the analysis, and (3.9) is one such clause:

- (3.9) Sardina 7 Corsica þa igland todæleð an lytel sæs earm, **se is twa 7 twentig mila brad**
 Sardinia and Corsica the islands separate a little sea's arm, it/which is two and twenty miles broad
 [Or 21,12]

⁶ See Andrew (1936), Allen (1980:82ff), Mitchell (1985 II:89ff) and Fischer et al (2000:56) for further discussion of relative and demonstrative pronouns in OE.

3.2.6 Clitics

It is well known that unstressed pronouns and certain other light elements (particles, adverbs) tend to occur preverbally in Old English, and these are sometimes analysed as clitics. A clitic may be defined as an ‘element which, like affixes, cannot occur freely in syntax but is in need of a “host” (...) A typical clitic will attach itself to a host, that is, a (fully inflected) word or phrase’ (Kerstens, Ruys, and Zwarts 1996–2001). The clitic analysis, most frequently applied by linguists working within generative frameworks (see eg van Kemenade 1987; Kiparsky 1995; Pintzuk 1999; Ohkado 2000), may account for structures that appear to be counterexamples to the V2-hypothesis (cf section 2.2).

Pronominal subjects and objects, as well as some short adverbs like *þa*, *swa* and *ne*, may be analysed as clitics in OE in certain positions. When these elements occur preverbally, but after an initial constituent, they may be considered as being cliticised to the finite verb to form a single syntactic unit. According to such an analysis, therefore, the subject pronoun *he* in (3.10) is not a separate constituent, and the clause has V2 order.

(3.10) Viii scypa he hæfde ær he Beorn amyrdode
eight ships he had ere he Beorn betrayed
[ChronC 1049,33]

Thus, many clauses that would otherwise have the verb in third position may be classified as V2 under a clitic analysis.⁷ For subordinate clauses a consequence of this analysis will be a greatly reduced frequency of SXV clauses, since a number of preverbal object pronouns and adverbs are not regarded as separate constituents. Both (3.11) and (3.12) would then be assigned to the SV- pattern rather than SXV.

(3.11) & him Cirus wæs æfterfylgende, **oþ he hiene gefeng**, & ofslog
and him Cyrus was following, until he him took, and slew
[Or 44,11]

⁷ Cf Bech (2001:79ff) for a discussion of the consequences of a clitic analysis for main clauses in OE and ME.

(3.12) & he us þonne forgyldēþ **swa we nu her doþ**, ge godes ge yfeles
and he us then recompenses as we now here do, both good and evil
[BIHom IV,228]

Clitics are believed to have disappeared some time in the fourteenth century (van Kemenade 1987:219; Stockwell and Minkova 1991:399), and the clitic hypothesis is therefore relevant for early and late OE as well as early ME.

The clitic hypothesis has been the subject of some criticism. Bech (2001:80) points out that there is no agreement on which elements are best analysed as clitics, and that our lack of knowledge about stress and emphasis makes it extremely difficult to distinguish between clitic pronouns and other pronouns. In a thorough investigation, Koopman (1997) shows that with the exception of *ne* ‘not’, the proposed clitics in Old English do not fulfil all the clitic criteria formulated by Kayne (1975). Koopman states that ‘there is some support for a clitic analysis’, but the evidence is insufficient to determine the extent to which personal pronouns are clitics, and adverbs are ‘unlikely’ to be so (1997:73).⁸ Given the controversy surrounding this approach, I have chosen to disregard clitics in my analysis, with the exception of *ne* (see below). However, the crucial distinction between pronouns and full NPs is in no way overlooked here, and is given considerable attention in chapters 4 and 5. I believe that pronominal and nominal elements behave in fundamentally different ways in OE, but that the contrasting distribution is not due to cliticisation of certain pronouns onto the verb, but instead has to do with the weight and information value of the various elements. Morphosyntactic and pragmatic properties of clause elements are treated in chapters 4 and 5.

The only word which has been analysed as a clitic here is the negative particle *ne* ‘not’. In OE, this particle always occurs immediately in front of the finite verb, and it is thus described as the element in OE which best qualifies under the criteria for clitics (Koopman 1997:75). *Ne* may occur in a contracted form with the verb (3.13) or alone (3.14).

⁸ See Westergaard (2009a:74f) for further criticism of the clitic hypothesis.

(3.13) Ða **ðe nelleð ðese godes hali wordes hlesten ne healden**, harkið hwat se haligast seið ðurh ðe profiete Dauið
 those who not-will these God's holy words listen-to nor observe, hear what the Holy-Ghost says through the prophet David
 [VV 19,21]

(3.14) Soðlice ne bið us to ælmessan geteald. gif we ðam mannum syllað þe heora neode sylfe habbað. **for ðan ðe god ne het us gewelgian ða hæbbendan**
 truly not is us as alms accounted. if we to-those men give who for-their need self have. because God not commands us to-enrich those who-have
 [ÆCHom II VII,125]

Clause-initial instances of *ne* are sometimes treated as separate, topicalised constituents (van Kemenade 1987; Stockwell and Minkova 1991), but as has been pointed out by eg Bech (2001:41) and Haugland (2007:170), the full form of *ne* behaves syntactically in the same way as the reduced, proclitic form. I have decided to analyse all OE and eME instances of the negative particle *ne* in the same way, viz as clitics that form one syntactic constituent together with the verb. Thus (3.13) and (3.14) have SvXV and SVX order, respectively.

3.2.7 Discontinuous phrases

Frequently, clauses contain a phrase that has been split into two or more parts. Discontinuous phrases are particularly common in Old English, and are typically found with noun phrases containing a postmodifying clause, as seen in (3.15) and (3.16). Adjective and adverb phrase heads are also occasionally separated from their postmodifiers, as seen in (3.17) and (3.18). The structure in (3.19) is very frequent in relative clauses, where the initial relative pronoun *þe* functions as prepositional complement and the preposition is obligatorily stranded and occurs later in the clause, but normally in front of the verb.

(3.15) Soðlice ne bið us to ælmessan geteald. **gif we ðam mannum syllað þe heora neode sylfe habbað**
 truly not is us as alms accounted. if we to-those men give who for-their need self have
 [ÆCHom II VII,125]

- (3.16) þa wæron ða Perse mid þæm swiþe geegsade, & eac ondredon **þæt mon þa brycge forwyrcean wolde þe æt þæm gemære wæs**
 then became the Persians of that very frightened, and also dreaded that one the
 bridge destroy would that at the boundary was
 [Or 45,21]
- (3.17) For ðære lufan Essaias wilnode **hu he nyttosð meahste beon his nihstum on
 ðys eorðlican life**
 from the love Isaiah desired how he most-useful might be to-his neighbours in
 this earthly life
 [CP 49,13]
- (3.18) and cwædon þæt him nan hlaford leofra nære þonne hiora gecynda hlaford **gif
 he hi rihtlicor healdan wolde þonne he ær dyde**
 and said that them no lord dearer not-was than their natural lord if
 he them better govern would than he before did
 [ChronC 1014,3]
- (3.19) & Godes is þæt yrfe **þe we big leofiaþ**
 and God's is that substance which we by live
 [BIHom IV,221]

A syntactic analysis of clauses with discontinuous phrases is problematic, since the split constituent occurs in two, sometimes three different positions in the clause. Which part should count in the analysis? Given the large number of clauses with discontinuous phrases in the database, I have decided to include them in my analysis. A closer look at these clauses reveals that the discontinuity is not random and irregular. On the contrary, in most cases there are specific reasons for splitting up phrases. In the examples above that have clausal postmodifiers placed postverbally, the discontinuity provides end weight in what would otherwise have been very front-heavy structures. Moreover, in SXVX clauses with a discontinuous phrase, the element to the left of the verb often has low information value while the element to the right has high information value (cf chapter 5). There are thus indications that clauses with discontinuous phrases are particularly interesting from a pragmatic point of view. This, coupled with the high frequency of such phrases, means that they have been included in the present analysis.

I have analysed the different parts of a discontinuous phrase as separate parts of the clause. This means that (3.15)–(3.18) are classified as SXVX clauses, while (3.19) has SXV order. The parts are also analysed separately according to weight (chapter 4) and

information value (chapter 5). Discontinuous phrases occur in several word order patterns, but are especially frequent in SXVX clauses.

3.2.8 The combination *þat is*

In eME *þat* gradually replaces *þe* as a relative, although the two forms are used interchangeably for some time. When a clause is introduced by the combination *þat is* (often *þt is* in the manuscript), the word *þat* may have three different functions. One is the regular demonstrative pronoun, and this use is fairly easily deductible from the context in most cases. Secondly, *þat* may be the first element of the explanatory equivalent of Latin *id est*, in which case it does not introduce a subordinate clause but rather an appositive of a formulaic character. Due to the fixed word order in these appositives, they have been excluded from the analysis. The third function of *þat* is as a relative pronoun. The two latter uses are not always easy to keep apart, as illustrated by the following examples:

- (3.20) Spereuwe haueð zet acunde, **þt is bi heue ancre**, þah me hit heatie, **þt is þe fallinde uuel**
the-sparrow has yet characteristic, which is suitable anchoress, though we it hate, that/which is the falling sickness
[AW 91,23]
- (3.21) for beo ha bitrept utewið, nis þer bute leade forð toward te gealforke, **þt is þe wearitreo of helle**
for be she caught outside, not-is there except lead forth toward the gallows, that/which is the gibbet of hell
[AW 90,12]
- (3.22) as he sculde his & heoren ant alre þinge schupent, **þt is god unsehelic**
as they should their and their idols and of-all things maker, that/which is God invisible
[Katherine 22,1]

The first clause in (3.20) is clearly relative, whereas the second appears ambiguous between ‘id est’ and ‘which is’. The same applies to the clauses in (3.21) and (3.22), which to my mind cannot be classified as one or the other with any certainty. The adopted policy is to leave cases like these out of the analysis.

3.3 Description of the word order patterns

This section presents the word order patterns used in the analysis, and describes the criteria for assigning a clause to a particular pattern. It is important to point out that the word order labels refer to abstract categories that cover a number of different actual element orderings.⁹ Because one and the same label may be found in the literature with a variety of meanings, and to avoid confusion and potential misunderstandings, the patterns are fairly thoroughly accounted for and extensively exemplified. The necessity of careful usage of word order labels is pointed out by eg Denison (1993:28).

S stands for the subject, while V equals the finite verb. However, if the verb phrase is complex and non-contiguous, a lower-case v indicates the finite verb and a capital V the non-finite verb(s). This is the case in the SvXV pattern. X entails all elements apart from subject and finite verb, ie non-finite verbs, objects, predicatives and adverbials. It should be noted that initial X elements are possible in all patterns, not just XVS where the label itself signals the presence of such an element. Thus, an initial X is obligatory in XVS clauses and optional in all other patterns. Furthermore, an X position may contain several X elements. In the following, examples from all four time periods are given for each pattern. Only examples that are special in one way or another are commented on, eg ones that represent a certain subtype within the overall pattern.

3.3.1 SXV

This is the so-called verb-final pattern, in which the finite verb occupies absolute clause-final position. Consequently, in complex verb phrases the non-finite verb must precede the finite verb. One or more X elements may precede the subject as in (3.24), and, most importantly, there must be at least one element separating the subject and the finite verb. Clauses with only a non-finite verb separating the subject and the finite verb, ie SVv, have also been included in this pattern, as seen in (3.25). This structure is taken to be fundamentally different from that which has the non-finite verb finally, ie SvV, which is included in the SVX pattern described further down.

⁹ Capital letters are used for word order labels as presented in the tables in chapters 4 and 5. Subtypes of each pattern, such as SVv, are given in small caps.

- (3.23) He hæfde þagyt, **þa he þone cyningc sohte**, tamra deora unbebohtra syx hund
he had moreover, when he the king sought, of-tame deer unsold six hundred
[Or 15,8]
- (3.24) Þæt folc ða ofscamod ongean cyrde to ðære lare **ðe hi ær forleton**
the people then ashamed towards turned to the instruction which they before left
[ÆCHom II X,124]
- (3.25) & Godes willa sy **þæt hi foreþingian motan**
and God's will is that they intercede should
[BIHom IV,123]
- (3.26) Also is of ðe manne **ðe ðese eadi mihte mid him hauedð**
just-so is [it] concerning the man who this blessed virtue with him has
[VV 29,21]
- (3.27) and what þinge þat þou can þenke **þat good is**, all þou may fynde in hym
and what thing that you can think that good is, all you may find in him
[MES 35,25]

3.3.2 SXVX

The SXVX pattern differs from the SXV pattern in having one or more elements in post-verbal position. The subject and the verb must be separated by at least one element, and one or more elements may precede the subject. Complex verb phrases must be contiguous, but the order of the verbs is irrelevant.

- (3.28) ac ic tæle **ðæt hine mon forðy upahebbe on his mode**
but I blame that him one therefore raises up in one's mind
[CP 41,2]
- (3.29) **gif we þonne on þæm syx wucan forlætap þa syx Sunnandagas þæs fæstennes**, þonne ne bið þara fæstendaga na ma þonne syx & þritig
if we then in the six weeks omit the six Sundays of-the fast, then not is of-the fast-days no more than six and thirty
[BIHom III,160]
- (3.30) Gretunge keiser, walde wel bicume þe for þin hehnesse, **gef þu þis ilke zeld þt tu dest to deouelen**
greetings emperor, would well become you in your nobility, if you this same sacrifice that you do to devils
[Katherine 21,9]

- (3.31) At þat cytee entreth the ryuere of Nyle in to the see **as I to þou haue seyð before**
 at that city enters the river of Nile into the see as I to you have said before
 [Mandeville 37,3]

3.3.3 SVX

Clauses belonging to the SVX pattern are first and foremost characterised by having the subject immediately before the finite verb, which in turn must be followed by one or more X elements, including non-finite verbs, cf (3.32). The subject may be preceded by one or more X elements, as seen in (3.33). If the verb phrase is complex, it has to be contiguous, ie the non-finite verb must follow the finite verb immediately, as in (3.35).

- (3.32) Ðonne bið sio cweorn becierred **ðonne se monn bið geendod**
 then is the mill turned when the man is ended
 [CP 31,21]

- (3.33) ac he dyde ealles to lytle dædbote of þære Godes are **þe he hæfde of manegum halgum stowum**
 but he made all too little restitution of the God's property which he aquired from many holy places
 [ChronC 1052,58]

- (3.34) & lahte ut his tunge se long **þt he swong hire a-buten his swire**
 and darted out his tongue so long that he swung it around his neck
 [Margaret 68,6]

- (3.35) þus þou madeste couenand with me in myn ante-teme **þat þou woldeste be keend to hym**
 thus you made agreement with me in my pre-theme that you should be kind to him
 [MES 34,3]

3.3.4 SvXV

In the SvXV pattern, often referred to as the 'sentence brace construction' (see eg Vennemann 1974:362), the finite and the non-finite verbs are separated by one or more X elements. The subject may be preceded by X elements, as in (3.36), but must always be followed immediately by the finite verb. Notice that the non-finite verb may be followed by one or more X elements, as exemplified in (3.39).

- (3.36) he hie eac oþrum folcum oftrædlice on þeowot sealde, **þe ær nan folc ne mehte mid gefeohte gewinnan**
 he them also to-other nations often into slavery gave, whom formerly no people not could
 by war take
 [Or 62,16]
- (3.37) ic lufige þone forlidenan man **ðe wæs þurh ungelymp beswicen**
 I love the shipwrecked man who was by misfortune betrayed
 [ApT 34,17]
- (3.38) he hit dide **forði þæt he wolde þurh his micele wiles ðær beon**
 he it did because he would through his crafty wiles there be
 [PC 1128,14]
- (3.39) sche mylked hem on the rede stones of marble **so þat the traces may zit ben sene in the stones all w[h]yte**
 she milked them on the red stones of marble so that the traces may still be
 seen in the stones all white
 [Mandeville 46,35]

3.3.5 XVS

In the XVS pattern there is one or more initial X elements, followed immediately by the finite verb. The subject must follow the verb, but there may be intervening elements between the verb and the subject, and the subject may in turn be followed by one or more elements. Complex verb phrases need not be contiguous, ie elements may intervene between the finite and the non-finite verb. XVS clauses are typically associated with the Old English main clause V2 phenomenon. The order does, however, occur in subordinate clauses as well, sometimes in so-called “impersonal” constructions with a dative or accusative argument initially, as in (3.40) and (3.41). There are also many cases of inversion with initial adverbials or regular objects; two such clauses are given in (3.42) and (3.43). Subordinate clauses with topicalisation are further discussed in chapter 4.

- (3.40) þa sædon heora biscepas eft þæt heora godas bædan þæt him mon sealde ænne cuce mon, **þa him þuhte þæt heo heora deadra to lyt hæfden**
 then said their priests again that their gods asked that them one give a living man, when them-D seemed that they of-their dead too few had
 [Or 57,18]

- (3.41) *ðis wæs gedon on Britius mæssedæg, forðam þam cyninge wæs gecyð þæt hi woldan hine besyrwan æt his life*
 this was done on St.-Brice's mass-day, because the king-D was told that they would him beshrew of his life
 [ChronC 1002,8]
- (3.42) *Eadi art þu, forðan ðe ðis ne tahte ðe non eorðlic mann, þat ic am Crist, godes liuendes sunu*
 blessed art thou, because this not taught you no earthly man, that I am Christ, God's living son
 [VV 25,33]
- (3.43) *So þan I may say þat here is a glorious felishippe*
 so then I may say that here is a glorious fellowship
 [MES 4,30]

3.3.6 SV-

This pattern is distinguished from SVX by the absence of an X element after the finite verb. Initial X elements may occur, and the verb phrase is simple. The pattern gives no information with respect to word order typology, since there are no X elements, and we cannot tell where X elements would have been placed had they been present.¹⁰

- (3.44) *Ic herige ðæt ge secað, ac leorniað ðæt ge witen hwæt hit sie*
 I praise that you seek, but learn that you know what it is
 [CP 53,11]
- (3.45) *and apollonius hine gemægnde swa swa god wolde on ðæs cyninges plegan*
 and Apollonius himself mingled so as God would in the king's play
 [ApT 20,7]
- (3.46) *Me sire, þeo deð als wa, þt is betere þen ich am*
 but sir, she does also, who is better than I am
 [AW 31,27]
- (3.47) *And þere ben .vij. places þat brennen t þat casten out dyuerse flawmes and dyuerse colour*
 and there are seven places that burn and that cast out diverse flames and diverse colour
 [Mandeville 36,6]

¹⁰ The pattern is kept as a separate category only in the early, general parts of chapter 4, but is later subsumed under miscellaneous clauses.

3.3.7 Miscellaneous

The clauses that did not fit into any of the above patterns were labelled *miscellaneous*. Most frequent in this category are clauses with the string *SXvXV* (3.48), which do not fit into either the *SvXV* pattern or the *SXVX* pattern. Another type which occurs with some regularity is exemplified in (3.49). It has an element between subject and verb, but the fact that the finite verb precedes the non-finite means that the clause is not verb-final and cannot be classified as *SXV*. Verb-initial clauses are less common in subordinate than in main clauses, but cases like (3.50) do occur.

(3.48) On ðæm æfterran geara þæs, Minucia hatte an wifmon, **þe on heora wisan sceolde nunne beon**

in the following year of-that, Minucia was-called a woman, who in their manner should nun be

[Or 60,8]

(3.49) & eal his lif he lifde buton synnum, **þeah þe he hine lete costian**

and all his life he lived without sin, though he himself let tempt

[BIHom III,116]

(3.50) Ah swuch leome & liht leitede þrinne **þt ne mahten ha nawt loki þear-azeines**

but such brightness and light shone inside that not could they not look there-against

[Katherine 38,4]

3.4 Information value

The method that is used for the pragmatic analysis of clauses is inspired by Bech (2001:145ff). As was mentioned in section 2.4.33, Bech operates with the concepts low information value (low IV) and high information value (high IV).¹¹ These are related to, but not co-extensive with the more traditional ones, given and new information. For example, an element which is used contrastively may be contextually given, but still have high information value. In addition, certain elements which cannot be classified according to the given/new distinction may be assigned low information value in the pragmatic analysis (Bech 2001:152). Examples of such elements are the anticipatory subjects *hit* ‘it’ and *þær* ‘there’, and the OE indefinite pronoun *man* ‘one’.

¹¹ The term *information value* is also used on several occasions by Quirk et al (1985:1357).

The criteria Bech uses for analysing a particular element as having either low or high IV are based on the theories of Firbas and Chafe (cf section 2.4.2). Bech takes the context and the semantic content to be the primary factors determining the information value of an element. This is the approach chosen for the present investigation as well, although with certain modifications, described below.

Recall from section 2.4 that a distinction may be made between referential and relational givenness–newness (Gundel 2003:125). To the extent that the two concepts are possible to keep apart, the present study deals with the referential aspect. In other words, the clauses in the corpus are not divided into two main parts (theme/rheme, topic/comment etc); instead it is individual **clause elements** that play a pivotal role. Thus, subject, objects, predicatives and adverbials are assigned either low or high IV. It must be emphasised that the referential aspect of givenness–newness cannot be fully detached from the relational aspect, since the topic/theme will tend to contain mostly given elements while the comment/rheme/focus will contain mostly new elements. On the other hand, topic and theme are not necessarily exclusively restricted to context-dependent elements, and the comment/rheme/focus does not always consist of only new information.¹²

As stated above, the context is an important determinant in the assignment of information value. However, a major problem is constituted by what to regard as relevant context. Firbas talks about ‘the immediately relevant context’ (1992:21), but does not define precisely what that means. He refers to Svoboda (1981), who analysed an Old English homily and subsequently claimed that an element generally remains retrievable for the span of seven clauses. Such an exact definition does not appeal to Firbas, but based on his own analysis of the distance between co-referential elements in two texts, he makes clear that ‘it is normal for the retrievability span to be very short (...) due to the continuous influx of new irretrievable information’ (1992:29-30). In this respect Firbas is supported by Chafe (1994:79): ‘the number of different referents that can be active at the same time is very small (...) any referent, unless it is refreshed, will quickly leave the active state’. Nevertheless, a decision must be made in each separate

¹² Quirk et al (1985:1362) distinguish between the ‘contextually established’ concepts *given* and *new*, and the ‘linguistically defined’ *theme* (in terms of position) and *focus* (in terms of prosody).

case as to whether an element is given or not, and a certain degree of subjectivity is necessarily involved. It does not appear feasible to operate with a fixed number of intervening clauses in order to decide the givenness of an element, as proposed by Svoboda (1981), because different elements are not likely to remain in the consciousness of the listener/reader for exactly the same number of clauses. For instance, major characters in a story will tend to stay in the consciousness longer than minor characters. In addition, the type and nature of the material intervening between two mentions of a referent may differ from one example to another. As we saw in section 2.4.2.3, Prince (1992) claims that an element remains discourse-old throughout the discourse, but the validity and practical usefulness of such a stance depends wholly on how the notoriously fuzzy concept of discourse is defined.

Keeping in mind that givenness is a status decided upon by the speaker, one might ask whether studying information structure is worthwhile at all, since direct access to the speaker's own assessment is almost never possible. Fortunately, in most cases information value can be decided upon relatively uncontroversially, based on the preceding context. The most problematic elements are those that are not strictly contextually given, but nevertheless have the potential to constitute some shared knowledge, cf Chafe's discussion of extralinguistic context (section 2.4.2.2). If, for example, the author of a homily or sermon refers to some biblical character not mentioned in the context, and the referent is placed in an early, preverbal position, is it not then quite likely that the writer assumes this character to be in the consciousness of the reader? That may well be, but to consistently analyse such elements as having low IV would be to adhere to Firbas' linearity principle, which is basically circular in character (cf section 2.4.3.3). Judging an element's IV on the basis of its position in the clause would render the whole analysis of IV pointless. The use of a definite determiner may also indicate that the speaker assumes an item to be known to the listener, but that need not always be the case, as in the well-known *in medias res* device. In other words, even though a writer may present an element as given, indicated either by its early position in the clause or by its definiteness, that element is not by necessity 'retrievable' (Firbas 1992), 'evoked' (Prince 1992), or 'in the consciousness of the addressee' (Chafe 1994).

Moreover, concepts like Chafe's (1976:31) 'shared knowledge' and Kohonen's (1978:67) 'pragmatically known information' are extremely hard to define. Kohonen mentions unique referents like 'sun', 'moon' and 'heaven', as well as central biblical characters as examples of such information, and classifies these as given. Can these elements, although obviously familiar to the addressee, really be expected to be in his or her consciousness at all times? Or more precisely, is it probable that the speaker expects these elements to be in the consciousness of the addressee at all times? Again, of course, we cannot look into the mind of the speaker. As Geluykens (1992:10) rightly points out: 'not everything the hearer "knows" can be assumed to be in his consciousness'. It is thus necessary to distinguish between elements that are familiar to the addressee and elements that can be expected to be in his/her consciousness. Consequently, elements that are potentially known or shared on the basis of world knowledge or the wider context have generally been assigned high information value in the present study. That is, even referents such as 'the earth', 'the sun', 'God', 'Christ' and 'the Lord' are not assumed to be in the consciousness of the addressee at their first mention. However, central elements like these are likely to remain in the addressee's consciousness for a longer time than peripheral elements before they leave the mind and become contextually independent, and need only be repeated once in a while to retain a low information status. Prince's category of unused elements seems to be at least partly related to 'pragmatically known information', and it has not been considered particularly useful for the analysis of IV.

No attempt has been made to establish firm criteria for how long an element remains context-dependent once mentioned. The reason is, as discussed above, that the decision depends on a number of things, most importantly the nature of the element in question, how central it is to the subject matter, how frequently it has been mentioned previously, and what type of material intervenes between two references to the same element. On the whole, the present method of analysis can be said to be fairly restrictive with regard to the span of an element's givenness. That is, keeping the human brain's very limited capacity for short-term memory in mind (Jonides et al 2008), an element is retrievable for a very short period of time after its first mention. The retrievability span will naturally increase somewhat when an element is

mentioned several times in the text, and the span is also likely to be longer for central elements than for peripheral ones (see eg Poirier and Saint-Aubin 1996).

Psychologically speaking, it seems fair to say that the concepts of givenness and information value are intrinsically connected with the speaker's own assessment of the addressee's consciousness, as suggested by both Prince (1992) and Chafe (1994). Nevertheless, most linguists, and certainly all historical linguists, have no access to the speaker's mind and must rely entirely on texts. Therefore, in the analysis of information value carried out here, context and semantic content will be the main deciding factors. Elements that are context-dependent have been assigned low IV, whereas elements not mentioned in the preceding context have high IV.¹³ Context-dependence includes anaphora, deixis, paraphrase, synonymy and certain cases of antonymy. In addition, and unlike Bech (2001), I have taken Prince's category of inferrable elements into account. It has not been kept separate, however, because inferrable elements seem to have much in common with context-dependent elements. Moreover, a separate category would be comparatively small and of little use statistically. Thus, elements regarded as inferrable have been assigned low information value. In conclusion, the assignment of information value is the outcome of both contextual and semantic considerations.

The subsequent sections describe in more detail how the various types of clause element have been analysed pragmatically.

3.4.1 Subjects, objects and predicatives

Elements with nominal function, ie subjects, objects and predicatives, are analysed as having low IV or high IV. If an element is regarded as contextually dependent, it is given low IV, whereas a contextually independent element is considered to have high IV.

Pronouns generally have anaphoric reference, and are therefore assigned low IV. This also goes for all relative pronouns, as well as the pronouns introducing nominal relative clauses. Indefinite, generic pronouns like *man* 'one' and *sume* 'some' are not

¹³ For examples of the practical analysis of information value, see section 3.4.4 below.

strictly speaking anaphoric, but are nevertheless deemed to have low information value, as are the anticipatory subjects *hit* ‘it’ and *þær* ‘there’. Quite frequently, pronouns have cataphoric reference, most typically to a relative clause postmodifying the pronoun, as in (3.51):

- (3.51) Ah leue ze, ich reade ow; o þe liuende godd mihti & meiful & euch godes
 ful, þe hereð **þeo þe him cleopieð to**
 but believe you, I advise you; in the living God mighty and powerful and of-everything good
 full, who hears those who him calls-out to
 [Margaret 63,11]

The pronoun *þeo* ‘those’ is head of the object noun phrase, but due to the head’s cataphoric reference the object NP as a whole is assigned high information value. Incidentally, the example also illustrates the most typical uses of the pronouns *I* and *you*, which have low IV based on the situational context rather than the textual one.

Full noun phrases may of course have either low or high IV. In many cases determiner use indicates whether a noun is context-dependent or not, but determiners may also be misleading. In (3.52), for example, the definite article is used with *hæte*, a noun which has not been mentioned in the preceding context, and which does not appear to be inferrable from the context either. Rather, it seems to contrast with *se cyle* later on in the clause. The subject *sio hæte* has therefore been analysed as a high IV element.

- (3.52) 7 sio hæte hæfð genumen þæs suððæles mare þonne se cyle þæs norððæles
 hæbbe, for ðon þe ælc wiht mæg bet wyð cyle þonne wið hæte
 and the heat has taken of-the south-part more than the cold of-the north-part
 has, because that each creature copes better with cold than with heat
 [Or 19,26]

Note that clause elements constituted by a clause have been left out of the pragmatic analysis, since they typically convey a mix of given and new information. Clausal elements are instead classified according to weight (cf chapter 4).

Adjective phrases are fairly similar to full NPs with respect to information value, and may have either low or high IV. For the most part, the assignment of IV to an

element can be done solely on the basis of the preceding context, but numerous cases of synonymy, paraphrase, contrast and inference also occur in the data.

3.4.2 Adverbials

Adverbials are also analysed as either low or high IV elements. If the adverbial is realised by an adverb, contextual dependence determines the IV. However, adverbs are relatively rarely co-referential with previous context in the same way that pronouns, full NPs and adjective phrases may be, apart from cases of deixis (*here, there, now*). Context-dependence is therefore not as relevant for adverbs as for other types of elements; rather, a decision must be made in each case as to whether the semantic content of the adverb contributes with important information or not. Adverbs which serve to link the clause to the preceding context are considered to have low information value, such as *then, afterwards, however, therefore* and *yet*. OE *ær* ‘before’ is a frequent item that also appears to serve a linking function in many cases. Interrogative adverbs (*how, when, who, where, what* etc) introducing dependent questions are also assigned low IV. Adverbs that are clearly context-independent are classified as high IV elements, the most typical examples being manner adverbs, for instance *terribly, rightly* and *thoughtfully*. Temporal adverbs such as *before, immediately, always, often* and *soon*, as well as negative and restrictive elements like *never, not* and *rarely* are not usually dependent or independent of context in the same sense as manner adverbs, and seem to vary with respect to their informational load. Of course, both manner adverbs and temporal/negative/restrictive adverbs may be repeated in the context, in which case they are assigned low IV.

Adverbials realised by prepositional phrases are not easy to analyse pragmatically since they consist of two parts, a preposition and a preposition complement, most typically a noun phrase. Kohonen (1978:138ff) proposes that only the noun phrase be taken into consideration in a pragmatic analysis (see also 2001:156), and this is the method chosen in the present investigation. Thus, if the preposition complement has low IV, the whole prepositional phrase is regarded as a low IV element, and vice

versa. The exception is when a preposition is used to express contrast, in which case the prepositional phrase has high IV.

Discontinuous prepositional phrases frequently occur in both Old and Middle English, as discussed in section 3.2.7:

- (3.53) *Seo cwacigende swuster eode of ðam stæpum þe heo on astod*
the quaking sister went from the steps which she on stood
[ÆCHom II II,159]

In cases like (3.53) the initial anaphoric element *þe* has low IV, whereas the dangling preposition *on* is disregarded as far as information value is concerned.

Like other clausal elements, adverbials in the form of clauses have been disregarded in the analysis of information value.

3.4.3 Verbs

Verbs are not assigned information value, but are instead analysed in terms of their argument structure, and classified as transitive, intransitive or copular verbs. Several scholars have pointed out the importance of an additional subcategory of intransitive verbs, viz ‘verbs of appearance or existence on the scene’ (Firbas 1992:65), also called ‘existential verbs’. Firbas claims that existential verbs are semantically weaker than other verbs, while both Haukenes (1998) and Bech (2001) show that existential verbs are strongly associated with XVS clauses in both OE and ME. Yet, since neither existential constructions nor inversion is particularly frequent in subordinate clauses, which are the main concern of this study, existential verbs will not receive special attention. The formal weight of verbs, on the other hand, will be investigated with respect to the SXV, SXVX and SVX patterns. In this context, formal weight is simply accounted for in terms of the number of syllables.

3.4.4 The practical analysis of information value

The following segment from the OE text *Cura Pastoralis* (29,23–31,6), together with the comments accompanying it, may serve to illustrate the current method of analysis.

It must be emphasised that it has been selected because it poses a lot more problems than an average stretch of text in the corpus, regarding, for instance, semantic categories such as synonymy, cross-reference, paraphrase and inference.

1. Oft ðonne se hirde gæð on frecne wegas, sio hiord ðe unwærre bið, gehrist.
often when the shepherd goes on dangerous ways, the flock which unwary is, falls.
2. Be suelcum hirdum cwæð se witga: Ge fortrædon Godes sceapa gærs & ge
of such shepherds spoke the prophet: Ye trod down God's sheep's grass and you
3. gedrefdon hiora wæter mid iowrum fotum, ðeah ge hit ær undrefed druncen.
defiled their water with your feet, though you it previously undefiled drank.
4. Sua ða lareowas hi drincað suiðe hluter wæter, ðonne hi
thus the teachers they drink very pure water, when they
5. ðone godcundan wisdom leorniað, & eac ðonne hie hiene lærað;
the divine wisdom learn, and also when they it teach;
6. ac hie hit gedrefað mid hira agnum unðeawum, ðonne ðæt folc bisenað
but they it defile with their own vices, when the people follow-example
7. on hira unðeawum, nals on hira lare
from their vices, not from their instruction

1. **Oft**. The adverb is analysed as having high IV here, but it is one of several short adverbs of time and restriction whose IV is sometimes hard to determine. For the placement of such adverbs, it is possible that weight or simply word class membership is more important than IV. Adverbs like *oft* 'often', *ær* 'before', *ærest* 'first', *eac* 'also' and *syþþan* 'later' seem to carry little informational weight in the majority of cases, although exceptions occur.

se hirde. This is another way of saying *lareowas* 'teachers, priests', which is found in the immediately preceding context. Such cases of synonymy are analysed as having low IV.

on frecne wegas. As mentioned above, prepositional phrases are analysed according to the IV of the noun phrase complement. *frecne wegas* has not been mentioned before, and does not seem to be retrievable from the context in any way, thus it has high IV.

sio hiord ðe unwærre bið. Even though *sio hiord* represents a good example of an element inferrable from the context (in this case based on the mention of *se hirde*), the postmodifying relative clause renders the NP subject as a whole context-independent.

The relative clause *ðe unwærre bið* is of course analysed separately, with a low IV relative pronoun subject, and a context-independent high IV subject predicative.

2. Be suelcum hirdum. The NP *suelcum hirdum* is context-dependent, and the whole PP is thus given low IV.

se witga. This mention of ‘the prophet’ could be a reference to Christ, who is mentioned a little before the beginning of the extract, although other interpretations are possible. *se witga* is assigned low IV here. It should be noted that the nature of *Cura Pastoralis* means that God, Christ and the Holy Ghost are very central and frequently mentioned characters, which tend to have low information value after their first mention. Without attempting any deeper theological discussion of the Holy Trinity and the relationship between its members, I argue that the three characters are in most cases synonymous with, or at least inferrable from, each other.

Ge. The pronoun does not have anaphoric reference, but must be considered to have low IV based on the situational context. The same is the case with the other two instances of *ge*.

Godes sceapa gærs. Even though *Godes sceapa* is inferrable from the mention of *hirde* and *hiord*, the phrase as a whole is assigned high IV due to the context-independence of the head noun *gærs* ‘grass’.

3. hiora wæter. This NP has not been mentioned before, and thus has high IV.

mid iowrum fotum. This element has not been mentioned in the immediately preceding context, and is consequently assigned high IV. It could be argued to be inferrable from *fortrædon* earlier in the sentence, but I have come to the conclusion that to trod on grass (with one’s feet) and to use one’s feet to defile water are two very different actions.

hit. The object pronoun has anaphoric reference to *hiora wæter*, hence low IV.

ær. In quite a few cases, the common adverb *ær* seems to link to the preceding context. That link does not seem to be entirely clear here. Thus, this instance of *ær* has not been analysed with regard to IV.

undrefed. This adjective is deemed to have lexical cross-reference with *gedrefdon* ‘defiled’, and is therefore assigned low IV. One might certainly argue that it is used contrastively, in which case it would have high IV.

4. **Sua.** This is a typical linking adverb, with low IV.

hi. Here *hi* is a resumptive pronoun with low IV.

suiðe hluter wæter. This object appears to be a paraphrase of the reference to the undefiled water above. Low IV.

hi. The anaphoric reference here again means that the element has low IV.

5. **ðone godcundan wisdom.** Even though ‘divine wisdom’ is a typically recurring theme of religious texts, it is hard to see how this element can have anything but high IV.

hie. See *hi* above.

hiene. Here the reference is anaphoric, to *ðone godcundan wisdom*, and the IV is low.

6. **hie** and **hit.** These are both anaphoric, low IV items; *hie* continues to refer back to ‘the teachers’ while *hit* is used about ‘the divine wisdom’.

mid hira agnum unðeawum. The phrase could perhaps be said to be partly inferrable from the mention of ‘dangerous ways’ as well as from the topic of the whole paragraph. Nonetheless, I do not find the link to be so clear as to assign the phrase low IV, and it is instead considered context-independent.

ðæt folc. The definite article signals givenness, but definiteness is not a defining criterion in itself. This phrase, however, appears to be synonymous with ‘the flock’ and ‘God’s sheep’ above, and thus has low IV.

7. **on hira unðeawum.** A corresponding phrase was given above, and the IV would normally be low. A complicating factor here is that this element seems to contrast with the following prepositional phrase, *on hira lare*. The latter must surely be given high IV because it is contrastive, but what about *on hira unðeawum*? One could say that it is context-dependent at its mention, and does not become contrastive until *on hira lare*

enters the discourse. On the other hand, when read out aloud *on hira unðeawum* may receive some prominence to indicate contrast. I have decided to assign high IV only to the second element in contrastive pairs like this, and *on hira unðeawum* thus has low IV.

nals. This is a spelling variant of *nealles*, meaning ‘not’ or ‘by no means’. The adverb is assigned high IV.

on hira lare. See comment for *on hira unðeawum* above.

3.5 Intersubjectivity test

Given the somewhat fuzzy nature of the concept of information value, and the degree of subjectivity involved in the analysis, it was decided that an intersubjectivity test was necessary. Such a test may give an indication as to whether the method of analysis is feasible and reliable, or if the degree of subjectivity involved is too high for the results to be of any real value. It must be said that a large proportion of the analysed elements are unproblematic and straightforward, eg all anaphoric pronouns as well as NPs that are clearly either dependent or independent of the context. Areas where deviations between analysts are likely to occur include possible cases of inference, synonymy and contrast, certain adverbs of time and restriction, as well as referents mentioned in the near, but not immediately preceding context.

The parallel analysis was undertaken by Kristin Bech, who is familiar with the concept of information value through her own thesis (2001). Some differences between her and my own approach have been discussed above, most importantly the inclusion in the present analysis of inferrable elements (cf Prince 1992). However, Bech’s intersubjectivity analysis is based on the theoretical and methodological outline provided in this and the previous chapter and not on her own work. 600 subordinate clauses from *Orosius* and 200 subordinate clauses from *Vices and Virtues* were analysed.

The results show a high level of correspondence between Bech’s and my own analysis. In the *Orosius* text a total of 1,555 elements were analysed. Of these, 3% (46) were analysed completely differently, ie one analyst assigned low IV and the other

high IV. 2.9% (45) were given either low or high IV by one analyst, but marked ‘uncertain’ by the other. The total number of elements with some kind of disagreement thus equals 5.9%, or 91/1,555. In the case of VV, the rate of disagreement is marginally higher, 3.4% (17/501) of the elements being analysed completely differently and 4.2% (21/501) partly differently, in total 7.6% (38/501). It thus seems clear that the differences that do exist are not so great as to influence the overall results and conclusions reached in chapter 5, and the method resorted to is therefore arguably sufficiently objective.

Nevertheless, it is interesting to discuss a little further those cases where the two analyses deviate from each other, to get an indication of how the method may be improved and refined in the future. Among the elements analysed completely differently, NPs and PPs dominate.¹⁴ Overall, Bech seems to allow a little shorter distance from one element’s previous mention to its next before it is perceived to have left the addressee’s consciousness and thus have high IV. On the other hand, Bech has a slightly higher tolerance level for possible cases of inference, and also interprets elements to be contrastive somewhat more frequently than myself. Elements which one of the analysts marked as ‘uncertain’ are typically short adverbs, especially those corresponding to ‘often’, ‘ever’, ‘never’, ‘later’, ‘first’, ‘well’, and ‘so’. As seen above, these elements are more often than not neither dependent nor independent of context, and each case has to be evaluated separately with respect to how much information it contributes with. It may be that certain adverbs are unsuitable for an analysis of information value, and that they should thus be excluded from the count. Indeed, after the intersubjectivity test was performed, the negative adverbs meaning ‘never’ (*na*, *naefre*) were deemed too difficult to analyse according to information value. They have been left out of the count, except for the few cases where they are clearly repeated and thus context-dependent with low IV, or clearly emphatic or contrastive with high IV. It must be said that most of the adverbs listed above are very frequent elements, and in

¹⁴ As stated in section 3.4.2, the analysis of a PP is basically an analysis of the NP constituting the prepositional complement. Exceptions are cases of contrastive prepositions, which are absent in the present corpus.

the great majority of cases Bech's parallel analysis was consistent with my own interpretation.

3.6 Statistics

In order to test whether the differences that are found in the tables in chapters 4 and 5 are statistically significant, Pearson's chi-square test has been applied. For one-dimensional comparisons of two values, the goodness-of-fit test is used. Observed and expected frequencies are entered into the online calculator at the VassarStats website (<http://faculty.vassar.edu/lowry/VassarStats.html>). For testing independence (two-dimensional), a chi-square contingency table test has been used, also provided online by VassarStats. The chi-square, degrees of freedom and p -value are given where relevant,¹⁵ and Yates' continuity correction is taken into account. For tests of independence, Cramér's V effect size measure is also given. As is customary in linguistic investigations, the acceptable significance level is set at $p < .05$. The tests have only been utilised where differences are considered relevant to the subject matter. Moreover, if the difference between two particular patterns or categories is obviously not significant, or if the number of occurrences is so low as to render the statistical test meaningless, no p -value is usually given.

¹⁵ The degrees of freedom equal 1 with few exceptions, and are specified only when higher than 1.

4 Word order patterns

4.1 Introduction

The focus in this chapter will be on the word order patterns found in the corpus. In section 4.2 the overall word order patterns are dealt with, including a comparison with main clauses and a discussion of differences between individual texts. Section 4.3 investigates the position of objects relative to main verbs, ie whether clauses can be labelled OV or VO. The realisation and weight of elements, both subjects, verbs and X elements, are treated in section 4.4.

4.2 General results

Table 4.1 shows the distribution of word order patterns¹ in subordinate clauses in all four periods under investigation.

Table 4.1: Word order patterns in early OE, late OE, early ME and late ME

	early OE		late OE		early ME		late ME	
	n	%	n	%	n	%	n	%
SXV	448	37	487	41	200	17	6	<1
SXVX	177	15	136	11	91	8	32	3
SVX	376	31	313	26	642	54	981	82
SV-	64	5	112	9	109	9	119	10
SvXV	75	6	92	8	74	6	37	3
XVS	26	2	22	2	28	2	19	2
misc	34	3	38	3	56	5	6	<1
Total	1200	99	1200	100	1200	101	1200	101

Under the assumption that the word order change to SV order is gradual, we might expect there to be a decrease of SXV order, and a corresponding increase of SVX order, throughout Old English. Table 4.1, however, shows that there is actually a small increase in the proportion of SXV clauses and a decrease of SVX order from early to late OE. The latter change is statistically significant, albeit by a small margin. The

¹ See section 3.3 for detailed descriptions and examples of the word order patterns.

decline in the SXVX pattern is also statistically significant.² In this respect, the results are somewhat unexpected considering the findings of some previous scholars. Hiltunen (1983:111) finds an increase of subordinate clause verb–particle order throughout Old English, an order typically associated with SV languages. Pintzuk’s (1999) results (see section 2.2) are not fully comparable with my own due to different theoretical frameworks, but her reports of a gradual increase in INFL-medial structure in subordinate (and main) clauses are not corroborated by the present data. Nevertheless, even though the diachronic development brings a few surprises, the overall picture of word order in OE subordinate clauses as relatively heterogeneous by and large confirms the findings of some previous works involving quantitative data, such as Gorrell (1895), Kohonen (1978) and Davis and Bernhardt (2002). On the other hand, considering the numerous claims of verb-final order being dominant in OE (see section 2.2), the proportions of 37% and 41% in the two OE subperiods are perhaps lower than expected. The SXV order is certainly dominant in the sense that it is the most frequent of the patterns used here, but one must not forget that three out of five subordinate clauses in OE are **not** verb-final.

For the purpose of the present study it is of interest to try to estimate the proportion of clauses which have SV order, ie those patterns in which the subject directly precedes the finite verb, and at least one other element follows the finite verb. The patterns SVX and SvXV are of this type. In early OE these patterns constitute 38% of the total (451/1,200), whereas the corresponding number for late OE is 34% (405/1,200).³ Thus, throughout the Old English period, at least one in three clauses occur in patterns which are typical for Present-day English. It is important to note, however, that the SvXV pattern includes a number of clauses which would be unacceptable today, eg those with an object between the finite and non-finite verbs. Thus, it is clear that the SV label does not fully correspond with another frequently used label in word order studies, viz VO, although the two for the most part overlap. The position of objects is treated separately in section 4.3, where the relationship between SV and VO order is discussed further.

² SXV: $\chi^2 = 1.54, p = .21$; SVX: $\chi^2 = 5.58, p = .02$; SXVX: $\chi^2 = 5.12, p = .02$.

³ The difference is not statistically significant: $\chi^2 = 2.36, p = .12$.

As far as acceptability in the modern language is concerned, we should note that a considerable number of clauses belonging to the ‘archaic’ patterns SXV and SXVX would be possible today, especially in the case of the latter order. This applies to a number of clauses with adverbs like *always*, *never*, *often*, *sometimes*, *soon*, *previously* and *then* in the position between subject and verb. However, it is naturally not within the scope of a quantitative investigation like this to classify every single clause in the corpus according to its modernity or lack thereof. The focus will be on the syntactic and pragmatic properties of word order patterns as defined in chapter 3, although individual clauses are of course exemplified throughout, and occasionally discussed in detail. Furthermore, in certain cases a discussion of acceptability is warranted (eg in section 5.3.4 on information value in SXVX clauses).

In contrast to the relative stability of the Old English period, the development from late OE to early ME shows significant changes in many respects. We see that the proportion of SXV order is strongly reduced, from 41% to 17% ($\chi^2 = 119.06$, $p < .0001$). It must nonetheless be emphasised that since the order still occurs in one in six clauses, there is arguably little in the present data to support the idea of a catastrophic decline and near-disappearance of verb-final order (cf section 2.3). On the other hand, while I argue that several previous accounts have overestimated the speed with which word order developed from Old English to early Middle English, as well as the extent of that development, there is little doubt that the two centuries before and after 1100 were a time of marked and relatively quick changes. SVX has become the most frequent pattern in eME, recorded in 54% of the total, while the combination of SVX and SvXV clauses has a proportion of 60% (716/1,200). Overall, therefore, the data signal that significant word order changes took place from OE to eME.⁴

The developments and trends observed between late OE and early ME are carried on into late ME and strengthened further; both SXV and SXVX clauses have now become marginalised, together constituting less than 4% of the total,⁵ while the SVX

⁴ SXV: $\chi^2 = 119.06$, $p < .0001$; SXVX: $\chi^2 = 8.52$, $p = .004$; SVX: $\chi^2 = 112.66$, $p < .0001$; SVX/SvXV: $\chi^2 = 85.72$, $p < .0001$.

⁵ Barber (1993:161) claims that verb-final order disappeared in early Middle English, but that does not seem to be entirely correct judging from the present data. On the other hand, with only 6 observed instances in late ME in the present corpus, Barber is arguably not very far from the truth.

pattern makes up more than four-fifths of all clauses. SVX and SV- clauses are the only ones which occur more than 3% of the time. At this stage, therefore, subordinate clause word order has clearly become strongly standardised, and is not much different from what we find in Present-day English. Considering that the four patterns SXV, SXVX, SVX and SvXV all go through statistically highly significant changes from early to late ME,⁶ it is surprising that word order change during the Middle English period has not received more attention than is the case. Indeed, it could be argued that at least as far as the development of verb-final order is concerned, the near-disappearance in late ME is more drastic than the strong reduction in early ME.

To my knowledge, there are no large-scale empirical studies on the development of subordinate clause word order from early to late Middle English.⁷ As was seen in section 2.3.1, a common view is that subordinate clauses initially lagged behind main clauses in the shift to SV order, but went through radical changes in the 11th and 12th centuries. It is often assumed that the shift to SV order was more or less completed in subordinate clauses by 1200 (Stockwell 1977; Canale 1978 (in van der Wurff 1997); van Kemenade 1987; Jucker 1990; Lightfoot 1991, 2006). Pintzuk's double base analysis (1999) is an exception, while Foster and van der Wurff (1995) offer interesting data in their corpus-based study of the late ME period. It is shown that OV order is still found in considerable numbers in both prose and verse around 1300, albeit more in verse, and then decreases gradually between 1300 and 1480 (1995:324). However, in the paper by van der Wurff from 1997, oriented towards the Minimalist Program, it is argued that all instances of OV order in lME are mere derivations from underlying VO order by leftward object movement (1997:485). In any case, the current findings suggest that subordinate clause word order changes markedly also from 1200 and onwards, and that the development in the 13th, 14th and 15th centuries deserves more attention than it has received so far.

⁶ SXV: $\chi^2 = 180.82, p = < .0001$; SXVX: $\chi^2 = 27.34, p < .0001$; SVX: $\chi^2 = 38.54, p < .0001$; SvXV: $\chi^2 = 10.78, p = .001$.

⁷ One quantitative study, that of Swieczkowski (1962), looks at word order in main and subordinate clauses in late Middle English only. Word order development in both early and late Middle English main clauses is studied thoroughly by both Haukenes (1998) and Bech (2001). See sections 2.4.3.3–2.4.3.4.

As stated earlier, main clauses have not been analysed in depth, and are included mainly as a point of reference for subordinate clauses with respect to the distribution of word order patterns. That distribution is presented in Table 4.2 below. Notice that two additional categories are used in this table, viz those clauses that have an initial X followed by the subject and then the finite verb (XSVX and XSV-). We have seen that clauses of this type are incorporated in the SVX and SV- patterns in subordinate clauses, where topicalisation is rare. The relevance of such clauses is considered greater in main clauses, however, since they represent exceptions from the V2 constraint most scholars agree exist in OE main clauses. The word order labels in Table 4.2 should thus be taken literally with respect to initial X placement, as opposed to the labels for subordinate clauses described previously. In other words, the SVX label in subordinate clauses corresponds to SVX and XSVX in main clauses. Despite these terminological differences, motivated by the belief that the determinants for word order are not identical in main and subordinate clauses, a rough comparison between the two types should be feasible.

Table 4.2: Word order patterns in main clauses in all periods

	early OE		late OE		early ME		late ME	
	n	%	n	%	n	%	n	%
(X)SXV	79	7	151	13	27	2	0	0
(X)SXVX	101	8	146	12	76	6	9	<1
SVX	315	26	261	22	463	39	553	46
SV-	4	<1	17	1	13	1	1	<1
SvXV	44	4	44	4	43	4	47	4
XSVX	189	16	123	10	183	15	354	30
XSV-	24	2	13	1	15	1	12	1
XVS	385	32	384	32	296	25	210	18
misc	59	5	61	5	84	7	14	1
Total	1200	100	1200	100	1200	100	1200	101

The table shows that (X)SXV and (X)SXVX clauses are more frequent in IOE than in eOE, while the proportion of SVX and XSVX clauses decreases between these two periods. With the exception of (X)SXVX clause, the results are strikingly similar to those observed in subordinate clauses, but even more pronounced here, in the sense

that (X)SXV, SVX and XSVX clauses all show highly significant changes.⁸ Interestingly, the results do not corroborate those reported by Bech (2001:73), who finds a significant increase of SVX clauses from eOE to IOE, and only minor changes for other patterns. On closer scrutiny, it is evident that the differences are chiefly down to the corpus texts chosen; in addition to the *Old English Orosius* and *Cura Pastoralis* constituting the eOE period in the present corpus, Bech studies *Boethius* and *Bede*, the latter standing out with a very low proportion of SVX order. This, coupled with her inclusion in IOE of *Ælfric LS*, a text with many SVX clauses and few (X)SXV clauses, strongly contributes to the conflicting results mentioned above. Both Bech's study and the present one thus highlight the importance of including numerous texts in a corpus investigation of word order, and this is further discussed in section 4.2.2 below with respect to my own data.

The present findings do not in any way support Lightfoot's (1991, 2006) theory of language change, which postulates completely different developments for subordinate clauses and main clauses in OE. The latter are claimed to display a 'slowly diminishing number of XP-V orders', while 'embedded clauses remained consistently XP-V' (2006:132). None of these claims are borne out by the Old English data; on the one hand, subordinate clauses are by no means consistently verb-final, and on the other, both main and subordinate clauses show an increase of SXV clauses, and a decrease of SVX and XSVX clauses. Thus, regardless of the obvious word order differences that exist between the two clause types, their diachronic development in OE is remarkably parallel. That can also be said about the transition from IOE to eME, where (X)SXV in main clauses is strongly reduced at the same time as the proportion of the SVX pattern nearly doubles, and the XSVX pattern increases from 10% to 15%. The changes resemble those observed for subordinate clauses in Table 4.1, and are all highly statistically significant.⁹ It should be noted that the reduction of SXV order from IOE to eME is stronger in main than in subordinate clauses. The fairly parallel

⁸ (X)SXV: $\chi^2 = 21.92, p < .0001$; SVX: $\chi^2 = 4.88, p = .03$; XSVX: $\chi^2 = 16.58, p < .0001$. The increase of (X)SXVX order is also significant: $\chi^2 = 7.84, p = .005$.

⁹ SXV: $\chi^2 = 85, p < .0001$; SXVX: $\chi^2 = 21.44, p < .0001$; SVX: $\chi^2 = 55.8, p < .0001$; XSVX: $\chi^2 = 11.38, p = .0007$.

development in subordinate and main clauses in some ways resembles Pintzuk's (1999) findings for INFL-medial structure in accordance with Kroch's (1989) Constant Rate Hypothesis. Even though SV order becomes less frequent in the present OE data, while Pintzuk reports of an increase of INFL-medial structure, the diachronic symmetry between subordinate and main clauses in both accounts is interesting. As noted before, comparisons between data-driven and more theory-driven studies should be exercised with caution, given differences in terminology and methods of analysis.

For subordinate clauses the development of the combination SVX and SvXV, ie typical SV orders, was calculated. To the extent that subordinate and main clause word orders are comparable, the diachronic development of the corresponding main clause patterns, ie SVX, SvXV and XSVX, is of interest. Recall that many scholars have claimed that main clauses shifted to SV order gradually and fairly slowly, whereas subordinate clauses are said to have shifted more rapidly. From eOE to IOE, the three relevant main clause patterns combined actually decrease, from 46% (548/1,299) to 36% (428/1,200), and the reduction is even more pronounced than in subordinate clauses. For the transition from IOE to eME the same patterns increase from 36% to 58% (689/1,200), about as much as in subordinate clauses (34% (405/1,200) to 60% (716/1,200)).¹⁰

Next, it is interesting to note the complete disappearance of SXV order and the considerable reduction of SXVX order from early to late ME. XSVX order, on the other hand, doubles between these two periods. The findings underline that the changes taking place *during* ME were significant not only for subordinate but also for main clauses, and should receive more attention. Hitherto, the OE/ME divide has been the focus of most research on earlier English word order, whereas the development in the 13th and 14th centuries has been somewhat neglected. Nevertheless, word order development during Middle English is not as sparsely investigated for main clauses as for subordinate clauses, thanks to eg the studies by Haukenes (1998) and Bech (2001) (cf section 2.4.3). Their findings are for the most part similar to my own, with respect to the near-disappearance of SXV clauses and the doubling of XSVX clauses (Bech

¹⁰ Contingency, SV order in subordinate vs main clauses from IOE to eME: $\chi^2 = 1.06$, $p = .3$, Cramér's $V = .02$.

2001:73), as well as the marked reduction of inverted XVS structures (Haukenes 1998:359; Bech 2001:73).¹¹

4.2.1 Topicalisation in subordinate clauses

For an X element to be defined as topicalised, it has to be non-obligatory in initial position. In other words, relative pronouns, nominal relative pronouns and interrogative words, ie clause elements that are obligatory in initial position due to the nature of the clause in which they occur, are not regarded as topicalised.

There is general agreement that topicalisation¹² is rare in subordinate clauses, which have a strong tendency to be subject-initial (Vennemann 1974:362; Koopman 1996:135; Haugland 2007:145).¹³ While a closer examination of the present data confirm that topicalisation is indeed much less widespread in subordinate than in main clauses (cf Table 4.2 and the high proportion of main clauses with XVS and XSVX order), it is certainly not so rare as to be negligible, as demonstrated by Table 4.3.

Table 4.3: Clauses with topicalised X elements in subordinate clauses

	eOE		IOE		eME		IME	
	n	%	n	%	n	%	n	%
XSXV	17	20	10	18	1	3	0	0
XSXVX	6	7	2	4	0	0	0	0
XSVX	20	24	8	14	9	29	12	57
XSV-	14	16	10	18	0	0	2	10
XVS	26	31	22	39	20	65	7	33
misc.	2	2	5	9	1	3	0	0
Total	85	100	57	102	31	100	21	100

The table illustrates that topicalisation is most common in early Old English (85/1,200, 7%), and that it is reduced over time. The largest number of topicalised elements occur

¹¹ Inverted clauses nevertheless persist in considerable numbers also in the early Modern English period, as reported by Haukenes (1998:360) and Bækken (1998:59). The former even finds a marked increase of XVS in the 16th century, before a rapid decline towards the end of the 17th century.

¹² Terms like *topicalisation* and *fronting*, as well as the problematic concept of *markedness*, have been used and defined in various ways by different scholars (see Haspelmath (2006) for discussion). No attempt is made here to distinguish between more or less marked initial elements, except that they are not tied to this position.

¹³ Allen (1995:46ff) agrees that topicalisation is infrequent in OE subordinate clauses, but emphasises that there was no structural prohibition against the fronting of objects in any sort of subordinate clause.

in the inverted XVS pattern typically associated with main clauses, where we also find some cases of an initial accusative or dative pronominal experiencer argument followed by a so-called impersonal verb (eg *me þuhte* me-D seemed ‘it seemed to me/I thought’). We may note that under some analyses, eg those proposed by Allen (1995) and Barðdal and Eythórssón (2005), such pronouns are considered syntactic subjects, in which case the clauses they occur in are classified as SVX rather than XVS.

In the present data, a whole range of different elements are topicalised, with variation within each word order pattern. Example (4.1) (previously given as (3.40)) contains two instances, with a regular object pronoun topicalised in the first clause (XSVX), and a dative experiencer pronoun in the XVS clause. Two object pronouns as well as an adverb occur in (4.2), *hire* and *ðonne* in the first XSV- clause and *him* in the XVS clause, while (4.3) is a verb-final clause with a topicalised object pronoun. Yet another pronoun is exemplified in (4.4), though this is an instance of a discontinuous prepositional phrase with a stranded preposition later in the clause, between subject and verb. Complete PPs are quite frequently topicalised, (4.5) being a case in point. A few full NP objects were also found in initial position, one of which is given in the XSV- clause in (4.6). Topicalised adverbs are displayed in (4.7) and (4.8), in XSSV and XSXVX clauses, respectively. (4.9) is a rare example of an initial subject predicative in the form of an adjective, whereas the first part of a discontinuous subject predicative is found in (4.10). Initial adverbial clauses turn out to be fairly common, especially in nominal *that*-clauses in the Mandeville text (4.11). Finally, (4.12) is a rare case of topicalisation in a *wh*-clause.

- (4.1) þa sædon heora biseþas eft þæt heora godas bædan þæt **him** mon sealde ænne **cucne mon, þa him þuhte þæt heo heora deadra to lyt hæfden**
 then said their priests again that their gods asked that them one gave a
 living man, when they seemed that they of-their dead too few had
 [Or 57,18]
- (4.2) **Gif hire ðonne se wiðsace**, ðonne is cynn ðæt **him** spiwe ðæt wif on ðæt nebb
 if her then he refuses, then is suitable that him spit the woman in the face
 [CP 45,2]
- (4.3) He ða eft geornlice bæd. þæt **him** man sumne mæssepreost gelangode
 he then again eagerly entreated than him one some bishop fetched
 [ÆCHom II II,37]

- (4.4) Ðurh ðone æpl ðæs eagan mon mæg geseon, **gif him ðæt fleah on ne gæð**
through the pupil of-the eye one may see, if it-M.D the albugo in not goes
[CP 69,17]
- (4.5) Hwæt wanode hire of Godes wisdom, **þa þa inne hire lutede eall Godes wisdom**
what curtailed her of God's wisdom, when inside her lurked all God's wisdom
[Kentish 138,6]
- (4.6) And as to bakbytynges Salomon seþ **þat vj þinges God hateþ**
and as to gossip Solomon says that six things God hates
[MES 24,33]
- (4.7) Ne behyde ge eowerne goldhord on eorðan **þæt ðær omm. and moððan hit awestað**
not hide you your treasure in earth so-that there rust and moths it destroy
[ÆCHom II VII,98]
- (4.8) 7 **gyf þar man an ban findeð unforbærned**, hi hit sceolan miclum gebetan
and if there one a bone finds unburnt, they it shall greatly pay
[Or 17,32]
- (4.9) for þan þæt heo understanden beo þan, **þæt bitere byð þa saregan þe heo sculen on helle on ecnyse geðrowigen**, for heora unmihte
because that she understood by that, that bitter is the grief which she shall in hell in eternity suffer, for her weakness
[Kentish 142,18]
- (4.10) ant ha somet seiden **þt witiest ha weren of alle þe meistes þe weren in estlonde**
and they together said that cleverest they were of all the masters who were in Orient
[Katherine 27,18]
- (4.11) And often tyme it falleth **þat where men fynden water at o tyme in a place it fayleth anoþer tyme**
and often it happens that where men find water at one time in a place it fails another time
[Mandeville 24,14]
- (4.12) & fægenað ðæs **hu hiene mon scyle herigean**
and rejoices in-that how him one shall praise
[CP 55,6]

In most cases, the motivation behind the topicalisation seems to be to provide a link to the preceding context. There are also some cases where a certain emphasis or focus is achieved, as with *inne hire* in (4.5), *vj þinges* in (4.6), *bitere* in (4.9) and *witiest* in

(4.10). The weight and complexity of the subject must also be taken into account, and end weight certainly seems to play a role in (4.5) and (4.9).

A comparison between Table 4.3 and Table 4.1 shows that all Old English XVS clauses have a topicalised X element on the analysis proposed here. Interestingly, that is not the case in ME. The two examples below show XVS clauses where the initial element is an obligatory part of the clause, a relative adverb (4.13) and an interrogative adverb (4.14), respectively. The word order in (4.14) suggests influence from main clause interrogatives.

(4.13) þet wæs on næt 7 on swin swa þet, on þa tun **þa wæs tenn ploges oðer twelfe gangende**, ne belæf þær noht an
that was in neat-cattle and in swine so that, in the town where was ten ploughs or twelve going, not remained there not one
[PC 1131,6]

(4.14) þan oon of þese filosofras come to Saynt Barnabe and asshed hym / **what was þe cause þat a flee, þat is so lityll a beesta, hathe sixe fete**
then one of these philosophers came to St. Barnabee and asked him / what was the reason that a flee, that is so little a beast, has six feet
[MES 6,23]

A breakdown of the topicalised elements into pronouns, full NPs, PPs, AdjPs, AdvPs and clauses is presented in Table 4.4,¹⁴ with a separate column for pronominal experiencer arguments ('imp'). Percentages are not given since most of the cells contain very few or no tokens.

¹⁴ Due to low frequencies, a further breakdown into periods has not been deemed worthwhile.

Table 4.4: The realisation of topicalised X elements in subordinate clauses¹⁵

	pron n	imp n	NP n	PP n	AdjP n	AdvP n	cl n
XSXV	22	0	0	2	0	5	1
XSXVX	7	0	0	1	0	2	0
XSVX	14	0	1	11	1	17	11
XSV-	19	0	1	0	1	6	1
XVS	19	22	2	14	2	21	5
misc.	2	0	1	3	0	1	1
Total	83	22	5	31	4	52	19

The table shows that pronouns¹⁶ are most frequently topicalised, followed by AdvPs and PPs. There is some variation according to word order pattern: whereas topicalised pronouns are very common in verb-final clauses, XSVX and XVS clauses have a more even distribution between pronouns, PPs, AdvPs and clauses.

Initial experiencer arguments do not occur in late ME in the present data. The fact that these arguments occur in a maximum of 22 out of a total of 76 cases of XVS order in eOE, IOE and eME (cf Table 4.1) shows that there is a substantial number of subordinate clauses with inversion of subject and verb, irrespective of whether initial experiencers are analysed as subjects or not.¹⁷

Another aspect of topicalisation is in what type of subordinate clause it occurs. This is displayed in Table 4.5.

Table 4.5: The distribution of topicalised elements according to clause type

	eOE		IOE		eME		IME	
	n	%	n	%	n	%	n	%
Nominal	28	33	18	32	9	29	13	62
Adverbial	48	56	28	49	17	55	3	14
Adjectival	9	11	11	19	5	16	5	24
Total	85	100	57	100	31	100	21	100

¹⁵ Some clauses have two rather than one topicalised X elements, as in example (4.2). In such cases, both elements have been included in the table; the total figure within each pattern here does therefore not match the data presented in Table 4.3.

¹⁶ In most formal syntactic theories, pronominal objects occurring between subordinator and subject, such as those found in examples (4.1)–(4.4), are not analysed as topicalisations but rather as cliticisations onto COMP. See eg van Kemenade (1987:127).

¹⁷ The number of clauses with initial experiencer arguments may be lower than 22. See fn 15 above.

In the first three periods it is adverbial clauses that contain the highest percentage of topicalisations.¹⁸ From early to late ME, however, there appears to be a marked shift towards nominal clauses, of which nearly all are *that*-clauses.

4.2.2 Intertextual comparison

That word order differences exist between individual authors in Old and Middle English is well-known, and has been commented on by a number of scholars in the past (see eg Mitchell 1985 II:958; Pintzuk 1999:236; Bech 2001:78). Nevertheless, and as mentioned previously, the existing empirical investigations on earlier English subordinate clauses have tended to focus on just one text from each period. In the present study, the word order of at least two texts from each period is analysed, in order to find out how much individual variation there is between different authors. If there is statistically significant variation, we may conclude that representativity cannot be achieved on the basis of a single text. To be fair, true representativity of Old and Middle English cannot be achieved anyway, since that would necessitate access to every single text produced.¹⁹ And even if we had that access, we would only be able to say something certain about the written language, not the spoken. We may conclude that what is achieved by studying several texts is only *better* representativity than if one had concentrated on one text. In the following, the word order patterns of each corpus text are presented.

Table 4.6 below shows the word order of the individual early OE texts.

¹⁸ It is clear that topicalisation in subordinate clauses in earlier English is by no means restricted to sentential complements after ‘bridge verbs’, as has been reported for some other Germanic languages such as German and Danish (Vikner 1995:70). Typical bridge verbs are ‘know’, ‘say’, ‘think’ and ‘believe’.

¹⁹ Indeed, one might go as far as to argue that full representativity must also entail access to all that *could have been* written down, but for some reason never was, ie, access to the linguistic competence of the speakers of a given language. As such, linguistic representativity is a utopic state towards which one should strive but which one cannot possibly reach.

Table 4.6: Word order in individual texts in early OE

	Or		CP	
	n	%	n	%
SXV	252	42	196	33
SXVX	86	14	91	15
SVX	160	27	216	36
SV-	38	6	26	4
SvXV	28	5	47	8
XVS	12	2	14	2
misc	24	4	10	2
Total	600	100	600	100

The most conspicuous differences between these two texts are found with the SXV and SVX patterns. Whereas verb-final order occurs 42% of the time in the *Old English Orosius*, its proportion in *Cura Pastoralis* is only a third of the total. For SVX clauses the intertextual variation is also marked, the pattern being much more frequent in CP than in Or. Both differences are statistically significant.²⁰

We may note that the proportion of a subset of SVX clauses, namely xsvx clauses, is almost twice as big in Or as in CP. About two-thirds of the instances in Or are relative clauses with an initial relativised object and an object predicative placed directly after the verb, and almost all these clauses have *man/mon* as subject. Interestingly, the Or text also contains a number of xsxv clauses with an initial relative object, the difference between the two sets of clauses being only the position of the object predicative. For examples, see section 4.4.2.1, where this variation is discussed further.

How do we explain the dissimilarities between the two texts? Dialectal variation does not seem to be of any relevance here, since both texts are considered to be West-Saxon. The manuscripts in which they survive are composed only a couple of decades apart; The Hatton MS used here for CP is Alfredian (Sweet 1871:xiii-xiv), while the main manuscript for Or, the so-called Lauderdale MS (cf section 1.2.1), is believed to be from the early 10th century (Bately 1980:xxxix).²¹ It is thus very unlikely that the date of composition has any bearing on the differences in word order. Apart from the

²⁰ SXV: $\chi^2 = 6.76, p = .009$; SVX: $\chi^2 = 8.04, p = .005$.

²¹ A little under one fifth of the Or data were collected from MS C (cf section 1.2).

shorter sections in Or on the voyages of *Ohthere* and *Wulfstan*, both Or and CP are translations from Latin. All in all, the observed variation seems to be chiefly down to the individual style of the translator (cf section 3.2.1), but may also be connected with the nature of the texts. For instance, Or is fairly repetitious in certain sections.

Tables 4.7–4.8 display word order in those parts of Or that are translated from Latin and those that are not, ie the *Ohthere* and *Wulfstan* interpolations.

Table 4.7: Variation within Orosius – subordinate clauses

	Translated		Non-translated	
	n	%	n	%
SXV	227	44	25	32
SXVX	80	15	6	8
SVX	130	25	30	38
SV-	34	7	4	5
SvXV	17	3	11	14
XVS	9	2	3	4
misc	24	5	0	0
Total	521	101	79	101

Table 4.8: Variation within Orosius – main clauses

	Translated		Non-translated	
	n	%	n	%
(X)SXV	55	11	0	0
(X)SXVX	53	11	2	2
SVX	109	23	51	44
SV-	0	0	0	0
SvXV	14	3	4	3
XSVX	47	10	13	11
XSV-	2	<1	1	<1
XVS	188	39	38	32
misc	15	3	8	7
Total	483	100	117	100

It must be stressed that the number of tokens found in the *Ohthere* and *Wulfstan* texts is fairly small, and that the results should therefore be interpreted with caution. Some points nevertheless deserve mention here. Especially conspicuous is the fact that SXV and SXVX order are much more common in the translated parts of Or than in the non-

translated vernacular sections, in both subordinate and main clauses, while SVX order is most frequent in the non-translated parts. In subordinate clauses, the SXV and SXVX differences are not statistically significant, while the SVX difference is, but only just.²² In main clauses, the differences for all these three patterns are highly significant.²³ This suggests that the word order of non-translated, vernacular early Anglo-Saxon may differ from that which is translated from Latin, but a lot more data is needed before any conclusions may be drawn. It is not within the scope of this thesis to pursue such a task, which could potentially yield very interesting results. A complicating factor is the fact that most of the *Ohthere* and *Wulfstan* interpolations stem from a later manuscript than the rest of the text, dated to the middle of the 11th century (cf section 1.2). This could certainly be a factor behind the differences.

Table 4.9 displays the word order patterns found in individual late Old English texts.

Table 4.9: Word order in individual texts in late OE

	ÆCHom		BIHom		ChronC		ApT	
	n	%	n	%	n	%	n	%
SXV	141	47	100	33	142	47	104	35
SXVX	38	13	38	13	24	8	36	12
SVX	59	20	97	32	72	24	85	28
SV-	27	9	18	6	33	11	34	11
SvXV	21	7	25	8	19	6	27	9
XVS	7	2	8	3	4	1	3	1
misc	7	2	14	5	6	2	11	4
Total	300	100	300	100	300	99	300	100

SXV is the pattern which is most unevenly distributed between the four texts. Its highest proportions are found in ÆCHom II and ChronC, both with 47%, whereas BIHom and ApT have 33% and 35% verb-final, respectively.²⁴ As far as the SVX pattern is concerned, ÆCHom II has a significantly lower proportion than both BIHom

²² SXV: $\chi^2 = 2.09, p = .15$; SVX: $\chi^2 = 3.84, p = .04$.

²³ SXV: $\chi^2 = 12.11, p = .0005$; SVX: $\chi^2 = 14.83, p = .0001$; SXVX: $\chi^2 = 7.84, p = .005$.

²⁴ SXV: ÆCHom II vs ApT: $\chi^2 = 5.28, p = .02$; ÆCHom II vs BIHom: $\chi^2 = 6.64, p = .01$; ChronC vs ApT: $\chi^2 = 5.56, p = .02$; ChronC vs BIHom: $\chi^2 = 6.94, p = .008$; ÆCHom II/ChronC vs ApT/BIHom: $\chi^2 = 12.5, p = .0004$.

and ApT.²⁵ The SVX proportion in ÆCHom II is markedly lower than that observed by Heggelund (2007), where three electronically available homilies by Ælfric, published by Lee (2003), were shown to contain 41% SVX order. For all other patterns, the differences are relatively small and also statistically non-significant. These four texts are in fairly close chronological proximity with regard to both manuscript date and original composition, meaning that here too the date of the texts should have no bearing on the results. Nor is there strong reason to believe that dialectal provenance should be relevant for the texts in this period.²⁶

It is noteworthy that the two texts with the highest proportion of verb-final clauses and the lowest proportion of SVX order, viz ÆCHom II and ChronC, are also two of the texts most frequently used as evidence of word order in OE subordinate clauses. The former has been empirically investigated by Barrett (1952), Kohonen (1978) and Davis and Bernhardt (2002), while various sections of *The Anglo-Saxon Chronicle* up to 1122, including ChronC, were studied by Bean (1983) and later used as evidence in Lightfoot's theory (1991, 2006). It seems fair to say that the predominance of certain texts in previous studies may have strengthened the impression that verb-final is dominant in OE subordinate clauses,²⁷ and that the texts usually resorted to are not necessarily representative of OE. A scholar investigating only ÆCHom II might conclude that SXV order is almost two and a half times more frequent than SVX order in IOE, whereas someone focusing on BIHom would observe an almost equal distribution between the two patterns.

In Table 4.10 a comparison is made between the six texts comprising the early ME part of the corpus.

²⁵ SVX: ÆCHom II vs BIHom: $\chi^2 = 8.78, p = .003$; ÆCHom II vs ApT: $\chi^2 = 4.34, p = .04$.

²⁶ All four texts are of West Saxon origin, but there is marked Anglian influence in BIHom.

²⁷ It should also be noted that different works by the same author may show considerable word order variation, as suggested by a comparison of main clause order in Bech's (2001:76) findings for Ælfric's LS and my own ÆCHom II data. The former has significantly more SVX and less SXV than the latter.

Table 4.10: Individual texts in early ME

	PC		Katherine		Margaret	
	n	%	n	%	n	%
SXV	34	15	26	15	31	16
SXVX	9	4	8	5	26	13
SVX	143	64	95	54	100	50
SV-	15	7	26	15	19	10
SvXV	12	5	12	7	6	3
XVS	4	2	3	2	5	3
misc	8	4	5	3	13	7
Total	225		175		200	

	VV		Kentish		AW	
	n	%	n	%	n	%
SXV	45	23	44	22	20	10
SXVX	21	11	17	9	10	5
SVX	91	46	88	44	125	63
SV-	10	5	18	9	21	11
SvXV	15	8	11	6	18	9
XVS	5	3	10	5	1	<1
misc	13	7	12	6	5	3
Total	200		200		200	

As demonstrated in the table, the proportion of SVX clauses varies across texts, from 44% in *Kentish* and 45% in VV to 63% and 64% in AW and PC, respectively. A comparison shows that the two latter texts have a significantly higher proportion of SVX clauses than VV and *Kentish*.²⁸ The PC is often considered one of the first true examples of Middle English (see eg Clark 1958:lxvi; Lass 1994:244; Freeborn 2006:90), and this may at least partly explain why some scholars have viewed the transition from Old to Middle English as a dramatic break rather than a gradual shift. A failure to take dialectal differences into account may explain the misapprehension: Allen (2000:6-7) argues that the comparison between the PC continuations (East Midlands) and other parts of the *Anglo-Saxon Chronicle* may be a comparison between apples and pears, since these texts come from different dialect areas. The word order of the PC may have been influenced considerably more by contact with Danish than is

²⁸ SVX: PC vs VV: $\chi^2 = 6.01$, $p = .01$; PC vs *Kentish*: $\chi^2 = 7.16$, $p = .005$; VV vs AW: $\chi^2 = 5.04$, $p = .02$; *Kentish* vs AW: $\chi^2 = 6.08$, $p = .01$.

the case with late West-Saxon texts.²⁹ Since ChronC is a text with more SXV and less SVX than the late OE average in my data, while PC has less SXV and much more SVX than the early ME average, a comparison between the two is arguably not fully representative of the transition from late OE to early ME.

Moreover, it should be noted that not even the *Peterborough Chronicle* necessarily represents a distinct break with Old English, as most emphatically pointed out by Bruce Mitchell in his 1964 paper. Mitchell concedes that the language of the PC shows some developments that are clearly not Old English, but criticises Clark's (1958:lxvi) claims of modernity and concludes that '[t]he syntax and word-order are still in many important respects Old English' (1964:144). Mitchell's main point is that the *Peterborough Chronicle* contains a great number of constructions that would not be possible in the modern language.

The proportion of clauses with SXV order also differs substantially between the individual eME texts, from 10% in AW to 23% in VV. Incidentally, these two texts are from different dialect areas, West Midlands and East Midlands, respectively. On the whole, however, varying dialectal origin does not sufficiently explain the considerable intertextual variation in early Middle English. The PC and AW show great similarities in nearly all patterns, but are written in different dialects.³⁰ The same is true for VV and *Kentish*. Interestingly, however, the findings of Allen (2000:12) suggest that the traditional dialect labels are too wide in scope. For instance, the East Midlands label does not capture the fact that there are differences between the north and south within this area. More southern texts, like VV, display a larger proportion of verb-final order than their northern counterparts, like the PC. Such differences are certainly backed up by the present data, especially considering that *Kentish* is a southern text strikingly similar to VV.

A closer look at the texts in IOE and eME reveals that some of the variation within each period is greater than the variation between texts from different periods. A chi-square contingency table test for all patterns shows that BIHom is considerably more

²⁹ Trips (2002:331), too, suggests dialectal differences due to Scandinavian influence in eastern and northern regions.

³⁰ PC and VV are both East Midlands texts, *Kentish* is obviously from the Kentish area, while the remaining three are of West Midlands origin.

similar to VV than it is to both *ÆCHom II* and *ChronC*.³¹ Furthermore, VV is more similar to both *BIHom* and *ApT* than to *AW*, and *Kentish* has more in common with *BIHom* than with *PC* and *AW*. *Kentish* is also more similar to *ApT* than to *AW*.³² These results underline the great word order variation between contemporary authors, but must also be used cautiously: the more degrees of freedom a chi-square test has, the bigger is the chance of finding significant differences, and the more difficult is it to know where the differences lie. The test's limitation is well illustrated by a comparison between the *Katherine* and *Margaret* texts, which gives a chi-square of 15.64 and a *p*-value of .02 (df = 6), despite the fact that the two texts have a very similar distribution of the two largest word order patterns, *SXV* and *SVX*.

Table 4.11 shows the word order patterns in the two late ME texts.

Table 4.11: Individual texts in late ME

	Mandeville		ME Sermons	
	n	%	n	%
SXV	1	<1	5	<1
SXVX	7	1	25	4
SVX	509	85	472	79
SV-	57	10	62	10
SvXV	19	3	18	3
XVS	5	<1	14	2
misc	2	<1	4	<1
Total	600	100	600	100

The table shows that the *SXVX* pattern is more frequent in *ME Sermons* than in the *Mandeville* text, and the difference is statistically significant ($\chi^2 = 9.04$, $p = .003$). Apart from that, the two texts are strikingly similar.

³¹ *BIHom* vs *VV*: $\chi^2 = 11.94$, $p = .06$; *BIHom* vs *ÆCHom II*: $\chi^2 = 20.78$, $p = .002$; *BIHom* vs *ChronC*: $\chi^2 = 23.91$, $p = .0005$. For all these calculations, the degrees of freedom equal 6.

³² *VV* vs *ApT*: $\chi^2 = 25.73$, $p = .0002$; *VV* vs *AW*: $\chi^2 = 29.2$, $p < .0001$; *Kentish* vs *BIHom*: $\chi^2 = 16.7$, $p = .01$; *Kentish* vs *PC*: $\chi^2 = 19.1$, $p = .003$; *Kentish* vs *AW*: $\chi^2 = 29.4$, $p < .0001$; *Kentish* vs *ApT*: $\chi^2 = 27.8$, $p = .0001$. For all these calculations, the degrees of freedom equal 6.

4.2.3 Religious vs non-religious texts

There are few systematic studies of word order differences according to different prose genres in earlier English.³³ Bækken (1998:92) finds significantly more inversion in religious prose than in other texts in two out of three subperiods of early Modern English, and describes the genre as ‘stylistically conservative’. Conservatism and archaism is often attributed to Bible texts (Crystal 1965:153; Crystal and Davy 1969:150; Sjölander 1979:13), although it is not always made clear what the conservatism involves. According to Haugland (2007:21), Bible translations are ‘notoriously unidiomatic’ due to a wish to avoid tampering with the sacred word of God. However, what applies to biblical translations may not be relevant for the religious texts in my corpus, ie homilies, sermons and treatises. Most of these are translations from Latin, and may as such show more or less faithfulness to the source text, but that is no more relevant for religious texts than for other translated prose. Homilies and sermons differ from Bible texts in the sense that they were written at a specific time for a specific purpose, namely to be read out aloud by the clergy in church. These texts, as opposed to biblical texts, are not taken to literally represent the word of God, and may thus display less close adherence to the original. Having said that, there are occasional Gospel citations in all the religious texts under scrutiny here, but these citations are not frequent enough to have any bearing on the overall results. All in all, there is probably little reason to expect religious prose in OE and ME to be more conservative than non-religious prose. Bækken’s (1998) findings for eModE are perhaps not surprising, since an English tradition for Bible translations had by then been established. Religious conservatism or not, there may of course exist systematic word order differences between these broadly categorised genres.

The data for early Old English is displayed in Table 4.12, which is identical to Table 4.6.

³³ Differences between prose and verse are fairly well documented. Considerations of metre and rhythm may influence word order in poetic language (Funke 1956; Swieczkowski 1962:11; van Kemenade 1987:4).

Table 4.12: Word order patterns according to text type: early OE

	Non-religious		Religious	
	n	%	n	%
SXV	252	42	196	33
SXVX	86	14	91	15
SVX	160	27	216	36
SV-	38	6	26	4
SvXV	28	5	47	8
XVS	12	2	14	2
misc	24	4	10	2
Total	600	100	600	100

As we saw in Table 4.6, there are major differences between these two texts both as regards SXV and SVX order. Whether the distributional variation can be attributed to text type is impossible to say, since there is only one text per genre in this period, but genre differences certainly cannot be ruled out.

In Table 4.13 the word order of the four late OE texts in the corpus is presented according to genre.

Table 4.13: Word order patterns according to text type: late OE

	Non-religious		Religious	
	n	%	n	%
SXV	246	41	241	40
SXVX	60	10	76	13
SVX	156	26	157	26
SV-	67	11	45	8
SvXV	47	8	45	8
XVS	7	1	15	3
misc	17	3	21	4
Total	600	100	600	102

The table clearly shows that in the late OE period, there are remarkably small differences between religious and non-religious prose. As we saw in Table 4.9 above, the intertextual variation in this period is considerable, and that variation appears to be independent of genre. *ÆCHom II* is a collection of homilies, while *ChronC* might be described as a historical narrative, but these two texts are nevertheless very similar in terms of word order. Similarly, *BIHom* and *ApT* belong to very different genres, yet

share a number of word order characteristics. Thus, the preferences of the individual author appear to govern word order to a much larger degree than does genre.³⁴

The data for early ME is presented in Table 4.14, where the three religious (VV, *Kentish* and AW) and the three non-religious (PC, *Katherine* and *Margaret*) texts are compared.

Table 4.14: Word order patterns according to text type: early ME

	Non-religious		Religious	
	n	%	n	%
SXV	91	15	109	18
SXVX	43	7	48	8
SVX	338	56	304	51
SV-	60	10	49	8
SvXV	30	5	44	7
XVS	12	2	16	3
misc	26	4	30	5
Total	600	99	600	100

The differences in the proportion of SXV (15% vs 18%) and SVX (56% vs 51%) between the genres turn out to be statistically non-significant,³⁵ and the same goes for all the other patterns. In other words, word order variation in this period is not down to the nature of the texts, but more likely to the individual style of the author, as was also argued for IOE.

In Table 4.15, given earlier as Table 4.11, the late ME data are presented.

³⁴ We may note that the language of Ælfric is generally regarded as being stylistically very conscious, among other things including a fairly simple syntax (Godden 2000:xxii). Of course, homilies and sermons were written specifically to be read out aloud in church by the clergy, and may as such be expected to show traits of the spoken language to a larger extent than other genres.

³⁵ SXV: $\chi^2 = 1.44, p = .23$; SVX: $\chi^2 = 1.7, p = .19$.

Table 4.15: Word order patterns according to text type: late ME

	Non-religious		Religious	
	n	%	n	%
SXV	1	<1	5	<1
SXVX	7	1	25	4
SVX	509	85	472	79
SV-	57	10	62	10
SvXV	19	3	18	3
XVS	5	<1	14	2
misc	2	<1	4	<1
Total	600	100	600	100

The religious text has retained a somewhat larger proportion of SXVX clauses ($\chi^2 = 9.04$, $p = .003$). The numbers are small, however, which makes it difficult to draw anything but tentative conclusions.

In sum, there is next to nothing in the present data to suggest that the word order of religious and non-religious texts differs systematically. The variation that does exist between texts is far more likely to be a result of the individual style of authors, as indicated in section 4.2.2. This is also confirmed by Taavitsainen (1993:195) for genres in Middle English texts in the Helsinki Corpus: ‘The only reliable starting point for research on Middle English genres is with the individual texts themselves’. Naturally, the inclusion of more texts per period, especially in Old English, would yield more reliable and possibly different results.

4.2.4 Clause type

In this section subordinate clauses are broadly categorised as nominal, adverbial or adjectival, in accordance with traditional analyses and also in line with the classification used by Mitchell (1985 I:772). As pointed out in section 3.2.2, distinguishing between various types of subordinate clauses is not always an easy task due to the multiple functions of several subordinating conjunctions. In later sections (4.2.4.1 and onwards) each main category is further subdivided. It should be noted that henceforth, the SV- order (see section 3.3) is not considered relevant and is incorporated in the ‘miscellaneous’ category.

Table 4.16 shows the distribution of word order patterns according to clause type in early OE.

Table 4.16: *Clause type and word order: early OE*

	Nominal		Adverbial		Adjectival		Total	
	n	%	n	%	n	%	n	%
SXV	91	31	184	37	173	43	448	37
SXVX	42	14	83	17	52	13	177	15
SVX	102	34	145	29	129	32	376	31
SvXV	23	8	30	6	22	6	75	6
misc	39	13	61	12	24	6	124	10
Total	297	25	503	42	400	33	1200	100

It has been noted by several scholars in the past that relative clauses³⁶ are more often verb-final than other clause types (Barrett 1952:101; Quirk and Wrenn 1957:94; Bean 1983:102; Fischer et al 2000:61; Davis and Bernhardt 2002:105ff).³⁷ In that respect, it is not surprising that this order is most frequent in adjectival clauses, of which the overwhelming majority are relative (cf section 4.2.4.3 below). The verb-final proportion is significantly higher in adjectival than in nominal clauses, but that is not the case in comparison with adverbial clauses.³⁸ SVX order is sometimes claimed to be typical of nominal clauses (Barrett 1952:102; Quirk and Wrenn 1957:94), but such claims are not supported by the early OE data: no significant differences are observed between the clause types for this order, nor for any of the other orders apart from SXV.

Two examples of adjectival SXV clauses are given below, with a full NP object (4.15) and an adverb (4.16) intervening between subject and verb. An adverbial SXVX clause is given in (4.17), illustrating the discontinuity typical for this pattern. The latter part of the subject predicative is placed after the verb *ware*, probably to comply with the principle of end weight. The very first clause from *Ohthere's* account given in (4.18) is an example of verb-final order in a *that*-clause, whereas the immediately following clause in the same account, also a *that*-clause (4.19), has SVX order. The same order in an adverbial clause is illustrated in (4.20). (4.21) shows an adjectival

³⁶ For a discussion of OE relative clauses and the problems associated with them, see section 3.2.5.

³⁷ As noted in section 2.2, the statistics provided by Barrett (1952) and Davis and Bernhardt (2002) are not fully comparable with my own.

³⁸ Nominal vs adjectival: $\chi^2 = 6.81, p = .009$; adverbial vs adjectival: $\chi^2 = 2.7, p = .10$.

SVX clause with an initial object relative pronoun, while an interrogative clause with SVX order is given in (4.22). Finally, (4.23) shows an adjectival SvXV clause with three elements between the finite and non-finite verb.

- (4.15) Ðæt ilce cuæð sanctus Paulus: Se **ðe God ne ongit**, ne ongit God hine
the same said St. Paul: He who God not knows, not knows God him
[CP 29,2]
- (4.16) & eac þa geata [þe] hie ut of Romebyrig to þæm gefeohte ferdon him mon
ascop þa noman **þe hie giet habbað**
and also the gates which they out of Rome to the battle marched of-it one
took the names which they still have
[Or 42,26]
- (4.17) Ond nu ure Cristne Roma bespricð þæt hiera [weallas] for ealdunge brosnien,
nales na **for þæm þe hio mid forheriunge swa gebismrad wære swa
Babylonia wæs**
and now our Christian Rome speaks-against because her walls with age decay,
not-at-all not because she by pillage so disgraced was as Babylonia was
[Or 44,12]
- (4.18) Ohthere sæde his hlaforde, Ælfrede cyninge, **þæt he ealra Norðmonna
norþmest bude**
Ohthere told his lord, Alfred king, that he of-all Northmen northmost lived
[Or 13,29]
- (4.19) He cwæð **þæt he bude on þæm lande norþweardum wip þa Westsæ**
he said that he lived on the land northwards by the west-sea
[Or 13,30]
- (4.20) Cirus, Persa cyning, þe we ær beforan sægdon, **þa hwile ðe Sabini & Romane
wunnon on þæm westdæle**, þa hwile wonn he ægþer ge on Scippie ge on Indie
Cyrus, of-Persians king, whom we before told about, while Sabines and Romans
fought in the west-part, then fought he both in Scythia and in India
[Or 43,1]
- (4.21) Hu ne is ðis sio micle Babilon **ðe ic self atimbrede to kynestole & to ðrymme**
how, not is this the great Babylon which I myself built as throne and as splendour
[CP 39,16]
- (4.22) & he nat **hwider he recð mid ðæm stæpum his weorca**
and he not-knows whither he tends with the steps his work-G.PL
[CP 65,6]

(4.23) Swa sindon wel monege ðara ðe gewundiað hiera mod mid ðæm weorcum
 ðisses flæsclican lifes, ða ðe **mehton smealice & scearlice mid hiera
 andgite ryht geseon**

so exist very many of-those who wound their mind with the works
 of-this fleshly life, those who may clearly and sharply with their
 understanding righteousness perceive
 [CP 69,4]

Table 4.17 shows the distribution of word order patterns according to clause type in late OE.

Table 4.17: Clause type and word order: late OE

	Nominal		Adverbial		Adjectival		Total	
	n	%	n	%	n	%	n	%
SXV	119	33	195	39	173	51	487	41
SXVX	46	13	55	11	35	10	136	11
SVX	97	26	150	30	66	20	313	26
SvXV	42	12	28	6	22	7	92	8
misc	60	16	70	14	42	12	172	14
Total	364	30	498	42	338	28	1200	100

When we consider earlier claims of a preference for SVX order in nominal clauses, it is interesting to note that it is in adverbial clauses the largest proportion of SVX clauses (30%) is found. As in eOE, adjectival clauses have the largest proportion of verb-final order, and it has risen from 43% to 51%.³⁹ There are also fewer adjectival SVX clauses in IOE than in eOE: 20% as opposed to 32%, and the difference is significant ($\chi^2 = 10.75$, $p = .001$). The difference between adverbial and adjectival clauses for the same pattern is also highly significant ($\chi^2 = 8.29$, $p = .004$). In this period nominal clauses have a larger proportion of SvXV order than the other two types.⁴⁰ (4.24) shows an adverbial clause with SXV order, (4.25) a nominal relative SXVX clause, (4.26) an adjectival SXV clause, and (4.27) an adverbial clause with the verbal brace, SvXV.

³⁹ The difference between the two periods is not statistically significant: $\chi^2 = 2.29$, $p = .13$.

⁴⁰ Nominal vs adverbial: $\chi^2 = 8.38$, $p = .004$; nominal vs adjectival: $\chi^2 = 4.3$, $p = .04$.

- (4.24) and sona wendon hiora fore to Cantwarebyrig and ða buruh raðe geodon, **gif hi ðe hraðor to him friðes ne gyrndon**
and soon turned their march on Canterbury and the city quickly stormed, if they rather with him peace not desired
[ChronC 1009,24]
- (4.25) Hit is þeh wen þæt feala manna þence hwylcum edleane he onfo æt Drihtne, oþþe hu God him þæt eft forgyldan wille, **þæt he ær for his noman sealde þæm earman**
it is however possible that many men consider what reward he receive from the-Lord, or how God him that later requite will, that he earlier for his sake gave the poor
[BlHom IV,35]
- (4.26) Ðu goda cyngc, efne þes man **þe þu swa wel wið gedest**, he is swiðe æfestful for ðinum gode
thou good king, truly this man whom you so well towards do-2SG, he is very envious of your property
[ApT 22,17]
- (4.27) & him gelome godcunde lac fore bringan; **forþon hi syndon Godes bearn gecegede**
and him frequently divine offerings forth bring; because they are God's children called
[BlHom IV,133]

The statistics for eME is given in Table 4.18.

Table 4.18: Clause type and word order: early ME

	Nominal		Adverbial		Adjectival		Total	
	n	%	n	%	n	%	n	%
SXV	22	9	65	15	113	22	200	17
SXVX	17	7	31	7	43	8	91	8
SVX	150	60	231	54	261	50	642	54
SvXV	25	10	22	5	27	5	74	6
misc	36	14	82	19	75	14	193	16
Total	250	21	431	36	519	43	1200	101

There is a continued tendency for verb-final order to be more widely used in adjectival clauses than in the other two types.⁴¹ In the SVX pattern, on the other hand, the observed differences are not statistically significant. As in IOE, there is a considerably

⁴¹ SXV, nominal vs adjectival: $\chi^2 = 15.42$, $p < .0001$; adverbial vs adjectival: $\chi^2 = 5.31$, $p = .02$.

higher proportion of SvXV in nominal clauses than elsewhere.⁴² Some eME clauses are given below; an SVX adverbial clause in (4.28), an interrogative clause with SVX order in (4.29), a non-restrictive relative clause in the SXVX pattern in (4.30), and a nominal SXV clause in (4.31).

(4.28) Alle hie wanten awei fram ðe, **for ðan ðe ðu folgedest ðin azene wille**
 all they went away from you, because you follow your own will
 [VV 23,16]

(4.29) Herst tu **hu Salomon eueneð bacbitere to stinginde neddre**
 hear you how Solomon compares backbiter to stinging adder
 [AW 44,2]

(4.30) nu is þe michel nied þat ðu understande mid scarpe witte hwat hie bien, þese
mihtes, ðe ðie muzen scilden fram ðese ʒewerʒede gastes
 now is you great need that you understand with sharp wit what they are, these
 virtues, which you may shield from these cursed spirits
 [VV 23,29]

(4.31) ant þrefter þenne fordon ant forðemed, ʒef ha nalde leauen **þet ha ʒet lefde**
 and thereafter then confuted and condemned, if she not-would leave what she still believed
 [Katherine 25,20]

Since word order in the lME period is overwhelmingly SVX, the frequencies for other patterns are necessarily low. The statistics are nevertheless given in Table 4.19 below.

Table 4.19: Clause type and word order: late ME

	Nominal		Adverbial		Adjectival		Total	
	n	%	n	%	n	%	n	%
SXV	0	0	2	<1	4	<1	6	<1
SXVX	5	3	10	2	17	3	32	3
SVX	161	81	347	81	473	83	981	82
SvXV	11	6	7	2	19	3	37	3
misc	23	12	61	14	60	10	144	12
Total	200	17	427	36	573	48	1200	101

Most conspicuous is the fact that the total proportion of nominal clauses is only 17%, slightly lower than in eME and considerably lower than in the OE periods. Within individual patterns, no major differences exist according to type of subordinate clause.

⁴² SvXV, nominal vs adverbial: $\chi^2 = 4.82, p = .03$; nominal vs adjectival: $\chi^2 = 5.07, p = .02$.

4.2.4.1 Nominal clauses

In the next three sections, nominal, adverbial and adjectival clauses are further subclassified, and the results are compared with some earlier observations in the literature. For nominal clauses the traditional distinction between *that*-, interrogative and nominal relative clauses has been used. The subclassification of OE and ME clauses is by no means unproblematic (cf section 3.2.2), since Present-day English grammatical categories are not always suitable for earlier English. For instance, clauses introduced by *swa hwæt swa*, treated here as nominal relative clauses, may more conveniently be analysed as adjectival in OE, according to Mitchell (1985 II:1). Moreover, the subjunction *þæt* may introduce not only nominal clauses, but also adverbial clauses of reason, result and purpose. Thus, a certain degree of subjective interpretation is necessary in this kind of analysis, but any ambiguities are generally resolved by the surrounding context.

Table 4.20: Word order according to subtypes of nominal clauses: early OE

	that-cl		interrog		nominal rel	
	n	%	n	%	n	%
SXV	57	26	26	43	8	57
SXVX	37	17	4	7	1	7
SVX	89	40	13	21	0	0
SvXV	19	9	4	7	0	0
misc	20	9	14	23	5	36
Total	222	101	61	101	14	100

Table 4.20 shows that there are certain differences between the subtypes of nominal clauses. Verb-final clauses occur more often in interrogatives than in *that*-clauses,⁴³ whereas the opposite situation can be observed for the SVX order: it is most frequent in *that*-clauses, much less common in interrogatives, and completely absent in nominal relative clauses.⁴⁴ This fits well with the difference Pintzuk (1999:228) reports between sentential complements and WH-clauses, the former being INFL-medial

⁴³ SXV, *that* vs interrogative: $\chi^2 = 4.08$, $p = .043$; *that* vs nominal relative: the expected frequency is too low to calculate a p -value.

⁴⁴ SVX, *that* vs interrogative: $\chi^2 = 4.21$, $p = .04$; *that* vs nominal relative: $\chi^2 = 4.57$, $p = .03$.

much more often than the latter. Smith (1893:238) also finds more SVX in *that*-clauses following a verb of saying than in other dependent clauses. In fact, *that*-clauses in Old English and some other Germanic languages are sometimes treated as embedded main clauses with typical main clause order when they are complements of ‘bridge’ verbs (Vikner 1995:65ff; Fischer et al 2000:111f; Haugland 2006:136).

Some examples of the different types are provided below. (4.32)–(4.34) show *that*-, interrogative and nominal relative clauses with SXV order, whereas SVX *that*- and interrogative clauses are exemplified in (4.35) and (4.36), respectively. We may note that the ‘miscellaneous’ category constitutes a large proportion of interrogative and nominal relative clauses in all periods, and these are for the most part clauses of the type SV-, with an obligatory X element initially, and no elements either between subject and verb or after the verb. An interrogative SV- clause is given in (4.37).

- (4.32) þa gecwædan hie þæt him leofre wære **þæt hie on ðæm iermþum heora lif geendodon** þonne hie ðæt gewinn forleten
 then said they that them dearer were that they by the hunger their life ended than that they the war leave
 [Or 39,29]
- (4.33) Him bið sua sua ðam menn ðe bið abisgod on færeldre mid oðrum cierrum, oððæt he nat **hwider he ær wolde**
 him is so as the man who is occupied on journey with other affairs, until he not-knows whither he formerly wanted
 [CP 37,21]
- (4.34) on ðæm earfoðum oft **ðæt he longe ær to yfle gedyde**, he gebett
 in the prosperity often what he long before evilly did, he repairs
 [CP 35,8]
- (4.35) ealra þara Romana wif ða þe he mehte he to [geligre] geniedde & his suna geþafode **þæt he læg mid Latinus wif**, Lucretie hatte, [Brutuses] sweostor
 of-all the Romans’ wives those that he could he to adultery forced and his son permitted that he lay with Collatinus’ wife, Lucretia called, Brutus’ sister
 [Or 40,4]
- (4.36) simle he sceal ætiewan on his lifes gestæððignesse **hu micle gesceadwisnesse he bere on his breostum**
 always he shall show in his life’s consistency how much prudence he carries in his breast
 [CP 77,13]

- (4.37) & þæt longe donde wæron ær þæt folc wiste **hwonan þæt yfel come**
 and that long doing were before the people knew whence the evil came
 [Or 60,20]

The IOE findings are presented in Table 4.21.

Table 4.21: Word order according to subtypes of nominal clauses: late OE

	that-cl		interrog		nominal rel	
	n	%	n	%	n	%
SXV	87	31	13	35	19	38
SXVX	41	15	2	5	3	6
SVX	89	32	4	11	4	8
SvXV	38	14	3	8	1	2
misc	22	8	15	41	23	46
Total	277	100	37	100	50	100

Late OE turns out to be quite similar to early OE, although we may note that SXV and SVX now occur with about equal frequency in *that*-clauses. At the same time, however, SVX is much more frequent in *that*-clauses than in the other two types of nominal clauses, just as in eOE.⁴⁵ One conspicuous difference between eOE and IOE is the higher relative frequency of nominal relative clauses in the texts from the latter period (50/364 (14%) vs 14/297 (5%)). The fact that the ApT text contains 33 out of these 50 clauses, one of which is exemplified in (4.38), underlines the intertextual variation discussed in section 4.2.2. (4.39) is one of very few examples in this period of an interrogative word with subject function. Nominal relative words also rarely have subject function, although cases like (4.40) do occur.

- (4.38) þonne wast þu **þæt þu nu git nast**
 then know you what you now still not-know
 [ApT 26,4]

- (4.39) La leof sege me **hwa sceal to his rice fon. þonne he broðer næfð**
 oh friend say me who shall to his kingdom succeed, when he brother not-has
 [ÆCHom II X,221]

⁴⁵ IOE SVX, *that* vs interrogative: $\chi^2 = 4.33$, $p = .04$; *that* vs nominal relative: $\chi^2 = 7.85$, $p = .005$.

- (4.40) **Swa hwa swa sylð anum ðurstigum menn ceald wæter on minum naman.**
 ne forlyst he his mede þære dæde
 whosoever gives one thirsty man cold water in my name
 not loses he his reward for-that deed
 [ÆCHom II VII,123]

Table 4.22 displays the results for eME.

Table 4.22: Word order according to subtypes of nominal clauses: early ME

	that-cl		interrog		nominal rel	
	n	%	n	%	n	%
SXV	10	6	2	5	10	24
SXVX	8	5	5	13	4	10
SVX	112	66	18	46	20	48
SvXV	22	13	3	8	0	0
misc	17	10	11	28	8	19
Total	169	100	39	100	42	101

In this period none of the differences are statistically significant.⁴⁶ Some examples of the subtypes are given below:

- (4.41) softe me mi sar swa & salue mine wunden þt hit ne seme nohwer ne suteli o mi
 samblant **þt ich derf drehe**
 soften me my hurt so and salve my wounds that it not appears nowhere nor shows in my
 face that I pain suffer
 [Margaret 62,17]
- (4.42) and harke **hwat he him andswarede**
 and hearken what He him answered
 [VV 25,32]
- (4.43) Nu we willen sægen sum del **wat belamp on Stephnes kinges time**
 now we will say some part what happened in Stephen king's time
 [PC 1137,79]
- (4.44) ne ich ne cnawe þi cun, ne **hwucche men þu hauest ihaued hiderto to
 meistres**
 either I not know your kind, or what men you have had hitherto as teachers
 [Katherine 25,5]

⁴⁶ eME SVX, *that* vs interrogative: $\chi^2 = 1.75, p = .19$; *that* vs nominal relative: $\chi^2 = 1.58, p = .21$.

(4.41) is a verb-final *that*-clause with a full NP object, while a nominal relative clause with the same word order but a pronominal object in preverbal position is exemplified in (4.42). An SVX nominal relative clause with the nominal relative pronoun functioning as subject can be seen in (4.43). Interestingly, of the 39 interrogative clauses in this period, 30 stem from only two texts, *Katherine* and *Margaret*. An instance with SVX order is given in (4.44).

In late Middle English there are very few occurrences for all patterns except SVX, and separate tables for this period have consequently not been considered worthwhile for any subtype of subordinate clause.

4.2.4.2 Adverbial clauses

The following tables contain traditional categories of adverbial meanings, although an attempt has been made to minimise the number to avoid too many cases of very few tokens. Thus, *time* and *place* are collapsed, the latter being very rare. *Condition* and *concession* are considered similar in meaning and are collapsed, as are *manner* and *comparison*. The latter two, moreover, may be difficult to keep apart. The same can be said about *result* and *purpose*, which are sometimes identical in OE with respect to both subjunction and verb mood (Mitchell 1985 II:415-416). Clauses of *reason* have been kept separate. The five categories used here are exemplified in (4.45)–(4.49).

(4.45) **þa he to Engleland com**, þa was he underfangen mid micel wurtscipe
when he to England came, then was he received with great honour
[PC 1154,5]

(4.46) **Fordon hie sua on ofermettum & mid upahafenesse becumað to ðære are ðære hirdelecan giemenne**, hi ne magon medomlice ðenian ða ðenunga
since they so with pride and with arrogance arrive at the honour
of-the pastoral care, they not may properly administer the ministrations
[CP 27,8]

(4.47) **Gif þu sy Godes sunu**, send þe nyþer of þisse heanesse
if you are God's son, cast yourself down from this height
[BIHom III,8]

(4.48) **as me ret in hire boc**, ha wes þe king assuer ouer al icwene
as one wrote in her book, she was to-the king Ahasuerus over all pleasing
[AW 88,26]

(4.49) and þonne þu him to becume, þonne acwel ðu hine, mid isene, oððe mid
 attre, **þæt þu mage freedom onfon þonne þu ongean cymst**
 and when you him to come, then kill you him, with iron, or with
 poison, that you may freedom receive when you again come
 [ApT 8,7]

There are some previous observations on word order in different adverbial clauses, mainly for Old English. Barrett (1952:102), Quirk and Wrenn (1957:94) and Davis and Bernhardt (2002:124ff) all report that causal clauses, which correspond to the *reason* category in Table 4.23 below, contain a majority of subject–verb orders, whereas verb-final typically occurs in temporal, conditional and concessional clauses. Davis and Bernhardt find that the two main orders are more equally distributed in clauses of comparison and result (2002:124ff). Bean’s (1983) study of the Anglo-Saxon Chronicle supports these findings as far as reason clauses are concerned, but reports of a clear preference for subject–verb order in result clauses.⁴⁷

Table 4.23: Word order according to subtypes of adverbial clauses: early OE

	time/place		reason		cond/conc		mann/comp		result/purp	
	n	%	n	%	n	%	n	%	n	%
SXV	79	42	19	22	49	40	22	51	15	23
SXVX	24	13	15	17	23	19	8	19	13	20
SVX	54	29	36	41	28	23	6	14	21	32
SvXV	7	4	9	10	3	2	2	5	9	14
misc	23	12	8	9	18	15	5	12	7	11
Total	187	100	87	99	121	99	43	101	65	100

The table shows that SXV is most common in clauses of manner and comparison, followed by time/place and condition/concession, while the SVX order is most frequent in clauses of reason. The results fit quite well with previous reports, but no explanation for this state of affairs is attempted here. SXVX is fairly equally distributed across patterns, whereas the SvXV category, although small, seems to follow the tendency for SVX clauses, being most frequent in clauses of reason and result/purpose.

⁴⁷ Bean only gives relative frequencies, not the number of tokens, for the word order of different subordinate clause types. Considering her overall results for subordinate clauses (1983:104), however, it is evident that the percentages are for the most part based on a very limited number of occurrences.

Table 4.24 contains the IOE results, which do not differ substantially from those reported for eOE:

Table 4.24: *Word order according to subtypes of adverbial clauses: late OE*

	time/place		reason		cond/conc		mann/comp		result/purp	
	n	%	n	%	n	%	n	%	n	%
SXV	88	48	7	11	42	36	33	50	25	38
SXVX	15	8	7	11	19	16	3	5	11	17
SVX	59	32	35	53	32	27	9	14	15	23
SvXV	7	4	7	11	7	6	1	2	6	9
misc	14	8	10	15	18	15	20	30	8	12
Total	183	100	66	101	118	100	66	101	65	99

Time/place and manner/comparison are the categories where SXV clauses are most frequent, while SVX clauses again dominate in clauses of reason. A substantial proportion of clauses of manner/comparison belong to the ‘misc’ category; nearly all of these occur in the SV- pattern. An example is provided in (4.50).

- (4.50) And þa æfter ðam gesette se cyng Yric into Norðhymbron him to eorle **ealswa Uhtred wæs**
and then after that appointed the king Eric into Northumbrian him to nobleman as Uhtred was
[ChronC 1016,27]

Table 4.25: *Word order according to subtypes of adverbial clauses: early ME*

	time/place		reason		cond/conc		mann/comp		result/purp	
	n	%	n	%	n	%	n	%	n	%
SXV	21	19	2	3	23	23	17	18	2	3
SXVX	3	3	2	3	8	8	5	5	13	20
SVX	68	60	41	71	52	51	43	45	31	48
SvXV	4	4	6	10	4	4	1	1	7	11
misc	17	15	7	12	14	14	30	31	11	17
Total	113	101	58	99	101	100	96	100	64	99

Early ME does not deviate significantly from OE, and shows the same basic tendencies for the two main patterns under scrutiny. In all three periods, SXVX clauses are most frequent in clauses of purpose and result, and an eME example is given below.

- (4.51) 7 þæs hecsten mihte heo bescadewode, **swa þæt heo of þan ilcan Halgen Gaste wearð bearneacinde**
 and the highest power her overshadowed, so that she of the same Holy
 Ghost became pregnant
 [Kentish 138,5]

4.2.4.3 Adjectival clauses

As was mentioned in connection with Table 4.16, most of the clauses labelled adjectival are relative clauses. There are, however, other types of phrase modifiers as well, constituting between 10% and 15% of the total. To my knowledge, a word order comparison between relative clauses and other types of adjectival clauses has not been made in the past. One reason for the lack of literature on the subject could simply be that there *are* no systematic differences; at least that is what is suggested by the present data. In both eOE, IOE and eME, no differences are statistically significant, or the expected frequencies are so low as to render the chi-square test pointless, and the tables have therefore been placed in Appendix I rather than here. Relative clauses have been exemplified in abundance earlier in this chapter, while the ‘other’ category needs illustration:

- (4.52) þa wæs he swa feor norþ **swa þa hwælhuntan firrest farap**
 then was he as far north as the whale-hunters furthest go
 [Or 14,9]
- (4.53) On ðæm hiewe **ðe he sceolde his gielpes stieran** on ðæm he his strienð
 under the pretence that he should his pride restrain, under that he it increases
 [CP 55,9]
- (4.54) Her on þisum geare se casere gaderode unarimedlice fyrde ongean Baldewine
 of Brycge þurh þæt **þæt he bræc þæne palant æt Neomagan**
 here in this year the emperor gathered innumerable army against Baldwin
 of Bruges due-to that that he destroyed the palace at Nijmegen
 [ChronC 1049,1]
- (4.55) & het swiðe bitterliche hongin hire & heouen up herre **þen ha ear wes**
 and had very cruelly hang her and heave up higher than she earlier was
 [Margaret 64,3]

(4.56) Soðlice swa micelle lufe hæfde eal seo ceaster-waru to him, **þæt hi lange**

tid eodon ealle unscorene and sid-feaxe

truly so great love had all the township for him, that they long

time went all unshorn and long-haired

[ApT 8,26]

(4.57) **þt hit beo soð**; lo her preoue

that it is true; see here proof

[AW 31,8]

Comparative clauses introduced by the correlative conjunction *swa–swa* are very common, especially in OE. An example is given in (4.52). In (4.53) and (4.54) we find *that*-clauses as phrase elements, from eOE and IOE respectively. Comparative clauses are illustrated in (4.55) and (4.56), and in the latter the modifying clause is separated from its head. The last example, (4.57), shows a very rare case of a phrase element clause being placed in initial position, whereas the head word comes last in the sentence.

Section 4.2 has shown that verb-final order in OE subordinate clauses is not necessarily as dominant as is often claimed. Moreover, word order is relatively stable throughout the Old English period, and the small changes that do occur do not indicate any movement towards SV order; on the contrary, SXV order increases slightly while SVX order decreases. In eME the picture changes markedly, and there is clearly a development towards SV order. Verb-final order, however, is still fairly frequent, and does not become marginal until IME, when exceptions from SV have become rare. It is interesting to note the parallelism in the diachronic development of subordinate and main clauses, which does not agree with some of the previous analyses.

The comparison of texts from the same period has demonstrated that the variation within one period may to some extent be greater than between periods. This was seen especially with respect to the four IOE and the six eME works, and shows the importance of studying more than one text from each period. Considerable word order variation also exists between the various subtypes of subordinate clause, as well as between subtypes of those subtypes.

4.3 OV vs VO

So far in this chapter the focus has been on the overall word order patterns, and X elements have included both objects, predicatives, adverbials and non-finite verbs. However, many word order studies of earlier English have tended to concentrate more specifically on the OV/VO dimension. It might indeed be argued that the position of objects relative to main verbs is more fundamental than the position of other X elements, since the object receives case from the verb. Nonetheless, even if the verb–object relationship is seen as primary, there do not appear to be any feasible reasons for excluding X elements other than objects. At least with respect to the study of word order from a typological and diachronic point of view, it is my belief that all elements must be considered, as has been done in this investigation. Adverbials and predicatives may give us valuable information, both when it comes to word order in general, and also when weight and information value are taken into consideration.

Having said that, there is little doubt that a narrowing down to the order of verbs and their objects might yield interesting results different from those presented in section 4.2, where all clause elements were taken into account. For instance, it is possible that the significant proportion of clauses with SVX order in both early and late OE does not reflect a significant proportion of post-verbal objects at this stage, since there might be very few objects in SVX clauses, whereas SXV clauses may have a large number of objects.

Before we proceed to the findings, a clear definition of the labels *OV* and *VO* is called for, since these have been used in a wide variety of senses by different scholars. Often they carry the general typological meaning, equalling Greenberg's (1963) SOV/SVO classification. Then the tags have significance beyond verbs and objects, in the sense that they are correlated with a number of other syntactic relationships and ordering principles, including the order of nouns and adjectives, nouns and genitives, as well as whether the language in question uses pre- or postpositions (cf section 2.2). Sometimes *OV* and *VO* are used in a concrete sense to describe the actual order of main verbs and objects, as in Foster and van der Wurff (1995). Quite frequently, in eg Pintzuk (1999), Allen (2000), Fischer et al (2000) and Koopman (2005), *OV* and *VO*

are calculated only from clauses containing a periphrastic verb phrase,⁴⁸ and the main focus is on pronominal objects and particles.

It is within generative linguistics that ‘OV’ and ‘VO’ have been used most frequently to describe word order and word order change. The present study is surface-based and non-generative, but it nevertheless aims at being of potential interest to linguists with various theoretical assumptions. Hopefully, the data may be useful as a point of reference, as long as one keeps in mind that the approach is descriptive, with no assumptions about cliticisation or movement of any kind.⁴⁹ It is generally agreed that a distinction between pronouns and full NPs is crucial when it comes to word order, and that the two behave in fundamentally different ways syntactically. A detailed analysis of the correlation between object type and word order for the main patterns is carried out in section 4.4.2.2 below, which should be consulted for full statistics. In this section, the aim is chiefly to find out the proportion of clauses with OV and VO order, both overall and in the individual word order patterns. Of course, individual instances are discussed in some detail where relevant, including the distinction between pronominal and full NP objects.

The analysis applied here is based on the position of objects (accusative, dative and genitive) in relation to the lexical verb, whether or not that verb is finite. In other words, both clauses with a single verb and those with a periphrastic verb phrase have been analysed. As is the case with the rest of the investigation, only clauses with an overt subject are included. However, a full account would also need to take into consideration subjectless coordinated clauses like the one below, as pointed out by eg Foster and van der Wurff (1995:313):

- (4.58) & com a culure, beornind se briht as þah ha bearnde, a guldene crune & sette
hire opt seli meidenes heaued
and came a dove, burning so bright as though it burned, a golden crown and set
it on-that blessed maiden’s head
[Margaret 86,11]

⁴⁸ Fischer et al (2000:139) also include clauses with only one (finite) verb if that verb is not regarded as fronted. Koopman (and others) argue that in general, clauses with a finite main verb are ambiguous between OV and VO, since the effects of verb movement cannot be analysed with certainty (Koopman 2005:47).

⁴⁹ That is not to say that the current approach is theory-neutral in any sense.

It is at this stage important to emphasise that OV and verb-final are two fundamentally different phenomena, at least under the current analysis. Part of the reason is that verb-final refers to the position of the finite verb, while OV describes the order of object and main verb. A clause can therefore be OV without being verb-final, and vice versa. The two concepts will no doubt tend to overlap in the large majority of cases, ie, a language which is largely verb-final will also be predominantly OV. That, however, does not change the fact that the two categories are not co-extensive. (4.59) is an SvXV clause with the object placed between the finite and lexical verb, while the SXVX clause in (4.60) also has an object preceding the main verb, which in turn is followed by a PP. Thus, both examples are OV, but not verb-final.⁵⁰

(4.59) & eac us is to geþencenne **pæt we sceolan þa ten bebodu healdan**
 and also us is to think that we must the ten commandments keep
 [BHom III,146]

(4.60) Lieue saule, **ʒif ðu ðese blisse hauest on ðine hierte**, ðe ne cump of nanes
 woredes blisse, ðane miht þu bien siker mid godes grace
 dear soul, if you this bliss have in your heart, which not comes from any
 world's bliss, then may you be sure of God's grace
 [VV 31,28]

In the same vein, nor do VO and what I have labelled SV order (cf section 4.2) necessarily coincide, since SXVX clauses are not SV but may have VO order. (4.61) and (4.62) both have adverbial elements before the main verb, and the object in postverbal position.

(4.61) **Gif he ðonne giet geswicen næfð his agenra unðeawa**, hu mæg he ðonne
 oðerra monna mod lacnian
 if he then still given-up not-has his own vices, how may he then
 other men's minds heal
 [CP 59,24]

⁵⁰ Allen (2000:313) distinguishes between Infl-final and verb-final, the former entailing final position for the finite verb, and the latter being instances of the non-finite verb in final position preceded by eg objects and particles. Thus, in SvXV clauses verb-final is put on the same footing as OV in Allen's terminology.

- (4.62) Ac þa syndon eremingas 7 ungesælige, **þe on eallra ednysse libbeð heora lif**
 but they are wretches and unhappy, who in complete joy live their life
 [Kentish 142,35]

In the following, a number of examples are given from eOE, IOE and eME. Special or rare cases are exemplified in connection with the tables for each period later in the section. Two SXV clauses with one pronominal object are cited in (4.63), while clauses with two pronominal and two nominal objects can be seen in (4.64) and (4.65), respectively. (4.66) contains an SXVX clause with a nominal object before the verb, while the same clause type containing *þæt* as anticipatory object and an extraposed object claused is given in (4.67). Discontinuous structures such as the one seen in (4.68) are typical for the SXVX pattern, with the head in preverbal position while the postmodifying element, normally a clause but sometimes a PP, is placed after the verb. Notice that this type of construction is counted as both OV and VO in the tables. (4.69) shows an SXVX clause with VO order. Moving on to the SVX pattern, an eME instance with postverbal pronoun is given in (4.70). (4.71) and (4.72) are common cases of VO, with a nominal and a clausal object, respectively. The SvXV pattern, like SXVX, can be either OV or VO, illustrated by (4.73) and (4.74). (4.75) resembles (4.67)–(4.68) in the sense that the clause is tagged as both OV and VO, but in this case because the pronominal indirect object appears before the main verb and the heavy direct object after. Finally, a couple of miscellaneous clauses are given in (4.76) and (4.77). The former is VO with the string SVvX, the latter OV with SXXvV order.

- (4.63) þeo **þt ham makieð** mote beon ilich ham ant alle **þe ham trusteð**
 those that them made must be like them and all who them trust
 [Katherine 26,6]

- (4.64) Hit is þeh wen þæt feala manna þence hwylcum edleane he onfo æt Drihtne,
oþþe hu God him þæt eft forgyldan wille
 it is however possible that many men consider what reward he receives from the-Lord,
 or how God him that later requite will
 [BIHom IV,36]

- (4.65) Arues wende þæt he his rice gemiclian sceolde **þa he his dohtor Philippuse**
sealed
 Aruba thought that he his kingdom enlarge should when he his daughter to-Philip gave
 [Or 62,2]

- (4.66) ðonne sceolon beon gesamnode ealle ða menn **ðe swyftoste hors habbað on þæm lande**
 then shall be assembled all the men who swiftest horse have in the land
 [Or 17,19]
- (4.67) **Þa Tostig þæt geaxode þæt Harold cing wæs toward Sandwic**, þa for he of Sandwic and nam of þam butsekarlon sume mid him
 when Tostig that understood that Harold king went towards Sandwich, then departed he from Sandwich and took of the boatmen some with him
 [ChronC 1066,19]
- (4.68) halde hire ed hame i ierusalem, **þt ha nawiht nute of þe worldes baret**
 hold her at home in Jerusalem, that she nothing not-knows of the world's clamour
 [AW 89,9]
- (4.69) Ðurh ða wunde he forliest ðone wlite his lioma, **ðonne he <ðurh> ðæt woo weorc forliest ðone wlite oðerra godra weorca**
 through the wound he loses the beauty of-his limbs, when he through the evil work loses the beauty of-other good works
 [CP 71,24]
- (4.70) Abid me þenne broþer, qð ha, **hwil þt ich ibidde me**
 await me then brother, said she, while that I pray me
 [Margaret 87,20]
- (4.71) Hwæt mænde he þonne elles, **buton þæt we gefyllon þæs þearfan wambe mid urum godum**
 what meant he then else, but that we fill the needy's womb with our riches
 [BIHom IV,19]
- (4.72) Ac Essaias, **ða Dryhten acsode hwone he sendan mehte**, ða cuæð Essaias:
 Ic eom gearo; send me
 but Isaiah, when God asked whom he send should, then said Isaiah:
 I am ready; send me
 [CP 49,8]
- (4.73) 7 þær is mid Estum an mægð **þæt hi magon cyle gewyrcan**
 and there is among Estonians a power that they may cold produce
 [Or 17,33]
- (4.74) ah nes þear nan **þt mahte neauer eanes wrenchen hire wið al his crefti crokes ut of þe weie**
 but not-is there none that might never once force her with all their crafty tricks out of the way
 [Katherine 19,25]

(4.75) Ðu geswore apollonio, gif he wolde gehirsumian minum willan on lare, **þæt þu woldest him ge-innian swa hwæt swa seo sæ him ætbræd**
 you swore to-Apollonius, if he would obey my will in teaching, that
 you would him restore whatever the sea from-him took
 [ApT 34,26]

(4.76) & for þe fearlac offruht; forȝet hire bone - þt ha ibeden hefde **þt ha iseon moste þen unsehene unwiht**
 and for the sudden fear; forgot her prayer – when she prayed had that she see
 might the unseen demon
 [Margaret 69,17]

(4.77) **Gif he ðonne ðæt wif wille forsacan**, ðonne hræce hio him on ðæt nebb foran
 if he then the woman will refuse, then spit she him in the face in-front
 [CP 43,15]

Table 4.26 shows the proportion of OV and VO in early Old English. Notice that objects that occur not only before the lexical verb but also before the subject have not been included in the table, since clauses with topicalised objects (cf section 4.2.1) are fundamentally different from clauses where the object is placed between subject and lexical verb (see eg Foster and van der Wurff 1995:313).

Table 4.26: The proportion of OV and VO: early OE

	OV		VO		Total	
	n	%	n	%	n	%
SXV	178	100	0	0	178	100
SXVX	59	49	62	51	121	100
SVX	0	0	155	100	155	100
SvXV	29	76	9	24	38	100
misc	10	67	5	33	15	100
Total	276	54	231	46	507	100

Of course, given the definitions of these word order labels, SXV clauses with objects can only be OV, and SVX clauses only VO. As the table demonstrates, however, there is considerable variation in the other patterns, ie SXVX, SvXV and miscellaneous. Of special interest here are the so-called ‘verb-late’ SXVX clauses, which are sometimes lumped together with SXV clauses as representative of the old word order (see eg Kohonen 1978:90; Stockwell and Minkova 1990:507). In early OE, objects in this pattern are almost equally split between preverbal and postverbal position. Thus, even if the subject and the verb are separated by at least one element, objects are frequently

placed to the right of the main verb. This is a clear demonstration that the SXVX pattern must be kept distinct from absolute verb-final clauses. In this pattern, clauses with two objects tend to have them on either side of the verb; this is the case in 9 out of 10 clauses in eOE. 8 of these 9 clauses have a preverbal indirect object in the form of a pronoun, and a postverbal full NP or clausal direct object, and it is thus evident that weight plays a major role here. An example is given in (4.78), while the only instance of both objects being placed on the same side of the verb is found in (4.79). Not incidentally, the indirect object in the latter example is a full NP.

(4.78) ...ær þon hie God mid þæm mæstan bismere geeaðmedde, **þa he hie ægðores benam ge heora cyninges ge heora anwaldes**
 ...until them God with the greatest disgrace humbled, when he them both
 deprived both of-their king and their power
 [Or 38,17]

(4.79) Se lareow sceal bion on his weorcum healic, **ðæt he on his life gecyðe lifes weg his hieremonnum**
 the teacher must be in his work lofty, so-that he in his life shows life's way to-his disciples
 [CP 81,2]

The total of 46% VO in subordinate clauses goes against some previous predictions and observations stating that OE subordinate clauses are overwhelmingly OV (eg Lightfoot 2006:132).⁵¹ As will be shown later (section 4.4.2.2), postverbal objects are nearly exclusively full NPs or clauses in OE, whereas there is a mix between pronouns and full NPs in preverbal position. Under some analyses, postverbal full NP objects in OE have moved rightward from their basic, preverbal position (eg van Kemenade 1987:39ff).

⁵¹ It was noted in section 2.3.1 that some of the primary data Lightfoot (2006) bases his conclusions on have fundamental limitations as evidence in a theory of language change. Gorrell (1895) is another of his main sources, and by closer inspection it becomes evident that Gorrell's results are misinterpreted by Lightfoot. Gorrell uses the same word order labels as Smith (1893), and the data show an OV rate of between 47% and 77% (of all clauses with object, plus a projected rate from Gorrell's '..... verb' pattern, where the type of preverbal element is not specified). Thus, Gorrell's findings come nowhere near the 80-90% 'verb in final position' cited by Lightfoot. As mentioned before, it is unclear whether Lightfoot means verb-final, OV or XP-V, but Gorrell's rates of verb-final order, ie clauses with the finite verb in final position, are even lower than the rates of OV, viz between 26% and 51% in the texts examined. A third possibility is that Lightfoot's percentages are calculated only from clauses containing objects and a complex verb phrase, in which case the OV rate varies between 57% and 84%, averaging just below 70%. In other words, neither verb-final nor OV occurs as often in Gorrell's data as indicated by Lightfoot.

The IOE results are presented in Table 4.27.

Table 4.27: The proportion of OV and VO: late OE

	OV		VO		Total	
	n	%	n	%	n	%
SXV	241	100	0	0	241	100
SXVX	68	62	41	38	109	100
SVX	0	0	148	100	148	100
SvXV	53	80	13	20	66	100
misc	16	84	3	16	19	100
Total	378	65	205	35	583	100

When we keep in mind the small increase in SXV order from eOE to IOE reported in Table 4.1, it is perhaps not surprising to see that the proportion of OV order also increases between these periods, from 54% to 65%. After all, the majority of OV clauses (241/378) are found in the SXV pattern. The increase of OV reported here is actually statistically significant, as is the decrease of VO order.⁵²

Postverbal pronouns occur a little more often in IOE than in eOE (cf section 4.4.2), and one instance is given in example (4.80). The demonstrative pronoun is possibly placed finally for emphasis. It is quite common to position postmodified pronouns after the verb as well, which may be attributed to the principle of end weight; this is illustrated by (4.81) and (4.82).

(4.80) **Da Uhtred geahsode þis**, ða forlet he his hergunge
 when Utred understood this, then abandoned he his plundering
 [ChronC 1016,23]

(4.81) wen is **þæt þu gemete sumne þæt þe gemiltsige**
 probable is that you meet some that you-D pity
 [ApT 18,14]

(4.82) Forþon ne þearf þæs nanne man tweogean, **þæt seo forlætene cyrice ne hycgge
 ymb þa þe on hire neawiste lifgeaþ**
 because not needs that-G no man doubt, that the forsaken church not care
 for those who in her neighbourhood live
 [BIHom IV,58]

⁵² eOE vs IOE, OV: $\chi^2 = 4.69$, $p = .03$; VO: $\chi^2 = 7.1$, $p = .008$. The combination of the two shows highly significant change according to the contingency test: $\chi^2 = 11.79$, $p = .0006$, Cramér's $V = .11$.

Table 4.28 displays the findings in early ME.

Table 4.28: The proportion of OV and VO: early ME

	OV		VO		Total	
	n	%	n	%	n	%
SXV	86	100	0	0	86	100
SXVX	36	54	31	46	67	100
SVX	0	0	248	100	248	100
SvXV	25	63	12	38	37	100
misc	33	85	6	15	39	100
Total	180	38	297	62	477	100

The development from IOE to eME shows a marked decrease of OV and a corresponding increase of VO clauses,⁵³ of which almost 5/6 (248/297) occur in the SVX pattern. Notice that the distribution in SXVX clauses in this period is very similar to that observed in eOE. In all three patterns where both OV and VO are possible, there is a majority of OV, and this tendency is particularly strong in miscellaneous clauses. The most common construction in this category is illustrated by (4.83), which differs from verb-final clauses only by the relative order of the two verbs. The type seen in (4.84) does not fit into any of the main categories either, since the subject and the verb are separated, and the two verbs are not contiguous. Also in eME do we find heavy NP objects in preverbal position, as illustrated by (4.85).

- (4.83) For þeh heo Josepe gehandfæst wære, þehhwedere he hæfde anrædlice on hire gemynte, **þæt heo næfre weres gemænnysse nolde cunnen**
 for though she to-Joseph betrothed was, nevertheless he had resolutely for her intension, that she never man's fellowship not-would know
 'for although she was engaged to Joseph, he had resolutely the intension for her that she would never know any man's fellowship'
 [Kentish 135,14]
- (4.84) þench ðat ðu art wel wurðe ðes eueles, **for ðan ðe ðu hit hauest wel ofearned**
 think that you are well deserving of-the evil, because you it have well earned
 [VV 29,11]
- (4.85) ant makien ham hehest in his halle **zef ha þeos modi motild ouercume mahten**
 and make them foremost at his court if they this proud spitfire overcome might
 [Katherine 25,18]

⁵³ Contingency: $\chi^2 = 76.21$, $p < .0001$, Cramér's V = .27.

In late ME there are only four instances of object–verb order, whereas 395 clauses have the objects in postverbal position. Example (4.86), an SvXV clause, is the only OV clause in the *Mandeville* text. It is possible that *þus* is not a pronoun here, as the context seems to suggest, but rather an adverb.

(4.86) And **whan sche hadde þus seyð** sche entred in to the fuyr
 and when she had thus said she entered into the fire
 [Mandeville 45,36]

Middle English Sermons contains three OV clauses, one an SXV clause (4.87) and the two other SXVX clauses (4.88)–(4.89). Example (4.89) is interesting because the object is long and heavy but still placed preverbally, possibly to give it added emphasis, or to link it to the preceding verb *loue*.

(4.87) for Criste, **þat all can**, ordeyn itt
 for Christ, who everyting can, arranges it
 [MES 9,23]

(4.88) þis kynge þat made weddynggus to is sonne betokenep þe Fadere of heuen, **þat all þinge made of nozthe**
 this king that made weddings to his son signifies the Father of heaven, who
 all things made of nothing
 [MES 17,38]

(4.89) Now God ȝeue us grace to vse kyendnes aȝeyne and loue hyme **þat so many signs of loue haþ shewed to vs all**, oure Lorde Ihesu Criste
 now God gives us grace to use kindness again and love him that so many
 signs of love has shown to us all, our Lord Jesus Christ
 [MES 27,19]

The findings in Tables 4.26–4.28 plus the data for late ME are summarised in Table 4.29 below:

Table 4.29: The proportion of OV vs VO: all periods

	eOE		IOE		eME		IME	
	n	%	n	%	n	%	n	%
OV	275	55	370	64	180	38	4	1
VO	229	45	207	36	295	62	395	99
Total	504	100	577	100	475	100	399	100

The OV proportion of 38% in early Middle English is even greater than the general results for X elements presented in section 4.2 would indicate, and underlines and strengthens the impression that the transition from OE to ME must have been fairly gradual. As far as VO and OV are concerned, the most dramatic changes appear to have taken place not between 1100 and 1200, but rather somewhere between 1200 and 1400, since it is not until late Middle English that OV order has become so infrequent as to be nearly negligible (1%). It may be noted, however, that OV was reportedly more frequent in verse than in prose throughout the Middle English period (Foster and van der Wurff 1995:314), and continued to occur in verse until the 19th century (Fischer et al 2000:139).

4.4 Element type and weight

The remainder of the chapter deals with the realisation of various clause elements. As in section 4.3, the patterns SXV, SXVX, SVX and SvXV are taken to be most important, although XVS clauses are also considered in connection with subjects. The findings will later be correlated against the results for information value in chapter 5. Given the low proportion of SXV and SXVX orders in late ME, that period will be treated only sporadically here.

For subjects and objects the crucial distinction between pronouns and full NPs is the main locus of attention, whereas predicatives and adverbials are categorised as either light or heavy. Verbs are similarly classified according to the number of syllables, in order to find out whether that has any bearing on word order. All elements constituted by clauses are kept in a separate category.

4.4.1 Subjects

The four main patterns under investigation are discussed in this section, as well as XVS clauses. The latter order is rare in subordinate clauses, and may therefore be interesting to study with respect to subject type. The miscellaneous category has not been deemed relevant in this section. It is important to observe that subjects consisting

of a pronoun head and an immediately following postmodifier have been classified as full NPs due to their weight. An example is given in (4.90).

- (4.90) Habbe þenne mucche dred, each feble wummon, **hwæn þeo þe wes riht ta iwraht wið godes honden; wes þurh a sihðe biswiken**
 have than much fear, each feeble woman, when she who was just then
 wrought with God's hands; was through one look betrayed
 [AW 32,12]

Table 4.30: The realisation of subjects in early OE

	pronoun		full NP		Total	
	n	%	n	%	n	%
SXV	373	83	75	17	448	100
SXVX	160	90	17	10	177	100
SVX	295	78	81	22	376	100
SvXV	59	79	16	21	75	100
XVS	0	0	18	100	18	100
Total	887	81	207	19	1094	100

81% of all subjects in the data from this period are pronominal. It is perhaps not surprising that the XVS pattern contains no pronominal subjects.⁵⁴ Of the four other patterns, SVX and SvXV contain most full NP subjects.⁵⁵

For the *Orosius* and *Mandeville* texts a comparison is made with main clauses, to see whether subject properties vary between the two clause types. In *Orosius*, subordinate and main clauses differ greatly with respect to subject type, as evidenced in Table 4.31. Since the XVS pattern stands out with respect to subject properties in both subordinate and main clauses, I present the findings both with and without inverted clauses.

⁵⁴ The XVS pattern covers instances with clausal subjects which are not included in the tables. There are eight in eOE, six in IOE, two in eME and one in lME.

⁵⁵ It might be argued that the OE data are somewhat skewed by the high frequency of *mon/man* subjects (90/600) in *Orosius*. Recall from section 3.2.4 that *man* is analysed as a pronoun here, but that such an analysis is not uncontroversial. It turns out, however, that despite the presence of pronominal *mon/man* in *Or*, the overall rate of pronominal subjects is lower in that text (75%) than in CP (86%).

Table 4.31: The realisation of subjects in Orosius

	pronoun		full NP		Total	
	n	%	n	%	n	%
all subordinate clauses	397	74	137	26	534	100
subordinate clauses excl. XVS	397	75	129	25	526	100
all main clauses	219	38	355	62	574	100
main clauses excl. XVS	182	52	166	48	348	100

Clearly, the exclusion of XVS gives a considerably higher proportion of pronominal subjects in main clauses. However, even when XVS is kept out of the equation, subordinate clause subjects are pronominal more often than main clause subjects (75% vs 52%). Given the (subordinate) nature of subordinate clauses, this situation is exactly what one might expect: subjects are frequently introduced in main clauses by means of a full NP, and then returned to in the subordinate clause by anaphoric reference. What may strike us as surprising here is that there are not even more pronominal subjects in subordinate clauses, and conversely, more full NP subjects in main clauses. An analysis that takes into account the position of the clauses in the sentence and in the larger discourse unit might shed more light on these findings; an initial subordinate clause is probably more likely to contain a full NP subject than a medial or final clause, and second or third conjunct main clauses may contain more subject pronouns than initial ones.

Table 4.32 presents the IOE results.

Table 4.32: The realisation of subjects in late OE

	pronoun		full NP		Total	
	n	%	n	%	n	%
SXV	397	82	90	18	487	100
SXVX	110	81	26	19	136	100
SVX	214	68	99	32	313	100
SvXV	81	88	11	12	92	100
XVS	1	6	15	94	16	100
Total	803	77	241	23	1044	100

The overall proportion of pronominal subjects is slightly lower in IOE than in eOE. Most noticeable in this table, however, is the fact that full NPs are significantly more frequent in the SVX pattern than in the other three non-inverted patterns combined

($\chi^2 = 18.56, p < .0001$). The single XVS clause with a pronominal subject stands out as exceptional:

(4.91) **Hwilon eac cuðberhtus ferde geond land bodigende godes geleafan. ða for unwedre gecyrde he to sumes hyrdes cytan. þe stod weste on ðam westene ðe he oferferde**

once also Cuthbert journeyed through country preaching God's faith. when/then because-of storm turned he to some shepherd's cottage. which stood desolate in the wilderness which he passed-through

'On a time also Cuthbert with great glory was journeying through the country, preaching God's faith, when on account of a storm he turned into a shepherd's cottage, which stood desolate in the wilderness over which he was travelling' (Thorpe 1846:137) [ÆCHom II X,51]

The translation provided by Thorpe (1846) suggests this is a subordinate clause, but one cannot rule out the possibility that it is a main clause, where the very strong V2 constraint in clauses with initial *ða* would lead to inversion. On the other hand, this XVS clause is not strictly speaking V2, since a prepositional phrase follows *ða* immediately and the verb is in third position.⁵⁶

The eME data, found in Table 4.33 below, show that SVX clauses again contain significantly more full NP subjects than the other non-inverted patterns combined ($\chi^2 = 9.81, p = .002$).

Table 4.33: *The realisation of subjects in early ME*

	pronoun		full NP		Total	
	n	%	n	%	n	%
SXV	181	91	19	9	200	100
SXVX	81	89	10	11	91	100
SVX	498	78	144	22	642	100
SvXV	60	81	14	19	74	100
XVS	1	4	25	96	26	100
Total	821	79	212	21	1033	100

One possible explanation for this state of affairs is that clauses with both subject and object in the form of full noun phrases will tend to have SVX order to avoid two

⁵⁶ Some scholars, eg Bech (2001), keep clauses with the string XXVS in a separate category, apart from inverted clauses with a single initial elements.

conjoined full NPs and thus potential ambiguity.⁵⁷ The XVS clause with a pronominal subject is given in (4.92). It is a rather special case of a *pæc*-clause with a topicalised adverbial clause followed by a negated auxiliary verb.

- (4.92) leasunge is se uuel þing, þet seint austin seið **þt forte schilde þi feader from deað; ne schuldest tu nawt lihen**
 lying is so evil thing, that St. Augustine says that for-to shield your father from death; not should you not lie
 [AW 44,13]

The IME data (Table 4.34) are of limited interest for a comparison of word order patterns because of the low number of tokens in all patterns except SVX. Nevertheless, the overall frequencies of pronominal and full NP subjects are worth commenting on.

Table 4.34: The realisation of subjects in late ME

	pronoun		full NP		Total	
	n	%	n	%	n	%
SXV	6	100	0	0	6	100
SXVX	21	66	11	34	32	100
SVX	688	70	293	30	981	100
SvXV	27	73	10	27	37	100
XVS	2	11	16	89	18	100
Total	744	69	330	31	1074	100

There are fewer pronominal and more full NP subjects than in the earlier periods,⁵⁸ although note should be taken of the typical IME subject *men*.⁵⁹

Similarly to what was done for eOE with the *Orosius* text, *Mandeville's Travels* will serve as a basis for the IME comparison between subordinate and main clauses. The findings are summarised in Table 4.35 below.

⁵⁷ Ambiguity avoidance as a motivating factor behind the change to SV order is proposed by eg Vennemann (1974:360) and Pillsbury (1967:87), and discussed in some detail by Kohonen (1978:127ff).

⁵⁸ Contingency, IME vs other periods: $\chi^2 = 44.15, p < .0001$, Cramér's V = .10.

⁵⁹ *Men* occurs 41 times in subordinate clauses in the two IME texts, and is especially frequent in *Mandeville*. It has been analysed as a noun here, but arguably also has properties typically associated with pronouns (cf section 3.2.4). When *men* is counted as a pronoun, the percentages for IME are 73 and 27. The contingency test still gives significance for the comparison between IME and the other periods ($\chi^2 = 10.36, p = .001$, Cramér's V = .05).

Table 4.35: The realisation of subjects in Mandeville

	pronoun		full NP		Total	
	n	%	n	%	n	%
all subordinate clauses	354	65	187	35	541	100
subordinate clauses excl. XVS	354	66	182	34	536	100
all main clauses	271	47	306	53	577	100
main clauses excl. XVS	261	62	160	38	421	100

Compared to eOE, the contrast between subordinate and main clauses is strongly reduced. Moreover, when XVS clauses are excluded the difference is so small as to be non-significant.⁶⁰ I can see no logical explanation either for why subordinate clauses should contain more full NP subjects in IME than in the other periods, or for why subordinate and main clauses are more similar in this respect in the latest period.

4.4.2 X elements

The section on X elements has two main parts: first, the elements have been classified according to a traditional tri-partite distinction between objects, predicatives and adverbials, to get a general idea of how these are distributed in the patterns under investigation. The second part is a more detailed account of each type of clause element, a fundamental distinction being made between light and heavy elements.

With the dominance in late ME of the SVX pattern and the subsequent low proportion of other patterns (cf Table 4.1), a breakdown of X elements into subcategories has not been carried out for that period. Thus, in this section tables are provided only for eOE, IOE and eME.

4.4.2.1 Clause elements

The two main patterns in this investigation, SXV and SVX, may be seen as opposites as far as the relative position of X elements and verbs is concerned, and are therefore given most emphasis. No attempt has been made to distinguish quantitatively between

⁶⁰ Contingency: $\chi^2 = 1.51$, $p = .22$, Cramér's $V = .04$.

direct and indirect objects, nor between subject and object predicatives. However, the subtypes are commented on when considered relevant.

The statistics in the following tables do not reflect the number of clauses, but rather the number of elements occurring in the different patterns. In other words, the total in the right hand column is larger than the total number of clauses in these patterns in Table 4.1, since multiple X's are regular in all patterns. Percentages are calculated from the right hand total, to illustrate the frequency of the various clause elements within each pattern. It should also be noted that initial X elements are not considered here, since they do not have a distinctive function between the various patterns.

Table 4.36 presents the eOE results for the SXV and SVX patterns.

Table 4.36: The realisation of X elements in SXV and SVX clauses in eOE

	objects		predicatives		adverbials		Total	
	n	%	n	%	n	%	n	%
SXV	186	33	68	12	303	54	557	99
SVX	163	37	116	26	161	37	440	100
Total	349	35	184	18	464	47	997	100

We see that objects are fairly equally distributed between the two patterns, but not so for predicatives and adverbials; the former occur more often in SVX clauses, the latter in SXV clauses. In this period the predicatives deserve extra attention, due to a particularly frequent construction in the *Orosius* text, introduced in section 4.2.2 in connection with Table 4.6. The construction is a relative clause containing an initial object as relative pronoun and an object predicative placed either before or after the verb. The structure is thus XSSV or XSVX. The subject is usually *man/mon*, but other types also occur, while the object predicative is overwhelmingly realised by a place name, occasionally a personal name. With a couple of exceptions, the verb in these clauses is *hatan*. Example (4.93) shows an XSVX clause with a resumptive subject *hi* and the object predicative placed finally, while (4.94) has *we* as subject and XSSV order. The sentence in (4.95) stands out as especially interesting, since it contains two relative clauses with very similar content but different word order. The only conspicuous contrast between the two is that the first verb is disyllabic (*nemned*) and

the second monosyllabic (*hæt*), but a closer inspection of the verbs in this subset of clauses shows that verb weight does not influence word order significantly.

(4.93) 7 þonne licgað westryhte oþ Armenia beorgas **þe þa landleode hi hatað**

Parcoadras

and then lie westwards to Armenia mountains, which the inhabitants they call

Parchoathras

[Or 11,27]

(4.94) His forme gefeoht wæs wið Atheniense, & hie oferwonn; & æfter þæm wið

Hiliricos, **þe we Pulgare hatað**

his first battle was with Athenians, and them overcame; and after that against

Illyrians, whom we Bulgarians call

[Or 61,22]

(4.95) 7 hire ryhtwestende is æt þæm beorge **þe mon Athlans nemneð** 7 æt þæm

iglande **þe mon hæt Fortunatus**

and her westernmost is at the mountains which one Atlas calls and at the

island which one calls Canary

[Or 9,15]

Whereas the *XSXV* type occurs on 20 occasions, there are 48 instances of *XSVX*. At this point, the variation between the two appears to be free and unsystematic. However, the two sets of clauses will be explored further in chapter 5 with respect to the information value of the object predicatives.

SXVX and *SvXV* clauses are presented in Table 4.37. In both patterns, X elements may occur both before and after the main verb, which explains the ‘pre’ and ‘post’ rows below.⁶¹

Table 4.37: The realisation of X elements in *SXVX* and *SvXV* clauses in *eOE*

		objects		predicatives		adverbials		Total	
		n	%	n	%	n	%	n	%
SXVX	pre	62	30	25	12	117	57	204	99
	post	64	33	41	21	90	46	195	100
SvXV	pre	28	32	4	5	56	64	88	101
	post	9	28	2	6	21	66	32	100
Total		163	31	72	14	284	55	519	100

⁶¹ In *SvXV* clauses no elements may intervene between subject and finite verb, and it is thus X elements’ position in relation to the main verb which has relevance and is displayed in these tables.

Starting with the SXVX pattern, it is perhaps not unexpected but nevertheless interesting to see how similar the distribution in preverbal position is to that observed in SXV clauses, and conversely how postverbal X elements seem to reflect those in the SVX pattern. SvXV clauses have a more equal distribution between pre- and postverbal position, and also contain very few predicatives.

The IOE findings in Table 4.38 strongly resemble those for eOE, since predicatives have a higher relative frequency in SVX than in SXV clauses, and adverbials are more frequent in SXV clauses.

Table 4.38: The realisation of X elements in SXV and SVX clauses in IOE

	objects		predicatives		adverbials		Total	
	n	%	n	%	n	%	n	%
SXV	266	41	40	6	347	53	653	100
SVX	163	44	51	14	159	43	373	101
Total	429	42	91	9	506	49	1026	100

The SXVX and SvXV patterns displayed in Table 4.39 below both have more objects preverbally than postverbally, and more adverbials postverbally. It is also noticeable that all eight predicatives in the SvXV pattern occur before the main verb.

Table 4.39: The realisation of X elements in SXVX and SvXV clauses in IOE

		objects		predicatives		adverbials		Total	
		n	%	n	%	n	%	n	%
SXVX	pre	72	40	14	8	93	52	179	100
	post	43	30	14	10	86	60	143	100
SvXV	pre	61	55	8	7	42	38	111	100
	post	13	37	0	0	22	63	35	100
Total		189	40	36	8	243	52	468	100

Moving on to eME, Table 4.40 shows that predicatives are still preferred in SVX clauses.

Table 4.40: The realisation of *X* elements in selected patterns in *eME*

	objects		predicatives		adverbials		Total	
	n	%	n	%	n	%	n	%
SXV	88	43	14	7	102	50	204	100
SVX	255	32	133	17	401	51	789	100
Total	343	35	147	15	503	51	993	101

On the other hand, objects are now more frequent in the SXV pattern, and adverbials show no particular tendency one way or the other.

The SXVX and SvXV results in Table 4.41 below show that predicatives are most frequent postverbally, as in *eOE*. Preverbal adverbials also stand out as common in SvXV clauses.

Table 4.41: The realisation of *X* elements in SXVX and SvXV clauses in *eME*

		objects		predicatives		adverbials		Total	
		n	%	n	%	n	%	n	%
SXVX	pre	36	36	10	10	54	54	100	100
	post	34	34	19	19	46	46	99	100
SvXV	pre	25	29	3	3	59	68	87	100
	post	12	39	2	6	17	55	31	100
Total		107	34	34	11	176	56	317	101

To the extent that any conclusions can be drawn from the above findings, it must be that predicatives show a tendency to be positioned after the verb. The result for objects and the typically mobile class of adverbials are less clear. The next subsection, with an analysis of how the various clause elements are realised, will give a much clearer picture of word order mechanisms in the four patterns under scrutiny.

4.4.2.2 Constituent type

Mitchell (1985 II:966) emphasises ‘the vital importance of distinguishing noun and pronoun objects — still not understood by all’. It is well-known that pronominal and full NP objects behave differently syntactically in *OE*, although there is no consensus on how the difference should be analysed (cf section 3.2.6). As has been stated before, the present investigation does not incorporate a clitic analysis of pronominal objects, but recognises the special behaviour of pronouns and other light elements. In the

following, therefore, a distinction is made between pronouns, full NPs and clauses. Again, noun phrases with pronoun heads that are directly postmodified are classified as full NPs, and the percentages in the tables are calculated within each pattern. The early OE SXV and SVX data are given in Table 4.42.

Table 4.42: The realisation of objects in early OE SXV and SVX clauses

	pronoun		full NP		clause		Total	
	n	%	n	%	n	%	n	%
SXV	79	42	107	58	0	0	186	100
SVX	1	<1	102	63	60	37	163	100
Total	80	23	209	60	60	17	349	100

As expected, pronouns are restricted to the SXV pattern, with one notable exception, the compound and thus fairly heavy pronoun *him selfum*, given in (4.96). Full NP objects occur very frequently in both patterns, while clausal objects only occur to the right of the verb. A pronominal object in the SXV pattern is given in (4.97), which also has a PP preverbally. Full NP objects in the same pattern are exemplified in (4.98)–(4.99) (the latter previously given as (4.65)), whereas an object with a pronominal head and a postmodifier is seen in the SVX clause in (4.100). The last two examples illustrate SVX clauses with a full NP and a clausal object, respectively.

- (4.96) **Hu ðæt mod ðætte wilnað for oðre beon lihð him selfum**, ðonne hit ðencð
 fela godra weorca to wyrçanne
 how the mind that desires above others to-be deceives itself, when it thinks
 many good works to perform
 [CP 55,14]
- (4.97) Ond siþþan his agenne sweor to deaðe beswac, **þa he hiene to him aspon**
 and afterwards his own father-in-law to death betrayed, when he him to him enticed
 [Or 39,22]
- (4.98) & se Dema **se ðe ðæt inngeðonc eall wat**, he eac ðæm inngeðonce demð
 and the Judge he who the thoughts all knows, he also the thoughts judges
 [CP 39,10]
- (4.99) Arues wende þæt he his rice gemiclian sceolde **þa he his dohtor Philippuse**
sealed
 Aruba thought that he his kingdom enlarge should when he his daughter to-Philip gave
 [Or 62,2]

- (4.100) ac hio sciolde beon gebunden mid ðære ilcan race, **ðætte he ne ðohte nawuht ungesceadwislices ne ungenetlices**
 but it should be bound by that same account, so-that he not thought
 nothing foolish nor useless
 [CP 77,11]
- (4.101) Soðlice **se ðe hæfð singalne sceabb** se ðe næbre ne ablinð ungestæððignesse
 truly he who has chronic scabbiness he who never not refrains-from wantonness
 ‘Truly he is afflicted with chronic scabbiness who never refrains from wantonness’
 [CP 71,3]
- (4.102) ac **þa he wiste þæt hie him on nanum fultome beon ne mæhte**, & þæt seo
 burg abrocen wæs, he him hamweard ferde to his agnum rice
 but when he knew that he them to no help be not could, and that the
 city stormed was, he him homeward went to his own kingdom
 [Or 44,9]

SXVX and SvXV clauses are presented in Table 4.43. Although ‘pre’ and ‘post’ labels are used for both patterns, it should be pointed out that preverbal position does not necessarily mean the same thing for the two. That is, one might say that preverbal position in SvXV clauses comes later than in SXVX clauses, since the position in the former is preceded by both subject and finite verb, but only by the subject in the latter. As noted above, no elements may intervene between subject and finite verb in SvXV clauses.

Table 4.43: The realisation of objects in early OE SXVX and SvXV clauses

		pronoun		full NP		clause		Total	
		n	%	n	%	n	%	n	%
SXVX	pre	31	50	31	50	0	0	62	100
	post	0	0	36	56	28	44	64	100
SvXV	pre	3	11	25	89	0	0	28	100
	post	0	0	3	33	6	67	9	100
Total		34	21	95	58	34	21	163	100

SXVX clauses show a fairly even distribution of pronouns and full NPs in preverbal position, and an exclusive preference for full NPs and clauses after the verb(s). As such, the SXVX pattern can be seen as a sort of compromise with respect to weight; X constituents found in preverbal position in SXVX clauses resemble those occurring in SXV clauses, while the postverbal elements in the SXVX pattern have a similar distribution to those found in SVX clauses. The SvXV pattern tells a slightly different

story, with relatively fewer pronominal objects before the main verb. As expected, pronominal objects have a certain resistance towards the ‘third’ position in SvXV clauses, as opposed to ‘second’ position in SXVX clauses. I use quotation marks here because there may be more than one X element before the main verb, and we cannot tell from the table whether the objects in question are in second, third, fourth or even fifth position without looking at every clause. It turns out that all preverbal pronouns in these two patterns that occur in sequences of X elements are indeed placed in the first X position.

A typical SXVX clause in this period has an object with a preverbal pronoun head and a postverbal relative clause as postmodifier. An example is given in (4.103):

- (4.103) **þonne he þa oferswiðed hæfde þe he þonne on winnende wæs mid þæm folce þe hiene ær fultumes bæd**, þonne dyde he him ægþer to gewældon
 when he those overpowered had who he then against fighting was as-well-as the
 people who of-him before help asked, then brought he them both under control
 [Or 62,13]

An interesting aspect of the IOE period is the proportion of pronominal objects in SVX clauses, as shown in Table 4.44.

Table 4.44: The realisation of objects in late OE SXV and SVX clauses

	pronoun		full NP		clause		Total	
	n	%	n	%	n	%	n	%
SXV	126	47	140	53	0	0	266	100
SVX	7	4	88	54	68	42	163	100
Total	133	31	228	53	68	16	429	100

In IOE there are seven object pronouns in the SVX pattern, as opposed to only one in early OE. One is the demonstrative *þis*, seen in example (4.104) below, and previously given as (4.80). It is possible that the pronoun is placed postverbally for emphasis, although one cannot say for certain. The remaining six postverbal pronouns are indirect objects occurring directly after the verb and before a heavy direct object, exemplified in (4.105)–(4.106).

- (4.104) **Ða Uhtred geahsode þis**, ða forlet he his hergunge
 when Uhtred understood this, then abandoned he his plundering
 [ChronC 1016,23]

- (4.105) Ga rædlice and sege him **þæt se cyngc bit ðe þæt ðu cume to his gereorde**
 go quickly and say him that the king bids you that you come to his repast
 [ApT 22,3]
- (4.106) ac ic bidde þe **þæt þu gife him swa hwæt swa ðu wille**
 but I beseech you that you give him whatever you wish
 [ApT 24,18]

Under some analyses, object pronouns in OE are clitics and should not occur postverbally unless clearly emphatic and/or contrastive, but none of the six cases here are likely to be emphatic. Rather, it seems to me, there is a beginning tendency in IOE to keep the two objects in ditransitive constructions close together, either before or after the verb, depending on weight.⁶² Thus, if one of the objects (usually the direct) is so heavy as to be placed after the verb, the other tends to be placed postverbally as well, even if it is very light. It must be said that the number of tokens is small, and that the two objects are still frequently separated by the verb in late OE. A large-scale investigation focusing specifically on this aspect of word order in OE might prove fruitful.

The table above also shows that pronouns are slightly more frequent and full NPs slightly less frequent in SXV clauses in IOE than in eOE, but the difference is not significant.⁶³

Two examples of NPs consisting of a pronoun head directly followed by a postmodifying clause are given in (4.107) and (4.108). As mentioned above, such phrases are classified as full NPs. There are 12 instances in the IOE SVX pattern, whereas a single one occurs in eOE, where the phrase is frequently discontinuous, the pronoun occurring preverbally and the postmodifying clause postverbally. Despite the small number of tokens, it is possible that the increase in IOE of contiguous phrases like these is a signal of word order change.

⁶² Fischer et al (2000:142) note the occasional occurrence of pronominal objects after the non-finite verb in IOE.

⁶³ Contingency: $\chi^2 = 0.77, p = .35$, Cramér's V = .05.

(4.107) Agifaþ nu teoþan dæl ealles þæs ceapes þe ge habban earmum mannum, & to Godes cyrican, þæm earmestan Godes þeowum þe þa cyrican mid godcundum dreamum weorþiað; **forþon seo cyrice sceal fedan þa þe æt hire eardiaþ**

give now tenth part of-all the possession that you have to-poor men, and to God's church, to-the poorest of-God's servants who the church with divine songs honour; because the church must feed those who in her dwell [BIHom IV,46]

(4.108) and he for ða to Sandwic and þær læg mid myclan scyphere **forð þæt se casere hæfde of Baldwine eall þæt he wolde**

and he went then to Sandwich and there lay with large army until that the emperor had of Baldwin all that he wanted [ChronC 1049,5]

Object realisation according to position in IOE SXVX and SvXV clauses is very similar to that observed for eOE, as evidenced by Table 4.45.

Table 4.45: The realisation of objects in late OE SXVX and SvXV clauses

		pronoun		full NP		clause		Total	
		n	%	n	%	n	%	n	%
SXVX	pre	37	51	35	49	0	0	72	100
	post	0	0	24	56	19	44	43	100
SvXV	pre	16	26	45	74	0	0	61	100
	post	0	0	5	38	8	62	13	100
Total		53	28	109	58	27	14	189	100

Worth commenting on is the fact that object pronouns are considerably more frequent preverbally in the SvXV pattern than in eOE, but still less frequent than in SXVX clauses. Also, given that 4% of the objects in SVX clauses are pronominal, one might expect some postverbal instances in the SXVX and SvXV patterns as well, but that is not the case.

Moving on to eME SXV and SVX clauses, Table 4.46 shows that the slight tendency observed in IOE for pronominal objects to be allowed postverbally is considerably strengthened, since as much as 21% of objects in SVX clauses are pronouns.

Table 4.46: The realisation of objects in early ME SXV and SVX clauses

	pronoun		full NP		clause		Total	
	n	%	n	%	n	%	n	%
SXV	60	68	28	32	0	0	88	100
SVX	53	21	160	63	42	16	255	100
Total	113	33	188	55	42	12	343	100

The SXV pattern, on the other hand, is increasingly restricted to pronominal objects (68%).⁶⁴ Nevertheless, since full NP objects still constitute almost a third (32%) of the total, SXV order is a far cry from being completely determined by element weight at this stage. The distribution of postverbal pronouns according to texts accentuates the earlier portrayal of great intertextual differences, as not a single instance is found in either *Kentish* or VV. Some examples of object pronouns in SVX clauses are given in (4.109)–(4.113), of which three are not only placed postverbally but also clause-finally. Full NP objects in SXV clauses can be seen in (4.114)–(4.115).

- (4.109) arudde mi sawle ut of þine honden, & heouen hire into heouene, **þah þu hongī me her**
 save my soul out of your hands, and lift her into heaven, though you hang me here
 [Margaret 63,20]
- (4.110) for **ʒef ei edwit ham**; þenne seggeð ha anan
 for if anyone blames them; then say they immediately
 [AW 31,27]
- (4.111) & hare read **þt heaneð me** haeuð al biset me
 and their assembly that afflict me have all surrounded me
 [Margaret 64,8]
- (4.112) Ah nu þu seist þt ha beod alle weldinde godes & wult **þt ich do ham wurdſchipe**
 but now you say that they are all-powerful gods and wish that I do them worship
 [Katherine 26,7]
- (4.113) & us þuncheð hokerlich & swiðe holes þrof, **ſwa þt teone ontent us**
 and us seems mockery and quite against reason, so that anger inflames us
 [Margaret 82,2]

⁶⁴ Contingency, IOE vs eME: $\chi^2 = 10.67$, $p = .001$, Cramér's $V = .18$.

- (4.114) For þurh þæt, **þæt heo bǣs ængles worden gelefd̄e**, hit wearð fullfremod on hire þæt þæt se engel hire sæde
 for through that, that she the angel's words trusted, it became fulfilled in her that which the angel her said
 [Kentish 136,4]
- (4.115) zewerwed bien hie, lauerd, alle **ðe ðine behode healden nelleð**
 cursed be they, Lord, all who your commandments hold not-will
 [VV 19,24]

In the SXVX and SvXV patterns, pronominal objects begin to appear to the right of the main verb in eME, as can be seen in Table 4.47 below. One example from each pattern is given in (4.116)–(4.117).

- (4.116) Ah swa ne schulen ha neuer me ne nan oðer **þt ariht luuieð þe**
 but so not shall they never me nor no other who rightly loves you
 [Margaret 62,13]
- (4.117) þt blake clað bitacneð þt ze beoð blake & unwurð to þe world wiðuten, **þt te soðe sunne haeuð utewið forculet ow**
 the black cloth symbolises that you are black and unworthy to the world outside, that the true sun has outwardly burned you
 [AW 30,25]

Table 4.47: The realisation of objects in early ME SXVX and SvXV clauses

		pronoun		full NP		clause		Total	
		n	%	n	%	n	%	n	%
SXVX	pre	24	67	12	33	0	0	36	100
	post	8	24	18	52	8	24	34	100
SvXV	pre	9	36	16	64	0	0	25	100
	post	3	25	7	58	2	17	12	100
Total		44	41	53	50	10	9	107	100

Again we see that there are fewer pronominal objects preverbally in SvXV than in SXVX clauses, 36% vs 67%. Both patterns display a considerable proportion of full NPs preverbally.

To briefly sum up the findings on objects, it seems that there is a beginning tendency in late Old English to allow pronouns to the right of the verb, although the number of occurrences is small and restricted to SVX clauses. The tendency is clearly accentuated in early Middle English, although pronominal objects are still preferred in an early, preverbal position. Moreover, full NP objects continue to occur preverbally

in considerable numbers also in eME. All in all, eME objects behave markedly, but not radically different from OE objects, and the development can only be described as gradual. The results serve as a testimony to my earlier claim that the shift to SV order in subordinate clauses did not take place rapidly, but must have been very gradual, and was by no means completed by 1200.

PREDICATIVES

We now move on to subject and object predicatives, for which a distinction has been made between light, heavy and clausal elements. The ‘light’ category comprises single adjectives and pronouns, while heavy elements primarily include modified or coordinated adjectives, full NPs, and a few PPs functioning as postmodifiers in discontinuous adjective or noun phrases.⁶⁵ Notice that predicatives in the SvXV pattern have not been broken down according to weight, due to very few tokens. A single adjective is found in (4.118), while (4.119) contains a possessive pronoun both in the subordinate and in the main clause. Furthermore, heavy predicatives are exemplified in (4.120)–(4.122), in the form of a modified adjective, a full NP and a PP in a discontinuous NP, respectively. (4.123) shows a rare case of a clausal predicative.

- (4.118) Ac monige menn beoð ðe noldon ðone hlisan habban **ðæt hie unwiese sien**
 but many men exist who not-will the rumour have that they foolish are
 [CP 67,2]
- (4.119) **Gif þæt land ðin is.** se ren is min
 if the land your is. the rain is mine
 [ÆCHom II VII,77]
- (4.120) ða wæs Apollonius gehaten sum iung man **se wæs swiðe welig and snotor**
 then was Apollonius called some young man who was very wealthy and prudent
 [ApT 4,29]

⁶⁵ It is debatable whether single adjectives are in fact lighter than single nouns. A distinction could have been made between single nouns and NPs with pre- or postmodifiers. However, preliminary tests suggest that the behaviour of single nouns does not differ fundamentally from that of NPs with pre- and/or postmodifiers, and that the primary distinction for noun phrases exists between pronouns and full NPs. Weight is a relative and not an absolute concept, as pointed out by eg Hartvigsson and Jakobsen (1974:51), and it may therefore be more fruitful to study variations within each phrase type than between phrase types. A detailed look at how element types are distributed according to information value is found in chapter 5.

- (4.121) seo wæs eac genæmd Maria æfter þære ærre dohter, **þas man cleopeð Maria Cleophe**
 she was also called Maria after the first daughter, who one called Maria Cleophe
 [Kentish 139,9]
- (4.122) æfter þæm Atheniense bædan Philippus, **þæt he heora ladteow wære wið Focesens þæm folce**
 after that the-Athenians asked Philip, that he their leader be against
 Phocians the people
 [Or 63,11]
- (4.123) Forðam þe þu girndest **þæt þu wære þæt se fæder is**
 because that you desire that you were what the father is
 [ApT 12,8]

Table 4.48 combines SXV, SVX and SXVX clauses in eOE.

Table 4.48: *The realisation of predicatives in early OE*

	light		heavy		clause		Total		
	n	%	n	%	n	%	n	%	
SXV	20	29	49	71	0	0	69	100	
SVX	15	13	97	84	4	3	116	100	
SXVX	pre	18	72	7	28	0	0	25	100
	post	10	24	26	63	5	12	41	99
Total	63	25	179	71	9	4	251	100	

There is a difference in the distribution of light and heavy elements between SXV and SVX clauses,⁶⁶ although the majority of predicatives are heavy in both patterns. The contrast between pre- and postverbal position in SXVX clauses is stark, since light predicatives are clearly preferred before the main verb while heavy elements dominate after the verb. The data indicate that the choice between pre- and postverbal position within the SXVX pattern is more important than the choice between SXV and SVX, as far as predicative weight is concerned.

Table 4.49 displays the distribution of predicatives in IOE, where the differentiation between the SXV and SVX patterns is much more marked than in eOE. Light predicatives are now in the majority in SXV clauses but still rare in SVX clauses.

⁶⁶ Contingency, SXV vs SVX: $\chi^2 = 5.69$, $p = .02$, Cramér's $V = .19$.

Table 4.49: The realisation of predicatives in late OE

	light		heavy		clause		Total		
	n	%	n	%	n	%	n	%	
SXV	25	66	13	34	0	0	38	100	
SVX	4	8	46	90	1	2	51	100	
SXVX	pre	11	79	3	21	0	0	14	100
	post	2	15	11	85	0	0	13	100
Total	42	36	73	63	1	<1	116	100	

Despite the low number of occurrences in SXVX clauses, it is telling how this pattern seems to behave like a hybrid between the two main patterns in this period, in the sense that the preverbal distribution resembles that in the SXV pattern, while postverbal elements have properties much like those found in SVX clauses. The same observation was made in connection with the overall distribution of objects, predicatives and adverbials in section 4.4.2.1.

The percentages for eME SXV and SXVX clauses given below (Table 4.50) should no doubt be taken with a pinch of salt due to relatively few predicatives in these patterns. Nevertheless, the distribution in all three patterns is very similar to that observed for IOE.

Table 4.50: The realisation of predicatives in early ME

	light		heavy		clause		Total		
	n	%	n	%	n	%	n	%	
SXV	10	71	4	29	0	0	14	100	
SVX	17	13	113	85	3	2	133	100	
SXVX	pre	9	100	0	0	0	0	9	100
	post	5	28	12	67	1	6	18	101
Total	41	24	129	74	4	2	174	100	

In sum, the distribution of predicatives shows a correlation between weight and position in all three periods. Diachronically, the preverbal position in SXV and SXVX clauses has a stronger preference for light elements in IOE and eME than in eOE, and there are no indications of a clear break between IOE and eME in this respect. The SVX pattern does not seem to change over time, however.

ADVERBIALS

The third and final part of this section focuses on adverbials. The distribution of subtypes of adverbials across patterns is very similar in eOE and IOE, and the two periods have therefore been collapsed. Those interested in the results for each subperiod are referred to Appendix I. The examples below illustrate light elements in the form of single adverbs (4.124)–(4.126) and a stranded preposition (4.127), and heavy elements as a modified adverb (4.128), PPs (4.129) and an NP (4.130). As usual, clausal elements constitute a separate category.

- (4.124) Mine gebroðra þa leofostan we truwiað **þonne ge gelomlice gehyrað ða mærlīcan wundra þæs eadigan cyðeres Stephanes**
 my brothers the dearest we trust when you repeatedly hear the
 noble wonders of-the blessed martyr Stephen
 [ÆCHom II II,3]
- (4.125) þe bacbitere unlideð hit & openeð **swa þt fulðe þt hit stinkeð wīde**
 the backbiter unlifts it and uncovers so the filth that it stinks wide
 [AW 46,3]
- (4.126) Wæs ða ræpling, se ðe **ær wæs heafod Angelkynnes and Cristendomes**
 was then captive, he who before was head of-the-English-people and Christendom
 [ChronC 1011,26]
- (4.127) & Godes is þæt yrfe **þe we big leofiaþ**
 and God's is the substance which we by live
 [BIHom IV,221]
- (4.128) Ða spræcon ða biscopas hem betwenan and sæden **þæt hi næfre mare ne wolden hafēn munechades man to ercebiscop ofer hem**
 then spoke the bishops them between and said that they never more not
 would have monastic man to archbishop over them
 [PC 1123,20]
- (4.129) Æfter þæm Romane curon III hund cempna & siex, **þæt sceolde to anwige gangan wīð swa fela Sabina**
 afterwards the-Romans chose three hundred champions and six, who should in duel
 go against so many Sabines
 [Or 42,28]
- (4.130) & eallum Cristenum mannum is beboden **þæt hi ealne heora lichoman seofon sibum gebletsian mid Cristes rode tacne**
 and to-all Christian men is commanded that they all their body
 seven times bless with Christ's cross' sign
 [BIHom IV,145]

The eOE and IOE SXV and SVX data are presented in Table 4.51.

Table 4.51: The realisation of adverbials in eOE and IOE SXV and SVX clauses

	light		heavy		clause		Total	
	n	%	n	%	n	%	n	%
SXV	295	45	357	55	0	0	652	100
SVX	22	7	260	81	38	12	320	100
Total	317	33	617	63	38	4	972	100

SXV clauses contain slightly more heavy than light adverbials, while there are only 7% light adverbials in SVX clauses. Some of the latter are given below, a stranded preposition in (4.131) and single adverbs in (4.132)–(4.133).

- (4.131) Him is be eastan se Wendelsæ þe man hæst Tirrenum, **þe Tiber sio ea ut scyt on**

him is to east the Mediterranean which one calls Tyrrhenian, which Tiber the river out runs into
[Or 21,14]

- (4.132) þa for he eft ongean to Wiht, and þær abutan be þam særiman **swa lange læg þæt hig comon togædere**, Harold eorl his sunu and he

then went he back again to Wight, and thereabout by the seacoast so long lay that they came together, Harold earl his son and he
[ChronC 1052,16]

- (4.133) nu læte ic ðe to þrittigra daga fæce, **þæt þu bebence ðone rædels ariht**

now dismiss I you for thirty days' interval, that you consider the riddle aright
[ApT 6,28]

Prepositional phrases appear to have the greatest mobility in OE, and the following two clauses from the same passage are nearly identical, except for the position of the PP:

- (4.134) Nu we witon **þæt ealle onwealdas from him sindon**

now we know that all empires from him are
[Or 36,7]

- (4.135) we witon eac **þæt ealle ricu sint from him**, for þon ealle onwealdas of rice sindon

we know also that all kingdoms are from him, because all empires from kingdoms are
[Or 36,8]

However, the fact that the verb in (4.134) is disyllabic, while it is monosyllabic in (4.135), cannot be discounted as a contributing factor to the different word ordering here. Verb weight is treated in section 4.4.3.

Table 4.52 shows the distribution in SXVX and SvXV clauses. It is striking how few light adverbials occur in postverbal position; only 3% of postverbal adverbials in SXVX clauses are light, and none in SvXV clauses. Some of these are given below: single adverbs in (4.136)–(4.137) and a dangling preposition in (4.138).

- (4.136) & he for his swongornesse hie ne gehyde, **ðylæs hit him sie eft witnod**
and he through his laziness it not hide, lest it him be later reproached
[CP 59,16]
- (4.137) Witodlice se ylca deofol **ðe hi tihte ær to ðære manfullican wyriunge.**
se hi eft siððan to hire agenre hengene gelærde
verily the same devil who her instigated before to the wicked cursing.
he her again later to her own hanging seduced
[ÆCHom II II,122]
- (4.138) & þa nihstan landleode on ægbere healfe him on fultum geteah, **oþ Somnite him gefuhton wið**
and the nearest country-people on both sides them for help drew, until Samnites
them fought with
[Or 60,27]

Table 4.52: The realisation of advls in eOE and IOE SXVX and SvXV clauses

		light		heavy		clause		Total	
		n	%	n	%	n	%	n	%
SXVX	pre	117	56	91	43	2	<1	210	100
	post	6	3	125	71	46	26	177	100
SvXV	pre	34	35	62	63	2	2	98	100
	post	0	0	34	79	9	21	43	100
Total		157	30	312	59	59	11	528	100

It is a little surprising that the length of single adverbs seems to have no influence whatsoever on their position. That is, adverbs of four or five syllables like *singallice* in (4.139) below appear to be just as resistant to a late clause position as mono- and disyllabic ones. Adverb phrases with pre- and/or postmodification, on the other hand, occur in both positions, although they are more frequent after the verb than before. Two examples of such phrases are given in (4.140)–(4.141). It should be noted that

adverb phrases consisting of more than one word are infrequent, and that the large majority of heavy adverbials are PPs.

- (4.139) **Ðonne birð se sacerd suiðe untællice awriten ðara fædra naman on his breostum, ðonne he singallice geðencð hiera lifes bisene**
 then carries the priest very blamelessly written of-the fathers' names on his breast, when he constantly considers their lives' example
 [CP 77,16]
- (4.140) **þæt þa se gionga cyning swiðor micle wenende wæs þæt hie þonon fleonde wæren þonne hie ænigne swicdom cyþan dorsten**
 that the young king much more believing was that they from-there fleeing were than they any stratagem practice durst
 [Or 44,26]
- (4.141) **On ðam ylcan geare wearð eac ofslegen ecgfridus se æðela cyning on his unsiðe. ða ða he on Peohtum begann to feohtenne to dyrstelice ofer drihtnes willan**
 in the same year was also slain Ecgfrith the noble king in his misfortune. when he on Picts began to war too rashly against God's will
 [ÆCHom II X,252]

A noteworthy difference between these two patterns is that light elements are less frequent preverbally in SvXV than in SXVX clauses, as was also the case for objects. The table shows that clausal adverbials are rare preverbally, although cases like (4.142) and (4.143) do occur:

- (4.142) **Æfter þæm þe Romeburg getimbred wæs twa hunde wintra & iiiix, þætte [Cambisis] feng to Persa rice, Ciruses sunu, se, mid þon þe he Egypte oferwon, gedyde þæt nan hæþen cyning ær gedon ne dorste**
 after Rome built was two hundred winters and six, that Cambisis succeeded to Persian kingdom, Cyrus' son, who, when he Egypt overcame, did what no heathen king before do not dared
 [Or 45,10]
- (4.143) **Þa gebroðra him beheton þæt hi woldon þæt treow þonne hi eft comon him gebringan**
 the brothers him promised that they would the tree when they again came him bring
 'The brothers promised him that they would bring him the tree when they came back'
 [ÆCHom II X,203]

These adverbial clauses have what Quirk et al (1985:1037) call medial position. However, they often appear to be parenthetical, and should perhaps be regarded as

being outside of, or at least peripheral to, the clause structure. That certainly seems to be the case for (4.142), at least.

The early ME data for SXV and SVX in Table 4.53 markedly contrast with their OE counterparts.

Table 4.53: The realisation of adverbials in early ME SXV and SVX clauses

	light		heavy		clause		Total	
	n	%	n	%	n	%	n	%
SXV	81	75	27	25	0	0	108	100
SVX	90	22	279	70	32	8	401	100
Total	171	34	306	60	32	6	509	100

The proportion of light adverbials in SXV clauses has risen from 45% to 75%, whereas SVX clauses now allow 22% light adverbials as opposed to 7% in OE. Diachronically, thus, one might say that the SXV pattern becomes more dependent upon the weight of X elements, and the SVX pattern less dependent. It is important to point out that the increase in the proportion of light elements in both patterns is not caused by an overall increase of such elements (33% in OE (Table 4.51), 34% in eME). Rather, it is the reduced total number of SXV clauses together with the increased proportion of SVX clauses in eME that makes possible these seemingly odd proportions. Two examples of single adverbs in SVX clauses are provided below.

- (4.144) Ant ich wulle tellen, hwen þu al to-toren art, In euchanes sihðe **þe sit nu** & sið þe; alle þine seonewen
and I will count, when you all apart-torn are, in everyone's sight who sit now and watch you; all your sinews
[Margaret 65,13]
- (4.145) **þa þe king was ute**, þa herde ðat sægen & toc his feord & besæt hire in þe tur
when the king was out, then heard that said and took his force and beset her in the tower
[PC 1140,51]

The eME data in Table 4.54 below likewise indicate that light adverbials are increasingly placed postverbally, more specifically in 15% (SXVX) and 18% (SvXV) of the cases. However, the number of tokens is very small. This change is at least partly brought about by an overall rise in the proportion of light elements in these

patterns, from 30% in OE (Table 4.52) to 38% here. Preverbal position is harder to interpret in comparison with OE, since there is a small increase of heavy adverbials in the SXVX pattern and a decrease in the SvXV pattern, but neither change is statistically significant.⁶⁷ The one instance of a preverbal clausal element is similar to the OE examples discussed above.

Table 4.54: The realisation of adverbials in early ME SXVX and SvXV clauses

		light		heavy		clause		Total	
		n	%	n	%	n	%	n	%
SXVX	pre	26	48	27	50	1	2	54	100
	post	7	15	33	72	6	13	46	100
SvXV	pre	30	51	29	49	0	0	59	100
	post	3	18	13	76	1	6	17	100
Total		66	38	102	58	8	5	176	101

The analysis of the distribution of clause elements according to weight has shown that light elements are increasingly allowed to the right of the verb, although the trend does not manifest itself in all patterns in all periods. For instance, light predicatives in SVX clauses are rare in all three periods investigated. At the same time, preverbal position allows fewer and fewer heavy elements. It is interesting to note that OE is not necessarily one homogeneous period that stands in stark contrast to ME; in the case of objects, pronouns seem to be more easily accepted postverbally in IOE than in eOE. Moreover, IOE turns out to be more similar to eME than to eOE with respect to the distribution of predicatives. Light adverbials, on the other hand, are much more common in SVX clauses in eME than in OE. Keeping in mind the overall results in Table 4.1, where the difference between IOE and eME was relatively marked, the development of element order according to weight could be said to be surprisingly slow. One important exception is pronominal objects, which start to appear postverbally and even clause-finally distinctly more often in eME than in IOE. However, these objects are still clearly preferred in preverbal position in eME.

⁶⁷ OE vs eME, preverbal heavy adverbials, SXVX: $\chi^2 = 0.28, p = .60$; SvXV: $\chi^2 = 1.04, p = .31$.

4.4.3 Verbs

This section focuses on two aspects of verbs in the data. The first is verb type, according to the traditional distinction between transitive, intransitive and copular verbs.⁶⁸ Passive verb phrases have been assigned to a separate category. Secondly, verbs in SXV, SXVX and SVX clauses are counted with respect to number of syllables, to see if any systematic differences exist between the patterns.

With respect to verb type, tables are not presented here because the statistics turn out to be of relatively little interest. Those interested in the details are referred to Appendix I.⁶⁹ Worth mentioning is the fact that copulas are generally far more frequent in both SVX and SXVX clauses than in SXV clauses,⁷⁰ while SXVX clauses contain many transitive and few intransitive verbs.

Table 4.55 gives the results for average verb weight in eOE, IOE and eME. The number of tokens in the two IME texts is so low for SXV and SXVX clauses that statistics are of little value. It must also be emphasised that only simple main verbs are included in the table.

Table 4.55: The weight of verbs in SXV, SXVX and SVX clauses: all periods

	eOE	IOE	eME
SXV	2.09	2.33	2.15
SXVX	2.03	2.44	1.98
SVX	1.82	1.94	1.69

In all periods we see that we see that verbs in SVX clauses are on average lighter than verbs in SXV and SXVX clauses, which may indicate that verb weight influences word order. In eOE the differences are fairly small, however.⁷¹

⁶⁸ For the ‘problem’ of classifying OE and ME verbs according to modern terminology, see Mitchell (1985 II:651).

⁶⁹ Percentages are calculated from left to right in the relevant tables in the appendix.

⁷⁰ Late ME is an exception in many respects, since low numbers in all patterns except SVX make comparisons across patterns of little use. A verb syllable count in the 32 SXVX clauses shows a very low average (1.23 syllables). Given the ‘late’ verb position in this word order pattern, it seems that verb weight plays little or no part in the formation of the pattern in IME.

⁷¹ Once again, there is great intertextual variation in the data. The verbs in CP have a much higher syllable average than in Or.

The data from this period were tested against my own main clause data, and the results are interesting; in main clauses, verbs in the SXV and SXVX patterns (2.51 and 2.42 syllables, respectively) are on average considerably heavier than in the SVX pattern (1.59 syllables). The results corroborate those presented by Bech (2001:175) for 133 OE main clauses. Based on her table 5.8, we may calculate a syllable average of 2.77 for SXV clauses and 1.53 for SVX clauses. Thus, it appears that the patterns SXV and SXVX are more pragmatically determined in main clauses. Given that these patterns are less frequent in main than in subordinate clauses and as such more ‘marked’, the findings are as expected. We may note that in IOE, the contrast between SXV and SXVX clauses on the one hand and SVX on the other is more pronounced than in eOE. For some reason, the highest syllable average occurs in the SXVX pattern in IOE.

All in all, there are indications of systematic differences in verb weight between the three patterns under scrutiny, but the variation is not as pronounced as in main clauses. The question remains whether verb weight is an independent factor influencing word ordering in subordinate clauses. To some extent that could be the case, but at least for the opposition between SXV and SVX order, part of the explanation could lie in information value: we saw above that copular verbs are much more frequent in SVX clauses than in SXV clauses, probably because subject predicatives tend to have high information value (cf chapter 5). Copulas are very light, and thus contribute to a fairly low average weight of verbs in SVX clauses. SXVX clauses complicate the picture, however, since they contain copulas about as frequently as SVX clauses, yet have a much higher syllable average, especially in the two OE subperiods. Earlier in the chapter we have seen that the correlation between the weight of X elements and word order is generally quite strong, and arguably it is stronger than the correlation between verb weight and word order. As will be seen in chapter 5, the same goes for the information value of X elements. Thus, it is argued here that the weight and IV of X elements are more important determining factors than verb weight, although it cannot be ruled out that the latter is one of a number of factors contributing to word

ordering.⁷² A full investigation of this aspect of word order would need to look into the nature of the relationship between verb weight, X element weight and the information value of X elements in each individual clause. Such a task has not been attempted here.

4.5 Summary

It was seen in section 4.2 that word order in OE subordinate clauses is heterogeneous, verb-final and SV order being most frequent. SXV order is the most frequent pattern in both eOE and IOE, but the combination of SVX and SvXV clauses, ie those with SV order, is equally as frequent in the earliest period. It seems fair to say that SV order is so common in OE subordinate clauses that one cannot exclude the possibility that these clauses contributed to the word order shift English went through in the course of the ME period. Marked changes take place in the transition from IOE to eME, when the proportion of SVX clauses doubles at the same time as the SXV pattern more than halves. The changes from eME to lME, however, are arguably just as significant, since SXV clauses nearly disappear and the SVX pattern is used more than 80% of the time in the final period.

Although subordinate and main clause word order obviously differs synchronically throughout the periods investigated, the diachronic development in the two clause types is remarkably similar, especially with respect to the change in the rate of SV order from eOE to eME. The results thus lend little support to some earlier claims of radically different developments in the two clause types.

All four periods are characterised by considerable differences between individual texts, a testament to the importance of investigating numerous text sources before drawing conclusions about earlier English word order. The extent of intertextual variation is highlighted by the fact that that some of the texts in IOE and eME share more characteristics with texts from the other period than with contemporaneous

⁷² Suzuki (2004:201) finds that the relative weight of modals and main verbs in *Beowulf* does not significantly affect the order of the two verbs in complex verb phrases.

works. There appears to be no systematic variation between religious and non-religious prose.

Section 4.3 has demonstrated that OV and VO orders are both common in OE, and that OV actually increases from eOE to IOE. In eME VO has become predominant, but OV still occurs in 38% of all clauses and does not become marginal until the lME period. All in all, the present data give no indications that OV order was overwhelmingly dominant in OE before disappearing almost completely in eME, as suggested by eg Lightfoot (2006). The SXVX pattern shows considerable variation between OV and VO, an indication that it shares properties with both SXV and SVX clauses.

Finally, it is obvious from section 4.4 that the weight of clause elements is an important factor governing word ordering, especially with respect to X elements. The weight of verbs may also be a determinant of word order, but arguably not to the same extent as X elements. Diachronically, light elements are increasingly allowed to the right of the verb, and SXV clauses generally allow fewer heavy X elements. Object pronouns begin to appear postverbally in IOE, which may be taken as an early sign of the development towards SV order. The low number of tokens calls for caution, however, and the rate of pronouns and full NPs preverbally is similar in the two OE periods. The proportion of postverbal pronouns increases markedly in eME, but preverbal position is still preferred. It is interesting to notice that IOE and eME are similar to each other, but markedly different from eOE, with respect to the weight of predicatives in SXV clauses. The behaviour of adverbials, on the other hand, is distinctly different in eME than in the two OE periods. Importantly, weight distribution does not necessarily change over time in all patterns with all types of X elements, as testified by the analysis of predicatives in SVX clauses.

It is noteworthy that despite the relative dominance of SVX clauses over SXV clauses in eME (cf Table 4.1, section 4.2), both patterns tolerate a considerable mix of light and heavy X elements, and it is at this stage not possible to conclude that one pattern is more or less influenced by the principle of end weight than the other. Chapter 5 brings interesting results with respect to information structuring in the two patterns over time.

5 Information value

5.1 Introduction

The concept information value (IV) and the theoretical basis on which it is grounded were outlined in chapters 2 and 3. This chapter presents the results of the analysis of the information value of clause elements, with a view to examining the information structure of clauses both synchronically and diachronically. By making comparisons with the syntactic findings in the previous chapter, I aim to shed light on the relationship between weight and information structure. One of the main goals is to investigate if and to what extent principles of information structuring determine word order in their own right, independently of weight considerations, and how this is manifested in the data.

Section 5.2 deals with the IV of subjects in selected patterns. The next section, 5.3, makes up the bulk of the chapter, and looks into the correlation between the position of X elements and their IV. The primary focus here is on the two major patterns SXV and SVX and the relationship between them, but SXVX and SvXV clauses also receive some treatment. Moreover, an attempt is made to examine the independent effect of information structuring principles on word order, both for X elements in general and for full noun phrase objects specifically.

5.2 Subjects

The purpose of the present section is basically twofold: First, to see to what degree the information value of subjects correlates with the types of subjects discussed in 4.4.1, ie pronouns vs full NPs. Second, to examine whether subordinate clause subjects generally have lower IV than main clause subjects, which is what one would expect if subordinate clauses are less important informationally than main clauses (cf Kohonen 1978:145). It was seen from the overall word order distribution presented in chapter 4 that subjects tend to occur initially or at least very early in the clause in the overwhelming majority of subordinate clauses. As such, it is conceivable that subject IV does not determine word order to a great extent, and certainly to a lesser extent than

in main clauses, where inversion is more frequent, and where one of the most important distinctions between XVS and XSV clauses is the weight and information value of the subject (Kohonen 1978; Haukenes 1998; Bech 2001).

Whereas full NP subjects may have either low or high information value, pronouns are normally anaphoric, referring backwards to a previously mentioned item, and are therefore assigned low IV in most cases. Cataphoric reference does occur, however, typically with a postmodifying relative clause separated from the pronoun subject head. It is conspicuous that the majority of cataphoric pronouns are demonstratives, and a couple of examples with high IV are provided in (5.1) and (5.2).

(5.1) þis ic sprece nu for ðæm þe ic wolde **þæt þa ongeaten, þe þa tida ures cristendomes leahtriað, hwelc mildsung sibban wæs**
 this I say now because I wish that they understand, who the times of-our
 Christianity revile, what mercy later was
 [Or 38,10]

(5.2) Ðæt is ðætte **se sceal, se ðe wile brucan ðara godcundra ðinga & ðara hefonlicra lara, forlætan ðas niðerlican & ðas eorðlecan weorc**
 that is that he shall, he who wishes to enjoy of-the divine things and of-the
 heavenly instruction, forsake the low and the earthly works
 [CP 81,13]

Table 5.1 shows the information value in eOE of subjects in the four main patterns under investigation, ie SXV, SXVX, SVX and SvXV, as well as the minor XVS pattern. Clausal subjects have not been assigned any information value.

Table 5.1: The IV of subjects in early OE

	low		high		total	
	n	%	n	%	n	%
SXV	416	93	32	7	448	100
SXVX	169	95	8	5	177	100
SVX	328	87	48	13	376	100
SvXV	69	92	6	8	75	100
XVS	5	28	13	72	18	100
Total	987	90	107	10	1094	100

On the whole, subjects overwhelmingly carry low information value in all patterns, except XVS. This corresponds well with the findings on subject type in chapter 4,

where it was shown that the majority of subjects are pronominal, apart from those occurring in XVS clauses. We may take notice of the fact that SVX clauses contain significantly more high IV subjects than do SXV, SXVX and SvXV clauses combined ($\chi^2 = 9.97, p = .002$). The same tendency is observed also for IOE and eME, but if we glance back to Tables 4.30–4.35, it becomes apparent that this difference is primarily a reflection of the higher number of full NP subjects in SVX clauses. Why that is the case is not further speculated on here.

For the comparison between subordinate and main clauses in eOE, the *Orosius* text has been used.¹ The results are given in Table 5.2, where the five patterns in Table 5.1 have been collapsed.

Table 5.2: Subject IV in subordinate and main clauses in *Orosius*

	low		high		total	
	n	%	n	%	n	%
subordinate	459	88	61	12	520	100
main	373	68	176	32	549	100
Total	832	78	237	22	1069	100

On average, the information value of subjects is substantially lower in subordinate clauses than in main clauses (contingency: $\chi^2 = 62.78, p < .0001$, Cramér's $V = .24$). Main clauses in this text have considerably more full NP subjects than do subordinate clauses (62% vs 26%),² and the results are thus about as expected. Overall, therefore, Kohonen's (1978:145) findings are confirmed: main clause subjects on average have higher information value than subordinate clause subjects. The superordinate nature of main clauses probably means that subjects tend to be mentioned for the first time there and then later repeated in the subordinate clauses, often, but not always, by means of a pronoun. This is a somewhat simplified account, because subordinate clauses

¹ The *Orosius* text is well-known for containing a high frequency of *mon/man* subjects. In the present data, such subjects constitute 15% of the total. This might have skewed the results somewhat, giving an unusually high rate of low IV subjects. A comparison with *Cura Pastoralis*, however, shows that there is actually a lower rate of subjects with low IV in *Orosius*, 87% vs 92%. If anything, the *mon/man* subjects contribute to levelling out the difference between the two texts. It was noted in section 4.4.1 (fn 55) that *Orosius* also has more full NP subjects than CP, which fits well with the results for IV.

² These and other results for subject type in both *Orosius* and *Mandeville* are discussed in section 4.4.1, which should be consulted for details.

sometimes occur sentence-initially, and they obviously can introduce entirely new subjects. Still, a manifest trend is apparent from these overall results.

However, it is in XVS clauses that the largest proportion of full NPs and high IV subjects occur in both clause types, and when these are excluded, surprising results materialise. Main clauses still contain significantly more full NP subjects than subordinate clauses, 48% vs 25%, but when the IV of subjects is compared for the two clause types, the differences are very small and statistically non-significant, as displayed in Table 5.3.

Table 5.3: Subject IV in Orosius; XVS clauses excluded

	low		high		total	
	n	%	n	%	n	%
subordinate	458	89	54	11	512	100
main	298	86	50	14	348	100
Total	756	88	104	12	860	100

89% of subordinate clause subjects have low IV, while the corresponding figure for main clauses is 86% (contingency: $\chi^2 = 2.5$, $p = .11$, Cramér's $V = .06$). Since full NP subjects still constitute nearly half of the total (166/348, cf Table 4.31) in main clauses in *Orosius*, it is evident that such subjects frequently have low IV. Closer examination shows that this is the case for 116 out of the 166 instances, ie 70%. Thus, although it is unproblematic to generalise over information value in the case of pronouns, which have low IV with very few exceptions, one cannot assume a priori that full NPs generally have high information value. When we look at XVS main clauses in isolation, the findings of Bech (2001) are confirmed: the pattern is largely pragmatically governed, in the sense that 68% (129/189) full NP subjects have high IV.³

³ In section 2.4.3.6 we saw that Westergaard (2005:83) bases her theory on the assumption that full NP subjects generally convey new information. The present findings suggest that such a generalisation strongly oversimplifies matters, and that the actual given/new status must be checked for the NPs in question. In Westergaard's defence, however, it must be said that full NP subjects in XVS clauses, her primary focus of attention, have a higher IV than full NP subjects in other patterns. Still, nearly a third (60/189, 32%) in the present data have low IV, which clearly indicates that an analysis of IV in each individual case is necessary.

The distribution of subject IV in late Old English is presented in Table 5.4.

Table 5.4: *The IV of subjects in late OE*

	low		high		total	
	n	%	n	%	n	%
SXV	465	95	22	5	487	100
SXVX	126	93	10	7	136	100
SVX	281	90	32	10	313	100
SvXV	89	97	3	3	92	100
XVS	11	69	5	31	16	100
Total	972	93	72	7	1044	100

As in eOE, there is a tendency for SVX clauses to contain more high IV subjects than the other three non-inverted patterns combined, ie SXV, SXVX and SvXV ($\chi^2 = 8.74$, $p = .003$). Somewhat surprisingly, there is a majority of low IV subjects also in the XVS pattern in this period.

It is evident from Table 5.5 below that early ME does not deviate from the two Old English subperiods when it comes to subject IV, with the exception of XVS clauses in comparison with late OE:

Table 5.5: *The IV of subjects in early ME*

	low		high		total	
	n	%	n	%	n	%
SXV	193	97	7	4	200	101
SXVX	88	97	3	3	91	100
SVX	577	90	65	10	642	100
SvXV	69	93	5	7	74	100
XVS	11	42	15	58	26	100
Total	938	91	95	9	1033	100

Yet again we observe a higher frequency of high IV subjects in SVX clauses than in SXV, SXVX and SvXV clauses ($\chi^2 = 9.81$, $p = .002$).

Table 5.6 below shows the results for lME.

Table 5.6: The IV of subjects in late ME

	low		high		total	
	n	%	n	%	n	%
SXV	6	100	0	0	6	100
SXVX	31	97	1	3	32	100
SVX	903	92	78	8	981	100
SvXV	32	86	5	14	37	100
XVS	5	28	13	72	18	100
Total	977	91	97	9	1074	100

When we compare all four periods, it is remarkable how similar the results are, the overall proportion of low IV subjects being between 90% and 93% throughout. In late ME, however, the relative frequencies should be taken with a pinch of salt because of the low number of tokens for all patterns except SVX.

Next, the *Mandeville* text will serve as a basis for a comparison of late ME subordinate and main clause subjects, given in Table 5.7.

Table 5.7: Subject IV in subordinate and main clauses in Mandeville

	low		high		total	
	n	%	n	%	n	%
subordinate	483	89	58	11	541	100
main	413	74	146	26	559	100
Total	896	81	204	19	1100	100

As in *Orosius*, high IV subjects are considerably more frequent in main than in subordinate clauses (contingency: $\chi^2 = 42.13$, $p < .0001$, Cramér's $V = .2$), and again the syntactic properties of subjects help explain this state of affairs: main clauses in *Mandeville* occur with full NP subjects 53% of the time (306/577, cf Table 4.35), against 35% (187/541) in subordinate clauses. When XVS clauses are excluded, however, there is only a slightly higher proportion of full NP subjects in main clauses than in subordinate clauses (38% vs 34%), a difference much lower, in fact, than the one described above for *Orosius* (48% vs 25%). The IV of subjects when XVS is disregarded shows no contrast between subordinate and main clauses,⁴ as was also the case with *Orosius*.

⁴ The figures for low IV are 90% (482/536) for subordinate clauses, 91% (367/403) for main clauses.

In this section we have seen that the information value of subjects in subordinate clauses is low in approximately 90% of the cases in all four periods. Main clause subjects have higher IV on average, but not when XVS clauses are excluded, despite the fact that main clauses still contain a larger proportion of full NP subjects. For both clause types, it is clear that full NP subjects frequently have low IV.

5.3 X elements

The analysis of the information value of X elements constitutes the main part of this chapter. We saw in chapter 4 that there are systematic and significant differences as regards the syntactic weight of preverbal and postverbal X elements; it remains to be seen to what extent those differences are reflected in the information structure of clauses. Naturally, some correlation is to be expected, since light elements like pronouns and a number of short linking and deictic adverbs (*then, thus, here, there* etc.) generally have low IV. The nature and degree of that correlation will be explored in the following, in addition to the crucial issue of how information structure develops over time in the various patterns.

5.3.1 The SXV and SVX patterns

The two major patterns under investigation, SXV and SVX, are distinguished by the position of X elements.⁵ The chief aim in this section is to establish how much the IV of X elements determines the choice of one word order pattern over the other. The results need to be correlated against the findings in chapter 4, both as regards the overall word order distribution and the more detailed analysis of the type and weight of X elements. Generally speaking, we might expect a certain correspondence between the overall frequency of the SXV and SVX patterns and the weight and information value of elements within those patterns. Thus, if a pattern becomes less common over

⁵ It must be noted that a minority of clauses in these patterns contain a complex verb phrase where the X element represents the non-finite verb, ie clauses with the string SVV or SVV. Verbs have not been analysed according to information value, and SVV and SVV clauses are thus excluded from the analysis below.

time, that pattern is likely to become more restricted with respect to the weight and IV of X elements it contains. Conversely, a word order pattern that increases in frequency over time will most likely also tend to become less constrained by the principle of end weight and the information principle, and thus allow a greater variety of X elements.

Notice that in this subsection, the figures in the ‘low IV’ and ‘high IV’ rows denote clauses where *all* relevant, ie non-initial, X elements have either low or high information value. There may of course be more than one X element per clause (cf section 5.3.2, where clauses with multiple X’s are analysed separately). The ‘mixed’ category comprises clauses with at least two X elements that have different IV and/or include a clausal element. The clausal category, although arguably purely syntactic, has been included here so that the percentages in the tables reflect the total number of clauses with X elements. Early OE examples of low and high IV are given in (5.3) and (5.4), while a high IV X and a clause with a mix of low and high IV in IOE are exemplified in (5.5) and (5.6). The latter has two low IV objects separated by a prepositional phrase with high IV. An eME clause with a long PP with high IV plus a low IV adjective is given in (5.7). The two final examples are from lME and contain a low and a high IV X element, respectively. Example (5.8) has previously been given as (4.87).

- (5.3) Ac hyra ar is mæst on þæm gafole **þe þa Finnas him gyldað**
 but their revenue is mostly in the tribute which the Finns them pay
 [Or 15,14]
- (5.4) oft him gebyrð ðæt hie weorðað bereafod ðara giefa **ðe him God**
for monigra monna ðingum geaf
 often them happens that they become deprived of-the gifts which them God
 for many men’s sake gave
 [CP 41,19]
- (5.5) And buton eallum þissum yfelum se cyng het gyldan þam here **ðe on Grenawic**
læig xxi þusend pund
 and besides all these evils the king commanded reward-INF the army which in Greenwich
 lay 21 thousand pounds
 [ChronC 1014,25]
- (5.6) Ic bidde þe ælflæd. **þæt ðu uncre spræce, on minum life, nanum ne ameldige**
 I beseech you Ælflæd. that you our discourse. during my life. to-nobody not mention
 [ÆCHom II X,237]

- (5.7) hie makeð him unwurð alle ðo faire þinges ðe **on ðare swikele woreld faire pencheð**
 it makes to-him worthless all the fair things which in the deceptive world fair seem
 [VV 29,33]
- (5.8) for Criste, **þat all can**, ordeyn itt
 for Christ, that everything can, arranges it
 [MES 9,23]
- (5.9) gretely commendynge þe peple **þat vertuosly lyvyd**
 greatly commending the people that virtuously lived
 [MES 9,3]

Table 5.8 presents the results for SXV clauses.

Table 5.8: The IV of X elements in SXV clauses in all periods

	eOE		IOE		eME		IME	
	n	%	n	%	n	%	n	%
low IV	198	49	256	59	126	81	4	–
high IV	149	37	103	24	25	16	2	–
mixed	61	15	75	17	5	3	0	–
clausal	0	0	0	0	0	0	0	–
Total	408	101	434	100	156	100	6	100

We see that in eOE, clauses with low and high IV X elements are fairly evenly distributed in the SXV pattern, albeit with a preference for low IV. At this stage, therefore, the pattern contains a considerable number of clauses which breach the principle that new information should come at the end of the clause. In IOE low IV elements have become more frequent, at the same time as there is a decline in the proportion of high IV X elements. The changes for both low and high IV elements are statistically significant.⁶ Thus, verb-final clauses appear to become increasingly restricted pragmatically over time. The trend is continued in eME, with a marked and highly significant rise in the proportion of low IV X elements, and a smaller, non-significant reduction of the proportion of high IV elements.⁷ It may be added that although the decrease of high IV X elements is not statistically significant from IOE to

⁶ eOE vs IOE, SXV low IV: $\chi^2 = 4.15$, $p = .04$; high IV: $\chi^2 = 10.97$, $p = .0009$. Contingency: $\chi^2 = 14.99$, $p < .0001$, Cramér's V = .15.

⁷ IOE vs eME, SXV low IV: $\chi^2 = 8.38$, $p = .004$; high IV: $\chi^2 = 2.92$, $p = .09$.

eME, it is significant from eOE to eME ($\chi^2 = 15.37, p < .0001$). Thus, some changes must be tested over a longer period of time to be significant. The small number of occurrences in lME means that the period is of little interest here. Note that clausal X elements never occur in SXV clauses, as was also evident from the syntactic findings in chapter 4.

The corresponding results for SVX clauses are displayed in Table 5.9 below. Two eOE clauses with a low IV X are given in (5.10) and (5.11). In the former, *Godes word* is inferrable from the mention of *Godes biboda* ‘God’s command’ as well as bible quotations in the preceding context. The PP *to Sciringesheale* in (5.11) has low IV on account of the mention of *Sciringesheal* only a few lines earlier in the text. (5.12) and (5.13) are from IOE and illustrate a low and a high IV X element respectively. (5.14) shows one of the relatively few clausal X elements in this pattern in eME. Interestingly, the clausal adverbial itself has verb-final order. In (5.15) there are two eME SVX clauses, both with a high IV X element. Finally, a lME clause with both low and high IV X elements is found in (5.16).

(5.10) Ðæt sindon ða **ðe gehierað Godes word**

that is those who hear God’s word
[CP 67,20]

(5.11) þonne is þis land **oð he cymð to Sciringesheale**, and ealne weg on þæt bæcbord Norðweg

then is this land until he comes to Sciringesheal, and all-the way on the left Norway
[Or 16,7]

(5.12) Ac þæt mæden hæfde unstillen niht, mid þære lufe onæled þara worda and sanga **þe heo gehyrde æt apollonige**

but the maiden had unquiet night, with the love inflamed of-the words and songs that she heard from Apollonius
[ApT 28,21]

(5.13) & **sona swa þu geseo nacodne wædian**, þonne geyre þu hine

and as-soon as you see naked beggar, then clothe you him
[BIHom III,195]

(5.14) Ðe inreste þesternesne is in ðare hierte ðe ne wile forsceawin **hwider he scal ðanne he henen farð**

the inmost darkness is in the heart which not will foreshow whither he shall when he hence goes
[VV 17,28]

(5.15) Ða beþohte he him þet **gif he mihte ben rotfest on Engleland þet he mihte habben eal his wille**
 then bethought he him that if he could be fast-rooted in England that he might have all his will
 [PC 1127,44]

(5.16) And sumtyme it was clept the vale of teres **because þat Adam wepte þere an .c. 3eer for the deth of Abell his sone þat Cayin slowgh**
 and sometime it was called the valley of tears because that Adam wept there one hundred years for the death of Abel his son who Cain slew
 [Mandeville 43,13]

Table 5.9: The IV of X elements in SVX clauses in all periods

	eOE		IOE		eME		IME	
	n	%	n	%	n	%	n	%
low IV	36	10	52	17	204	34	348	38
high IV	220	59	144	48	262	44	356	39
mixed	43	12	40	13	93	17	159	17
clausal	71	19	66	22	41	7	55	6
Total	370	100	302	100	600	102	918	100

Compared to SXV clauses, SVX clauses are arguably much more strongly pragmatically determined in the earliest period, since there is a clear preference for high IV X elements, and the low IV category only makes up 10% of the total. Thus, only a small minority of early OE SVX clauses do not adhere to the information principle, one of which is given in example (5.10) above. The proportion of low IV X elements rises to 17% in IOE, where there is a corresponding decrease of high IV elements. Both changes are statistically significant, if only just in the case of high IV. The contingency test shows a highly significant difference in the distribution of low and high IV between eOE and IOE.⁸ The early ME results show a marked deviation from IOE in the proportion of low IV X elements, which doubles. There is a small, non-significant decrease of elements with high information value, from 48% to 44%.⁹ Between eOE and eME, however, the proportion of high IV X elements decreases significantly, from 59% to 44%.¹⁰ In late ME the trend from the earlier periods is

⁸ eOE vs IOE, SVX low IV: $\chi^2 = 6.6, p = .01$; high IV: $\chi^2 = 3.98, p = .046$. Contingency: $\chi^2 = 10.23, p = .001$, Cramér's V = .16.

⁹ IOE vs eME, SVX low IV: $\chi^2 = 19.4, p < .0001$; high IV: $\chi^2 = 0.62, p = .43$.

¹⁰ eOE vs eME, SVX high IV: $\chi^2 = 11.63, p = .0006$.

continued, and there is now an almost even distribution of low and high IV elements. However, the changes from eME to IME are not so great as to give significance.¹¹ A comparison between IOE and IME, on the other hand, gives significance for high IV elements.¹² For some reason, there are considerably fewer clausal X elements in the Middle English periods than in Old English, relatively speaking.

Recall from section 4.2 that early OE and late OE show a relatively similar distribution of word order patterns, and that the diachronic differences that do exist are not in accordance with what one would expect if English was in the process of becoming an SV language. Specifically, the proportion of SVX clauses was shown to decline rather than increase between the two periods. When these results are kept in mind, the results for information value in the SXV and SVX patterns in late Old English reveal certain noteworthy tendencies. As we saw above, low IV X elements become more frequent in both patterns from early to late OE. Even though the development in the two patterns is in a sense parallel, the interpretation in terms of information structure must be that the patterns move in opposite directions: SXV clauses allow fewer high IV X elements and are thus more restricted pragmatically than earlier, while SVX clauses appear to have become less confined pragmatically since a larger proportion of low IV elements are allowed postverbally.

An overall count was performed of low vs high IV for all X elements in all the subordinate clauses in the corpus, in order to check whether the distribution varies between the different periods. The results can be seen in Table 5.10.

Table 5.10: The distribution of IV for all X elements in all periods

	eOE		IOE		eME		IME	
	n	%	n	%	n	%	n	%
low IV	930	54	941	58	891	60	803	59
high IV	790	46	686	42	588	40	553	41
Total	1720	100	1627	100	1479	100	1356	100

¹¹ eME vs IME, SVX low IV: $\chi^2 = 1.39, p = .24$; high IV: $\chi^2 = 2.05, p = .15$. Contingency: $\chi^2 = 3.37, p = .07$, Cramér's $V = .06$.

¹² IOE vs IME, SVX high IV: $\chi^2 = 4.08, p = .04$.

According to a chi-square contingency table test, the change in distribution from eOE to IOE is statistically significant, but the effect size measure indicates a low association between IV and time periods ($\chi^2 = 4.66$, $p = .03$, Cramér's $V = .04$). The overall increase in the proportion of low IV elements obviously contributes to the increase in the proportion of these elements in both SXV and SVX clauses between the two Old English periods, although it is not sufficient alone to explain the changes described above. Nevertheless, a bit of caution is called for in the interpretation of the development from eOE to IOE. If we compare the eOE distribution with the other three periods combined in Table 5.10, the difference is even more marked ($\chi^2 = 12.43$, $p = .0004$, Cramér's $V = .05$). One interpretation of the results is that subordinate clauses become 'more subordinate' from IOE onwards, in the sense that they contain more given and less new information.¹³ Table 5.10 demonstrates that the overall distribution of low and high IV X elements is stable from IOE to IME, and the findings in Tables 5.8–5.9 for those periods are therefore somewhat more reliable than for the transition from eOE to IOE.

All in all, when the results of this section are compared with the findings on word order distribution in section 4.2, it becomes clear that the syntactic and pragmatic analyses of word order patterns in Old English and Middle English subordinate clauses tell two partly different stories. On the one hand, the findings on word order distribution indicate a fairly stable word order situation throughout the Old English period, and a significant change from late OE to early ME, when SXV order is reduced markedly, at the same time as the frequency of SVX clauses more than doubles. This trend continues into late ME. The analysis of information structure, on the other hand, shows manifest changes in SXV and SVX clauses also from early OE to late OE, something which is not reflected in the frequency distribution of these patterns. Both patterns display an increase in the proportion of low IV X elements, but the interpretation must be different for each pattern: SXV clauses become more and more susceptible to the information principle over time, while the converse is true for SVX clauses; these become less pragmatically governed over time. It must be emphasised

¹³ Recall from section 3.2.2 that the distinction between subordination and coordination may not have been as clear-cut in OE as it is in PDE.

that it is only in the Old English period that the results can be described as unexpected in relation to the syntactic findings mentioned above. In eME and lME, the gradual reduction in the frequency of verb-final clauses is also reflected in the pragmatic properties of the pattern. Similarly, as SVX clauses become much more common in eME and lME, they also allow a larger number of low IV X elements, indicating the fixation of this word order as the unmarked and syntactically preferred one. Thus, as far as the development from IOE to lME is concerned, the present results confirm the assumption that patterns with decreasing frequency become more and more marked pragmatically, while patterns that increase in frequency are less and less dependent on the IV of elements. However, as will be shown in section 5.3.4, the pragmatic development of SXVX clauses is less straightforward than for the two patterns under scrutiny here.

Even though the analysis of information structure shows surprising results for Old English when correlated with *overall* word order distribution, the findings are partly as expected seen against the analysis of element weight in section 4.4.2.2, where it was shown that verb-final clauses contain more light and fewer heavy predicatives in IOE than in eOE. There is no significant increase in the proportion of pronouns in SXV clauses between these two periods, however. It is apparent that different levels of analysis are needed in order to describe word order changes with some precision. It is at this stage of the analysis not entirely clear whether information value is a determining factor in its own right, or whether it simply reflects the weight of elements. In fact, as long as the data indicate a relatively close correlation between the information principle and the principle of end weight, one cannot tell which of the two, if any, is primary. Obviously, none of the principles is absolute, and they thus represent tendencies rather than rules. In sections 5.3.3 and 5.3.5 the relationship between the two principles is further explored.

Finally in this section we return to a subset of relative clauses in the *Orosius* text discussed and exemplified previously (section 4.4.2.1), where the position of the object predicative varies between pre- and postverbal position in a seemingly random fashion. The intention with Table 5.11 is to test whether the variation is explicable by

principles of information structuring, ie whether preverbal object predicatives tend to have low IV, while postverbal ones more often carry a high informational load.

Table 5.11: The IV of object predicatives in a subset of relative clauses in Orosius

	X SXV		X SVX	
	n	%	n	%
low	5	23	5	10
high	17	77	47	90
Total	22	100	52	100

Although the percentages reveal a tendency toward fewer low IV and more high IV predicatives in X SXV clauses (*be mon X haet*) than in X SVX clauses (*be mon haet X*), the differences turn out to be non-significant (Fisher Exact Test, two-tailed, $p = .15$). In both clause types the object predicative is typically not mentioned before and thus has high information value. Information value, therefore, does not seem to have much bearing on the word order in these 74 clauses. Rather, the variation between X SXV and X SVX appears to be fairly random, given that the context, type of subject, type of predicative and information structure are very similar. As such, the data presented here might be seen as support for the view of language change as a gradual process where several variants may coexist over time, both in the language of the community and in the language of individuals (sociolinguists like Weinreich, Labov and Herzog (1968), Milroy (1999), Croft (2000) and Eitler (2004), as well as variationist generativists like Pintzuk (1999)). Conversely, the results do not support those working within strict parameter-setting models where a central assumption is that one speaker has only one variant available in his/her grammar, and that any deviations from that variant is a special case or an anomaly (Chomsky 1981; Lightfoot 1979, 1991, 2006). The subset of clauses discussed here is of course not the sole reason for the stance taken with respect to the nature of language change; on the contrary, most of the findings thus far in this investigation convey the message that variation, both predictable and random, is an important characteristic of word order in both eOE, IOE and eME.

5.3.2 Multiple X

In this section a correlation is made between the position of non-initial X elements and their information value in SXV and SVX clauses with multiple X elements. The intention of doing this is to find out whether information value determines not only the position of X elements in the clause relative to the verb, but also the internal ordering of X elements. There are only minor diachronic differences, and the three periods eOE, IOE and eME have therefore been collapsed in Tables 5.12–5.15. Because of the low number of SXV clauses in IME, that period is not considered here. The results for SXV clauses with two X elements between subject and verb are displayed in Table 5.12. Examples (5.17)–(5.20) illustrate the four possible combinations l+h, l+l, h+l and h+h, respectively.

(5.17) Ac hit is micel ðearf **ðæt mon hire suiðe hrædlice wiðbregde**
 but it is great need that one it very soon withstands
 [CP 79,20]

(5.18) oðer sum oðer dwel hie driueð, and seggeð þat he nafde naht gode handsselle **ðe him þat sealde**
 or some other error they entertain, and say that he not-had good handsel who him that sold
 [VV 29,8]

(5.19) and gif ðu wundrige **þæt swa scamfæst fæmne swa unforwandigendlice ðas word awrat**
 and if you wonder that so bashful maid so boldly these words wrote
 [ApT 32,14]

(5.20) Witodlice cupberhtus ferde swa swa his gewuna wæs. ymbe geleaffulre bodunge. **þæt he ðam ungelæredum folce. lifes weig tæhte**
 truly Cuthbert went so as his wont was. occupied-with faithful preaching. so-that he the ignorant people life's way taught
 [ÆCHom II X,97]

Table 5.12: The IV of X elements in SXV clauses: two X elements

	1st		2nd	
	n	%	n	%
low	171	74	115	51
high	60	26	112	49
Total	231	100	227	100

There is a definite preference for placing low IV elements in the first of the two X positions, while the distribution of low and high IV elements is almost equal for the second position. A comparison between first and second position for IV shows significant differences.¹⁴

Table 5.13 shows the distribution in clauses with three X elements, of which an example is given in (5.21). In this eOE clause all three elements have high IV, in the form of PPs:

- (5.21) *Ac hiora anwalda endas wæron swiþe ungelice; for þon þe Babylonie mid monigfealdum unryhtum & firenlustum mid heora cyninge buton ælcra hreowe libbende wæran*
 but their empires' ends were very different; because the Babylonians
 in manifold evils and sinful-lusts with their king
 without any remorse living were
 [Or 38,17]

Table 5.13: The IV of X elements in SXV clauses: three X elements

	1st		2nd		3rd	
	n	%	n	%	n	%
low	38	78	27	56	23	48
high	11	22	21	44	25	52
Total	49	100	48	100	48	100

The findings here resemble those above in the sense that low IV elements are most frequent in the first X position and least frequent in the third position. Given the two-way distinction used in these tables, the opposite is of course true for elements with high information value. It turns out, however, that the difference between first and second position is statistically significant, while second vs third is not.¹⁵

In the case of the SVX pattern, clausal X elements have also been included in the tables. Some combinations are given in the examples below. Both X elements in (5.22) are assigned low IV, but the heaviness of the final PP probably contributes to its

¹⁴ Contingency: $\chi^2 = 25.67$, $p < .0001$, Cramér's V = .24.

¹⁵ Contingency, 1st vs 2nd: $\chi^2 = 4.06$, $p = .044$, Cramér's V = .23; 2nd vs 3rd: $\chi^2 = 0.38$, $p = .54$, Cramér's V = .08.

position in the clause. High + low is exemplified in (5.23), high + high in (5.24), and low + clause in (5.25).

(5.22) Swa sindon wel monege ðara **ðe gewundiað hiera mod**

mid ðæm weorcum ðisses flæsclican lifes

thus exist very many of-those who wound their mind

with the works of-this fleshly life

[CP 69,4]

(5.23) & us is get wyrse þæt we urne ceap teoþian, **gif we willaþ syllan**

ure þæt wyrste Gode

and us is yet worse that we our goods tithe, if we desire to-give

our the worst to-God

[BIHom IV,29]

(5.24) Þet wæs forþi þet corn wæs litel 7 se penig wæs swa ifel þet se man **þa hæfde**

at an market an pund, he ne mihte cysten þærof for nan þing twelfe penegas

that was because that grain was scarce and the coinage was so debased that the man who had

at a market a pound, he not could exchange thereof for no thing twelve pence

[PC 1124,30]

(5.25) And **sith þat foules þat han no kyndely wytt ne resoun gon thider**

to seche þat gloriose virgyne wel more oughten men an to seche hire t to

worschipen hire

and since that fools that have no natural wit nor reason go thither

to seek that glorious virgin well more ought men only to seek her and to worship her

[Mandeville 39,8]

Table 5.14: The IV of X elements in SVX

clauses: two X elements

	1st		2nd	
	n	%	n	%
low	129	47	56	20
high	143	52	148	53
clause	2	<1	75	27
Total	274	100	279	100

Table 5.14 shows that low IV elements are much more common in the first than in the second of the two positions ($\chi^2 = 29.48$, $p < .0001$), while there is no such difference for high IV elements. Furthermore, X elements constituted by clauses almost exclusively occur finally. The two instances with a clausal X occurring as the first X element have a clause also as the second element.

Table 5.15 displays the distribution in SVX clauses with three X elements.

Table 5.15: The IV of X elements in SVX clauses: three X elements

	1st		2nd		3rd	
	n	%	n	%	n	%
low	20	61	16	46	5	14
high	13	39	16	46	17	49
clause	0	0	3	9	13	37
Total	33	100	35	101	35	100

There is statistical significance for the distribution of low IV elements between first and third as well as second and third positions,¹⁶ but not for the distribution of elements with high information value. Thus, we once again see that the internal ordering of X elements is at least partly sensitive to the information principle. Clausal elements have a preference for third position, which is as expected considering their relative heaviness.¹⁷

The findings in this section have demonstrated that in clusters of two or three X elements in the two main patterns under investigation, there is a correlation between the information value of elements and their position, in the sense that the IV increases from left to right. For future study, it would be interesting to perform a more detailed analysis of the clauses in question, in order to find out how close the correlation between weight, information value and clause position is. For clauses with clusters of three or more X elements the quantitative analysis may be combined with a more qualitative approach, since such clauses are relatively limited in number.

5.3.3 Element type and information value

The comparison in this section between SXV and SVX order will reveal whether the variation in information structure between the two patterns simply reflects morphosyntactic weight, or whether principles of information structure have an influence on word order independent of element weight (cf section 2.4.1). At least

¹⁶ Low IV, 1st vs 3rd position: $\chi^2 = 8.71, p = .003$; 2nd vs 3rd position: $\chi^2 = 4.76, p = .03$.

¹⁷ Clausal, 1st vs 3rd position: $\chi^2 = 10.37, p = .001$; 2nd vs 3rd position: $\chi^2 = 5.06, p = .002$.

three dimensions are potentially involved: the synchronic situation within each pattern, the diachronic development within each pattern, and a synchronic and diachronic comparison across patterns. Synchronic differences between the two patterns will receive most attention here; the other dimensions have for the most part been covered by findings discussed in previous sections.

In addition to the traditional distinction between pronouns, full NPs, PPs, AdvPs and AdjPs, the two latter types have been subdivided into simple and complex phrases. A simple AdvP or AdjP consists of a single word, ie the head alone, whereas complex phrases have pre- and/or postmodifiers. Constituents consisting of two or more coordinated heads are also considered heavy and consequently classified as complex. As in chapter 4, noun phrases with immediately postmodified pronoun heads are classified as full NPs.

Table 5.16 presents the results for the SXV pattern in early OE.

Table 5.16: The IV of X elements according to type in eOE SXV clauses

	low IV		high IV		Total	
	n	%	n	%	n	%
pronoun	79	99	1	1	80	100
full NP	62	41	90	59	152	100
simple AdvP	92	77	28	23	120	100
complex AdvP	7	28	18	72	25	100
PP	69	48	74	52	143	100
simple AdjP	9	53	8	47	17	100
complex AdjP	0	0	11	100	11	100
Total	318	58	230	42	548	100

The table shows that while pronouns nearly exclusively have low IV, a majority (59%) of full NP X elements in this pattern have high information value. Moreover, there are systematic differences within adjective and adverb phrases, according to whether the head is modified or not: as expected, phrases constituted by heads alone have lower IV than complex phrases, ie those with pre- or postmodification of the head. For adverb phrases the percentages for low IV are 77% (simple) and 28% (complex), for adjective phrases 53% and 0%. Simple adjective phrases with low IV (5.26) and high IV (5.27), as well as a complex adjective phrase with high IV (5.28), are exemplified below.

- (5.26) *Biscepe gedafnað ðæt he sie tælleas. Ðarbufan is geteald hwelc he beon sceal, gif he untælwierðe bið*
 bishop-D befits that he is blameless. Besides is told what he be shall,
 if he blameless is
 [CP 53,10]
- (5.27) 7 norðeward, he cwæð, *þær hit smalost wære, þæt hit mihte beon þreora mila*
 brad to þæm more
 and northward, he said, where it narrowest was, that it might be three miles
 broad to the waste
 [Or 15,28]
- (5.28) *Eac is to geðencanne ðæt on ða tiid ðe se biscephad swa gehiered wæs,*
 sua hwelc swa hine underfeng, he underfeng martyrdom
 also is to reflect that at the time when the bishop-office so valued was,
 whoever it accepted, he accepted martyrdom
 [CP 53,17]

The single instance of a pronoun deemed to have high information value is given in (5.29). Pronouns like (*an*)*other*, *much* and *little* are examples of words which in many cases have no clear referent elsewhere in the text, unlike eg the personal pronouns, and are as such difficult to assign IV.

- (5.29) *Ac sio tunge bið gescinded on ðam lariowdome ðonne hio oðer lærð, oðer hio liornode*
 But the tongue is disgraced in the teaching when it one-thing teaches, another it learnt
 [CP 27,11]

The late OE results are found in Table 5.17.

Table 5.17: The IV of X elements according to type in IOE SXV clauses

	low IV		high IV		Total	
	n	%	n	%	n	%
pronoun	121	100	0	0	121	100
full NP	85	56	68	44	153	100
simple AdvP	94	75	31	25	125	100
complex AdvP	7	30	16	70	23	100
PP	83	52	77	48	160	100
simple AdjP	6	26	17	74	23	100
complex AdjP	0	0	3	100	3	100
Total	396	65	212	35	608	100

We see that the overall proportion of low IV elements in this pattern increases from early to late OE (58% vs 65%), and with that in mind no particular element type stands out in comparison with early OE. Simple adjective phrases appear to be moving in the direction of higher IV (47% in eOE vs 74% in IOE), but the figures are too small for conclusions to be drawn.

In Table 5.18 below the eME results are presented. The one pronoun with high IV is *nammor* in example (5.30). It is a special type of compound pronoun which is fairly heavy and may thus be said to be similar to a full NP.

(5.30) **þa he nammor ne mihte**, þa uuolde he ðat his nefesculde ben abbot in Burch:
 oc Crist it ne uuolde
 when he no-more not could, then would he that his nephew should be abbot of Peterborough:
 but Christ it not would
 [PC 1132,7]

Table 5.18: The IV of X elements according to type in eME SXV clauses

	low IV		high IV		Total	
	n	%	n	%	n	%
pronoun	56	98	1	2	57	100
full NP	17	65	9	35	26	100
simple AdvP	40	89	5	11	45	100
complex AdvP	2	29	5	71	7	100
PP	18	86	3	14	21	100
simple AdjP	4	44	5	56	9	100
complex AdjP	0	0	3	100	3	100
Total	137	82	31	18	168	100

Again there is a general increase in the proportion of low IV elements (65% vs 82%), and the increase is most marked for prepositional phrases, from 52% to 86%.

Before we turn to the SVX pattern, the pronoun category in the three tables above (5.16–5.18) requires some attention. It could be argued that the inclusion of pronouns skews the results, since they are near-obligatory in preverbal position in Old English anyway. Certainly, the SXV pattern is increasingly restricted to cases where X is a pronoun, from 14.6% (80/548) in eOE to 34.0% (57/168) in eME. On the other hand, the tables have shown that also full NPs increasingly have low IV over time (41% in eOE, 56% in IOE, 65% in eME). Table 5.19 summarises the results in Tables 5.16–

5.18 excluding pronouns, and demonstrates that we get the same tendencies diachronically whether or not pronouns are taken into account.

Table 5.19: The IV of X elements in SXV clauses when pronouns are excluded

	eOE		IOE		eME	
	n	%	n	%	n	%
low	239	51	275	56	81	73
high	229	49	212	44	30	27
Total	468	100	487	100	111	100

Naturally, the total proportion of high IV elements is higher when pronouns are removed from the count, but there is no doubt that the SXV pattern has become fairly restricted pragmatically by eME for other element types as well.

The results for SVX clauses in eOE are presented in Table 5.20.

Table 5.20: The IV of X elements according to type in eOE SVX clauses

	low IV		high IV		Total	
	n	%	n	%	n	%
pronoun	1	–	0	–	1	100
full NP	28	16	151	84	179	100
simple AdvP	7	58	5	42	12	100
complex AdvP	0	0	6	100	6	100
PP	24	21	88	79	112	100
simple AdjP	2	15	11	85	13	100
complex AdjP	0	0	27	100	27	100
Total	62	18	288	82	350	100

The single pronoun is *him selfum*, previously shown in example (4.96). Compared to the eOE SXV pattern, SVX clauses considerably more often occur with high IV full NPs (84% vs 59%) and PPs (79% vs 52%).¹⁸ In other words, the same type of element is more likely to have high IV when occurring postverbally than preverbally. The difference for simple adjective phrases is not statistically significant.¹⁹ Similarly to

¹⁸ Contingency, NPs: $\chi^2 = 25$, $p < .0001$, Cramér's V = .28; PPs: $\chi^2 = 18.36$, $p < .0001$, Cramér's V = .28.

¹⁹ Fisher Exact Test, two-tailed, $p = .06$.

what was observed in SXV clauses, there is a difference between single adverbs and complex adverb phrases, but the number of occurrences is low.

The late OE findings are presented in Table 5.21.

Table 5.21: The IV of X elements according to type in IOE SVX clauses

	low IV		high IV		Total	
	n	%	n	%	n	%
pronoun	7	100	0	0	7	100
full NP	39	32	82	68	121	100
simple AdvP	5	71	2	29	7	100
complex AdvP	0	0	4	100	4	100
PP	34	27	91	73	125	100
simple AdjP	0	0	5	100	5	100
complex AdjP	0	0	12	100	12	100
Total	85	30	196	70	281	100

Only the two categories of full NPs and PPs are sufficiently sizeable to validate statistical testing. Diachronically, these contain an increasing proportion of low IV elements, in line with the general increase. However, the difference for PPs is not significant.²⁰ The synchronic comparison with SXV clauses is almost a carbon copy of the situation in early OE, with a much higher rate in SVX clauses of high IV full NPs (68% vs 44%) and PPs (73% vs 48%).²¹

²⁰ Contingency, eOE vs IOE SVX, NPs: $\chi^2 = 10.52$, $p = .001$, Cramér's V = .20; PPs: $\chi^2 = 0.78$, $p = .38$, Cramér's V = .07.

²¹ Contingency, eOE SVX vs eOE SXV, NPs: $\chi^2 = 25$, $p < .0001$, Cramér's V = .28; PPs: $\chi^2 = 18.36$, $p < .0001$, Cramér's V = .28.

Next, SVX clauses in eME are treated in Table 5.22.

Table 5.22: The IV of X elements according to type in eME SVX clauses

	low IV		high IV		Total	
	n	%	n	%	n	%
pronoun	52	100	0	0	52	100
full NP	77	33	155	67	232	100
simple AdvP	58	70	25	30	83	100
complex AdvP	0	0	15	100	15	100
PP	127	51	124	49	251	100
simple AdjP	8	44	10	56	18	100
complex AdjP	5	13	35	88	40	101
Total	327	47	365	53	692	100

Early ME differs markedly from the other two periods in one important respect: pronouns, adverb phrases and adjective phrases now occur regularly in the SVX pattern. As in the SXV pattern, the simple phrases clearly contrast with their complex counterparts. In the case of simple AdvPs, the average IV is much higher in the SVX pattern than in the SXV pattern. Again, that also applies to full NPs and PPs: these phrases are more likely to have high IV in SVX than in SXV clauses.²²

The primary conclusion to be drawn from this section is that the information value of elements is indeed a determining factor for word ordering. In the eOE and IOE data, only full NPs and PPs are numerous enough to allow a comparison between SXV and SVX clauses, but the results for these two categories leave little doubt about the impact of IV. For eME it is also possible to test AdvPs statistically, with the same result: postverbal elements are more likely to have high information value than preverbal ones with the same relative weight. The OE and ME data suggest, therefore, that we can dismiss Hawkins' (1991, 1994) claim that pragmatic factors play no role in word ordering.

²² Contingency, eME SVX vs eME SXV, simple AdvPs: $\chi^2 = 4.86$, $p = .03$, Cramér's V = .21; NPs: $\chi^2 = 9.12$, $p = .003$, Cramér's V = .2; PPs: $\chi^2 = 8.24$, $p = .004$, Cramér's V = .19.

5.3.4 SXVX clauses

Apart from the main patterns SXV and SVX, the SXVX pattern is the only one to which special attention is devoted in the analysis of information value. It was seen in chapter 4 that SXVX clauses share characteristics, synchronically and diachronically, with both SXV and SVX orders with respect to the weight of X elements. Preverbal elements resemble those occurring in SXV clauses, while postverbal elements are similar to those found in the SVX pattern, and SXVX clauses may as such be said to have a double status. It remains to be seen whether the same applies to the information value of the elements.²³

In the tables below, the statistics represent clauses, not elements, in the same fashion as in section 5.3.1. Notice that the totals in the preverbal and postverbal columns do not necessarily match, since some elements are not analysable for IV (eg dangling prepositions), while others are not given any value due to their uncertain status.

The eOE results are found in Table 5.23.

Table 5.23: The IV of X elements in SXVX clauses: eOE

	preverbal		postverbal	
	n	%	n	%
low IV	84	48	15	9
high IV	77	44	104	59
mix	13	7	11	6
clausal	1	<1	46	26
Total	175	100	176	100

There is a distinct gap between preverbal and postverbal position, with an almost even split between clauses with low and high IV elements preverbally, and only 9% with low IV elements after the verb. Interestingly, these figures are remarkably similar to the eOE findings for SXV and SVX clauses respectively, as shown in Tables 5.8–5.9.

²³ Bech's (2005) study of OE and ME main clauses with SXVX order shows that low IV X elements tend to occur early in the clause and high IV elements late in the clause, in line with the information principle. It is also argued, based on a close examination of some individual clauses, that writers 'made use of the options available to them in order to process and structure information in the most context-sensitive, efficient, and also, it may be argued, elegant way' (2005:159).

Clausal elements are almost exclusively restricted to clause-final position, with one exception, the parenthetical clause previously given as example (4.142):

(5.31) *Æfter þæm þe Romeburg getimbred wæs twa hunde wintra & iiiix, þætte [Cambisis] feng to Persa rice, Ciruses sunu, se, mid þon þe he Egypte oferwon, gedyde þæt nan hæþen cyning ær gedon ne dorste*
 after Rome built was two hundred winters and six, that
 Cambisis succeeded to Persian kingdom, Cyrus' son, who, when he Egypt
 overcame, did what no heathen king before do not dared
 [Or 45,10]

The diachronic aspect is considered most salient in this section, especially when compared with the development in SXV and SVX clauses. The IOE data are given in Table 5.24.

Table 5.24: *The IV of X elements in SXVX clauses: IOE*

	preverbal		postverbal	
	n	%	n	%
low IV	65	49	22	16
high IV	45	34	62	46
mix	21	16	10	7
clausal	1	<1	42	31
Total	132	100	136	100

The proportion of elements with high IV preverbally is lower than in eOE (34% vs 44%), which corresponds well with the findings for SXV clauses. Postverbally there is a change over time for both low and high IV elements, similar to that observed for SVX clauses earlier. None of these changes are so great as to give statistical significance, however.²⁴ As in eOE, there is one instance of a preverbal clausal X, similar to the one in (5.31) above:

²⁴ eOE vs IOE, preverbal high IV: $\chi^2 = 1.62, p = .20$; postverbal low IV: $\chi^2 = 3.17, p = .08$; postverbal high IV: $\chi^2 = 2.39, p = .12$.

(5.32) *Us sæde soðlice beda, þæt se eadiga Cuðberhtus ða ða he wæs eahta wintre cild arn swa swa him his nytenlice yld tihte plegende mid his efenealdum*
 us informed truly Bede, that the blessed Cuthbert then when he was eight winters
 child ran so as him his thoughtless age urged playing with his coevals
 [ÆCHom II X,7]

Table 5.25 displays the eME results. We see that the tendency from eOE to IOE continues into eME, since low IV elements increase in frequency both preverbally (from 49% to 67%) and postverbally (from 16% to 33%).

Table 5.25: The IV of X elements in SXVX clauses: eME

	preverbal		postverbal	
	n	%	n	%
low IV	56	67	29	33
high IV	23	28	41	46
mix	4	5	6	7
clausal	0	0	13	15
Total	83	100	89	101

However, only the change in postverbal position gives significance.²⁵ All in all, it seems fair to conclude that although the general development in SXVX clauses reflects the processes observed for SXV and SVX clauses, the tendencies are far less pronounced in the first pattern than in the last two. Even when the figures for both low and high IV elements are compared over a longer time span, from eOE to eME, it is only the increase in the proportion of postverbal low IV elements that is statistically significant.²⁶ These elements show a change in rate over time almost identical to that found in SVX clauses. It is somewhat surprising that the distribution in preverbal position does not change over time, at least if SXVX is to be evaluated on a par with SXV as a pattern about to disappear. Recall how it was hypothesised earlier (section 5.3.1) that patterns which decrease in frequency will become more pragmatically governed over time. For the SXVX pattern, that would entail more low IV elements preverbally and more high IV elements postverbally, in accordance with the

²⁵ IOE vs eME, preverbal low IV: $\chi^2 = 2.7, p = .10$; postverbal low IV: $\chi^2 = 5.65, p = .02$.

²⁶ eOE vs eME, preverbal low IV: $\chi^2 = 3.76, p = .053$; preverbal high IV: $\chi^2 = 3.32, p = .07$; postverbal low IV: $\chi^2 = 19.17, p < .0001$; postverbal high IV: $\chi^2 = 1.61, p = .20$.

information principle. The preverbal development does not fit with the prediction, while we have seen that high IV X elements postverbally decrease in number from eOE to eME. Thus, as far as SXVX clauses are concerned, it seems as if the frequency of the pattern over time is not too strongly linked with its pragmatic development. A closer look at the clauses in this pattern reveals that it is by no means a unified one, ie it represents a mix of clauses that are acceptable and clauses that are unacceptable in today's SV language, unlike the SXV pattern in which the overwhelming majority of clauses would not be possible in Present-day English. The following four SXVX examples, all taken from eME, illustrate the point.

(5.33) Nis buten an godd, as ich ear seide, **þt al þe world wrahte & al worldliche þing**

not-is but one God, as I earlier said, who all the world made and all wordly things
[Kath 24,4]

(5.34) & to þe alde **for þi þt ha to þe zungre zeoueð uel forbisne**

and to the old because that they to the younger show bad example
[AW 31,25]

(5.35) 7 eft sume arlease mænn sone swelteð, **þæt heo sone habben þæt þæt heo æfter eodan**

and again some wicked men soon perish, so-that they soon have that which they after went
[Kentish 142,31]

(5.36) and ðæs ðe ðu **gearo forwite hwam ðu gemiltsige**, ic eom apollonius se tirisca ealdorman

and so that you already know whom you pity, I am Apollonius the Tyrian prince
[ApT 18,7]

The first two, with object (5.33) and prepositional phrase (5.34) preverbally, are ungrammatical in today's language, while the last two both have adverbs before the verb, and would probably be deemed acceptable by most native speakers (apart from *æfter eodan* in (5.35)). The latter type appears to have become more common already in eME, and certainly in lME, based on the frequency of clauses with a single adverb in preverbal position, especially *never*, *then*, *first*, *always*, *earlier* and certain manner

adverbs.²⁷ A qualitative evaluation of every clause in these two periods has not been attempted because of the uncertainty associated with intuition tests. All the same, there are indications that the SXVX pattern takes on new features in the course of the period under investigation, and develops from being similar to verb-final to becoming increasingly a variant of modern SV order. In Old English, it is similar to the SXV pattern in the sense that a large number of heavy and informationally new elements are found preverbally. In ME, postverbal elements in this pattern on average have lower IV than previously, indicating that the clauses they occur in are less pragmatically governed. It must be noted that the OV and VO distribution explored in chapter 4 does not change over time in SXVX clauses; the OV/VO ratio is fairly stable in this pattern from eOE to eME.

In late ME the observed frequencies are fairly low, but the table has nevertheless been included to complete the picture.

Table 5.26: The IV of X elements in SXVX clauses: lME

	preverbal		postverbal	
	n	%	n	%
low IV	18	58	19	59
high IV	9	29	8	25
mix	1	3	4	13
clausal	3	10	1	3
Total	31	100	32	100

The most noticeable change from eME is that the frequency of clauses with low IV elements postverbally increases (from 33% to 59%), but not quite enough to be significant ($\chi^2 = 3.64, p = .056$).

Overall, the development of the SXVX pattern in a certain sense resembles both that of the SXV and the SVX patterns, since low IV elements increase in frequency both preverbally and postverbally. Only the increase postverbally is statistically

²⁷ The frequencies for single adverbs preverbally are 19% (33/177) in eOE, 18% (25/136) in IOE, 29% (26/91) in eME and 47% (15/32) in lME. The change from IOE to eME and from eME to lME is not statistically significant, but the difference between IOE and lME is: IOE vs eME: $\chi^2 = 2.12, p = .15$; eME vs lME: $\chi^2 = 1.78, p = .17$; IOE vs lME: $\chi^2 = 7.73, p = .005$.

significant, however. Thus, there are signs that the pattern changes its character over time, and by the IME period appears to become more a variant of the new, dominant SV order than of the old verb-final order. In that respect, SXVX clauses should perhaps not be treated collectively under one heading as has been done here. Nevertheless, the present study is primarily concerned with surface word orders and not with a qualitative evaluation of individual clauses, and a full-scale division into ‘old’ and ‘modern’ instances of SXVX order has not been attempted.

5.3.5 OV and VO

In this section I build on the findings in section 4.3, and look at information value for objects only. Although full NP objects are of greatest interest here, tables have been computed for pronominal objects as well, since these do not have low IV in 100% of the cases. To simplify matters, combined figures for all clause patterns are used in this section.

For preverbal object pronouns, displayed in Table 5.27 below,²⁸ there is one instance of a high IV pronoun in each of the first three periods. Two of these, given in examples (5.37) and (5.38), have cataphoric reference, while the third is the compound *nammor* (5.39).²⁹

(5.37) **þonne he þa oferswiðed hæfde þe he þonne on winnende wæs mid þæm folce þe hiene ær fultumes bæd**, þonne dyde he him ægþer to gewældon
 when he those overpowered had who he then against fighting was as-well-as the people who of-him before help asked, then brought he them both under control
 [Or 62,13]

(5.38) Ne þurfon ge wenan **þæt ge þæt orceape sellon þæt ge under Drihtnes borh syllap**, þeh ge sona instæpes þære mede ne ne onfon
 not need you think that you that for-free give which you under Lord’s security give, though you soon at-once the recompense not not receive
 [BIHom IV,33]

²⁸ The inclusion of the IME column serves to illustrate the complete loss of preverbal pronouns by this stage.

²⁹ (5.37) was previously given as (4.103), while (5.39) was given in (5.30) above.

(5.39) **þa he nammor ne mihte, þa uolde he ðat his nefe sculde ben abbot in Burch:**
 oc Crist it ne uolde
 when he no-more not could, then would he that his nephew should be abbot of Peterborough:
 but Christ it not would
 [PC 1132,7]

Table 5.27: *The IV of preverbal pronominal objects*

	eOE		IOE		eME		IME	
	n	%	n	%	n	%	n	%
low	113	99	186	99	113	99	0	–
high	1	<1	1	<1	1	<1	0	–
Total	114	100	187	118	114	100	0	–

Table 5.28 demonstrates that postverbally, pronominal objects have low IV without exception.

Table 5.28: *The IV of postverbal pronominal objects*

	eOE		IOE		eME		IME	
	n	%	n	%	n	%	n	%
low	1	–	7	100	64	100	118	100
high	0	–	0	0	0	0	0	0
Total	1	100	7	100	64	100	118	100

At least two conclusions can be drawn from these findings: as expected, and one might add by nature, pronouns almost exclusively carry low IV. Moreover, information value seems to have little influence on the position of pronouns, since the few instances with high IV actually occur before the verb. However, it is difficult to draw conclusions based on three examples. For OE, it is possible to turn the argument around and say that the near-exclusive low IV status of pronouns is the reason for their preverbal placement. Again, I argue, one cannot easily keep the syntactic and pragmatic aspects of word order apart, since pronouns are both light and informationally given.

It is especially the diachronic dimension that has motivated the writing of this section: how do the pragmatic properties of full NP objects change over time? Will the current findings confirm the results for NPs in general in the two selected patterns in section 5.3.3? Table 5.29 provides some telling figures for objects in preverbal position.

Table 5.29: The IV of preverbal full NP objects

	eOE		IOE		eME	
	n	%	n	%	n	%
low	70	41	126	55	44	65
high	99	59	103	45	24	35
Total	169	100	229	100	68	100

There is a higher and higher rate of low IV preverbal full NP objects (and of course a gradually lower rate of high IV objects). At first sight the difference between eOE and IOE looks considerable, and it is certainly interesting that even though the frequency of OV increases from eOE to IOE (cf section 4.3), preverbal objects have low IV more often in the latter than in the former period. A contingency test indicates that the distribution of IV between the two periods is indeed significant ($\chi^2 = 7.61$, $p = .007$, Cramér's $V = .14$). A note of caution is necessary, however, since the goodness-of-fit test does not give significance for either low or high IV.³⁰ Only when the development is tested over two time periods, from eOE to eME, does the one-dimensional test show significance.³¹ The differences between IOE and eME are not significant with either test. Again, therefore, it is evidently necessary to study language change over a number of centuries to get a more complete picture. With respect to preverbal, full NP objects, it is clear that in the long run, they change from being predominantly contextually independent to being contextually dependent.

Table 5.30, where IME is also included, presents the results for postverbal objects.

Table 5.30: The IV of postverbal full NP objects

	eOE		IOE		eME		IME	
	n	%	n	%	n	%	n	%
low	28	20	34	29	77	42	112	46
high	115	80	85	71	108	58	131	54
Total	143	100	119	100	185	100	243	100

First of all, the two tables on full NP objects reveal that the distribution of information value differs considerably between postverbal and preverbal position, in compliance

³⁰ eOE vs IOE, low IV: $\chi^2 = 3.42$, $p = .06$; high IV: $\chi^2 = 3.24$, $p = .07$.

³¹ eOE vs eME, low IV: $\chi^2 = 4.98$, $p = .03$; high IV: $\chi^2 = 4.63$, $p = .03$.

with the information principle.³² At the same time, the direction of change is towards more low IV not only before but also after the verb, from 20% in eOE to 46% in lME. Again the development is not necessarily statistically significant from one period to the next, but over a longer time span these changes are highly significant.³³ The results corroborate the findings in section 5.3.3, and further reinforce the impression that information value can be singled out as an independent word order determinant.

5.4 Summary

In section 5.2 it was seen that subordinate clause subjects overwhelmingly carry low information value, and that subject IV on average is higher in main clauses. However, the difference is contingent on the inclusion of XVS clauses, and non-inverted subjects have the same average information value in the two clause types, somewhat surprisingly.

The analysis of the IV of X elements in section 5.3 demonstrated that there is an increase in the proportion of low IV elements in both SXV and SVX clauses, but the interpretation for each pattern must be different: SXV order becomes more pragmatically restricted over time, in the sense that it complies with the information principle to an increasing extent. SVX order, in contrast, becomes less and less dependent on the IV of X elements. It is important to note that IV distribution changes significantly not only from IOE to eME, but also from eOE to IOE, which is surprising given the relative stability in OE indicated by the overall word order distribution discussed in chapter 4. The study of information structure could thus be said to reveal ongoing changes which are not necessarily apparent from word order distribution alone. In both SXV and SVX clauses, multiple X elements tend to be arranged from low to high IV. The SXVX pattern was also analysed for the IV of X elements, and the pattern is not of a uniform type throughout the periods investigated. The diachronic

³² Contingency, eOE preverbal vs postverbal: $\chi^2 = 16.15$, $p < .0001$, Cramér's $V = .23$; IOE: $\chi^2 = 21.01$, $p < .0001$, Cramér's $V = .25$; eME: $\chi^2 = 9.71$, $p = .002$, Cramér's $V = .20$.

³³ eOE vs eME, low IV: $\chi^2 = 11.56$, $p = .0007$; high IV: $\chi^2 = 5.44$, $p = .02$.

development of the distribution of IV in postverbal position resembles that observed for SVX clauses.

As might be expected, the principle of end weight and the information principle appear to work in conjunction most of the time, since long and complex elements also tend to convey new, important information, while short elements are most often context-dependent. It may therefore be difficult to determine whether a given construction is the outcome of weight considerations, the information principle or both. Nevertheless, subsections 5.3.3 and 5.3.5 unequivocally show that information value is a determining factor for word ordering in its own right, and not simply a by-product of morphosyntax, since the same element type does not have the same IV distribution in preverbal and postverbal position.³⁴ On the other hand, the information principle can of course not be attributed anything approaching rule status; it represents a tendency and is as such one of many factors influencing the choice of one word order over another. OE and ME word order is arguably more susceptible to the information principle than word order in PDE, which is more fixed, but the susceptibility in OE and ME varies according to pattern and time period. Much of the observed variation appears to be fairly random and independent of general word order principles.

³⁴ The exception is pronouns, which almost always have low IV, regardless of position.

6 Summary and conclusions

The present study has investigated surface word order in 4,800 subordinate clauses in a text corpus from early Old English (eOE), late Old English (IOE), early Middle English (eME) and late Middle English (IME), with special emphasis on the weight and information value of clause elements. 4,800 main clauses are also included in the corpus for reasons of comparison. Although numerous word order patterns are described, SXV and SVX orders have received the most attention. The former has the finite verb in final position, while the latter is viewed as the primary representative of SV order, ie clauses where the finite verb immediately follows the subject and complements are placed to the right of the verb. SXVX and SvXV clauses are also studied in some detail.

The background for the dissertation is outlined in chapter 1, where it is pointed out that subordinate clauses in OE and ME have received relatively little attention in the past from an empirical point of view, and that there exist no large-scale studies covering a variety of texts ranging from early Old English to late Middle English, a central period in the development of word order in English. The main aim of the investigation is to provide an overview of subordinate clause word order, as well as discussing various syntactic and pragmatic properties connected with the word order patterns, synchronically and diachronically. Present-day English (PDE) is an SV language, whereas subordinate clauses in OE show variation chiefly between verb-final and SV order. These two orders have been the main object of investigation, with respect to frequency as well as syntactic and pragmatic characteristics over time.

Chapter 2 presents some of the most relevant previous research, while chapter 3 deals with methodological aspects. In the latter, the concepts of weight and information value are discussed at some length to provide a background for the analysis carried out in chapters 4 and 5.

The longest chapter in the dissertation is number 4, where a range of topics are investigated. The overall word order distribution in the four periods shows that OE subordinate clauses are characterised by variation, and that no one order clearly dominates. Clauses with SV order are frequent in both OE subperiods, and somewhat

surprisingly more so in eOE (38%) than in IOE (34%). Even though the SXV pattern is the most frequent single pattern throughout OE, it is arguably not as typical of subordinate clauses as is often suggested in the scholarly literature, ranging between 33% and 47% in the six OE texts examined. SXV order can be said to be highly typical for subordinate clauses only in a relative sense, viz in comparison with main clauses. OE subordinate clauses with SV order are so frequent that it does not appear feasible to rule them out as a possible contributing factor in the shift to SV order in English, as has been done by Lightfoot (2006) in his ‘degree-0 theory’. From IOE to eME considerable changes manifest themselves, most notably the doubling of the relative frequency of SVX order to 54% and more than halving of SXV order to 17%. The latter has by no means become marginal, however, and the present data do not support earlier claims that the transition from IOE to eME involved radical and catastrophic changes. The most dramatic change as far as SXV order is concerned occurs from eME to IME, since verb-final clauses are all but absent by the 15th century.

The comparison between subordinate and main clause order suggests a remarkably parallel development over time, especially concerning the frequency of clauses with SV order. The data do therefore not support the idea that subordinate clause order changed much more rapidly and dramatically than main clause order.

Previous quantitative studies have tended to focus on just one or two texts. The analysis of intertextual variation strongly suggests that representativity is limited unless several text sources are investigated. Indeed, the present investigation would itself have benefited from a wider range of works, especially from the eOE period.

The separate section in chapter 4 on the order of objects and main verbs in many ways confirms the overall findings described above: there is considerable variation in the first three periods under scrutiny, VO being a common option in OE (36%–45%) while OV order is a far cry from being marginal in eME at 38%. In the 15th century, clauses with OV order have nearly disappeared.

The final part of chapter 4 demonstrates that the principle of end weight is an influential factor behind word ordering, in particular in the case of X elements. In eOE, light elements are rare in postverbal position, and the weight constraint is most

pronounced for pronominal objects, as expected. Heavy elements, on the other hand, are frequent both in pre- and postverbal position, and a number of SXV and SXVX clauses breach the principle of end weight. Over time, preverbal position becomes more dependent on the weight of X elements, while postverbal position becomes less dependent and allows more light elements. It must be noted, however, that the diachronic development outlined here is not necessarily smooth and even, nor is it observable in all patterns with all subtypes of X element. Moreover, while eOE and IOE in some respects are similar and contrast with eME, in other respects the two latter periods share characteristics but differ from eOE.

Chapter 5 is concerned with the information value (IV) of clause elements, and a distinction is made between low IV and high IV. The main aim of the chapter is to determine to what extent the information principle, ie the tendency to proceed from low IV to high IV, determines word order in the corpus texts.

The IV of subjects does not seem to have much bearing on word order in subordinate clauses, given that topicalisation is rare and that the overwhelming majority of clauses are consequently subject-initial. The placement of X elements, on the other hand, is sensitive to information value to a considerable extent. In eOE, the SXV pattern is not particularly affected by the IV of elements, while the SVX pattern is highly restricted pragmatically. Diachronically, low IV X elements become more common in both patterns, both from early to late OE and from IOE to eME. This is interpreted to signify that SXV clauses become more pragmatically determined over time, at the same time as SVX clauses occur increasingly independently of information structuring constraints. Under the assumption that the more frequent a word order is, the less dependent it is on pragmatic constraints, the development from IOE to eME fits well with the increase in SVX order observed in chapter 4 between those periods. From eOE to IOE, however, we have seen that no such increase takes place, and there is actually a drop in the proportion of SVX clauses in IOE. In that light, the pragmatic development presented in chapter 5 can only be described as surprising. Crucially, it testifies to the importance of studying pragmatic aspects of word order in addition to syntactic aspects. Word order distribution alone only tells part of the story, and in this particular case the analysis of information structure may be said to reveal diachronic

trends of material interest. SXVX clauses are also treated in this chapter, and based on the IV of elements in pre- and postverbal position over time it is argued that the pattern shares properties with both SXV and SVX clauses, but gradually seems to become more similar to the latter.

The final part of chapter 5 concentrates on the correlation between the weight and information value of X elements, first for various phrase types in SXV and SVX clauses, then for full NP objects in pre- and postverbal position. The aim is to establish whether IV is an independent factor influencing word order, regardless of morphosyntactic weight, and the analysis comprehensibly shows that within the same weight category, IV differs in pre- and postverbal position. Earlier claims that pragmatic factors play no role whatsoever in word ordering are not supported by the data from OE and ME subordinate clauses examined here.

Chapters 4 and 5 demonstrate that both element weight and information value influence word order. However, the results also unequivocally show that neither the principle of end weight nor the information principle have anything approaching absolute status; the two word order principles represent tendencies rather than rules, and a great deal of the variation observed is not explicable by word order principles at all.

To the extent that it is possible to postulate a dominant word order in eOE, IOE and eME, the insights provided by the distribution of weight and information value may be valuable. SXV is arguably the dominant order in eOE, in the sense that preverbal position of X elements is least dependent on weight and information value. In the IOE period it is still SXV clauses that allow the greatest variety of X elements, but the distribution in pre- and postverbal position in the various patterns differs from that observed in eOE, and suggests that postverbal position is slowly becoming less dependent on the weight and information value of X elements. In eME the situation is reversed in terms of information structure; it is now postverbal X elements that are least constrained by the information principle. In terms of weight, on the other hand, the eME data show that both pre- and postverbal position allow a great deal of variation. All in all, it is perhaps conceivable to talk about dominant word orders on three different levels, at least: Word order distribution, dependence on the principle of

end weight, and dependence on the information principle.

Finally, I argue that the analysis of the weight and information value reveals crucial information about **how** the change to PDE SV order came about, but not necessarily **why**. Preverbal position, chiefly occurring in SXV and SXVX clauses, becomes more and more restricted to light and informationally given elements over time, while postverbal position, mainly in SVX and SXVX clauses, allows for a greater range of elements diachronically. This signals that the postverbal placement of X elements gradually becomes the preferred option, and that SV order is about to establish itself as the norm. However, the question **why** the movement towards SV order started in the first place involves a variety of factors not within the present scope.

There are several aspects of subordinate clause word order treated in this investigation which could be worth pursuing further. One that I find particularly intriguing is the (albeit infrequent) occurrence in late OE of postverbal pronouns, especially in ditransitive constructions. A case study of these constructions in IOE and eME might shed light on the reasons for placing some indirect objects before the verb and some after. Moreover, the study of verb weight has been inconclusive, yet revealing interesting tendencies that deserve more attention. An approach where the distribution of verb weight is tested against both the weight and information value of X elements could prove fruitful. A more detailed look at intertextual variation might also be valuable; only the overall word order distribution has received attention here, but other aspects of word order, such as the distribution of weight and information value, may vary between different authors and texts.

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Appendix I – Additional tables

Ref. section 4.2.4.3

Table A.1: Word order in relative clauses vs other adjectival clauses: early OE

	relative		other	
	n	%	n	%
SXV	162	45	11	28
SXVX	49	14	3	8
SVX	116	32	13	33
SV-	15	4	3	8
SvXV	14	4	8	20
misc	4	1	2	5
Total	360	100	40	102

Table A.2: Word order in relative clauses vs other adjectival clauses: late OE

	relative		other	
	n	%	n	%
SXV	150	52	23	49
SXVX	29	10	6	13
SVX	55	19	11	23
SV-	28	10	5	11
SvXV	22	8	0	0
misc	7	2	2	4
Total	291	101	47	100

Table A.3: Word order in relative clauses vs other adjectival clauses: early ME

	relative		other	
	n	%	n	%
SXV	100	23	13	16
SXVX	36	8	7	8
SVX	221	51	40	48
SV-	36	8	8	10
SvXV	19	4	8	10
misc	24	6	7	8
Total	436	100	83	100

Ref. Table 4.51, section 4.4.2.2

Table A.4: The realisation of adverbials in eOE SXV and SVX clauses

	light		heavy		clause		Total	
	n	%	n	%	n	%	n	%
SXV	136	44	170	56	0	0	306	100
SVX	14	9	125	78	22	14	161	101
Total	150	32	295	63	22	5	467	100

Table A.5: The realisation of adverbials in IOE SXV and SVX clauses

	light		heavy		clause		Total	
	n	%	n	%	n	%	n	%
SXV	159	46	187	54	0	0	346	100
SVX	8	5	135	85	16	10	159	100
Total	167	33	322	64	16	3	505	100

Ref. section 4.4.3

Table A.6: The distribution of verb types in early OE

	transitive		intransitive		copular		passive		Total	
	n	%	n	%	n	%	n	%	n	%
SXV	246	55	135	30	43	10	24	5	135	30
SXVX	106	60	27	15	34	19	10	6	27	15
SVX	221	59	78	21	60	16	17	5	78	21
SvXV	33	44	19	25	5	7	18	24	19	25
Other	60	48	36	29	20	16	8	6	36	29
Total	666	56	295	25	162	14	77	6	295	25

Table A.7: The distribution of verb types in late OE

	transitive		intransitive		copular		passive		Total	
	n	%	n	%	n	%	n	%	n	%
SXV	283	58	134	28	39	8	31	6	487	100
SXVX	91	67	25	18	18	13	2	1	136	99
SVX	166	53	73	23	49	16	25	8	313	100
SvXV	58	63	11	12	2	2	21	23	92	100
Other	80	47	63	37	12	7	17	10	172	101
Total	678	57	306	26	120	10	96	8	1200	101

Table A.8: The distribution of verb types in early ME

	transitive		intransitive		copular		passive		Total	
	n	%	n	%	n	%	n	%	n	%
SXV	97	49	72	36	18	9	13	7	200	101
SXVX	62	68	14	15	15	16	0	0	91	99
SVX	300	47	190	30	120	19	32	5	642	101
SvXV	39	53	13	18	0	0	22	30	74	101
Other	89	46	67	35	27	14	10	5	193	100
Total	587	49	356	30	180	15	77	6	1200	100

Table A.9: The distribution of verb types in late ME

	transitive		intransitive		copular		passive		Total	
	n	%	n	%	n	%	n	%	n	%
SXV	2	33	2	33	2	33	0	0	6	99
SXVX	16	50	12	38	3	9	1	3	32	100
SVX	467	48	214	22	196	20	104	11	981	101
SvXV	8	26	11	35	1	3	11	35	31	99
Other	66	44	66	44	12	8	6	4	150	100
Total	559	47	305	25	214	18	122	10	1200	100