

The Verbal Complex in Subordinate Clauses from Medieval to Modern German

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The Verbal Complex in Subordinate Clauses from Medieval to Modern German
by Christopher D. Sapp

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Christopher D. Sapp
University of Mississippi

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Introduction

1.1 The verbal complex in modern and older German

A well-known characteristic of Modern Standard German is the asymmetry between main-clause and subordinate-clause word order. In main clauses, the finite verb occupies the second position of the clause (1a–d), and any non-finite verb (1b) or verbal particle (1c) will occur at the end of the clause. If there is more than one non-finite verb, these will occur adjacent to each other at the end of the clause (1d), forming a “verb cluster” or “verbal complex” (VC), in which the verbs appear in a prescribed order relative to each other (1e).¹

- (1) a. Klaus *liest* heute das Buch.
 K. reads_{fin} today the book
 ‘Klaus reads the book today.’
- b. Klaus *will* heute das Buch *lesen*.
 K. wants_{fin} today the book read_{inf}
 ‘Klaus wants to read the book today.’
- c. Klaus *liest* heute das Buch *durch*.
 K. reads_{fin} today the book through
 ‘Klaus reads through the book today.’
- d. Klaus *will* heute das Buch *lesen können*.
 K. wants_{fin} today the book read_{inf} can_{inf}
 ‘Klaus wants to be able to read the book today.’
- e. *Klaus *will* heute das Buch *können lesen*.
 K. wants_{fin} today the book can_{inf} read_{inf}

1. Throughout this work, parts of the verbal complex will be italicized. In addition, extraposed or intervening constituents will be indicated by bold face.

In subordinate clauses introduced by complementizers, on the other hand, all verbs, finite and non-finite, occur at the end of subordinate clauses (2a).² If the subordinate clause has two or more verbs, these will form a verbal complex. Word order within the VC is fixed, at least when the complex consists of only two verbs. I will call the finite verb 1, and the non-finite verb selected by the finite verb will be labeled 2. (Any dependent verb selected by verb 2 will be labeled 3, and so on.) In Standard German, the only possible order for a two-verb complex in a subordinate clause is 2-1, i.e. the non-finite V followed by the finite V as in (2b).

- (2) a. ... dass Klaus heute das Buch *liest*.
 that K. today the book reads
 ‘... that Klaus is reading the book today.’
- b. ... dass Klaus heute das Buch *lesen will*.
 that K. today the book read₂ wants₁
 ‘... that Klaus wants to read the book today.’
- c. *... dass Klaus heute das Buch *will lesen*.
 that K. today the book wants₁ read₂
 ‘... that Klaus wants to read the book today.’

The word-order asymmetry between main and subordinate clauses goes back to Old High German, the earliest recorded stage of the language: main clauses strongly tend toward V2, while subordinate clauses have later placement of the finite verb (Axel 2007:6). Because verbs in subordinate clauses tend to occur late, earlier stages of German, like the modern language, exhibit verbal complexes. However, medieval varieties of German (like many contemporary continental West Germanic dialects) show considerable variation in word order within the VC. This variability can be illustrated with clusters of two verbs in Early New High German (ENHG), the language of the central and southern German-speaking areas from 1350 to 1650. In addition to the 2-1 order (3a), we find the opposite order 1-2 (3b). Furthermore, some material may occur between the verbs, resulting in an order that we will label 1-x-2 (3c). Finally, independently of verb order, a constituent may be extraposed, i.e. placed to the right of the verbs (3d).

2. Unintroduced subordinate clauses, typically the complements of bridge verbs, display main-clause-like, verb-second word order:

- (i) Ich habe gesagt, Klaus *will* heute das Buch *lesen*.
 I have said K. wants₁ today the book read₂
 ‘I said Klaus wants to read the book today.’

- (3) a. das er in kainer sund *verczweiffeln* sol
 that he in no sin despair₂ shall₁
 'that he shall not despair in any sin' (Pillenreuth 161)
- b. das der mensch alle sein lebtag nicht anders *scholt* thun
 that the person all his life.days nothing else should₁ do₂
 'that man should do nothing else all the days of his life' (Pillenreuth 206)
- c. das der mensche nicht *scholt* sein *rew* sparen ...
 that the person not should₁ his regret save₂
 'that one should not hold back his repentance ...' (Pillenreuth 212)
- d. Wye man *fragen* sol dy *krancken*
 how one ask₂ shall₁ the sick
 'how one should ask the sick' (Pillenreuth 166)

Word order variation within the verbal complex is the subject of this study. Although VCs occur in both main and subordinate clauses, this study is limited to subordinate clauses. This is because in main clauses, the finite verb is always in the second position, so that VCs can occur only when there are three or more verbs in the clause, as in (1d). Given that the vast majority of VCs contain only two verbs, especially in older texts, subordinate clauses provide the most fruitful ground for searching for complexes. Moreover, comparing VCs in main and subordinate clauses may be comparing unlike types, since main clauses have complexes of only non-finite verbs, while subordinate-clause verbal complexes usually contain a finite verb.

This study investigates these VCs in the history of German, beginning with medieval German and continuing to some modern varieties of German. For medieval and early modern German, I will attempt to describe as accurately as possible the frequencies of particular word orders, the linguistic factors that favor some orders over others, and the diachronic and dialectal spread of these phenomena. For Modern German, I investigate similar phenomena, both in the standard language and in several dialects, resulting in a more complete understanding of synchronic grammar and diachronic developments.

There are at least two reasons why the changes in the relative order of verbs that occur in the history of German are interesting, not only for philologists of German but also for those interested in language change and syntactic theory. First of all, many changes in word order have been argued to be related to other changes in the language, such as the loss of inflectional morphology. However, the inflectional system of German has remained remarkably stable throughout its attested history. Therefore, the diachronic developments within the German VC present an interesting case, because the change in word order appears to be motivated by factors other than morphological change.

The second reason that this phenomenon is worthy of diachronic treatment is because it has increasingly received synchronic attention. There has been a flurry of research in the last twenty years seeking the best analysis for the 1-2 and 2-1 orders in Dutch and varieties of German (see Chapter 5). Because written Standard Dutch shows variation in the VC, it can be adequately investigated using corpus studies, as in de Sutter et al. (2008). Contemporary dialects of German, on the other hand, are rarely written, thus a large-scale corpus study of variation in the VC is necessarily limited to older stages of the language. Earlier stages of German appear to allow even more variation than most of the modern dialects, thus providing additional data that the synchronic analyses should take into account. Moreover, investigating earlier stages of contemporary varieties may help explain some aspects of these orders that have not been understood.

The rest of this chapter is organized as follows. Section 1.2 presents some previous scholarship on the VC in earlier stages of German. Section 1.3 outlines the organization of the rest of this book.

1.2 Previous scholarship on diachronic German verb order

1.2.1 The sentence-frame analysis

Despite an enormous body of diachronic research on the word order of German, the verbal complex has been relatively neglected. Most scholarship on syntactic change in German has concentrated on two aspects of German word order. First, the verb-second (V2) phenomenon of main clause word order has received substantial diachronic treatment e.g. by Lenerz (1985) and more recently by Axel (2007). Secondly, extraposition (both in main and subordinate clauses) has been a major topic in German grammar, being an object of research in many historical studies of word order in German.

This state of affairs is, I believe, largely a result of the traditional sentence-frame analysis of German word order (e.g. Wöllstein-Leisten et al. 1997: 53–54). Under this model, illustrated in Table 1, the verbs in main clauses “frame” the rest of the sentence, with the finite verb forming the so-called “left bracket” and the non-finite verb the “right bracket”. In subordinate clauses, the complementizer forms the “left bracket” and the verb cluster the “right bracket”. The positions before, between, and after the “brackets” are labeled the “pre-field”, “middle field”, and “post-field”, respectively.

Table 1. The sentence-frame analysis of German

	pre-field	L bracket	middle field	R bracket	post-field
main cl.	Klaus	will	heute das Buch	lesen.	
sub. cl.		dass	Klaus heute das Buch	lesen will.	

Modern German strictly limits what kinds of constituents can be extraposed, i.e. found in the post-field. However, as discussed above and illustrated in (3), earlier stages of German are much freer in this respect. Thus much of the scholarship on the history of German word order has focused on the development of the sentence frame, i.e. the decreasing frequency of extraposition. The relative order of the verbs in the VC is often either ignored (because the variation is within the so-called right bracket) or as in Admoni (1990: 156), the 1-2 order is treated as an instance of extraposition (i.e. the non-finite verb is in the post-field). Lenerz (1985: 105) similarly downplays changes in the VC, noting that there is synchronic and diachronic variation but labeling this an example of “stylistic reorderings” that “do not concern the syntactic structures of German as such.”

1.2.2 The verbal complex in MHG and ENHG

1.2.2.1 Behaghel (1932)

For many years, most discussion of Middle High German (MHG) grammar was limited to the poetic texts from the high point of courtly literature. Many earlier grammars such as Paul (e.g. 1966) hardly discuss the position of verbs at all. The exception is Behaghel’s *Deutsche Syntax*, which discusses word order in older Germanic prose texts in great detail, from Old English through Old High German to ENHG. This includes a lengthy treatment of verbal complexes in subordinate clauses (1932: 86–118).

Regarding two-verb complexes, Behaghel notes that both orders are possible and claims that the 2-1 order is increasingly preferred under Latin influence (1932: 87). In addition, a rhythmic principle influences verb order: the combination of a stressed word plus a verbal complex with the 1-2 order produces the sequence “Hochton, Unton, Hochton” (‘stressed word, unstressed word, stressed word’), while the combination of a light word and the 2-1 order produces the sequence “Unton, Hochton, Unton” (1932: 87). Finally, Behaghel finds that constructions with infinitives behave differently from those with participles, with the participial construction preferring the 2-1 order (1932: 105).

1.2.2.2 *Prell (2001)*

Prell (2001) provides a very thorough study of MHG syntax, based primarily on prose rather than courtly poetry. He analyzes word order in main and subordinate clauses from twenty-four MHG prose texts from an early version of the Bochumer MHG corpus.³ Prell's work forms the basis of the thoroughly revised syntax section of Paul's (2007) MHG grammar.

Of the 901 instances of two-verb complexes in subordinate clauses in Prell (2001:83), 28% have the 1-2 order. Prell finds several factors that have an effect on verb order. First, there is an increasing tendency for VCs in the 2-1 order to appear clause-finally: at the beginning of the 12th century, nearly half of the 2-1 complexes have extraposition, while by the 14th less than a quarter do (2001:84). On the other hand, VCs with the 1-2 order continue to occur with a high degree of extraposition throughout the period (2001:84), a trend that is found in several ENHG studies. Secondly, there is a strong effect of syntagm: 39% of modal-infinitive syntagms have the 1-2 order, while 24.7% of perfects and only 16.8% of passives do (2001:85). Thirdly, when the non-finite verb has a stressed separable prefix (SSP), the 1-2 order occurs more frequently than expected: there are 21 instances of the 2-1 order but 22 instances of 1-2 (2001:87).

With respect to complexes of three verbs, Prell (2001:88) finds only 16 instances in subordinate clauses. Of these, 7 are in the 1-3-2 order, 5 are 3-1-2, and 4 are 1-2-3. The majority of these examples involve a modal verb with the passive voice. Prell finds no instances of 3-2-1, the prevalent order in Modern Standard German.

Prell concludes from this data that MHG, like Modern German, is a verb-final language with movement of the finite verb to COMP in main clauses (2001:119). For Prell, the topological fields in the two stages of German are exactly the same, so that the structure for both is as in Table 1 above. The differences are that the post-field is a "strong" position in MHG (i.e. extraposition was frequent) but has weakened in the modern language, while the 2-1 order in the right bracket was "weak" in MHG (i.e. there was variation in the VC) but has become "strong" (2001:119). Prell suspects that these two changes may be related, with the result that Modern German subordinate clauses nearly always end in a finite verb (2001:119).

1.2.2.3 *Hammarström (1923)*

By Early New High German (ENHG), prose texts range across many dialects and genres, and thanks to an increasingly literate population, there are many texts such as personal letters that may more accurately reflect the speech of the time. Hammarström (1923) looks at verb placement in ENHG in both chancery

3. Although this is the same corpus from which I selected texts for my study (Chapter 2), only five texts were selected by both Prell (2001) and my study: *Notker, Buch der Könige*, *Speculum ecclesiae*, *Schwarzwälder Predigten*, and *Mühlhäuser Reichsrechtsbuch*.

documents and popular literature. The earliest chancery documents, from the first half of the 14th century, have the 1-2 order 12–16% of the time. By the 16th century, this has fallen to 0–1%. The rates of 1-2 are higher for popular literature of the 16th century, ranging from 5–37%. In all time periods and text types, the rate of the 1-2 order is higher for the modal-infinitive construction than for the participial constructions.⁴ Hammarström (1923: 150–162) also looks at subordinate clauses with three verbs, but the number of tokens is quite small. Generally speaking, he finds a preference for the 3-2-1 order in official documents but for 1-3-2 with the IPP construction.

Hammarström's (1923: 199–200) conclusion is that the word order of the chancery documents was influenced by Latin (although he does not explicitly discuss what form that influence took), and the chancery documents, in turn, served as the model for the emerging written standard. However, Hammarström's selection of texts is very uneven, with the chancery documents much older than the literary texts and, as Maurer (1926: 84) points out, not distinguished by dialect.

1.2.2.4 Maurer (1926)

Maurer (1926) places much more emphasis on dialect differences. He investigates a large number of both official documents and literary texts, from different dialect areas from 1300 to 1700. Unlike Hammarström (1923), Maurer looks only at perfect constructions. Although he does not give the results for perfects with *haben* 'have' in tabular form, his results for perfects with *sein* 'be' are repeated in Table 2. Based on these results, he concludes that the Alemannic areas (Switzerland, Alsace, Swabia, and Baden) have the highest rates of 1-2, while East Middle German (EMG) and North Bavarian (i.e. Nuremberg) have the lowest rates.

Table 2. Frequency of 1-2 order with *sein* perfects in Maurer (1926)

Region	Percentage of 1-2 order (1400–1600) ⁵
High Alemannic (Swiss)	30%
Low Alemannic (Swiss)	12%
Alsatian	50% → 33%
Swabian	50% → 60%
S. and M. Bavarian	8%
N. Bavarian (Nuremberg)	3%
Rhine Franconian	10% → 30%
EMG dialect	60% → 20%
EMG written language	5% → 0%

4. See Sapp (2006) for a more detailed discussion.

5. Adapted from Maurer (1926: 148). Maurer's table is more complicated than this, with some variation over time for some dialects.

percentages of the 1-2 order, because it is divided into two categories. Thirdly, as Härd (1981:26) points out, the number of tokens from each text is quite small. It is unclear whether the differences between Hammarström's and Maurer's results are due to the fact that Maurer takes into account texts from various dialects, or due to the problems with his study. Finally, like Hammarström (1923), Maurer (1926) does not give any indication of whether his results are statistically significant.

1.2.2.5 Härd (1981)

Härd (1981) is a study of 17,073 clusters of three or more verbs, from 1450 to 1975. We will be concerned here only with his first period (1450–1580), from which he has 2,704 tokens. The details of his study will be discussed and compared to my results in Chapter 3, but here I will summarize his basic findings.

First of all, Härd (1981:75) finds that, although ENHG has an increasing tendency to have the finite verb at the end of a two-verb cluster (2-1), it has the opposite tendency in three-verb clusters, with an increasing preference for the 1-3-2 order. Secondly, Härd (1981:54) finds this trend mainly in the High German dialects, with Low German preferring the 3-2-1 order. Finally, after the ENHG period, Härd (1981:174) demonstrates that the downward trend in the 3-2-1 order reverses for all constructions except the IPP, becoming the norm by the 20th century.

1.2.2.6 Ebert (1981)

Ebert (1981) examines a variety of text types written by forty-four people from Nuremberg from the 14th to 16th centuries. By investigating texts from just one city, Ebert is able to pinpoint some of the social and stylistic variables that determine the variation between the 2-1 and 1-2 orders.⁷ He thus avoids Maurer's pitfall of lumping all types of texts together while dodging the problem of dialect differences. Moreover, Ebert uses a sophisticated statistical model (Generalized Linear Interactive Modeling) that controls the variables stress, time, style, class, education, and occupation.

Ebert (1981:219–228) finds that the following factors have an effect on verb order. The stress of the word preceding the VC turns out to be a significant factor. When the preceding word is a noun (i.e. stressed according to Ebert), there is no clear preference for either order, but when the preceding word is a pronoun (assumed to be unstressed), the 2-1 order is strongly preferred. Time is also a significant variable, with a general decline in the 1-2 order as has been shown in other studies. The results for style are significant as well, with more formal letters having

7. Ebert (1981) treats only VCs where the two verbs are adjacent, thus excluding instances of 1-x-2.

higher rates of 2-1. Combining the factors class, education, and occupation gives the following hierarchy: administrators have the highest rates of 2-1, followed by merchants, artisans, students, nuns, and secular women. The type of syntagm is significant as well: *werden* + participle has the highest rate of 2-1, followed by *haben* + participle, modals/*werden* + infinitive, and finally *sein* + participle.

Ebert considers other “rhythmic” factors, which have been given primary importance since Maurer (1926). First, Ebert (1981:206) disproves Maurer’s contention that sentence-final subordinate clauses show a higher rate of 2-1 and thus that the 2-1 order is linked to falling intonation. Secondly, Ebert (1981:229) confirms Maurer’s findings (1926: 159) that verbs with stressed separable prefixes are the least likely to show the 2-1 order. Thirdly, Ebert (1981:208) finds that the alternation of stressed and unstressed syllables in the VC “may affect the choice” of orders, but the number of examples is too small for statistical analysis. Finally, Ebert (1981:209) notices that the placement of the VC within the clause may have an effect on the ordering within the cluster: when the verbs are in clause-final position, the 2-1 order is preferred.

Based on these findings, Ebert concludes that Latin influence on the 2-1 order has been overstated. First of all, the preference for 2-1 is not tied to an individual’s knowledge of Latin: merchants and artisans, who would not have had much schooling in Latin, show a higher rate of 2-1 than students, who received their education in Latin. Secondly, although Maurer claimed that Latin perfect passives like *quod dictum est* ‘which was said’ influenced the German passive *das gesagt ist* ‘which is said’, *sein* + participle is the syntagm which shows the lowest rate of 2-1. Ebert (1981:231) maintains that this “soundly refutes” the Latin hypothesis.⁸ According to Ebert (1981:237), the tendency to show the 2-1 order more and more over time is an example of “change from above”, passed down from the chancery style, rather than an imitation of Latin syntax.⁹

1.2.2.7 Ebert (1998)

Ebert (1998) studies verb placement primarily in the language of teenagers from 16th-century Nuremberg. Ebert (1998:65–67) finds several factors that influence verb order in the writings of these individuals. First, as seen in earlier research,

8. Ebert’s examples of *sein* + participle are all the perfect active use of *sein*; he excludes the *sein* passive (1981:204). Other studies find that the *sein* passive has very high rates of 2-1, see the discussion of Ebert (1998) below and Chapters 2 and 3. This somewhat weakens Ebert’s refutation of Latin hypothesis, since Maurer (1926) would predict high rates of 2-1 with the *sein* passive, not necessarily the *sein* perfect.

9. However, as Burridge (1993:117) points out, this still does not rule out indirect Latin influence, since Latin word order could have influenced chancery style.

different syntagms favor the 2-1 order to different degrees, following the hierarchy *werden* passive > *sein* passive > *haben* perfect > infinitive constructions > *sein* perfect. Second, the stress or category of the preceding word affects verb order (as in Ebert 1981). Third, Ebert claims that the rhythmic structure of the non-finite verb affects word order, although essentially this is reducible to the type of prefix on the verb. Fourth, Ebert finds that for some individuals the lexeme of the non-finite verb plays a role, but this is possibly reducible to prefix type and syntagm. The highest rates of 2-1 occur with the verbs *vernehmen/vernommen* ‘perceive (inf./PPP)’ and *empfangen* ‘receive (inf./PPP)’, which have an unstressed prefix, while the lowest rates occur with the forms *gewest* ‘been’ and *werden/worden* ‘become (inf./PPP)’. *Gewest* and *worden* occur only in the *sein* perfect, and *werden* is an infinitive, thus these forms necessarily occur in the syntagms with the lowest rates of 2-1.¹⁰ Fifth, some individuals show lower rates of the 2-1 order when the finite verb is subjunctive. Finally, the 2-1 order increases over time, and the effect of some factors (the stress of the preceding word, the lexeme of the non-finite verb) diminishes over time. In addition, most of the individuals show increasing rates of 2-1 over their lifetimes.

Ebert investigates not only the linguistic factors that affect verb order with these teenagers, but also the social circumstances that may have influenced them. Although individuals show higher rates of 2-1 with increased schooling (and young men more than young women), the above factors continue to favor the 1-2 order, leading Ebert (1998: 102) to conclude that children acquired the effect of those factors on VC order from the spoken language of the time, rather than learning them in school. Moreover, Ebert (1998: 116) finds no mention of VC order in school books or grammars of the time. Ebert’s (1998: 154) examination of printed texts from Nuremberg reveals much higher rates of 2-1, with only syntagm having a significant effect on verb order. Ebert (1998: 154) concludes from this that the teenagers’ increasing tendency to use the 2-1 order was influenced by contemporary printed texts, but that the factors that favor the choice of word orders are genuine features of spoken ENHG.

1.2.2.8 Bies (1996)

Another recent study of ENHG word order is Bies (1996). Bies compiles a corpus of over 5,000 clauses (900 of which are subordinate clauses) mainly from letters, including material from a wide range of dialects. Assuming that ENHG, like Modern Standard German, is an underlyingly SOV language, she investigates two aspects of ENHG syntax: extraposition and the 1-2 order.

10. On the other hand, *gewesen* ‘been’, an alternative form to *gewest*, has the same syntagmatic distribution but a much higher frequency of 2-1.

In the section on extraposition, Bies (1996:66) points out that ENHG, like Modern Standard German, allows the extraposition of clauses, PPs, and heavy NPs. Unlike Modern Standard German, however, ENHG also allows the extraposition of non-heavy NPs. When heavy NP shift has been controlled for, Bies (1996:39) finds that NPs extrapose to force a narrow focus interpretation. This focus-driven extraposition is lost by the Modern German period (1996:65).

In her study of the 1-2 order, Bies (1996:61) confirms some of Ebert's (1981) results, establishing that the rate of 1-2 falls over time and agreeing with Ebert that ENHG is undergoing a change from above. Although Bies (1996:54) determines only a weak effect of social class, she does find a significant effect of style, with higher rates of 1-2 in "less monitored styles". She also generally confirms Ebert's hierarchy of syntagms.

However, Bies disputes some other results of Ebert. First, Bies (1996:59) finds that the stress of the word preceding the VC has no significant impact on the order of verbs. She believes that this may be "due to a comparison of unlike objects across corpora" (1996:60).¹¹ Secondly, Bies (1996:60) concludes that the placement of the VC within the clause is insignificant, i.e. extraposition has no effect on verb order. However, her data do show an effect of extraposition on word order, if one looks at different types of extraposition separately. In Bies' Table 17 (1996:61), the 1-2 order occurs more often than expected with an extraposed NP (37.1% versus the expected rate of 27.3%), whereas extraposed PPs have the 1-2 order at 29.2%, close to the expected rate.

1.2.2.9 *Reifsnnyder (2003)*

Reifsnnyder (2003) is a study of the ENHG dialect of Augsburg, using a corpus with a wide variety of text types from the period 1500–1660. Her study covers orthographic, morphological, and syntactic variation in Augsburg, with the three syntactic variables being double negation, position of the verb within the clause (i.e. extraposition), and order within the VC. Only the results for the latter variable will be discussed here.

There are three factors that affect verb order in her study. First, as in previous studies, Reifsnnyder (2003:229) finds a general decline of 1-2 over time. Secondly, Reifsnnyder (2003:224–225) confirms the importance of text type for verb order. The text types assumed to be removed from the spoken language—chronicles, city ordinances, letters from schoolmasters, official letters and reports, and printed pamphlets—have the lowest rates of the 1-2 order. Personal letters, personal narratives, and guild books are assumed to be most reflective of the

11. My own study, like Bies, finds no such effect across dialects in ENHG, but like Ebert I find the effect in particular dialects (see Chapter 3.2.3.2).

spoken language and indeed have the highest rates of 1-2. Thirdly, Reifsnnyder (2003:226–227) determines an effect of clause type: clauses starting with a *wh*-word or with the relative complementizer *so* have the highest rates of 2-1. For Reifsnnyder (2003:245), the prevalence of the 2-1 order in official texts, as well as its increasing frequency over time, is the result of the adoption of a standard language ideology.

1.2.2.10 *Summary*

Because traditional philological study of MHG concentrated on the poetic language of the most famous literary works, the study of its prose syntax has only begun to receive much attention, for example by Prell (2001). There is a larger body of scholarship on ENHG syntax, although few studies address word order within the verbal complex. The studies that do treat the relative order of verbs are all incomplete in some sense. Hammarström (1923) investigates a variety of texts over the whole ENHG period, but does not take dialect differences into account. Maurer (1926) covers a wide range of dialects but has few tokens from each text. Moreover, these early studies do not use any kind of test for statistical significance. Hård (1981) uses a very large corpus of three-verb complexes but ignores those with only two verbs altogether. Ebert (1981, 1998) treats only two-verb clusters and only in writings from Nuremberg, and Reifsnnyder (2003) does the same for Augsburg. Bies (1996) looks at two-verb clusters from a broader geographic distribution but does not give detailed information on dialect differences. Finally, only Ebert (1981, 1998) pays serious attention to the factors that favor particular orders.

In attempting to establish linguistic factors that affect word order in the VC, the following factors are discussed by more than one of these studies: syntagm type, rhythm, extraposition, prefix type, dialect, sociolinguistic factors, and Latin influence. However, no study to date has tested all of these factors against each other using a large corpus and sophisticated statistical tools. The historical studies presented in Chapters 2 and 3 attempt to fill this gap in the research by including a wide variety of prose texts from many dialects, addressing clusters of two and three verbs, and statistically testing multiple linguistic and social factors.

1.2.3 The verbal complex in contemporary German

Like the previous scholarship on word order in ENHG, studies of contemporary German verb order have focused almost exclusively on extraposition. It is relatively rare to find a description of a German dialect that gives details on the relative order of the verbs. Even rarer is a discussion of the linguistic factors that influence VC order. (Those few studies that do address these phenomena will be

discussed in detail in Chapter 4 below.) Thus the chapter on Modern German seeks to broaden the synchronic description of these orders in present-day standard and dialectal German. Moreover, since the phenomena investigated are the same as for ENHG, the study of the contemporary language allows for a better understanding of the diachronic developments involved.

1.3 Organization

The remainder of this book is organized as follows. Chapter 2 treats verb order in subordinate clauses in Middle High German (1050–1350), based on a database compiled from the *Bochumer Mittelhochdeutschkorpus*. Chapter 3 examines similar phenomena in Early New High German (1350–1650) using the *Bonner Frühneuhochdeutschkorpus*. These chapters establish the frequencies of the various word orders, the linguistic factors that favor them, and their diachronic, dialectal, and sociolinguistic distributions.

Chapter 4 covers Modern Standard German and several contemporary dialects of German. After reviewing existing descriptions of these varieties, the chapter presents three new studies: a questionnaire-based study of word order in Austrian dialects and Swabian, a more detailed questionnaire study of the effect of focus on these orders in Zurich German, and a Magnitude Estimation study of Standard German word order. This will allow a comparison with the data from MHG and ENHG.

Note that Chapters 2 through 4 are primarily descriptive in nature, and I attempt to avoid terminology that assumes a particular syntactic analysis. Therefore, purely descriptive labels such as 1-2 and 1-x-2 are used instead of the more familiar terms Verb Raising and Verb Projection Raising, which imply an analysis like that of Haegeman (1992). Likewise, in these descriptive chapters the term extraposition should not be taken to imply a specific analysis (such as rightward movement), but instead is used to simply describe the occurrence of a constituent to the right of the verbal complex.

Chapter 5 builds on the descriptive and empirical work of the previous chapters to address the theoretical aspects of this research. The two primary goals of this chapter are to establish the best analysis of German clause structure and to determine the nature of the relationship between focus, prosody, and word order in the VC. At that point, I will make more explicit assumptions about the syntax of these word orders.

Chapter 6 concludes the book, summarizing the most important findings and discussing their broader synchronic and diachronic implications for German word order.