

# The syntactic status of V-final conjunct clauses in Old English: the role of priming<sup>1</sup>

ANNA CICHOSZ 

*University of Łódź*

(Received 27 January 2023; revised 4 September 2023)

This study is a corpus-based investigation of the use of the V-final (VF) order in Old English conjunct (or coordinate) clauses. The aim of the analysis is to determine which of the two hypotheses formulated in earlier studies of the subject finds more convincing data support in the available corpora of Old English. According to one interpretation, conjunct clauses are a subtype of main clauses, and the VF order is used in both groups to signal continuation in discourse, especially with punctual, dynamic and relatively heavy verbs. Under the other view, VF conjunct clauses are syntactically subordinate, with the coordinating conjunction blocking verb movement like a complementiser. The present study shows that while both hypotheses are descriptively adequate, the main mechanism responsible for the use of the VF order in conjunct clauses is syntactic priming, with the VF order activated by a trigger clause (usually subordinate) and spreading to the following conjunct clause(s), which often results in long chains of subsequent VF clauses.

**Keywords:** Old English, conjunct clause, verb-final, syntactic priming, corpus study

## 1 Introduction

Old English (OE) conjunct clauses (i.e. main clauses introduced by a coordinating conjunction, mostly *and* ‘and’ and *ac* ‘but’) have an unclear status in the syntactic accounts of the language. On the one hand, some older studies claim that OE conjunct clauses resemble subordinate clauses in their visible preference for the V-final (VF) order (Mitchell 1985: §1685; Traugott 1992: 277). On the other hand, Bech (2001, 2017) quite convincingly shows that the proportion of VF clauses among OE conjuncts is actually relatively small. Nevertheless, it is true that the VF order is more frequent in conjunct than in ordinary main clauses, and the reasons for this phenomenon are not entirely clear. Bech (2012) proposes a pragmatic or functional explanation: VF conjunct and non-conjunct main clauses appear in a similar set of discourse contexts; they attract similar verb types and the end-weight principle has an impact on their use. Since Bech’s (2012) study is based on a relatively small sample of 214 VF clauses from 9 OE texts, and her discourse analysis is based on 87 VF clauses from *The Anglo-Saxon Chronicle* and Orosius, this interesting theory calls for more data support. Zimmermann (2017) proposes a syntactic analysis of VF conjunct

<sup>1</sup> I would like to thank Ans van Kemenade for her methodological support and invaluable comments on an early version of the article, as well as Tara Struik and Erwin Komen for their help with Corpus Studio queries and Artur Bartnik and Maciej Grabski for their feedback.

clauses, claiming that OE coordinating conjunctions could sometimes occupy the same syntactic position as subordinating conjunctions, which blocks verb movement and results in the VF order, but his study does not aim to answer the question why *and* and *ac* would behave in two different ways (sometimes being pure logical connectors, and sometimes functioning as complementisers), and what factors influenced this variation. The only variable that Zimmermann (2017) identifies as significant is diachrony, since VF conjunct clauses are more frequent in early OE texts, but Cichosz (2021) shows that this result is skewed by Latin influence since early OE VF conjuncts are largely restricted to two translations, i.e. Bede's *Historia Ecclesiastica* and Orosius' *Historiae adversus paganos*. Nevertheless, even though Latin influence must be an important factor inflating the frequency of the pattern, VF conjuncts are also found in non-translated texts so foreign transfer cannot be the only explanation for the phenomenon in OE syntax in general.

All in all, the current state of research offers two interpretations of the syntactic status of OE conjunct clauses: Bech's (2001, 2012, 2017) studies suggest they should be treated as main clauses because coordination simply corresponds to the discourse functions performed by VF main clauses in general, while Zimmermann (2017), following earlier studies such as Mitchell (1985: §1685) or Traugott (1992: 277), interprets VF conjuncts as syntactically subordinate, with pragmatic factors, if present, playing a secondary role in the variation. Naturally, these two perspectives, distinct as they sound, are not mutually exclusive since the complexity of OE word and constituent order is known to be the result of an interplay between syntax and information structure (e.g. Taylor & Pintzuk 2012; van Kemenade & Westergaard 2012). Nonetheless, even if we assume that the clause-final position of the finite verb in OE conjunct clauses is neither completely dependent on pragmatic factors nor purely syntax-based, it is still important to determine whether OE VF conjunct clauses should be seen as a subtype of main or subordinate clauses.

The aim of this study is to analyse available corpus data in order to establish whether VF conjunct clauses are closer to VF main or VF subordinate clauses. The examination focuses on a few variables identified as significant in this respect on the basis of smaller-scale corpus investigations (verb weight, verb type, discourse function). In addition, the analysis explores the possibility of syntactic priming as the mechanism underlying the frequent use of the VF order in OE conjunct clauses, which makes it possible to explain the seemingly random distribution of the structure in the corpus of OE prose.

## 2 OE conjunct clauses and the V-final order

The fact that OE main and subordinate clauses show different constituent order tendencies is well known and discussed in numerous studies of OE syntax (Mitchell 1985; van Kemenade 1987; Pintzuk 1999; Fischer *et al.* 2000; Ringe & Taylor 2015). In general, OE has been compared to modern West Germanic V2 languages: 'Whereas main clauses often have word orders that are reminiscent of the Verb Second (V2) property,

subordinate clauses have frequent verb-final orders' (Haeberli & Ihsane 2016: 502). After many years of thorough, data-driven research we know that the resemblance of OE to its modern Germanic cousins is limited since the OE V2 has its specificity (van Kemenade & Westergaard 2012), and it is not impossible to find a VF main clause in OE: even though the pattern is 'generally on the low side' (Ringe & Taylor 2015: 406), its frequency 'is much higher than previously acknowledged' (Pintzuk & Haeberli 2008: 367). Nevertheless, the asymmetry between main and subordinate clauses is an established fact. What we do not know, however, is the place of OE conjunct clauses in this dichotomy.

Fischer *et al.* (2000: 53) report that 'although a small number of main clauses have no Verb-Second ... the number of coordinate main clauses lacking it is far greater (even ones starting with a topic) and they often have the verb-final orders usually associated with subordinate clauses'. Recently, however, Bech's (2017: 5) investigation of the entire YCOE corpus of OE prose has shown that 'conjunct clauses are more frequently verb-final than main clauses are, but that is different from saying that they are frequently verb-final' (in her study only 11 per cent of OE conjunct clauses are reported to be VF). According to Bech's earlier small-scale study (2012: 74–5), there are four factors promoting the use of VF in OE main declarative clauses, including conjuncts:

- Information structure: In VF main clauses the subject usually conveys given information, though it is not necessarily pronominal.
- Weight: Heavy verbs are often placed clause-finally; around 37 per cent of verbs in Bech's sample of VF (SXV) clauses have three syllables, while the result for SVX clauses is only 4.5 per cent.
- Verb type: Verbs in VF (SXV) clauses are punctual rather than durative and copula verbs are rare, while in SVX clauses they constitute around 40 per cent of the sample.
- Discourse function: While 'no clear contrast between word orders has been found' (Bech 2012: 82), VF clauses mostly fulfil a coordinating discourse function, i.e. they operate 'on the main level of the text hierarchy' (Bech 2012: 67).

In short, Bech (2012) suggests no difference between main and conjunct clauses in their use of VF. If we take Bech's (2017) larger quantitative data as the basis for the whole discussion, the difference between main non-conjunct and conjunct clauses in OE is indeed small enough for such an interpretation to be plausible. Nonetheless, the difference may be more substantial if the VF order is defined in a different way, and there are great discrepancies in the definitions of the VF order between scholars working within various theoretical frameworks, which have an impact on the interpretation of the data.

On the one hand, there are numerous studies which do not assume the existence of any derivational processes, following the what-you-see-is-what-you-get approach observed, for instance, by Construction Grammar (Goldberg 2006). For such linguists a VF clause simply has a finite verb in the absolute clause-final position. This, however, is often not enough since such VF clauses are often very short and composed of relatively light constituents, as in (1). Therefore, usually there are some additional

criteria, e.g. for Mitchell (1985: §3911), who writes about S...V instead of VF, noting that it is sometimes called ‘the subordinate order’, the element intervening between the subject and the verb must be a nominal object, a nominal or adjectival complement or a participle or infinitive, and it definitely cannot be a personal pronoun (Mitchell 1985: §3916). Thus, clauses qualifying as VF would be like (2), where a nominal object is placed between the subject and the verb, and (3), where an infinitive is the intervening phrase.

- (1) & he him þa bebead  
and he him then ordered  
‘And then he ordered him’ (GDPref\_and\_3\_[C]:13.198.3.2562)<sup>2</sup>
- (2) and þu his stemne gehyrst,  
and you his voice hear  
‘And you will hear his voice’ (+AHom\_13:146.1951)
- (3) & heora nænig to him gecyrran nolde,  
and their none to him turn not-would  
‘And none of them wanted to turn to him’ (LS\_17.2\_[MartinVerc\_18]:52.2263)
- (4) & mid blisse his gast asende,  
and with joy his spirit sent  
‘And sent his spirit with joy’ (LS\_28\_[Neot]:104.98)

For descriptive studies, the starting point for any additional restrictions, though, is the presence of a verb at the end of the clause. This is also the basis for the investigations of Bech (2001, 2012, 2017), who – while recognising the problem of defining the VF order – decided to follow Mitchell’s (1985) definitions of element order patterns to make her results comparable to older descriptive studies. Interestingly, since the subject is an obligatory element of Mitchell’s (1985) VF (SXV), this approach automatically excludes clauses without overt subjects such as (4), even if they contain relatively heavy elements. This decision may be problematic for the analysis of conjunct clauses, where subjects are regularly omitted. I will come back to this issue in section 4.1.

Generative studies, on the other hand, aim to establish the underlying structure of the OE clause, and derivational process are at the heart of the analysis. According to numerous formal studies of OE syntax, OE was a mixed OV/VO (or head-initial/head-final) language, with some of the surface orders derived from the former and some from the latter underlying structure (Pintzuk 1999, 2005; Fuß & Trips 2002). As a result, scholars working within the generative framework focus on constituent orders

<sup>2</sup> All the examples throughout the article include the YCOE identifiers, but in section 4.4, where longer context was needed, examples were taken from the *Dictionary of Old English Web Corpus* (2009) and they include DOE identifiers.

which may be used as a diagnostic for an underlying OV or VO structure, and many attested patterns turn out to be ambiguous, i.e. they may be derived by various possible movement processes from either base. Thus, the result is that in the generative approach the only clear diagnostic for an underlying VF (OV, head-final) order is represented by (3), where a non-finite verb form immediately precedes a finite verb form. The alternative arrangement, however, is not a diagnostic for a head-initial structure since it may be derived from a VF base by means of verb-raising (van Kemenade 1987), which clusters two verb forms as in (5), or its variant, known as verb-projection raising (Pintzuk 1996), which affects the whole verb phrase, e.g. a non-finite verb and its object as in (6). Even though these processes are optional in OE subordinate clauses (Haerberli & Pintzuk 2012), they do account for a large amount of data.

(5) & eowre synna beoð adylegode.  
 and your sins are destroyed  
 ‘And your sins will be destroyed’ (+ACHom\_I, 22:356.68.4368)

(6) & hæfdon micne dæl þara horsa freten  
 and had great part of the horses consumed  
 ‘And have consumed a big part of the horses’ (ChronA\_[Plummer]:894.80.1073)

The problem is that for generative linguists (5) and (6) may be interpreted as VF structures, while in a descriptive study they would never be treated as such. Next, it should be noted that generative accounts do take into consideration clauses with simple VPs, but the identification of head-final structures is assumed to be ‘more difficult’ there (Ringe & Taylor 2015: 406). Zimmermann (2017) includes in his study SXV clauses with an intervening VP-constituent such as a non-pronominal object, a non-finite verb or a particle. For Pintzuk (1999, 2005), any clause with at least two heavy pre-verbal constituents is considered VF, which indicates that (4) could safely be treated as such even though it does not contain an overt subject. Since a large number of OE conjunct clauses lack overt subjects, this approach will also be followed in this study, as explained in detail in the following section.

In short, OE conjunct clauses are viewed differently by different scholars, and the discussion becomes quite complicated as a result of the differences in our understanding of VF. This study aims to provide data which would be convincing to linguists working within different theoretical frameworks, testing the closeness between conjunct and main as well as conjunct and subordinate clauses in their use of the VF order.

### 3 Study design

The aim of the study is to determine whether OE VF conjunct clauses bear closer affinity to VF subordinate or VF main clauses. Thus, the first hypothesis tested in this study is that despite their atypical constituent order, VF conjuncts are still a subtype of main clauses. This would entail that in both conjunct and non-conjunct main clauses the clause-final

placement of the verb should be seen as a pragmatic device, signalling continuation in discourse, and since conjunct clauses are particularly well suited for this purpose, it is natural that they follow this order more willingly than non-conjunct main clauses. If this hypothesis holds, we should be able to observe a clear functional consistency of VF conjunct and main clauses, their collocability with similar verbs and verb types, and a similar impact of weight on the verb's position in the clause.

The other hypothesis to be tested is that VF order of conjunct clauses is a signal of their syntactic subordination, which entails closeness between VF conjunct and subordinate clauses. For this hypothesis to hold, the functional resemblance of VF conjuncts to VF main clauses should be limited or (perhaps) inconsistent, VF conjunct clauses should attract all sorts of verbs and verb types (or at least the same verbs and verb types as VF subordinate clauses), and the clause-final placement of the verb should be relatively insensitive to weight (or sensitive to the same degree as in subordinate clauses).

In order to determine which of these two hypotheses finds more support in the textual data, the study focuses on VF and non-VF main, conjunct and subordinate clauses extracted from the syntactically annotated *York–Toronto–Helsinki Parsed Corpus of Old English Prose* (YCOE, Taylor *et al.* 2003). The queries were written in CorpusStudio (Komen 2009) using Xquery and executed on xml versions of YCOE psd files. Next, the results, annotated for a number of features crucial for the analysis, were imported into a CESAX database (Komen 2011), which made it possible to filter them according to numerous variables discussed below.

Since it is impossible to come up with a unified treatment of VF and non-VF clauses with simple and complex VPs, the study is based on the more numerous and more evenly distributed clauses with simple VPs (initial searches revealed 784 VF conjunct clauses with simple VPs, rather evenly distributed among different texts, and 501 V-Aux conjuncts, 187 (37 per cent) of which are found in only two texts, Bede and Orosius). In order to make the results as convincing as possible, at least two heavy elements preceding the clause-final verb were necessary to treat the clause with a single VP as unambiguously VF. In this study, four types of heavy elements were selected: a nominal subject (an NP with a noun, in most cases modified by some pronouns and/or adjectives), a nominal object (the same restriction), a prepositional phrase (governing an NP with a noun) or a non-light adverb (short and frequent adverbs, such as *ða* 'then', *ðær* 'there', *eac* 'also', *eft* 'again', *na* 'not at all', *swa* 'so', *þonne* 'then', *þider* 'thither', *þanon* 'thence', *ðus* 'thus', *nu* 'now' and *þeah* 'though', were excluded). Therefore, if a clause contained a nominal subject, it was enough for it to have a nominal object or a non-light adverb preceding the clause-final verb to qualify for the study. Naturally, some other elements could also appear in the clause. Examples (7) and (8) are representative of a VF conjunct clause with a nominal subject considered in this study.

- (7) And Apollonius his hearpenægl genam  
and Apollonius his harp-plectrum took  
'And Apollonius took his harp plectrum' (ApT:16.31.333)

- (8) and se fugol sona aweg gewat;  
 and the bird soon away departed  
 ‘And the bird soon flew away’ (+ACHom\_II\_11:93.46.1899)

In the case of clauses with pronominal and null subjects, two of the three possible heavy phrases had to precede the clause-final verb, as in (9) and (10).

- (9) & hi heofon mid heora mægenum bridlodan,  
 and they heaven with their powers bridled  
 ‘And they controlled heavens with their powers’  
 (LS\_12\_[NatJnBapt[BiHom\_14]]:161.15.2047)

- (10) & to arcebiscop arwurðlice gehalgode.  
 and to archbishop honourably consecrated  
 ‘And (he) honourably consecrated (him) as archbishop’  
 (ChronE\_[Plummer]:1022.1.2061)

If the same elements were present in the clause, but the verb was not placed in the clause-final position, the clauses were classified as non-VF, as in (11)–(13) featuring a nominal subject, a pronominal subject and a null subject respectively.

- (11) and Ælfrēd his brōðor feaht wið þara eorla getruman,  
 and Alfred his brother fought against the earls’ host  
 ‘And Alfred, his brother, fought against the host of earls’ (ChronC\_[Rositzke]:872.12.660)

- (12) and he ðærrihte mid wyrnum fornumen. gewat of life;  
 and he immediately with worms taken departed of life  
 ‘And he soon died, consumed by worms’ (+ACHom\_II\_28:222.38.4911)

- (13) and geornlice leornodon heora geleafan æt Crisante  
 and eagerly learned their faith at Chrysanthus  
 ‘And (they) eagerly learned their faith from Chrysanthus’ (+ALS\_[Chrysanthus]:216.7455)

The results returned were filtered and divided into clause types (main, conjunct, subordinate) and two competing orders: VF or non-VF. In the case of clauses with nominal subjects, the study focuses on the variation between SXV and SVX (X being defined as a heavy constituent), while in clauses with null and pronominal subjects it is about the variation between (S)XXV and (S)VXX/(S)XVX. Other (minor) subject types (e.g. demonstratives and other pronouns) were not taken into account.

Among VF clauses I also included those which fulfilled all of the abovementioned conditions but the clause-final verb was immediately followed by a subordinate clause, such as (14). The logic behind this decision was that no variation was possible in such a case; the subordinate clause could not be placed anywhere else.

- (14) and gewrite on ciste alegde þæt se þe hi funde hi  
 and writing on chest placed that this who her found her  
 wurðlice bebirigde  
 honourably buried  
 ‘And (I) placed a letter on her chest, so that the person who found her would give her an  
 honourable burial’ (ApT:48.26.503)

After manual inspection of the results, a number of conjuncts with *ne* ‘nor’ were identified in the study sample. Since they are not clearly associated with *ac*- and *and*-conjuncts in the literature of the subject, they have also been excluded from the study sample.

All in all, the methodological approach followed in the study design was very restrictive since the idea behind this analysis is to provide data that would be useful and convincing to scholars working within different theoretical frameworks.

## 4 Results

### 4.1 Corpus distribution

As shown in [table 1](#) based on the whole YCOE corpus, the quantitative data confirm that while conjunct clauses differ from main clauses in their stronger preference for VF, in subordinate clauses this order is still twice as frequent.

Table 1. *General results for clauses with simple VPs*

	VF		Non-VF		All
Main	136	4.2%	3,095	95.8%	3,231
Conjunct	784	18.0%	3,575	82.0%	4,359
Subordinate	2,297	34.5%	4,353	65.5%	6,650

The tendency is similar for all the three subject types taken into account in the study ([tables 2a–2c](#)), but it is interesting to observe that conjunct clauses are rather close to main clauses when the subject is nominal (4% vs 9%), when it is pronominal the tendency for VF increases to 19 per cent, while in clauses with null subjects it soars up to 26 per cent.<sup>3</sup>

Table 2a. *General results for clauses with nominal subjects*

	VF		Non-VF		All
Main	68	3.6%	1,821	96.4%	1,889
Conjunct	138	8.8%	1,436	91.2%	1,574
Subordinate	741	30.3%	1,707	69.7%	2,448

<sup>3</sup> Nonetheless, it should be noted that all of these differences prove statistically significant.



Table 2b. *General results for clauses with pronominal subjects*

	VF		Non-VF		All
Main	45	4.4%	981	95.6%	1,026
Conjunct	202	19.0%	859	81.0%	1,061
Subordinate	838	35.3%	1,533	64.7%	2,371

Table 2c. *General results for clauses with null subjects*

	VF		Non-VF		All
Main	23	7.3%	293	92.7%	316
Conjunct	444	25.8%	1,280	74.2%	1,724
Subordinate	718	39.2%	1,113	60.8%	1,831

While it is true that the frequency of VF is highest with null subjects for all three clause types (see figure 1), the difference is most pronounced with conjunct clauses.<sup>4</sup>

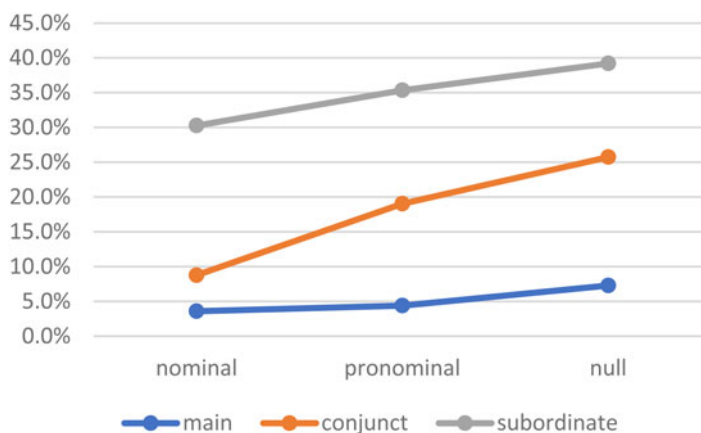


Figure 1. The proportion of VF in clauses with different subject types

All in all, the specific syntactic behaviour of conjunct clauses, placing them somewhere between ordinary main and subordinate clauses, is confirmed by the numbers.

<sup>4</sup> It is important to note that there are as many as 1,724 conjunct clauses with null subjects and two heavy clause constituents in YCOE, i.e. around 40 per cent of all conjunct clauses extracted for the study do not have an overt subject. This shows the impact of the definition of VF on the results. If we equate VF with SXV, almost a half of all conjunct clauses are automatically excluded from the investigation, which is a number high enough to seriously distort the results of any study.

Interestingly enough, in some texts conjuncts are very close to subordinate clauses; see [table 3](#). For instance in Bede, VF is present in 47 per cent of conjunct clauses and 54 per cent of subordinate clauses, while the Vercelli Homilies show practically no difference between the clause types, though the frequency of the VF order is generally on the low side (18% vs 19%).

Table 3. *Proportion of the VF order in conjunct, main and subordinate clauses in the longest YCOE texts (clauses with simple VPs)*

Text	Conjunct			Main			Subordinate		
	VF		all	VF		all	VF		all
Bede's History	95	46.6%	204	18	13.1%	137	192	54.5%	352
Catholic Homilies II	92	27.5%	334	6	1.5%	388	192	38.2%	502
Blickling Homilies	23	23.2%	99	3	3.9%	77	102	46.8%	218
Catholic Homilies I	64	21.7%	295	14	3.4%	411	255	41.1%	620
ASCh E	60	21.7%	276	4	10.3%	39	42	41.6%	101
Orosius	38	21.5%	177	2	2.1%	94	106	48.0%	221
Vercelli Homilies	15	18.3%	82	7	9.7%	72	29	19.3%	150
West-Saxon Gospels	18	13.6%	132	9	4.2%	216	69	28.0%	246
Lives of Saints	54	12.0%	449	5	2.3%	217	113	25.1%	451
Supp. Homilies <sup>5</sup>	22	11.2%	197	1	0.8%	130	68	19.8%	343
Gregory's Dialogues C	10	6.8%	147	2	2.5%	79	89	17.3%	515
Boethius	2	4.1%	49	1	1.5%	67	60	26.0%	231
Cura Pastoralis	1	1.6%	62	1	1.4%	71	124	31.4%	395
Heptateuch	4	1.4%	280	3	1.2%	250	25	11.7%	213

In most texts conjuncts are clearly between main and subordinate clauses. In some other texts, however, conjunct clauses are extremely close to main clauses, as e.g. in the Heptateuch and Cura Pastoralis (around 1–2 per cent of VF for both clause types). Thus, whatever the motivation for the use of the VF order in conjunct clauses, it cannot be universal but rather text-specific since this pattern was clearly avoided by some OE writers and translators.

The following sections present the impact of weight, lexical tendencies and the place of VF clauses in a larger context.

<sup>5</sup> One may wonder about the reasons for such a discrepancy in Ælfric's works since the proportion of VF clauses is drastically different in his Catholic Homilies I and II, Lives of Saints and Supplemental Homilies. As pointed out by one of the reviewers, some portions of the last work are edited from manuscripts which are quite late and should rather be classified as Early Middle English. This study takes into account all YCOE texts but of course we must realise that this textual material is not perfect and some of the variation may be explained by its specificity, including the discrepancy between the assumed date of composition and the date of the corresponding manuscript.

#### 4.2 Weight

For Bech (2012), weight of the verb is one of the crucial factors promoting the use of the VF order in main and conjunct clauses, and weight in general is recognised as an important variable influencing word and constituent order in OE (Mitchell 1985; Pintzuk & Taylor 2006). Table 4 shows that length of the finite verb (measured in number of characters) has a very clear impact on the order of clauses regardless of clause type.

Table 4. *The average length of the finite verb in all the analysed groups of clauses*

	Main			Conjunct			Subordinate		
	VF	non-VF	diff	VF	non-VF	diff	VF	non-VF	diff
Verb length	6.97	5.46	1.51	7.06	5.87	1.19	6.78	5.87	0.91

It turns out that in VF main, conjunct and subordinate clauses the verb is visibly longer than in non-VF contexts, and this difference (though relatively largest in main and smallest in subordinate clauses) proves statistically significant in all three cases (independent samples T-Test,  $p < 0.001$ ). Thus, even though Bech's (2012) observation is confirmed beyond any doubt, it does not help us decide whether VF conjunct clauses are closer to VF main or to VF subordinate clauses since subordinates follow the same tendency as main clauses, placing the finite verb at the end more eagerly if the verb is relatively heavy. Examples (15)–(17) illustrate the typical clause-final placement of relatively long verb forms for all the clause types.

(15) And Annas and Caiphas þæt loc geinseglodon  
 and Annas and Caiphas the lock sealed  
 'And Annas and Caiphas sealed the lock' (Nic\_[A]:12.1.24.212)

(16) on his Drihtenes andetnysse æfre þurhwunode.  
 on his Lord's praise always remained  
 '(He) always kept praising his Lord' (+ALS\_[Vincent]:157.7901)

(17) Ic geseo þæt ðu þurh ðinum drycræfte þas  
 I see that you through your magic the  
 tintregan gebysmerast.  
 torture mock  
 'I see that you mock these tortures with your sorcery' (+ACHom\_I, 29:423.149.5754)

In short, this part of the analysis proves inconclusive since the impact of weight does not give a clear indication of the syntactic motivation for the use of the VF order in OE

conjunct clauses. Weight turns out to be a universal phenomenon influencing all clause types in a similar way. Thus, it seems necessary to take a look at individual verbs and examine the collocational range of each clause pattern before any final conclusions are drawn.

#### 4.3 Verbs attracted to the VF order

This section is based on collocation methods used to measure the collocational range of syntactic structures, i.e. the collexeme analysis (Stefanowitsch & Gries 2003), which identifies lexical items attracted to and repulsed from the analysed construction in a statistically significant way, and the distinctive collexeme analysis (Gries & Stefanowitsch 2004), which focuses on competing structures, checking which variant is strongly preferred by which lexical element. The tests produce the so-called collocation strength measure (CollStr), which is significant at  $p < 0.01$  if the result is 3 or higher.

When only absolute frequencies are reported, the most powerful verbal collocate of the VF conjunct clause is the verb *wesan* ‘to be’ (13 occurrences), closely followed by *gewitan* ‘to depart’ (11) and *healdan* ‘to hold, to keep’ (11). Nonetheless, when the data are fed into a collexeme analysis calculator (Gries 2022), which checks this against the overall corpus frequency of the verbal lexemes, it turns out that *wesan* ‘to be’ is not attracted to the analysed pattern and its high frequency in the VF conjuncts is a by-product of its generally high frequency in YCOE (35,867 instances; see Cichosz *et al.* 2022).

Table 5 shows that the verbs strongly attracted to the analysed structure (*gewitan* ‘to depart’, *gegan* ‘to go, to happen’, *asendan* ‘to send’, *afaran* ‘to depart’, *adrifan* ‘to

Table 5. *The verbs most strongly attracted to the VF conjunct clause*

Rank	Verb	Translation	Frequency in VF	Remaining frequency	Relation	CollStr
1	<i>gewitan</i>	to depart	11	682	attraction	54.12928
2	<i>gegan</i>	to go, to happen	7	121	attraction	51.68429
3	<i>asendan</i>	to send	9	428	attraction	48.86219
4	<i>afaran</i>	to depart	5	30	attraction	46.92063
5	<i>adrifan</i>	to drive, to expel	7	185	attraction	45.94248
6	<i>gesittan</i>	to sit, to settle	6	140	attraction	40.81794
7	<i>healdan</i>	to hold, to keep	11	1,341	attraction	40.02051
8	<i>gedreccan</i>	to vex, to provoke	5	64	attraction	39.78882
9	<i>gehyran</i>	to hear, to obey	6	167	attraction	38.77026
10	<i>onfon</i>	to take, to receive	10	1,082	attraction	38.60492
11	<i>geendian</i>	to end	7	347	attraction	37.42614
12	<i>þwean</i>	to wash	5	91	attraction	36.40811
13	<i>gesettan</i>	to set, to fix	9	916	attraction	35.77054
14	<i>adræfan</i>	to drive away	5	126	attraction	33.26424
15	<i>gedælan</i>	to divide	4	56	attraction	31.13962

drive, to expel') are indeed dynamic and punctual, and many of them are verbs of movement. The most frequent collocate, *wesan*, is actually repulsed from the construction with the CollStr measure of 2.02, which is significant at  $p < 0.05$ .

In the case of VF main clauses, the numbers are of course much lower given the rarity of the structure, but the strongest collocate is *cuman* 'to come' (7 occurrences), closely followed by *gewitan* 'to depart' (5), which is an interesting overlap with VF conjuncts.

Table 6. *The verbs most strongly attracted to the VF main clause*

Rank	Verb	Translation	Frequency in VF	Remaining frequency	Relation	CollStr
1	<i>gewitan</i>	to depart	5	688	attraction	34.10975
2	<i>ateon</i>	to draw out	3	168	attraction	25.74102
3	<i>cuman</i>	to come	7	4,924	attraction	25.73798
4	<i>mætan</i>	to have a dream	2	15	attraction	24.95036
5	<i>afeormian</i>	to cleanse	2	37	attraction	21.49215
6	<i>gelipigian</i>	to soothe	2	50	attraction	20.31731
7	<i>gebyncan</i>	to seem, to occur	2	97	attraction	17.71296
8	<i>þolian</i>	to suffer	2	189	attraction	15.08112
9	<i>onfon</i>	to take, to receive	3	1,089	attraction	14.73511
10	<i>gemengan</i>	to mix, to mingle	2	276	attraction	13.58868
11	<i>gebetan</i>	to improve	2	292	attraction	13.36692
12	<i>geswutelian</i>	to declare	2	358	attraction	12.56612
13	<i>gefyllan</i>	to fill	2	594	attraction	10.58734
14	<i>læran</i>	to teach	2	830	attraction	9.293249
15	<i>sellan</i>	to give	2	2,313	attraction	5.462089

The collexeme analysis (presented in table 6) confirms the strong association between *gewitan* 'to depart' and the VF order, observed for both main and conjunct clauses and illustrated with (18)–(19). Other strong collocates of VF in main clauses are *ateon* 'to draw out', *cuman* 'to come', *mætan* 'to have a dream' and *afeormian* 'to cleanse'.

(18) Martinus se eadiga of þysum middanearde gewat;  
 Martinus the blessed of this world departed  
 'The blessed Martinus departed from this world' (+ALS\_[Martin]:1399.6895)

(19) and feor fram his geferum gewat.  
 and far from his companions departed  
 'And departed away from his companions' (LS\_8\_[Eust]:34.33)

The verbs are also mostly dynamic and punctual, so the lexemes attested in both main and conjunct VF clauses follow the tendency described in Bech (2012). Subordinate clauses,

however, diverge from this pattern, showing no clear semantic limitation as to the verbal collocates appearing in the VF structure.

Table 7. *The verbs most strongly attracted to the VF subordinate clause*

Rank	Verb	Translation	Frequency in Vf	Remaining frequency	Relation	CollStr
1	<i>habban</i>	to have	68	5,941	attraction	156.5233
2	<i>underfon</i>	to receive	30	763	attraction	136.2706
3	<i>becuman</i>	to become, to happen	29	850	attraction	123.9751
4	<i>gehyran</i>	to hear, to obey	36	1,659	attraction	123.6826
5	<i>healdan</i>	to hold, to keep	33	1,319	attraction	122.014
6	<i>onfon</i>	to take, to receive	28	1,064	attraction	106.1
7	<i>cuman</i>	to come	49	4,882	attraction	101.4818
8	<i>weaxan</i>	to grow	19	332	attraction	99.69444
9	<i>lufian</i>	to love	26	1,084	attraction	94.02995
10	<i>gehealdan</i>	to hold, to keep	21	770	attraction	80.91323
11	<i>gefremman</i>	to make	15	259	attraction	79.01948
12	<i>gebetan</i>	to improve	15	279	attraction	76.90893
13	<i>gesecan</i>	to seek	14	221	attraction	76.12025
14	<i>þeowian</i>	to serve	14	228	attraction	75.29461
15	<i>libban</i>	to live	17	516	attraction	71.47861
16	<i>wyrcean</i>	to work, to make	22	1,338	attraction	64.35887
17	<i>began</i>	to bow, to begin	12	209	attraction	63.00435
18	<i>nabban</i>	to not have	17	732	attraction	60.40937
19	<i>wesan</i>	to be	120	35,747	attraction	59.4457
20	<i>secan</i>	to seek	16	645	attraction	58.80003

Table 7 shows that these are both very dynamic and punctual verbs such as *underfon* ‘to receive’, *becuman* ‘to become, to happen’, *onfon* ‘to take’ or *cuman* ‘to come’ and stative and durative verbs such as *habban* ‘to have’, *lufian* ‘to love’ or even *wesan* ‘to be’, with the latter group illustrated by (20)–(21).

(20) Secgge ic þe nu eac þæt ic on sundrum þa stowe  
 say I you now also that I especially the places  
 her on eorðan lufige  
 here on earth love  
 ‘I am telling you now also that I especially love the places here on earth’  
 (LS\_25\_[MichaelMor[BiHom\_17]]:201.70.2565)

(21) & hig wundredon be his lare, forþam his spæc on anwealde wæs.  
 and they wondered by his teaching because his speech on power was  
 ‘And they wondered about his teaching because his speech was powerful’ (Lk\_  
 [WSCp]:4.31.3858)

Such examples are much more difficult to find in main and conjunct VF clauses, though a careful comparison<sup>6</sup> of a larger group of verbs attracted to each of the three clause types revealed numerous overlaps illustrated in figure 2.

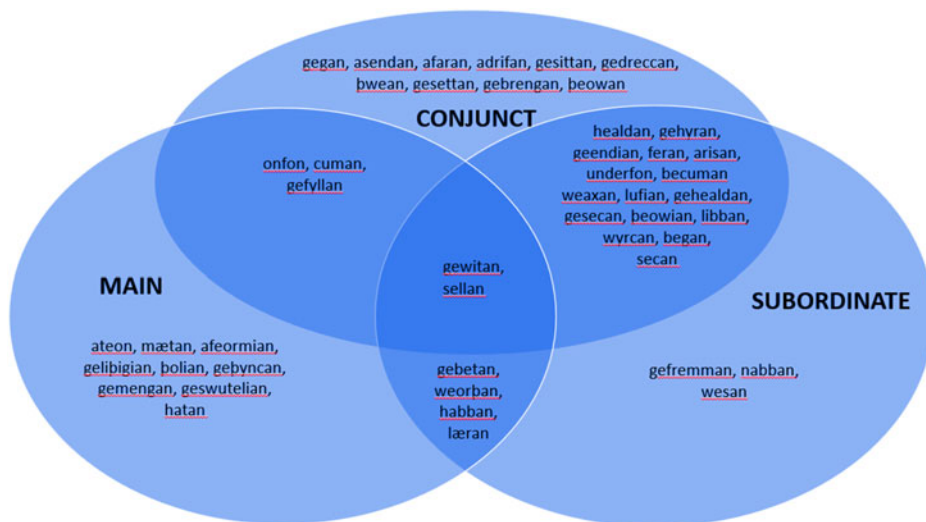


Figure 2. Overlaps in the verbs attracted to the VF pattern (see Appendix for a translated version)

When a larger number of verbs is taken into account, the tendency described by Bech (2012) becomes less clear since the shared collocates of conjunct and subordinate VF clauses include *lufian* ‘to love’ and *libban* ‘to live’, while main and subordinate clauses both attract *habban* ‘to have’, but it is true that all the verbs illustrated in the graph are predominantly non-stative and non-durative. What is more, despite numerous shared verbal lexemes, *wesan* remains a specific collocate of the VF subordinate clause, repulsed from the VF conjunct and main clauses.

Nonetheless, the picture is not complete yet. So far, we have only looked at VF structures, but there is another test which may shed more light on the situation, i.e. the distinctive collexeme analysis, which compares the frequency of lexemes between competing structures, checking which of them are preferred by either variant. In this case, the test allows us to model the competition between VF and non-VF order in particular clause types, as illustrated by tables 8a–8c (the rows where VF is the preferred variant are shown in bold to make the results clearer).

<sup>6</sup> I took 20 most significantly attracted verbs from each group of clauses and cross-checked them.

Table 8a. *Results of the distinctive collexeme analysis for conjunct clauses (20 most significant results)*

Rank	Verb	Translation	Frequency in VF	Frequency in non-VF	Preference	CollStr
1	<i>fon</i>	to take	1	176	non-VF	62.4034
2	<i>wesan</i>	to be	13	205	non-VF	28.49645
3	<i>beon</i>	to be	0	68	non-VF	27.20109
4	<i>habban</i>	to have	5	116	non-VF	21.9492
5	<b><i>afaran</i></b>	<b>to depart</b>	<b>5</b>	<b>0</b>	<b>VF</b>	<b>17.18211</b>
6	<i>licgan</i>	to lie	2	68	non-VF	15.84103
7	<b><i>gedreccan</i></b>	<b>to vex</b>	<b>5</b>	<b>1</b>	<b>VF</b>	<b>12.16968</b>
8	<b><i>þwean</i></b>	<b>to wash</b>	<b>5</b>	<b>1</b>	<b>VF</b>	<b>12.16968</b>
9	<i>weorþan</i>	to become	0	30	non-VF	11.94216
10	<i>cweþan</i>	to say	3	62	non-VF	10.68483
11	<b><i>gegodian</i></b>	<b>to bestow</b>	<b>3</b>	<b>0</b>	<b>VF</b>	<b>10.30296</b>
12	<b><i>ymsittan</i></b>	<b>to circumcise</b>	<b>3</b>	<b>0</b>	<b>VF</b>	<b>10.30296</b>
13	<i>niman</i>	to take	2	51	non-VF	10.14362
14	<b><i>adræfan</i></b>	<b>to drive away</b>	<b>5</b>	<b>2</b>	<b>VF</b>	<b>9.595053</b>
15	<b><i>gedælan</i></b>	<b>to divide</b>	<b>4</b>	<b>1</b>	<b>VF</b>	<b>9.132227</b>
16	<b><i>geswican</i></b>	<b>to stop</b>	<b>4</b>	<b>1</b>	<b>VF</b>	<b>9.132227</b>
17	<b><i>gebiddan</i></b>	<b>to pray</b>	<b>6</b>	<b>4</b>	<b>VF</b>	<b>8.740608</b>
18	<b><i>geendian</i></b>	<b>to end</b>	<b>7</b>	<b>6</b>	<b>VF</b>	<b>8.486701</b>
19	<i>slean</i>	to kill	0	21	non-VF	8.349921
20	<b><i>herian</i></b>	<b>to praise</b>	<b>5</b>	<b>3</b>	<b>VF</b>	<b>7.780325</b>

Table 8b. *Results of the distinctive collexeme analysis for main clauses (10 most significant results)*

Rank	Verb	Translation	Frequency in Vf	Frequency in non-VF	Preference	CollStr
1	<i>wesan</i>	to be	1	365	non-VF	26.41311
2	<b><i>gewitan</i></b>	<b>to depart</b>	<b>5</b>	<b>7</b>	<b>VF</b>	<b>15.93165</b>
3	<b><i>ateon</i></b>	<b>to draw out</b>	<b>3</b>	<b>1</b>	<b>VF</b>	<b>14.52714</b>
4	<b><i>geþyncan</i></b>	<b>to seem</b>	<b>2</b>	<b>0</b>	<b>VF</b>	<b>12.61225</b>
5	<b><i>mætan</i></b>	<b>to dream</b>	<b>2</b>	<b>0</b>	<b>VF</b>	<b>12.61225</b>
6	<i>cweþan</i>	to say	0	120	non-VF	10.76483
7	<i>beon</i>	to be	0	118	non-VF	10.58188
8	<b><i>afeormian</i></b>	<b>to cleanse</b>	<b>2</b>	<b>1</b>	<b>VF</b>	<b>8.879865</b>
9	<b><i>gelipigian</i></b>	<b>to soothe</b>	<b>2</b>	<b>1</b>	<b>VF</b>	<b>8.879865</b>
10	<b><i>gefyllan</i></b>	<b>to fill</b>	<b>2</b>	<b>2</b>	<b>VF</b>	<b>7.240503</b>



Table 8c. *Results of the distinctive collexeme analysis for subordinate clauses (20 most significant results)*

Rank	Verb	Translation	Frequency in VF	Frequency in non-VF	Preference	CollStr
1	<i>wesan</i>	to be	120	499	non-VF	75.62136
2	<i>beon</i>	to be	20	176	non-VF	64.05389
3	<b><i>gedon</i></b>	<b>to do</b>	<b>16</b>	<b>1</b>	<b>VF</b>	<b>27.32595</b>
4	<i>habban</i>	to have	68	230	non-VF	20.24489
5	<b><i>gefremman</i></b>	<b>to make</b>	<b>15</b>	<b>3</b>	<b>VF</b>	<b>18.26416</b>
6	<b><i>gehealdan</i></b>	<b>to hold</b>	<b>21</b>	<b>10</b>	<b>VF</b>	<b>14.20684</b>
7	<b><i>gebetan</i></b>	<b>to improve</b>	<b>15</b>	<b>5</b>	<b>VF</b>	<b>13.6782</b>
8	<b><i>began</i></b>	<b>to go, to turn</b>	<b>12</b>	<b>3</b>	<b>VF</b>	<b>13.07376</b>
9	<i>nesan</i>	to not be	5	39	non-VF	12.59584
10	<b><i>þeowian</i></b>	<b>to serve</b>	<b>14</b>	<b>5</b>	<b>VF</b>	<b>12.13809</b>
11	<b><i>weaxan</i></b>	<b>to grow</b>	<b>19</b>	<b>10</b>	<b>VF</b>	<b>11.56068</b>
12	<i>cweþan</i>	to say	3	29	non-VF	11.08672
13	<i>weorþan</i>	to become	10	49	non-VF	9.160827
14	<b><i>geendian</i></b>	<b>to end</b>	<b>13</b>	<b>6</b>	<b>VF</b>	<b>9.052121</b>
15	<b><i>gesecan</i></b>	<b>to seek</b>	<b>14</b>	<b>7</b>	<b>VF</b>	<b>8.993669</b>
16	<b><i>underfon</i></b>	<b>to take</b>	<b>30</b>	<b>26</b>	<b>VF</b>	<b>8.545562</b>
17	<b><i>abregdan</i></b>	<b>to move</b>	<b>4</b>	<b>0</b>	<b>VF</b>	<b>8.508667</b>
18	<b><i>behreowsian</i></b>	<b>to repent</b>	<b>4</b>	<b>0</b>	<b>VF</b>	<b>8.508667</b>
19	<i>deman</i>	to deem	0	10	non-VF	8.482977
20	<i>tihtan</i>	to urge	0	10	non-VF	8.482977

One basic observation to be made on the basis of the data is that while punctual non-durative verbs are not consistent in their preferences (e.g. *cweþan* ‘to say’ prefers the non-VF order, while *geendian* ‘to end’ selects VF), the VF pattern is almost never preferred by stative durative verbs regardless of clause type. In order to highlight the striking lexical similarities between the clause types, tables 9 and 10 group the verbs which most significantly prefer one variant over the other.

Table 9. *Verbs preferring the VF over the non-VF order in particular clause types*

Conjunct	Main	Subordinate
1 <i>afaran</i> ‘to depart’	<i>gewitan</i> ‘to depart’	<i>gedon</i> ‘to do’
2 <i>gedreccan</i> ‘to vex’	<i>ateon</i> ‘to draw out’	<i>gefremman</i> ‘to make’
3 <i>þwean</i> ‘to wash’	<i>geþyncan</i> ‘to seem, to occur’	<i>gehealdan</i> ‘to hold’
4 <i>gegodian</i> ‘to bestow’	<i>mætan</i> ‘to have a dream’	<i>gebetan</i> ‘to improve’
5 <i>ymbsittan</i> ‘to circumcise’	<i>afeormian</i> ‘to cleanse’	<i>began</i> ‘to go, to turn’

Table 10. *Verbs preferring the non-VF over the VF order in particular clause types*

	Conjunct	Main	Subordinate
1	<i>fon</i> 'to take'	<i>wesan</i> 'to be'	<i>wesan</i> 'to be'
2	<i>wesan</i> 'to be'	<i>cweþan</i> 'to say'	<i>beon</i> 'to be'
3	<i>beon</i> 'to be'	<i>beon</i> 'to be'	<i>habban</i> 'to have'
4	<i>habban</i> 'to have'	<i>getacnian</i> 'to signify'	<i>nesan</i> 'to not be'
5	<i>licgan</i> 'to lie'	<i>habban</i> 'to have'	<i>cweþan</i> 'to say'

It is quite striking that in all the three clause types punctual and dynamic verbs show the strongest preference for the VF order, while stative and durative verbs such as *wesan* 'to be', *beon* 'to be' and *habban* 'to have' belong to the strongest collocates of non-VF. Interestingly, despite the general attraction of *wesan* to the VF subordinate clause, when the choice is limited to VF and non-VF, the lexeme shows definite preference for the latter. Thus, the lexical distance between main, conjunct and subordinate VF clauses is largely diminished: they all seem to favour punctual and dynamic verbs and clearly disprefer statives.

All in all, the analysis shows that the lexical preferences of verbs observed in VF main, conjunct and subordinate clauses are strikingly similar, which means that collocational range is not a factor that may help us determine whether the OE VF conjunct clauses are closer to main or subordinate clauses following the same order.

#### 4.4 *Place in discourse and syntactic priming*

So far, the factors taken into account in the analysis have failed to answer the basic research question of this study, i.e. whether the VF order is used in conjunct clauses in a way similar to main or subordinate clauses. The last variable which was expected to provide some hints as to the syntactic status of VF conjuncts was discourse function, which was supposed to be similar for VF main and conjunct clauses (Bech 2012). Such a detailed analysis of function required a more qualitative approach. For this purpose, I have extracted samples of VF and non-VF conjunct and main clauses from each text where the proportion of the VF order in conjunct clauses was higher than 15 per cent (see table 3): Bede's History, Catholic Homilies I and II, Blickling Homilies, the Anglo-Saxon Chronicle E, Orosius and Vercelli Homilies. The samples were supposed to consist of 10 clauses from 4 clause types (conjunct VF, conjunct non-VF, main VF and main non-VF), i.e. 40 clauses per text, but this approach turned out to have its limitations in the case of VF main clauses since most of the texts showed fewer instances of the pattern, so the overall number of VF main clauses taken into account in the qualitative analysis is 42 instead of the expected 70 (see tables 12 and 14).

Since the basis of this investigation is Bech's (2012) observation that VF conjunct and non-conjunct main clauses function in a similar way in OE discourse, the same methodology was followed in this study, with the analysis based on the Segmented

Discourse Representation Theory (Asher & Lascarides 2003; Asher & Vieu 2005). Accordingly, the analysed clauses were categorised as representing coordinating or subordinating discourse relations. In the former case, the clause belongs to the main line of narrative, pushing the story forward. In the latter, it is placed in a substructure of the text, presenting background, providing additional information, comments or explanations. Even though Bech (2012: 81–2) admits that there is no straightforward relation between word order and discourse structure in OE, her study shows that VF clauses rarely represent subordinating relations: their basic function is to continue and develop the main storyline.

As shown in tables 11 and 12, the analysis confirms both Bech's (2012) findings and her reservations: while VF conjunct and main clauses are indeed used to introduce events from the main line of narration, they are hardly exceptional in this respect since this is the main function of the great majority of all clauses taken into account in the analysis.

Table 11. *Discourse function of VF and non-VF conjunct clauses*

	VF conjunct clauses			Non-VF conjunct clauses		
	coordinating	subordinating	all	coordinating	subordinating	all
Bede's History	5	5	10	7	3	10
Catholic Homilies II	10	0	10	9	1	10
Blickling Homilies	9	1	10	10	0	10
Catholic Homilies I	8	2	10	8	2	10
ASCh E	7	3	10	9	1	10
Orosius	9	1	10	7	3	10
Vercelli Homilies	8	2	10	9	1	10
Whole sample	56 (80.0%)	14 (20.0%)	70	60 (85.7%)	10 (14.3%)	70

Table 12. *Discourse function of VF and non-VF main clauses*

	VF main clauses			Non-VF main clauses		
	coordinating	subordinating	all	coordinating	subordinating	all
Bede's History	7	3	10	8	2	10
Catholic Homilies II	6	0	6	9	1	10
Blickling Homilies	3	0	3	8	2	10
Catholic Homilies I	10	0	10	9	1	10
ASCh E	3	1	4	7	3	10
Orosius	2	0	2	9	1	10
Vercelli Homilies	7	0	7	10	0	10
Whole sample	38 (90.5%)	4 (9.5%)	42	60 (85.7%)	10 (14.3%)	70

Therefore, even though there is a functional similarity between VF conjunct and non-conjunct main clauses, it is not a convincing discriminator since it transpires that in some texts or text types (especially clearly narrative texts such as chronicles, as admitted by Bech 2012: 81), subordinating discourse relations are underrepresented and the main storyline is developed by a number of different constituent order patterns.

Nonetheless, while the initial aim of this qualitative investigation was to inspect the discourse function of VF clauses, what I noticed quite quickly looking at the clauses in larger context was a striking tendency of VF structures to accumulate in one passage. Example (22) is representative of the phenomenon, with all clause-final finite verbs highlighted.

- (22) & þa hæðenan on Norðhymbrum **hergodon**  
 and the heathen on Northumbria plundered  
 & Ecgferðes mynster æt Donemuþe **berefodon**  
 and Ecgferth's monastery at Donmouth raided  
 & þær heora heretogena sum ofslægen **wearð**,  
 and there their leaders' some killed were  
 & eac heora scipu sume þurh oferweder wurdon tobrocene  
 and also their ships' some through storm were broken  
 & heora feala þær **adruncon**,  
 and them many there drowned  
 & sume cuce to þam stæðe **comon**  
 and some alive to the shore came

'And the pagans plundered Northumbria and raided Ecgferth's monastery at Donmouth and some of their leaders were killed there and also some of their ships were destroyed by the storm and many of them drowned and some came to the shore alive' (cochronE,ChronE\_ [Plummer]:794.7.901)

This huge stacking of VF clauses in certain fragments of various prose texts suggests syntactic priming as a possible mechanism strengthening the use of the VF order in the investigated group of clauses.

Priming is a well-known phenomenon according to which speakers tend to repeat syntactic structures that they have recently heard or produced, and it has been convincingly supported with experimental evidence (Hilpert 2019: 146). In other words, if syntactic alternatives exist, the speaker's choice is affected by the structure they have used or heard before (Reitter *et al.* 2011) since 'the more frequently a node or relation is activated, the more readily it may become activated in the future' (Traugott & Trousdale 2013: 54–5). In order to check if the VF order could have been primed by a preceding VF clause, I have looked at all the clauses (regardless of type, i.e. including subordinates) directly preceding the sampled clauses, and did the same for the control group of non-VF clauses to check if any interesting differences surface. Only clauses placed immediately before the investigated clause were taken into account, though of course priming effects may be more long lasting (Reitter *et al.* 2011).

Table 13. *The order of clauses directly preceding VF and non-VF conjunct*

Text	VF conjunct			Non-VF conjunct		
	preceded by VF		all	preceded by VF		all
Bede's History	7	70.0%	10	3	30.0%	10
Catholic Homilies II	5	50.0%	10	2	20.0%	10
Blickling Homilies	9	90.0%	10	1	10.0%	10
Catholic Homilies I	3	30.0%	10	1	10.0%	10
ASCh E	5	50.0%	10	2	20.0%	10
Orosius	8	80.0%	10	1	10.0%	10
Vercelli Homilies	1	10.0%	10	3	30.0%	10
Whole sample	38	54.3%	70	13	18.6%	70

As shown in table 13, the difference between VF and non-VF clauses in the proportion of preceding VF clauses<sup>7</sup> is quite striking in most of the analysed texts. Only the Vercelli Homilies do not follow this tendency, but let us recall that in this text the frequency of both conjuncts and subordinates following the VF order is relatively low (see table 3), which means that priming could not have played an important role in this text because the number of VF trigger clauses is limited. Regardless of this exception, for the whole dataset shown in table 13 (N=140) the Fisher exact test confirms that the difference between VF and non-VF conjuncts with respect to the proportion of preceding VF clauses is highly significant ( $p < 0.00001$ ).<sup>8</sup> What the analysis shows is that a VF conjunct clause is more likely to be preceded by a VF clause (of any type) than a non-VF clause, and (23)–(26) are relevant examples of the phenomenon. The clause in bold is one of the sampled clauses; the preceding clause-final verb is underlined.

- (23) Ge eac monige weallas mid seofon & fiftægum torran gehruron  
 and also many walls with seven and fifty towers destroyed  
 & gefeollan: & swylce eac monige oðre ceastre tohrorene  
 and fell and likewise many other cities fallen  
wæron. & **se hunger & se wolberenda stenc þære lyfte**  
 were and the hunger and the pestiferous smell of the air  
**monige þusendo monna & neata fordilgade & fornam.**  
 many thousand men and animals destroyed and took  
 'And also many walls with fifty-seven towers were destroyed and fell down, and likewise many other cities were fallen. And the hunger and pestiferous smell of the air killed many thousand men and animals' (Bede 1, 015600 (11.48.14)–015700 (11.48.16))

<sup>7</sup> The preceding clause was classified as VF on the basis of surface order, i.e. when a finite verb form was in the clause-final position, immediately preceding the clause under analysis.

<sup>8</sup> The test was run on a 2x2 contingency table (38 VF conjuncts preceded by VF, 32 VF preceded by non-VF, 13 non-VF preceded by VF and 57 non-VF preceded by non-VF), odds ratio = 5.1401525.

(24) Hwæt ða cuðberhtus æfter þæs engles lare his cneow  
 what then Cuthbert after the angels' instruction his knee  
beðode. **and he sona gesundfull his færeldes breac.**  
 warmed and he soon healthy his journey broke  
 'What then, Cuthbert warmed his knee according to the angels' instructions and he soon,  
 healthy, started his journey' (Catholic Homilies II, 001500 (82.44))

(25) Bis is se ilca þe þu longe for his deape plegode,  
 this is the same which you long for his death played  
**& þu us æt endestæfe mycel herereaf gehete.**  
 and you us at end great spoil promised  
 'This the same one for whose death you have long strived and you promised us great spoil at  
 the end' (Blickling Homilies, 002100 (45))

(26) Æfter þæm wæs þæt Sabinisce gewinn, & him Romane  
 after that was the Sabine victory and them Romans  
 þæt swiðe ondrædende wæron, & him gesetton  
 that much afraid were and them set  
 hiran ladteow þonne hiera consul wære, þone ðe hie tictatores  
 their leader that their consul was that which they dictator  
heton, **& hie mid þæm tictatore micelne sige hæfdon.**  
 called and they with the dictator great victory had  
 'Then there was a victory against the Sabines, whom the Romans feared a lot, and they chose a  
 leader, who was their consul, called a dictator, and they enjoyed a great victory under him'  
 [Orosius 1, 005700 (4.41.12)]

A similar tendency can be observed for main clauses shown in [table 14](#) (and again with the Vercelli Homilies as the only exception), and the difference between VF and non-VF main clauses in this respect is confirmed by the Fisher exact test ( $p < 0.00001$ ).<sup>9</sup>

Examples (27)–(29) illustrate the phenomenon.

(27) Onfoh þu eorþe lichaman of þinum lichaman genumen, þæt  
 accept you earth body of your body taken that  
 þu hine eft agyfan mæge, þonne hine God liffæste.  
 you it again restore may when it God makes alive  
**Se gast up to heofon gesohte.**  
 the spirit up to heaven sought  
 'Accept, Earth, the body taken out of your body so that it may be restored when God makes it  
 alive again. The spirit went up to seek heaven.' (Bede 1, 000400 (1.94.14)–000500 (1.94.15))

<sup>9</sup> N=112 (24 VF preceded by VF, 18 VF preceded by non-VF, 9 non-VF preceded by VF and 61 non-VF preceded by non-VF), odds ratio = 8.8211084.

Table 14. *The order of clauses directly preceding VF and non-VF main clauses*

Text	VF main			Non-VF main		
	preceded by VF		all	preceded by VF		all
Bede's History	5	50.0%	10	1	10.0%	10
Catholic Homilies II	5	83.3%	6	0	0%	10
Blickling Homilies	1	33.3%	3	2	20.0%	10
Catholic Homilies I	7	50.0%	10	1	10.0%	10
ASCh E	3	75.0%	4	1	10.0%	10
Orosius	2	100.0%	2	1	10.0%	10
Vercelli Homilies	1	14.3%	7	3	30.0%	10
Whole sample	24	57.1%	42	9	12.8%	70

(28) Sume wimmen of ure geferrædene eodon to his byrgene. and þær  
 some women of our congregation went to his tomb and there  
 englas gesawon. ðe cyddon þæt he leofode; **Sume**  
 angels saw who said that he lived some  
**eac ure geferan to ðære byrgene comon.**  
 also our companions to the tomb came  
 'Some women from our congregation went to his tomb and there they saw angels, who said  
 that he lived. Also some of our companions came to the tomb.' (Catholic Homilies II, 000700  
 (161.14)]-000800 (161.16))

(29) Dis wæs swiðe geswincfull gear þurh manigfealð ungyld &  
 this was very troublesome year through many excessive taxes and  
 þurh mycele renas þe ealles geares ne ablunnon; **forneah ælc tilð**  
 through great rains which all year not desisted almost all cultivation  
**on mersclande forferde.**  
 on marshland passed away  
 'This was a very difficult year because of many excessive taxes and great rains which  
 continued throughout the year and almost all the crops were lost in the damp.'  
 [Anglo-Saxon Chronicle E, 155300 (1098.11)]

In general, priming is in line with Pintzuk (1999: 224), who observed that VF conjuncts are more frequent when the first of the conjoined clauses is VF as well, but the present interpretation goes even further, suggesting no type restriction on the preceding VF clause. Considering the difference in the proportion of VF clauses between main and conjunct clauses, it is not enough for the second conjunct to repeat the order of the first main clause since we do not have enough VF main clauses to trigger such a high number of VF conjunct clauses. If we assume (as I do in this study) that subordinates could also be triggers and that the clauses did not have to be syntactically linked (i.e. it

is enough to have any VF structure preceding the conjunct), the quantitative data make more sense, especially since the impact of preceding clauses could also be strengthened by transfer from Latin, where the VF order was the default option in most texts.<sup>10</sup>

Naturally, the question is why syntactic priming is more readily applied to conjunct than to main clauses. If the phenomenon operated without any restrictions, we should expect a similar proportion of VF in both clause types. Here, Zimmermann's (2017) analysis may be a useful starting point. If the VF order is 'the subordinate order' related to the presence of a subordinating conjunction (complementiser) at the beginning of the clause, perhaps the priming effect is lexically limited, i.e. a lexical element in the form of a conjunction enables the order to be activated more readily. If there is no conjunction, a VF clause would mostly fail to trigger a VF structure in the following clause, hence the low number of VF non-conjunct main clauses. Since *and* and *ac*, as coordinating conjunctions, are in a sense functionally similar to subordinating conjunctions (i.e. both are used to link clauses), they could have been used or perceived by OE speakers as a viable replacement and thus also (indirectly) associated with 'the subordinate order'. This would be in line with Zimmermann's (2017) double interpretation of *and* and *ac*, which could sometimes be located in C just like subordinators. This could have happened only if speakers of OE could treat both subordinating and coordinating conjunctions as functionally related items. The potential interchangeability of coordinating and subordinating conjunctions could have been strengthened by the fact that coordinating conjunctions may also link subordinate clauses, both in contemporary (30) and Old English (31).

(30) The Minister believes that the economy is improving and (that) unemployment will soon decrease. (from Quirk *et al.* 1985: 946)

(31) Sægde him mon, þæt heo of Breotone ealonde  
 said him one that they of Britain island  
 brohte wæron, **ond** þæs ealondes bigengan swelcre  
 brought were and the island's inhabitants such  
**onsyne men wæron.**  
 face men were

'Someone told him that they were brought from the island of Britain and the inhabitants of this island were men of such countenance' (cobede, Bede\_2:1.96.13.887)

Such examples, especially if there is no overt subject in the second conjunct, would usually be interpreted as examples of VP coordination rather than clause coordination, but an alternative analysis is also an option (Huddleston & Pullum *et al.* 2002: 1348–9).

<sup>10</sup> The Vulgate would be an important exception since the text is dominated by V1 clauses (Cichosz *et al.* 2016), but the differences in the order of the Latin source text could explain some of the intertextual differences (e.g. VF is relatively infrequent in the Heptateuch, even in subordinate clauses).



Therefore, it is possible to see some analogy between examples such as (31) (with the VF conjunct subordinate clause shown in bold) and VF main conjunct clauses discussed in this article, represented by (32).

- (32) & þæs munes cnol mid þeosterlicum gehnipum eall  
 and the mountain's top with dark clouds all  
 oferhangen wæs.  
 overhung was  
 'And the top of the mountain was completely covered with dark clouds'  
 (+ACHom\_I,\_34:467.52.6722)

Whether or not either of the clause-initial conjunctions may or should be interpreted as a complementiser in C is a question that I will leave open, but the surface similarity between conjunct main and conjunct subordinate clauses is quite clear. This, in turn, could enable speakers to form a simple generalisation, associating the VF order with a clause of any type starting with a conjunction (subordinating or coordinating). Such *and-* or *ac-*subordinates could perhaps function as a bridging context, facilitating the transfer of the generally subordinate VF order to main conjunct clauses via conjunct subordinate clauses. As a result, a conjunct clause is better suited for a clause-final placement of the finite verb than a regular main clause, where no lexical element could enable such a generalisation.<sup>11</sup> Variables such as weight, verb type or type of discourse relation could make the use of the pattern more probable, but they are not the actual reasons for it, functioning rather as additional factors.

## 5 Conclusion

The aim of the investigation was to determine whether conjunct clauses show a particularly high frequency of the VF pattern because their function links them to a special subgroup of main clauses following this order (Bech 2012, 2017), or because in some contexts OE coordinating conjunctions occupy the same place as subordinating conjunctions in the clause structure and therefore VF conjuncts are syntactically subordinate (Zimmermann 2017). The analysis presented in this article shows that VF conjuncts are close to both VF main and VF subordinate clauses in their preference for longer verb forms as well as punctual and dynamic verbs (as opposed to their clear dispreference for stative and durative verbs). The study suggests that the crucial phenomenon responsible for the use of the VF order in OE conjunct clauses is syntactic priming, with the VF order activated by a trigger clause (in most cases a subordinate) and then transferred to the following conjunct clause, especially if the verb form was relatively long and the verb was not stative. Thus, it turns out that the phenomenon is psycholinguistic rather than syntactic or pragmatic, though it may of

<sup>11</sup> It should be noted that there is one small group of main clauses where the VF order is relatively frequent, i.e. main clauses introduced by the interjection *hwæt* 'what' (Walkden 2013; Cichosz 2018). Since *hwæt* could also introduce a subordinate clause, this interpretation could perhaps even be extended to *hwæt*-clauses.

course be interpreted syntactically as the presence of *and* or *ac* in C, which is primed by a preceding clause, and it does not exclude some additional and more subtle pragmatic or functional motivations, which would require further, in-depth qualitative analyses of a larger number of VF conjuncts in various OE texts.

*Author's address:*

*Department of Corpus and Computational Linguistics*  
*Institute of English Studies*  
*University of Łódź*  
*ul. Pomorska 171/173*  
*90–236 Łódź*  
*Poland*  
[anna.cichosz@uni.lodz.pl](mailto:anna.cichosz@uni.lodz.pl)

#### References

- Asher, Nicolas & Alex Lascarides. 2003. *Logics of conversation*. New York: Cambridge University Press.
- Asher, Nicolas & Laure Vieu. 2005. Subordinating and coordinating discourse relations. *Lingua* 115, 591–610.
- Bech, Kristin. 2001. Word order patterns in Old and Middle English: A syntactic and pragmatic study. Unpublished PhD dissertation, University of Bergen.
- Bech, Kristin. 2012. Word order, information structure, and discourse relations: A study of Old and Middle English verb-final clauses. In Meurman-Solin *et al.* (eds.), 66–86.
- Bech, Kristin. 2017. Old truths, new corpora: Revisiting the word order of conjunct clauses in Old English. *English Language and Linguistics* 21(1), 1–25.
- Cichosz, Anna. 2018. The constituent order of *hwæt*-clauses in Old English prose. *Journal of Germanic Linguistics* 30(1), 1–42.
- Cichosz, Anna. 2021. Verb-final conjunct clauses in Old English prose: The role of Latin in translated texts. *NOWELE* 74(2), 172–98.
- Cichosz, Anna, Piotr Pęzik, Maciej Grabski, Sylwia Karasińska, Michał Adamczyk, Paulina Rybińska & Aneta Ostrowska. 2022. *A frequency dictionary of Old English prose*. Lodz: University of Lodz Press.
- Cichosz, Anna, Jerzy Gaszewski & Piotr Pęzik. 2016. *Element order in Old English and Old High German translations*. Amsterdam: John Benjamins.
- Dictionary of Old English Web Corpus*. 2009. Compiled by Antonette diPaolo Healey with John Price Wilkin and Xin Xiang. Toronto: Dictionary of Old English Project.
- Fischer, Olga, Ans van Kemenade, Willem Koopman & Wim van der Wurff. 2000. *The syntax of early English*. Cambridge: Cambridge University Press.
- Fuß, Eric & Carola Trips. 2002. Variation and change in Old and Middle English: On the validity of the Double Base Hypothesis. *Journal of Comparative Germanic Linguistics* 4, 171–224.
- Goldberg, Adele. 2006. *Constructions at work: The nature of generalization in language*. Oxford: Oxford University Press.
- Gries, Stefan Th. 2022. Coll.analysis 4.0. A script for R to compute perform collostructional analyses. <https://stgries.info/teaching/groningen/index.html> (accessed 15 January 2023).

- Gries, Stefan Th. & Anatol Stefanowitsch. 2004. Extending collocation analysis: A corpus-based perspective on 'alternations'. *International Journal of Corpus Linguistics* 9(1), 97–129.
- Haerberli, Eric & Tabea Ihsane. 2016. Revisiting the loss of verb movement in the history of English. *Natural Language & Linguistic Theory* 34(2), 497–542.
- Haerberli, Eric & Susan Pintzuk. 2012. Revisiting verb (projection) raising in Old English. In Dianne Jonas, John Whitman & Andrew Garrett (eds.), *Grammatical change: Origins, nature, outcomes*, 219–38. Oxford: Oxford University Press.
- Hilpert, Martin. 2019. *Construction grammar and its application to English*. Edinburgh: Edinburgh University Press.
- Huddleston, Rodney & Geoffrey K. Pullum et al. 2002. *The Cambridge grammar of the English language*. Cambridge: Cambridge University Press.
- Kemenade, Ans van. 1987. *Syntactic case and morphological case in the history of English*. Dordrecht: Foris.
- Kemenade, Ans van & Marit Westergaard. 2012. Syntax and information structure: Verb-second variation in Middle English. In Meurman-Solin et al. (eds.), 87–118.
- Komen, Erwin. 2009. *Corpus Studio Manual*. Nijmegen: Radboud University Nijmegen. (Available online at [http://erwinkomen.ruhosting.nl/software/CorpusStudio/CorpStu\\_Manual.pdf](http://erwinkomen.ruhosting.nl/software/CorpusStudio/CorpStu_Manual.pdf))
- Komen, Erwin. 2011. *Cesax: Coreference editor for syntactically annotated XML corpora*. Nijmegen: Radboud University Nijmegen. (Available online at [http://erwinkomen.ruhosting.nl/software/Cesax/Cesax\\_Manual.pdf](http://erwinkomen.ruhosting.nl/software/Cesax/Cesax_Manual.pdf))
- Meurman-Solin, Anneli, María José López-Couso & Bettelou Los (eds.). 2012. *Information structure and syntactic change in the history of English*. New York: Oxford University Press.
- Mitchell, Bruce. 1985. *Old English syntax*. Oxford: Clarendon Press.
- Pintzuk, Susan. 1996. Old English verb-complement word order and the change from OV to VO. *York Papers in Linguistics* 17, 241–64.
- Pintzuk, Susan. 1999. *Phrase structures in competition: Variation and change in Old English word order*. New York: Garland.
- Pintzuk, Susan. 2005. Arguments against a universal base: Evidence from Old English. *English Language and Linguistics* 9(1), 115–38.
- Pintzuk, Susan & Eric Haerberli. 2008. Structural variation in Old English root clauses. *Language Variation and Change* 20(3), 367–407.
- Pintzuk, Susan & Ann Taylor. 2006. The loss of OV order in the history of English. In Ans van Kemenade & Bettelou Los (eds.), *The handbook of the history of English*, 249–78. Oxford: Blackwell.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech & Jan Svartvik. 1985. *A comprehensive grammar of the English language*. London: Longman.
- Reitter, David, Frank Keller & Johanna D. Moore. 2011. A computational cognitive model of syntactic priming. *Cognitive Science* 35(4), 587–637.
- Ringe, Don & Ann Taylor. 2015. *The development of Old English*. Oxford: Oxford University Press.
- Stefanowitsch, Anatol & Stefan Th. Gries. 2003. Collocations: Investigating the interaction between words and constructions. *International Journal of Corpus Linguistics* 8(2), 209–43.
- Taylor, Ann & Susan Pintzuk. 2012. Rethinking the OV/VO alternation in Old English: The effect of complexity, grammatical weight, and information status. In Terttu Nevalainen & Elizabeth Closs Traugott (eds.), *The Oxford handbook of the history of English*, 835–45. Oxford: Oxford University Press.

- Taylor, Ann, Anthony Warner, Susan Pintzuk & Frank Beths. 2003. *The York–Toronto–Helsinki Parsed Corpus of Old English Prose (YCOE)*. Department of Linguistics, University of York. Oxford Text Archive. [www-users.york.ac.uk/~lang22/YcoeHome1.htm](http://www-users.york.ac.uk/~lang22/YcoeHome1.htm)
- Traugott, Elizabeth Closs. 1992. Syntax. In Richard M. Hogg (ed.), *The Cambridge history of the English language*, vol. 1: *The beginnings to 1066*, 168–289. Cambridge: Cambridge University Press.
- Traugott, Elizabeth Closs & Graeme Trousdale. 2013. *Constructionalization and constructional changes*. Oxford: Oxford University Press.
- Walkden, George. 2013. The status of *hwæt* in Old English. *English Language and Linguistics* 17, 465–88.
- Zimmermann, Richard. 2017. Formal and quantitative approaches to the study of syntactic change: Three case studies from the history of English. Unpublished PhD dissertation, University of Geneva.

## APPENDIX

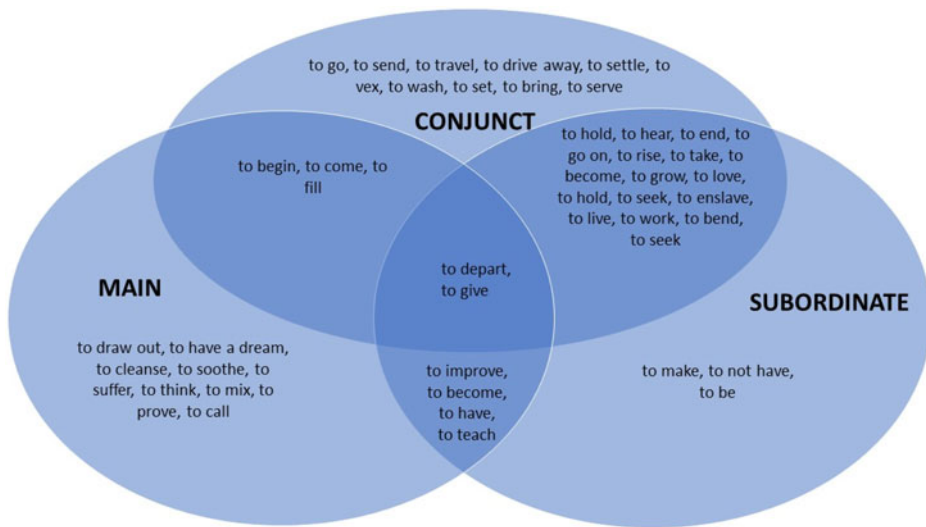


Figure 2 (translated). Overlaps in the verbs attracted to the VF pattern