THE IMPACT OF TEXT TYPE, INFORMATION STRUCTURE, AND DISCOURSE RELATIONS ON THE USE OF VERB SECOND IN MIDDLE ENGLISH: A CASE STUDY OF CHAUCER'S PROSE WORKS*

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Abstract There have been many contributions to the understanding of how and why the non-subject-initial verb second (V2) phenomenon (i.e. subjectverb inversion) declined in Middle English, yet there are few perspectives that explore the factors driving the considerable amount of intra-writer variation in V2. In particular, there is limited research on the type of text, and whether authors' syntax mirrors the weakened link between syntax and information structure that drove V2 usage in late medieval English (e.g. Bech 2001, 2014; Los 2009, 2012; van Kemenade 2012; van Kemenade & Westergaard 2012; Hinterhölzl & van Kemenade 2012). Appealing to the status of information structure in late medieval English, and briefly, the discourse relations present within the text, I argue that Chaucer's use of V2 reflects a verb movement pattern that no longer made a verbal position available based on the information-structural status of the sentence. I show that this change in non-subject-initial V2 is evidenced in three of Chaucer's prose works, and that its frequency is closely tied to the information status of the beginning of the sentence and the subject in driving inverted and non-inverted structures. I suggest that it is the nuances of text type and their rhetoric, and their interaction with the (non)-existence of information structural pressures, that accurately explains the occurrence of XVS and XSV structures. This Chaucerian V2 analysis serves as an exemplar study for understanding how texts might represent the collective impact of a range of factors on syntactic change, and the forces behind the instability of V2 in the history of English.

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1 Introduction

Prior studies have suggested that Chaucer's frequent use of V2 was a result of contact between English and Norse (Kroch & Taylor 1997; Haeberli 2002a; Eitler 2006); his family lived in East Anglia, once an area of Norse settlement, and he had an upbringing in London, which underwent significant socioeconomic growth in late medieval England. The role of audience design has also been proposed as one of the factors driving varied rates in individual authors (Eitler 2006; Eitler & Westergaard 2014). However, given recent research on the extent of Norse influence on English V2 syntax (Walkden 2021, In press; van Kemenade 2022), as well as recent work on the impact of information structure (IS) on the frequency of V2 with different types of subject (Bech 2001; Los 2009; van Kemenade & Westergaard 2012), explanations for Chaucer's use of V2 across his prose texts require some reconsideration. Furthermore, the degree to which the factor of audience design affected syntax is uncertain—the link between the familiarity or dialect of the audience and the nature of the V2 used is too broad of an association to explain why writers varied in their usage.

The purpose of this paper is to instead explore whether the nuances of text type affected V2 usage, using Chaucer's prose works as a case study, specifically: A Treatise on the Astrolabe, a handbook on astronomy; The Parson's Tale, a sermon-like text on penitence; and The Tale of Melibee, an apologue on the value of mercy. I focus on Chaucer's V2 syntax as his prose works come at a time when there is high variation in use of the V2 phenomenon, part of which was likely driven by discourse-related factors. This line of inquiry interacts with recent work on the weakening influence of IS on English V2, with both the IS status of the subject and the initial multifunctional constituent no longer playing an impactful role in discourse-linking (e.g. Los 2009; van Kemenade & Westergaard 2012; Los 2012; Los & Dreschler 2012; Los & Komen 2012; Bech 2014). In addition, I provide brief insights into how the structuring of coordinating and subordinating discourse relations (distinct from *syntactic* coordination and subordination) might tell us more about the changes in verb movement patterns in late Middle English (ME). In particular, the presence of foregrounding and backgrounding (see Asher & Lascarides 2003; Asher & Vieu 2005; and Bech 2012 on 'Segmented Discourse Representation Theory', or SDRT) could be closely linked to the type of rhetoric present within the text. Discourse relations might have an impact on the frequency of V2 structure during a time when the link between the ordering of verb and subject, and the IS status of individual syntactic elements, was weak. I show in this paper that careful examination of the status of information structure and discourse relations, in combination with texts' argumentation or rhetoric, can

reveal more about the overall stability of the V2 phenomenon in late medieval English. 1

First, I briefly outline the status of historical English verb second, up until the present-day, and assess some of the background literature on the range of factors that have been considered as influential on changes to the frequency of V2 usage in Middle English. In particular, I discuss factors related to information structure, discourse relations, dialect variation, audience, and text type (Section 2). I then examine the extent to which Chaucer's use of V2 can be attributed to the type of prose text, investigating whether information structural pressures and/or the type of discourse relations present within the text contributed to Chaucer's high variation in use of V2, referring back to the wider inconsistency in use of the phenomenon in late medieval English. In my investigation, I refer to work conducted on the loss of local anchoring - the initial constituent's ability to make specific reference to the preceding discourse – by Los et al. (2023). Los et al. utilise the 'Pentaset' (Komen, Los & van Kemenade 2023) to categorise the referential status of individual elements within the sentence, and to assess the impact of information structure on Chaucer's V2 syntax (Section 3.1). Following this examination of IS, I determine whether some of the newer uses of V2 can be explained by the type of discourse relations (whether discourse coordinating or subordinating) that link to the type of text (i.e. whether the main purposes of the text are to provide an explicit argument, or teach via a narrative) (Section 3.2). I then conclude by summarising the combined impact of information structure and discourse relations on Chaucer's use of V2 across his different types of prose works (Section 4).

In this study, I compare the frequency of cases of non-subject-initial V2 and V3 word order, given that, generally, the former order declined in favour of the latter. These structures therefore correspond to the inverted and non-inverted structures, XVS(X) vs. XSV(X).

2 Verb second in the history of English

2.1 The impact of information structure on the syntax of verb second in Old English

The difference in the frequency of use of non-subject-initial V2 in Old English (OE), with different types of subject, has been firmly established in prior re-

¹ My PhD thesis investigates the multiple interfaces that can be used to explain the overall instability of V2 in the history of English, which include the factors of information structure, discourse relations, dialect variation, and language contact (Whittle 2023). This investigation of the impact of text type on Chaucer's prose works arises from this doctoral research.

search (e.g. van Kemenade 1987; Pintzuk 1993; Fischer et al. 2000; Haeberli 2000, 2002a, 2002b; among others). There is well-known variation between the position of pronominal and nominal subjects in relation to the finite verb in OE, with "pronominal subjects [...] normally appear [ing] before rather than after the finite verb", in sentences other than those introduced by a whword, negation, or short deictic or discourse-linking adverbs such as *þa/þonne* 'then', bus 'thus', nu 'now', and swa 'so'—contexts which instead resulted in a highly frequent V2 with both subject types.² It was later found that the differences in the position of the verb depending on the type of subject were based on the information-structural (IS) status of the initial constituent and the subject, and that changes to this close link between IS and syntax contributed to the overall decline of the V2 phenomenon in English (e.g. Bech 2001, 2014; Westergaard 2009; Los 2009, 2012; Hinterhölzl 2009; Hinterhölzl & van Kemenade 2012; van Kemenade & Westergaard 2012; among others). The initial constituent in OE was multifunctional, encoding "marked and unmarked topics, as well as marked focus" (Los 2009: 99), and subjects had a referential status, exhibiting a given or familiar status (e.g. linking to a referent in the preceding discourse) or a new status (e.g. introducing a new referent to the discourse or emphasising a previously activated one). Los & Dreschler (2012: 860, citing Hinterhölzl & Petrova 2010: 319), articulate the close relationship between IS and the ordering of syntactic elements: when a familiar topic (such as an object or adverbial) is fronted, the aboutness topic and background elements – the given information – must be distinguished from the new information, which is often the nominal subject. However, when the subject itself exhibits given information, in addition to the initial object or adverbial, the verb must occur after the subject to separate given from new information. Examples (1-2) highlight the differences in ordering of the verb and subject depending on the type of subject, with the relevant parts of the sentence highlighted for IS status.

(1) [Hine GIVEN] gelæhte [unasecgendlic adl NEW] [him GIVEN] seized [unspeakable sickness NEW] 'An unspeakable sickness took hold of him'

Ælfric's Catholic Homilies I, сосатном1, 5:221.127.996³

² Each of these adverbs either mark a temporal direction in the discourse or link two pieces of discourse together to form a conclusion, and are closely linked to syntactic operations which drive verb movement to a high position within the CP.

³ Unless otherwise stated, examples were obtained from YCOE (Taylor et al. 2003) or PPCME2 (Kroch, Taylor & Santorini 2000-).

(2) [Das ping GIVEN] [we GIVEN] habbað [be him [these things GIVEN] [we GIVEN] have [about him gewritene NEW] written NEW]

'These things we have written about him'

Anglo-Saxon Chronicle E (Plummer), adapted from Fischer et al. (2000: 130)

This close relationship between syntax and IS – as highlighted by the status of the initial constituent and the subject – led to a new landing site for verb movement positioned between given and new information, and created a boundedness between levels of the discourse (Los 2012). This landing position for the verb was positioned lower than the highest C (the position for syntactic, feature-driven movement). The below tree introduces a possible structure for the different landing sites of the verb. Like Roberts (1996) and Walkden (2017), I propose that the lower landing site for IS-driven verb movement is within the lower layer of a split Complementizer Phrase (CP), named 'C1', with the landing site for syntactic verb movement as the higher layer (C2). The TP also hosts verb movement in cases of verb third (V3).

⁴ I do not delve into this topic in much detail here, but I am most inclined to agree with recent proposals suggesting the verb always moved to C in medieval Englishes, in cases of V2 word order, due to the asymmetry of use of V2 in English between main and subordinate clauses (see findings by van Kemenade 1997; Salvesen & Walkden 2017; Walkden & Booth 2020). A split CP also neatly captures the motivation for verb movement to different layers based on various information-structural pressures, such as force, focus, familiarity, and finiteness (see Rizzi 1997; Frascarelli & Hinterhölzl 2007; and Walkden 2017 for discussion of the layers of the split CP).

⁵ This proposal of verb movement to a lower level than C, in cases of V3 word order, follows work by van Kemenade & Westergaard (2012) It remains unclear as to why some types of V3 word order arose in Old English, namely those which cannot be explained by a syntactic or information structural operation. It is possible that a theory of optionality could explain the variation between two types of verb movement here (V-to-C and V-to-T). Adger's (2006) theory of 'Combinatorial Variability' accounts for why "non-deterministic variation in form with no corresponding variation in meaning" occurs in a single grammar, which might explain different patterns of V2 (XVS) and V3 (XSV). Cases of V3 could be explained by a theory of optionality by positing V-to-T movement. Specifically, an innovative V-to-T movement in English would underpin patterns whereby (1) the verb occurred after the subject when a syntactic or discourse-linking operation occurred in initial position, or (2) the verb occurred after a new subject despite an information-structural element occurring in initial position. Both given/linked and new/unlinked subjects occur above T, meaning V-to-T is a feasible movement process to have occurred in these circumstances.

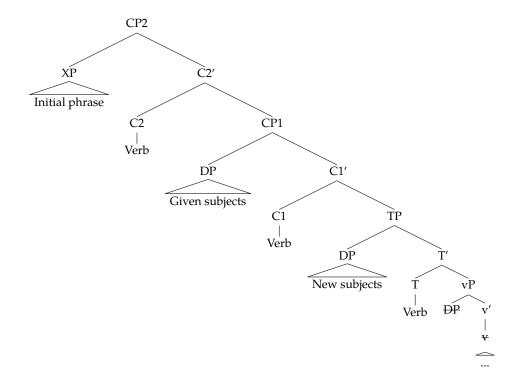


Diagram 1: Split CP proposal for verb movement, resulting in V2 or V3 word order (adapted from Walkden 2017; initially posited by Roberts 1996).

The difference between OE and other Germanic V2 languages is that not all instances of non-subject fronting led to V2 word order in OE, due to the tendencies of IS to drive the position of the verb between given and new information. The use of the V2 phenomenon then started to change in late medieval English, as the link between IS and syntax that motivated the occurrence of several cases of V2 in OE began to weaken.⁶

2.2 The forces driving change in the nature of verb second in Middle English

In late medieval English, there was much higher variation in the use of V2, meaning that the tendencies of information structure to place given before new information no longer drove the placement of the verb and subject in a

⁶ It is also possible that IS-driven V2 had already weakened by late Old English. For example, Bech (2001: 161) found that there were a number of cases of subjects with a 'low' informational value (i.e. linked to the preceding discourse) in the XVS pattern (e.g. with a frequency of 42.9% in non-conjunct clauses, and 25% in conjunct clauses). I would like to thank the reviewers of this article for pointing this finding out, and who state that research is still ongoing in this area to discover when IS-driven V2 was being lost in OE.

large number of cases. This change resulted in an increase of V2 with subjects exhibiting old information (e.g. see van Kemenade and Westergaard's 2012 study highlighting the rise of V2 with pronominal subjects, especially when the verb was an auxiliary), and a decline in V2 with subjects exhibiting new information. Examples (3-4) reflect these two changes. In (3), the hearer-old subject godd 'God' occurs after the verb forbet 'forbids'. As van Kemenade et al. (2008: 14) note, "definite expressions without an antecedent" appear in a high position "when they are associated with a strong sense of presupposition". In the Pentaset categories – as will be demonstrated in Section 3 – the referent 'God' would be categorised as an 'assumed' entity—the readership often has shared knowledge of referents occurring externally to the text. Example (3) thus represents a case of V2 which would not have been used often in OE, yet rose in frequency in the late medieval period. In (4), the newly introduced referent, Ligurgius king of Lacedomy 'Lycurgus, king of Sparta', occurs before the verb mad 'made', reflecting the transition to V3 word order, which occurred regardless of the information-structural status of the subject in the sentence.

(3) [Dis] forbet godd, hat we houhfull ne care-full ne [this] forbids God that we anxious neither care-full nor scule bien. should be

'God forbids this: we should be neither anxious nor full of cares'

Vices and Virtues I, CMVICES1, 87.1024

(4) [In bis tyme] Ligurgius king of Lacedomy mad certeyn lawes [in this time] Lycurgus king of Sparta made certain laws 'In this time, Lycurgus, king of Sparta, made certain laws'

Capgrave's Chronicles, CMCAPCHR, 35.108

In addition to the rise in the use of V3 structure, the multifunctionality of the initial constituent – which made links to the preceding discourse, but also introduced new referents – was decaying in Middle English. Los (2012: 41) makes it clear that the loss of a "dedicated first position for linking (i.e. the loss of verb second)" may have caused deictic elements to lose their specific referential status, yet equally, the "loss in functional flexibility of the first constituent" may have led to the loss of the dedicated initial position—and verb second. There appears to be a bidirectional process of either change affecting one another, leading ultimately to an increased use of non-subject-initial V3

word order, as well as the transfer of discourse-linking to an initial preverbal subject (e.g. see Los & Dreschler 2012; Komen et al. 2014).

The loss of local anchors – the ability of the initial position to link to the prior discourse – might have also led to the decline of V2. Los et al. (2023: 367) find that the use of local anchors declines much earlier than previously assumed, following the loss of the specificity of standalone demonstrative pronouns, combined with the loss of gender marking. While local anchors decline, frame-setters (containing new information, with a forward-looking perspective and an ability to advance the discourse) appear to rise in late Middle English and become the preferred initial adverbial in the face of the loss of the multifunctionality of first position (Los et al. 2023: 356). It is interesting to consider whether local anchors are being utilised in Middle English texts, to understand the purposes of V2 order at a time when there is high variation in application of the phenomenon. Additionally, a look at whether initial frame-setters were giving rise to V2 word order at this time might also help to explain why specific types of texts have a higher rate of V2 or V3 structure.

A final factor that might influence the frequency in use of V2, and that might also explain intra-writer variation in use of V2, is the choice to exhibit subordinating and coordinating *discourse* relations (distinct from *syntactic* subordination and coordination, relating solely to the syntactic hierarchies of linguistic units). Asher & Lascarides (2003) and Asher & Vieu (2005) introduced 'Segmented Discourse Representation Theory' (or SDRT), which is based on the idea that "some parts of a text play a subordinate role relative to other parts" (Asher & Vieu 2005: 592). Some sentences therefore may elaborate on or support ideas presented earlier in the discourse (discourse subordination), while some sentences operate on the same level of discourse, pushing the discourse forward or foregrounding information (discourse coordination).

The position of the verb and the subject on the surface could be supported by the idea that authors structure their works based on the type of discourse they wish to present in the text. Bech (2012: 68) refers to the work of Hopper (1979), who finds that, while VS word order corresponds to foregrounded events, SV word order corresponds to backgrounded events. This finding is similar to that of those working in the field of information structure—the position of the subject in Old English is important for reinforcing referential links, with subject pronouns, for example, occurring before the verb as they have an antecedent in the preceding discourse. An intriguing issue is to determine what happened in later medieval English: can the changing position of the landing site of the verb, in IS-driven cases of V2, say anything about the evolution of discourse structuring? Did V2 have a new discourse function,

following the inability for IS to impact the positions of the verb and subject?

Discourse relations have also been examined in Hinterhölzl and Petrova's (2005) study of Old High German (OHG). They found that V2 sentences in the 9th century OHG text *Tatian Translation* adopted the rhetorical relation of *Elaboration*, to drive the subordinating linkage of discursive segments, while V1 sentences drove the continuation of the discourse (the rhetorical relation of *Continuation*). This *Elaboration-Continuation* distinction relates to Hopper's (1979) finding regarding SV and VS sentences, with subject-initial V2 sentences in OHG making the link to the preceding discourse, and V1 sentences whereby the subject follows the verb making links to following discourse. Again, the question arises as to whether this type of referential information was able to drive the placement of the verb in Middle English.

There are some challenges of applying SDRT to historical data, and determining whether there are contrasts between word order and discourse relations. Bech (2012: 81-82) found no conclusive evidence regarding a contrast between the presence of XVS and XSV word orders in OE and foregrounding and backgrounding functions. While the SDRT theoretical framework can be "difficult to apply to naturally occurring language data, and especially language in its older stages" (Bech 2012: 69), Bech recognises that there are still some practical tools that can be applied as part of the SDRT framework, which I discuss in Section 3.

2.2.1 Text type as a factor driving intra-writer variation in the use of verb second

A number of the above issues discussed in relation to the loss of IS-motivated V2 in English, as well as the loss of a special initial position to link to preceding discourse, also feed into why intra-writer variation might have existed during this period of instability. A factor that is pertinent to understanding intra-writer variation in use of V2 – that of 'text type' – has rarely been explored in the English V2 literature.

Two notable studies that have focused on the use of V2 by a single author are Eitler (2006) on Geoffrey Chaucer, and Eitler & Westergaard (2014) on John Capgrave. These studies refer to audience design as a factor driving the frequency of V2, specifically the (un)familiarity of the audience—whether the text was written for a local, regional, or national readership. These studies also relate the use of V2 to language contact, i.e. whether Chaucer and Capgrave exhibited a grammar with strict V-to-C movement like Norse, V-to-I movement (which they state is a V2 restricted by IS), or non-V2. For instance, Eitler & Westergaard (2014: 225) found that Capgrave's Sermon predominantly exhibited V-to-C movement (a 'CP-V2' grammar), with V2 occurring in all contexts regardless of the information status of the subject. They sug-

gest that Capgrave used a typical East Anglian V2 grammar since the sermon was initially written to be preached at a local congregation. In contrast, they found that the two Saints' lives, the *Life of Saint Augustine* and the *Life of Saint Gilbert*, exhibited a V2 driven by IS-based tendencies (an 'IS-V2' grammar). They state that the V2 in this text primarily occurred with new, compared to familiar, subjects, representative of a regional audience based in the East Midlands that was not affected by the rise of an innovative non-V2 grammar primarily occurring in the South. Finally, they found that the *Abbreuiacion of Cronicles* had the highest rate of V3 word order out of all the texts (a 'non-V2' grammar), as it was written for a national audience because of its dedication to the King. They report that there was a statistically significant correlation between whether the audience was local or national, and the presence of a V2 grammar (with V-to-C movement) or a non-V2 grammar in the text, suggesting audience may play a role in the appearance of a specific type of V2 syntax.

However, there are challenges to the audience design approach in capturing V2 variation in late medieval English. There are two issues with the audience design model posited by Bell (1984, 2001) used to explain potential accommodation toward the V2 syntax of Chaucer and Capgrave's readership. First, Bell's audience design model is based on intra-speaker rather than intrawriter variation. Second, recent studies have found that speakers do not necessarily adapt their syntax to meet the needs of their interlocutors (e.g. see a recent study by Morgan & Ferreira 2022 on resumptive pronouns), meaning that late medieval writers also may not model their syntax based on the familiarity of the audience to the author. Moreover, it is difficult to ascertain Chaucer's actual audience. As Strohm (1983: 142) makes clear, Chaucer's fictional audience of Canterbury pilgrims "has its own value as a reminder of the variety and idiosyncrasy of possible audience response", so the specific needs or interests of Chaucer's readership cannot be fully determined. Chaucer's primary and immediate audience of works such as *The Canterbury* Tales is likely to have been knights, esquires, and clerks related to the civil service of Richard II, with whom he communicated regularly (Strohm 1983: 143). Given the high variation in use of V2 across texts read by the educated, it cannot be assumed what their 'V2 grammar' would have been like. Lastly, Los (2013: 281) states that a large number of the cases of V2 in Capgrave's Abbreuiacion of Cronicles is used to mark an episode boundary, suggesting a new use for V2 had emerged by this point in the sixteenth century. The lack of V2 systematicity in this text is not necessarily related to the growing obligatoriness of V3 order in late medieval English, but instead related to a choice of discourse-referencing style, suggesting there is something characteristic

about the type of text in driving a new or recycled use of V2 or V3 structure. Chaucer's texts were written in the century prior, suggesting the investigation of his use of V2 might lead to discoveries about an older medieval V2 usage that was changing, rather than a V2 that was being recycled.

social effects (regional effects > gender effects) > audience effects > text type effects + type of discourse/level of IS status > frequency of V2

Figure 1 A flow chart adapted from Eitler (2006: 200) to show the different levels of influence on linguistic variation, specifically the frequency to which V2 was used in the history of English.

Rather than positing that the familiarity of the audience was a driving factor behind variation in the V2 of individual author's works, I argue that the nuances of text type can more accurately explain this variation. I propose, in line with others, that text type categories are created based on linguistic features at the level of the discourse (i.e. an author (un)consciously decides on a text type category based on the rhetoric and styles of discourse referencing they wish to use); categories which then bear upon the frequency to which V2 is used in a text. As Biber (1988: 170), Lee (2001: 38) and Taavitsainen (2001: 88) identify, a text's type is defined by its internal co-occurring linguistic features. On the other hand, 'genre' encompasses the author's reasons for writing the topic, with categories assigned based on this external criterion (Biber 1988: 170, in Lee 2001: 38). I show that it is the level to which V2 syntax is linked to information-structural and discourse relations – properties that then determine the text's type – that impacts the frequency of V2 within the text. I have adapted the flow chart in Figure 1 by Eitler (2006: 200) to show where text type, which is closely linked to IS status and the type of discourse, figures into the different levels of influence on linguistic variation (with the bolded levels highlighting the additions). It is the nuances afforded by text type which might more concretely explain why V2 syntax changes in English, as opposed to audience effects which appear to influence the more general creation of genres.

3 Case study. The V2 of the Chaucer canon and its links to information structure and discourse relations

The three Chaucerian texts I analyse throughout this study are: A Treatise on the Astrolabe (Astrolabe), and the two prose works from The Canterbury Tales,

The Parson's Tale (ParsT) and The Tale of Melibee (Melibee). I also include a text for comparison, *The Equatorie of the Planetis (Equatorie)*, which some scholars consider to be a Chaucer original (e.g. Price 1955), with Eitler's (2006) study of V2 also placing the text under Chaucerian authorship. However, recent evidence points toward John Westwyk, a monk of Tynemouth, as the likely author, due to his donor signature closely resembling the hand of the rest of the text (see Rand 2015). The purpose of its inclusion is to show how the type of text and its rhetorical nature – in the case of *Equatorie*, an instructional text on astronomy (similar to that of Astrolabe) – might lead to a specific type of structure being represented. The second purpose is to show that the readership of the text likely had little impact on the frequency to which V2 was used. For example, Eitler (2006) has argued that Equatorie may have, like Astrolabe, been written for Chaucer's son Lowys, with the text exhibiting an East Anglian, 'CP-V2' grammar, accommodated to the dialect of his family. Since scholars are now more certain that the author of Equatorie cannot have been Chaucer, it becomes less relevant to discuss audience design as a factor closely linked to the nature of V2 used in the texts.

Text		Date	Author	Genre	Text type
The Pars Tale	on's	c.1390	Geoffrey Chaucer	Religious treastise	Morally didactic, sermon
The Tale Melibe		c.1390	Geoffrey Chaucer	Fiction, allegory	Morally didactic, apologue
A Treatis		c.1391	Geoffrey Chaucer	Astronomy, handbook	Instructional, pedagogical

Table 1 A table of the provenance of each text of analysis in this study.

⁷ I exclude Chaucer's other prose text in PPCME2, *Boece*, due to the existence of a further exemplar – the French translation by Jean de Meun, *Le Roman de la Rose* – in addition to the original Latin source, *De consolatione philosophiae* by Boethius. MacLeish (1969: 13) also acknowledges that the style of Boece is "loose" and "the language somewhat diffuse", which is potentially linked to the multiple exemplars used in writing the text. While *The Tale of Melibee* is also a translation from the French text *Livre de Melibée et de Dame Prudence*, each of the texts likely had some French influence and it cannot always be ascertained the extent to which English writers calqued their syntax on French. I recognise that this is a possibility, yet consideration of translation interference would add a further variable to the current analysis, so I refer the reader to work by Haeberli (2007, 2010) on how French exemplars might have contributed to the use of V2 in Chaucer's works.

Table 1 details the rough date of composition for each of the texts, the genre of the text and the text's type.⁸ V2 and V3 structures were collected from The Penn Parsed Corpus of Middle English 2 (Kroch et al. 2000-) using parsed corpus-based software. Each of Chaucer's works provide a rhetoric that is slightly different depending on the arguments that are presented. The scientific handbook, Astrolabe, is instructional, expository, and pedagogical in nature, as if the text were a lecture on astronomy. It is an adaptation from a Latin piece into English, detailing the workings of an astrolabe displaying the position of the stars. 10 Similarly, ParsT is an instructional text, yet for moral purposes, using "orthodox Christian doctrine" (Benson 2008: 21) to emphasise the negative consequences of the seven deadly sins. In The Canterbury Tales, the tale is spoken to teach others about "moralitee and virtuous mateere", in response to a request for fables by the Host, to which he refers to as "swich wrecchednesse" (ParsT, lines 34-38). ParsT has been considered a sermon, preserved as such in many medieval religious libraries, suggesting Chaucer might have followed the long tradition of Old English sermons (Taavitsainen 1993, citing (Fowler 1987: 13). Melibee is also a morally didactic text, yet in the form of a philosophical and moral apologue, weaving its argument implicitly throughout its narrative. This long, moral tale in prose is given by Chaucer himself as a form of punishment for his audience of pilgrims, when his initial tale of Sir Thopas was considered "nat worth a toord!" by the Host. The idea of the need to be merciful in the face of adversity, seeking peace of war, is represented by the characters of Melibee and Prudence in the text (see Yeager 2014). Consequently, the text encourages its readership toward the teachings of Christ via a frame narrative. Taavitsainen (1993: 191) further describes Chaucer as "a highly conscious stylist exploiting the features of religious prose for artistic purposes", indicating the need to inter-

⁸ Date of composition and genre were retrieved from the metadata of PPCME2 (Kroch et al. 2000-). Text type more specifically appeals to the nature of the argument or rhetoric presented throughout the text, rather than the reasonings for the creation of the text (more appropriate for genre).

⁹ In the queries, I searched for cases whereby there is a single element in initial position (excluding any extraneous variables, such as conjunctions, punctuation, left-dislocation, etc. which may not be included inside the CP), followed by the verb in second position and the subject in third position. Non-inversion of the subject and verb is then used for the V3 search query. See Appendix A for examples of queries to search for inverted and non-inverted structures in declarative sentences. I then undertook detailed qualitative analysis to eliminate any cases which could not be considered V2, especially those with discourse markers outside of the main clause. See the end of this section for a rundown of the exclusions, including cases of the late-subject constraint.

¹⁰ *Equatorie* is similar in nature to *Astrolabe*, yet was originally written in English and features the workings of an equatorium, "a device to compute the position of the planets using raw data provided in the accompanying astronomical tables" (Falk 2019: 329).

rogate Chaucer's use of specific syntactic features that might serve as different discourse functions.

The methods I undertake in this study bring together a range of recent explanations for change in the V2 phenomenon in English, as discussed in Section 2. The exploration of how these factors impact syntactic structure at the textual level can shed further light on a) whether individual texts mirror the changes to the structuring of discourse relations occurring more widely, especially in the 14th century when these changes are primarily evidenced, and b) whether these new structural ways of marking discourse functions in specific types of text might have influenced the overall frequency to which V2 was used in late medieval English.

To study these two questions, I investigate specific cases of V2, in comparison to V3, in relation to their referential and discourse-related properties. I primarily use the Pentaset (Komen et al. 2023, cited in Los et al. 2023: 351) to categorise the referential information exhibited by initial constituents and subjects in the sentence, and analyse them in relation to the surface position of the verb. These categorisations can provide further clues as to the landing site of the verb (as part of the split CP, or within T, as discussed in Section 2.1), and highlight the purposes of the multifunctional initial position (e.g. as a local anchor or a frame-setter) and their involvement in V2 and V3 structure.

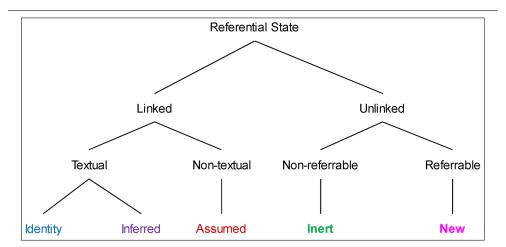


Figure 2 The Pentaset categories of referential state (Komen et al. 2023, cited in Los et al. 2023: 351).

Figure 2 highlights the hierarchy of the Pentaset categories of referential information, which can be applied to initial objects and PPs, as well as different types of subject. Los et al. (2023: 351-352) state that the Pentaset is split into 'linked' and 'unlinked' categories, in relation to whether the initial con-

stituent or subject is linked to a referent in the discourse or externally. *Identity*, Inferred, and Assumed are categories denoting textual and non-textual links to another referent, their antecedent. *Identity* is a referent with an antecedent that has recently been evoked in the discourse, such as the preceding sentence. Inferred means its antecedent was evoked earlier in the text, or that the antecedent can be inferred by the reader based on its properties (e.g. it can be inferred that a house has a door, a chimney, a window, etc.). Assumed means the referent represents shared knowledge amongst the readership, for example 'God' or 'our Lord', and is also generally applied to the subject pronouns 'I' and 'you' which are known to the reader. *Inert* and *New* are unlinked categories that do not have an antecedent and do not refer to some external entity. Inert is used for NPs that do not introduce a referent into the interlocutors' mental representation and are known as "discursively inert", meaning that these expressions are entities that cannot be referred back to (Los et al. 2023: 351). Inert NPs are usually bare or indefinite nouns, and represent labels, such as 'mankind' or 'a husband'. 11 New status refers to an NP or referent that is introduced for the first time, and is not linked to a referent in the preceding discourse. Of particular interest is whether sentences in Chaucer's texts are generally introduced by local anchors and/or frame-setters, and whether these sentences have V2 or V3 structure, in relation to the Pentaset categorisations of referring backward or forward. These categories then might relate to the presence of a specific type of rhetoric (e.g. a text with an exhortative versus an allegorical frame).

There are also cases of V2 that are more closely linked to syntactically-driven operations, similar to earlier patterns of V2. Van Kemenade & Los (2006: 226) recognise that these contexts are introduced by initial negative elements (and *wh*-phrases, as in interrogative sentences), as well as initial short, deictic and/or temporal elements (like 'then', 'now', 'thus' and 'so'), given "discourse marking is tied up with morphosyntactic marking" (initially highlighted in van Kemenade & Milicev 2005). The ordering of verb and subject in these types of sentences is also of interest across different text types, especially as short, deictic adverbs continued to trigger V2 frequently even when the overall rate of V2 was declining (see van Kemenade & Westergaard 2012, cited by Los 2013: 282).

¹¹ As a reviewer outlined to me, these types of inert NPs are not similar to generic expressions which can be referred back to in a sentence, e.g. as in the sentence, 'Every farmer who owns *a donkey* beats *it*.'

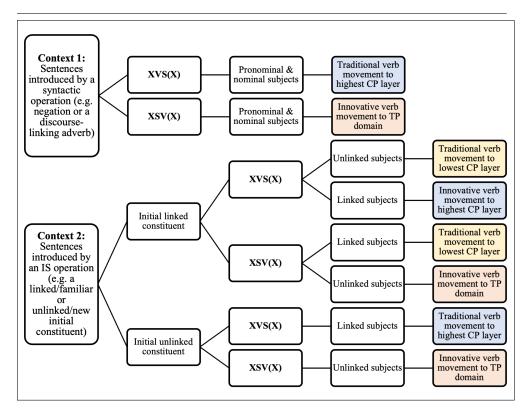


Figure 3 A diagram highlighting the different contexts of V2 and V3 word order in the late medieval English period, and their link to verb movement, in relation to syntactic and IS-related pressures. Key: Blue = verb movement to highest CP layer; Yellow = verb movement to lowest CP layer; Orange = verb movement to TP domain.

Each of these categorisations lead to further understanding of the different types of verb movement present in individual authors' grammars. The following diagnostics of non-subject-initial V2 and V3 declarative sentences allow one to identify the evolving types of verb movement, which can be found in the diagram of Figure 3.

The first innovative context involves V-to-C movement in sentences introduced by a preposed constituent driven by IS-related properties, in particular, those exhibiting anaphoric and discourse-linking properties (thus, categorised as one of the 'linked' categories). If the verb occurs frequently in the second position, and the subject can be identified under one of the 'linked' categories (*Identity, Inferred, Assumed*), this might reflect a new pattern emerging in ME, which was counter to the frequent movement of the verb to the lowest part of a split CP (C1). In these cases, verb movement occurs to the highest

layer of the CP (C2), like the historic syntactically-driven V2. The second innovative context involves V-to-T movement. One diagnostic for this type of verb movement is declarative sentences introduced by a syntactic operation or a short, deictic or discourse-linking adverb. If the verb occurs frequently in the third position after the subject in these sentences in Chaucer's prose works, there is potentially a change toward a V3 word order happening at this point in the medieval period. The verb in these situations moves to the lowest possible domain below C, which I label T, here. In addition, if the subject can be identified under one of the information-structural 'unlinked' categories (*Inert*, *New*), and occurs before the verb rather than after it, this might further mirror the emerging V3 pattern in late medieval English, and V-to-T movement. Both of these situations would highlight that a lower position within the CP was no longer being made available through information-structural tendencies, in Chaucer's prose works but potentially more generally in late ME.

A constituent may also be preposed and introduce a new referent to the discourse (related to the 'unlinked' category, as above). These initial elements, distinct from those motivated by anaphoricity, also drove verb movement to the highest point of the CP, a position for force, focus and contrastive material (see Frascerelli and Hinterhölzl's 2007: 112-113 structure of the left periphery, as cited by Walkden 2017: 62). While these cases involved V-to-C movement, as in syntactically motivated V2 cases, they highlight the presence of a multifunctional initial position in driving V2 word order due to information-structural tendencies.

As outlined in Section 2.2, methods for identifying the type of discourse relations in historical texts might bring us closer to understanding why there was intra-writer variation in the use of V2 in late ME (SDRT). Given the challenges mentioned by Bech (2012), especially regarding the lack of a dichotomy between XVS and XSV sentences and coordinating and subordinating discourse relations in Old English, I reserve further investigation of this dichotomy to these newer, innovative V2 and V3 patterns found in late ME. While there is a level of intuition required to identify coordinating and subordinating patterns of discourse in historical texts, there is a test that makes the diagnostics more concrete. Bech (2012: 69-70) discusses the use of an ad-

¹² Note that, alongside the loss of verb movement to the CP domain, the position of subjects was also changing in late ME. There was a movement toward a merged subject position for both discourse-old and discourse-new subjects, within Spec, TP (e.g. see Biberauer & van Kemenade 2011). This may also be a further factor reinforcing cases of V2 in late ME, as well as the rise in verb movement to the highest point of the CP following the loss of a lower, IS-driven verbal position.

ditional sentence to test whether the sentence of analysis elaborates on prior discourse, or provides a new direction in the narrative (adapted from Asher & Vieu 2005: 592), as shown in (5). (v) in (5) is provided as an example sentence of analysis within a wider discourse. The presence of (vi) means that the discourse surrounding John's meal can no longer be elaborated on after the introduction of the dancing competition in (v), as it has introduced a new topic of discourse.¹³ The discourse relation between (ii) and (v) is therefore coordinating and provides a continuation in the narrative, as the new sentence (vi) can no longer activate the older topic in (ii). In the following study, I use the sentence occurring after the V2 or V3 structure of analysis to assist in diagnosing the discourse relation, and discuss whether elaborating on earlier topics might disrupt the flow of the argumentation.¹⁴

- (5) (i) John had a great evening last night.
 - (ii) He had a great meal. α
 - (iii) He ate salmon.
 - (iv) He devoured lots of cheese.
 - (v) He then won a dancing competition. β
 - (vi) ? Then he had a great dessert. γ

Finally, I outline some of the exclusions required when analysing V2 and V3 structure in historical English. First, I eliminate some of the sentence outputs retrieved from PPCME2 which do not have a non-subject-initial constituent within the main clause CP, resulting in V2 or V3 order. I use Los (2015: 205-206) to clearly define diagnostics for determining elements outside of the left periphery. Conjunctions can find their way into the queried V2 and V3 sentences, resulting in coordinated verb-initial sentences being obtained (the queries in highlight a workaround for avoiding these types of sentences appearing). In addition, sentences beginning with adverbs such as *moreovere* 'moreover', *further-over* 'furthermore', *alswo* 'also', *next*(*e*) 'next',

¹³ This concept is also named 'the Right Frontier Constraint'; see Asher & Vieu (2005: 592) and Bech (2012: 70) for further detail.

¹⁴ Due to some of the ambiguity possible when interpreting discourse relations, especially in relation to historical data (e.g. see discussion in Bech 2012: 78 regarding the decision process between coordination and subordination in the case of *The Peterborough Chronicle*), I analyse a maximum of five instances of both innovative V-to-C2 movement, and V-to-T movement in each of the prose works, using the framework above. The multiple interactions possible between constituents that exhibit different types of referential information, and the discourse relations present across the entirety of the text, make this type of analysis fairly complex and I therefore limit the study to a few examples.

¹⁵ Note that coordinated XVS and XSV sentences were included in the data for this study.

and *yit* 'yet', and emphatic constructions, such as *for certes* 'certainly' and *for sothe* 'truthfully', are all discarded from the study. Cases of apparent 'V2' and 'V3' in these contexts are resurrected, or 'exapted', forms of V2/V3, often used to demarcate new sections in the narrative while the canonical V2 word order declines in frequency. Second, as noted by Los (2009, 2012), there is the potential for 'analytically ambiguous' examples of V2 and V3 to slip through in quantitative analyses, especially in later medieval periods. These cases relate to the 'late subject constraint' introduced by Warner (2007), whereby informationally-new subjects may appear in end-focus position, or exhibit presentational focus (Los 2009: 104). In these cases, the subject remains down in the specifier position of the VP, and the finite verb does not move up to the TP or CP domain. These are most identifiable when the verb is unaccusative (i.e. does not take an external argument), and in cases with the lexical verb 'be'.

3.1 The use of V2 and its interaction with information-structural status in Chaucer's prose works

The following section investigates the link between V2 word order in Chaucer's prose works and the information status of different elements of the sentence, in relation to the changes being exhibited in Middle English more widely.

Context 1: sentences with initial syntactic operators and deictic/discourse-linking adverbials						
Type of subject (syntactic)	Astrolabe		ParsT		Melibee	
Type of subject (syntactic)	XVS(X)	XSV(X)	XVS(X)	XSV(X)	XVS(X)	XSV(X)
Pronominal	19	1	24	6	18	9
Nominal	4	0	14	1	5	4
Indefinite			10	1		

Table 2 A table comparing the number of instances of XVS(X) versus XSV(X) in each of the Chaucerian prose works, in context 1 (sentences with initial syntactic operator and deictic/discourse-linking adverbials). Grey boxes refer to a lack of data for that particular category.

Context 2: sentences with initial linked or unlinked constituents								
Type of	Type of	Type of	Astrolabe		ParsT		Melibee	
initial const.	subject (IS)	subject (syntactic)	XVS(X)	XSV(X)	XVS(X)	XSV(X)	XVS(X)	XSV(X)
Linked	Linked	Pronominal	5	0	13	6	0	2
		Nominal			4	0	2	1
	Unlinked	Nominal	2	0	6	0	0	1
		Indefinite			1	1		
Link Unlinked Unlin	T :1 J	Pronominal			2	8	3	11
	Linkea	Nominal						
	Unlinked	Nominal					2	1
		Indefinite			1	1		

Table 3 A table comparing the number of instances of XVS(X) versus XSV(X) in each of the Chaucerian prose works, in context 2 (sentences with initial linked or unlinked constituents). Grey boxes refer to a lack of data for that particular category.

Tables 2-3 compare the number of instances of XVS(X) versus XSV(X) word order (also referred to as V2 and V3 throughout this paper) across each of the Chaucerian prose works. These are split into the two different contexts discussed earlier (labelled 'context 1' and 'context 2' here, respectively): contexts with an initial syntactically-motivated, deictic or discourse-linking constituent, and contexts with an initial anaphoric constituent (*Linked*), or a constituent that introduces a new referent (*Unlinked*). It take each of the texts in turn and make comparisons regarding the instances of V2 versus V3 across different contexts.

V2 sentences in *Astrolabe* are mostly introduced by deictic, discourse advancing adverbs, with both pronominal and nominal subjects (which occur frequently compared to V3 sentences, i.e. 19/20 and 4/4 cases of V2 versus V3, respectively). In particular, the initial adverbs of 'then', 'thus', and 'now' consistently resulted in movement of the verb to second position in these texts (6-7).

¹⁶ I bring in the results found from examining *Equatorie* when discussing *Astrolabe*.

¹⁷ Los states that the indefinite subjects man/men/me develop from nouns (e.g. 'mankind', 'human being'), yet they "constitute an intermediate category of vague, generic, 'light' predications and are prosodically weak like pronouns" (2002: 182). Furthermore, van Bergen (2000: 118) found that in contexts with 'fronted topics' (similar to the initial linked constituents analysed in the current study) indefinite subjects patterned similarly to pronouns in that they did not invert with the verb. However, van Bergen also notes that the indefinite subject man is considered a nominal subject in, for example, van Kemenade (1987) and Koopman (1997), yet it is treated as a pronominal in Haeberli & Haegeman (1995: 86). I have thus decided to treat indefinite subjects separately in this instance, but it is possible that further research investigating contexts the impact of the initial multifunctional constituent on word order might reveal similarities between the position of pronouns and indefinite subjects.

(6) [Now] wol I preie mekely every discret persone that redith [now] will I pray humbly every single person that reads or herith this litel tretys ... or hears this little treatise

'Now I will pray humbly that every single person that reads or hears this little treatise ...'

A Treatise on the Astrolabe, CMASTRO, 662.C2.16

(7) [Than] hath Januarie 31 daies ... [then] has January 31 days 'Then, January has 31 days ...'

A Treatise on the Astrolabe, CMASTRO, 665.C1.81

Equatorie displays a similar frequency of V2 with all subject types (19/19 instances were V2)—with all but two of the V2 sentences being introduced by these same deictic adverbs (e.g. 8-9).

(8) [thanne] shaltow sette the fix point of thy compas ... [then] shall-you set the fix point of your compass ...'

The Equatorie of the Planetis, CMEQUATO, 22.70¹⁸

(9) [thus] may thin instrument laste perpetuel [thus] may thine instrument last perpetually 'Thus, may thine instrument be everlasting'

The Equatorie of the Planetis, CMEQUATO, 18.17

The dialogic use of postverbal linked/familiar pronominal subjects is evident in both texts, which use first person pronoun I to teach the use of the instrument (6), and the second person pronoun tow 'you' to show the intended audience how they should set their compass (8). The consistent use

¹⁸ There are a number of cases of what appears to be cliticisation of the subject to the right-edge of the verb in Chaucer's prose works. There are also cases where the verb and subject appear separate, e.g. *shul ye* in (17). I acknowledge here that this possible cliticisation might have had an impact on the order in which the verb and subject appeared. However, this argument for cliticisation also contributes to the idea that what we are seeing in Chaucer's works is a highly repeated word order for the purposes of linking and advancing the discourse, and might be mirroring orders where the verb and subject are separate as in (17).

of auxiliary verbs (e.g. wol 'will' and shal 'shall'), directly followed by the subject pronoun, "carefully guide[s] [the reader] through the process" of using the instrument (Taavitsainen 1994: 334-335). While there is no explicit dialogue, Falk refers to the conversational tone of the texts, which appear to address a specific readership and represent "a dialogue between a scholar and a craftsman within the persona of the author himself" (2019: 348). Examples (7) and (9) also show the use of postverbal linked nominal subjects (Januarie 'January' and thin instrument 'thine instrument'). The use of the second person possessive pronoun thin 'thine' highlights how the author addresses the readership directly, as if it were a live instruction of the instrument.

The highly repetitive nature of both texts, using consistent V2 word order with dialogic postverbal subjects, makes the treatises "truly pedagogical", not only teaching the readership how to use the instruments, but also "giving the reader a profound understanding of what he is doing ..." (Falk 2019: 337). The repetitive use of postverbal first and second person pronouns instructs the reader to pinpoint precisely which elements of the astrolabe or equatorium the author is discussing, to aid in understanding the functionality of the instrument. It is also reasonable to expect that these instructional and exhortative texts would lead to the use of temporal and discourse-advancing adverbs, such as 'then' and 'now', to introduce V2 sentences in the scientific texts, which consistently look forward to the following discourse and guide the reader through the use of the instruments. As Freywald et al. found in their study of Germanic vernaculars, the initial temporal constituent acts as an "interpretational frame or anchor for the following statement" to represent "time, place, condition" and a "discourse-advancing" function (2015: 89). Astrolabe and Equatorie similarly adopt V2 sentences introduced by discourseadvancing adverbs to reinforce a specific type of pedagogy in the form of an expository handbook, and persuade its readers of the benefits of using these scientific instruments.

Comparatively, there is a lower proportion of sentences introduced by initial anaphoric, or 'linked', constituents in *Astrolabe* and *Equatorie*, but when they do occur, these sentences result in V2 rather than V3 word order. Intriguingly, there is no difference in the frequency of V2 depending on if there is a linked or unlinked subject, with zero cases of V3 with both subject types in both texts (minus the context of unlinked subjects in *Equatorie*, where there is neither V2 nor V3). Some instances of V2 in both texts, motivated by the use of initial linked constituents, are provided in (10-13). Each of the initial constituents are either linked to a previously activated referent (labelled *Identity*) or can be inferred based on the presence of another referent (labelled *Inferred*). For example, a "fortunat ascendent" 'a fortunate ascendant' in *As-*

trolabe, and *this cercle* 'this circle' and *this lymbe* 'this border' in *Equatorie*, are linked to referents in the preceding sentences. In addition, *this tretis* 'this treatise' in *Astrolabe* is a referent inferrable based on the type of text the audience is reading.

(10) [This tretis, divided in 5 parties] wol I shewe the [this treatise, divided into 5 parts] will I show thee under full light reules and naked wordes in English under full light rules and naked words in English 'In this treatise, which is divided into five parts, I will write these words in plain English for thee'

A Treatise on the Astrolabe, CMASTRO, 662.C1.12

(11) [A "fortunat ascendent"] clepen they whan that no [a "fortunate ascendant"] declare they when that no wicked planete ... wicked planet

'They declare a "fortunate ascendant" when no wicked planet ...'

A Treatise on the Astrolabe, CMASTRO, 671.C1.268

(12) [this cercle] wole I clepe the lymbe of myn equatorie ... [this circle] will I call the border of my equatorium 'I will call this circle the border of my equatorium'

The Equatorie of the Planetis, CMEQUATO, 18.10

(13) [this lymbe] shaltow deuyde in 4 quarters by .2.
[this border] shall-you divide in 4 quarters by 2
diametral lynes
diametric lines
'You shall divide this border into four quarters by two diametric lines'

The Equatorie of the Planetis, CMEQUATO, 18.11

Given the frequent use of V2 over V3 with initial anaphoric constituents, and their occurrence with linked and unlinked subjects, it is unlikely that information-structural pressures affected the ordering of subject and verb in the astronomical handbooks. In OE, this environment would generally

cause linked subjects and subject pronouns to occur preverbally, whereas unlinked/new subjects would occur postverbally. This disparity occurred due to the need to display given before new information, and have the verb act as a boundary marker between the two. Yet, the occurrence of linked subjects postverbally would suggest this tendency is not borne out in *Astrolabe* and *Equatorie*. The similar frequencies of V2 in both scientific handbooks overall suggests that the instructional and pedagogical nature of this type of text may be driving its structure, which did not rely on any tendencies of 'given-beforenew' information.

I now turn to discussion of *ParsT* and *Melibee*. Like *Astrolabe* and *Equatorie*, *The Parson's Tale* exhibits a high overall rate of V2 in sentential environments with initial deictic adverbs and linked constituents (with 72 cases of V2 and 15 cases of V3)—the latter of which often consists of 'local anchors', defined as initial constituents that make a connection with the preceding context. On the other hand, *The Tale of Melibee* employs V2 at a slightly lower rate within the deictic, discourse-linking adverbial group (with 23 cases of V2 and 13 cases of V3), which is even lower with initial anaphoric constituents (with 3 cases of V2 and 11 cases of V3 with linked subjects, for example). For contexts introduced by an initial unlinked constituent – often frame-setters which introduce the narrative occurring in the following context – there is a much more infrequent use of V2, particularly with linked subjects (with 3 cases of V2 and 9 cases of V3 in *ParsT*, and 5 cases of V2 and 12 cases of V3 in *Melibee*).

The most intriguing findings arising from *ParsT* come from sentences introduced by local anchors and frame-setters, as mentioned above. In ParsT, a number of sentences with initial frame-setters begin with PPs headed by the preposition 'against' (as in 14-16). The three examples all look forward to following discourse: the PP agayns the richesse of this world looks forward to the discussion of poverty in the following context; the PP agayns three manere of wronges that his enemy dooth to hym looks forward to the three things that one must do in response to the wrongs by one's enemy; and the PP agayns hate and rancour of herte newly introduces the concept of hatred and looks forward to the love and affection one should feel in response. These sentences occur in close succession with one another, and lead most frequently to V3 word order (with 8/11 instances having preverbal subjects). The consistent use of sentences with an initial frame-setter in *ParsT* demonstrates that we might be seeing a highly repeated word order within a text that has an explicit rhetoric regarding penitence. These frame-setters assist in the flow of argumentation, with the same type of frame-setter occurring consistently. They generally occur with the verb in the third position, reflecting an innovative V-to-T movement pattern, even though pronominal/linked subjects rarely occurred preverbally prior to this time period. Consequently, V3 word order might have been emerging in specific environments whereby there is repetition of the same initial frame-setter throughout.

(14) [Agayns the richesse of this world] shul they han mysese [against the riches of this world] shall they have misery of poverte of poverty

'Against the riches of this world, they shall have misery of poverty'

The Parson's Tale, CMCTPARS, 292.C1.152

(15) [Agayns three manere of wronges that his enemy dooth to [against three manner of wrongs that his enemy does to hym] he shall doon three thynges him] he shall do three things
'Against three manner of wrongs that his enemy does to him, he shall do three things'

The Parson's Tale, CMCTPARS, 304.C2.666

(16) [Agayns hate and rancour of herte] he **shal** love hym in [against hate and bitterness of heart] he **shall** love him in herte heart

'Against hatred and bitterness, he shall love him in his heart'

The Parson's Tale, CMCTPARS, 304.C2.667

Conversely, Chaucer might have adopted an innovative V2 word order with the use of initial local anchors and linked subjects in *ParsT*, despite these types of subjects historically occurring preverbally (due to their need to be close to their antecedent in the preceding discourse). The examples (17-20) highlight cases of postverbal linked subjects (generally subject pronouns under the *Assumed* category) in contexts with initial local anchors, despite their rare appearance in the history of English generally, and their decline in late ME in favour of frame-setters (for example, Los 2009; Dreschler 2015; Los et al. 2023). As mentioned, linked/given subjects rarely occurred postverbally in contexts with an initial anaphor, due to the tendencies of information structure to position given before new information. Thus, the fact that Chaucer positions linked subjects postverbally in sentences introduced by local anchors is surprising.

(17) [By the fruyt of hem] **shul** ye knowen hem [by the fruit of them] **shall** you know them 'By the fruit of them, you shall know them'

The Parson's Tale, CMCTPARS, 289.C2.49

(18) [After Pride] wol I speken of the foule synne of Envye [after Pride] will I speak of the foul sin of Envy 'After Pride, I will speak of the foul sin of Envy'

The Parson's Tale, CMCTPARS, 303.C1.597

(19) [Thy neighbor] artow holden for to love ... [thy neighbour] art-thou commanded for to love 'You are commanded to love thy neighbour ...'

The Parson's Tale, CMCTPARS, 304.C2.655

(20) [thyn enemy] shaltow love for goddes sake, by his [thine enemy] shall-thou love for God's sake by his comandement commandment

'By his commandment, thou shall love thine enemy for God's sake'

The Parson's Tale, CMCTPARS, 304.C2.664

This type of word order is also seen occasionally in *Astrolabe*, with linked subjects occurring more frequently postverbally than preverbally in this context. In *ParsT*, out of the 23 sentences with linked subjects and introduced by local anchors, 17 of them have V2 structure. Chaucer may therefore be using a pattern of V2 that reflects the weakened pressure of information structure on the position of the verb and the subsequent rise of postverbal linked/given subjects. Specifically, local anchors in (17-20) are used in ParsT to strengthen the link with their antecedents, and weave an argument throughout. For instance, (17-18) are introduced by PPs by *the fruyt of hem* 'by the fruit of them' (labelled *Identity*) and *after Pride* (labelled *Inferred*). These PPs are anchored to the antecedents *digne fruyt of Penitence* 'the worthy fruit of Penitence' and men (17), and the discussion of 'pride' in the preceding sections (18). Furthermore, (19-20) are anchored to preceding discourse using the direct objects *thy neighebor* and *thyn enemy*. *Thy neighebor* (19) is anchored to its activation in preceding discourse (*Identity*), and *thyn enemy* (20) refers to the

discussion of one's enemy in the preceding sentences (but also, the use of the possessive pronoun *thine* is in the second-person, which can be assumed by the reader to be related to themselves; *Assumed*). These initial anchored objects and PPs precede the verb in its second position, even though the subjects in each of these sentences are linked to their antecedent. Historically, these sentences might have resulted in V3 word order with linked subjects. Not only might the repetitive nature of specific types of local anchors and frame-setters, and their ability to introduce V2 and V3 structure respectively, link to the inability of IS to make a lower (C1) position available for verb movement, but it may also be a result of the type of text and the use of structure for specific discourse-related purposes. I come back to this discussion later.

The Tale of Melibee presents a usage of V2 that is lower compared to the other texts I have presented in this case study, with a higher use of V3 word order instead. There are 18 cases of V2 with pronominal subjects (compared to 9 cases of V3) and 5 cases of V2 with nominal subjects (compared to 4 cases of V3) in contexts with an initial deictic adverb. Furthermore, in contexts with an initial unlinked constituent, Melibee has an even lower rate of V2 (with 5/17 instances exhibiting V2, compared to ParsT's 3/11 instances). Examples (21-25) investigate some of the cases of V2 introduced by linked, local anchors, and unlinked, frame-setters.

Like *ParsT*, *Melibee* has a number of sentences introduced by local anchors, making continual links to the preceding discourse. However, they behave differently in terms of the ordering of the following linked subject and verb. (21) is an example of an initial local anchor, *to thise forseide thynges* 'to these foresaid things' (labelled *Identity*, as it links to preceding discourse on weeping), that leads to V2 word order with the linked subject *Melibeus*.

(21) [To thise forseide thynges] answerde Melibeus unto his wyf [to these foresaid things] answered Melibee unto his wife Prudence

Prudence

'Melibee answered to these foresaid things to his wife Prudence'

The Tale of Melibee, CMCTMELI, 218.C1.43

However, instances fronted with a local anchor more frequently result in V3 word order with linked subjects in *Melibee* (3/5 cases with V3 word order, compared to *ParsT*'s 6/23). (22) reflects the structure of this environment. V3

¹⁹ In sentences introduced by linked constituents, there is not enough data for cases of non-subject-initial V2 and V3 in *Melibee* for comparison with the other prose works.

sentences introduced by constituents with a link to the preceding discourse in *Melibee* (in 22, the discourse relates to discussion on poverty) are generally introduced by longer conditional adjuncts (e.g. beginning with 'if'), temporal adjuncts (e.g. beginning with 'when') or adverbials of reason (e.g. beginning with 'because' or similar). There is frequent use of these types of sentences in *Melibee*, and they always lead to V3 word order, matching the historical picture whereby linked subjects occurred preverbally in this context.

(22) [By thise resons that I have seid unto yow, and by [by these reasons that I have said unto you, and by manye othere resons that I koude seye], I graunte yow ... many other reasons that I could say] I grant you 'Because of these reasons that I have said to you, and because of many other reasons that I could say, I grant you ...'

The Tale of Melibee, CMCTMELI, 233.C1.623

Some of them also introduce a new referent or concept (23-25), which are innovative in the sense that, historically, unlinked and linked subjects might have occurred postverbally in this context with initial new referents.²⁰ The initial constituents in (23-25) are frame-setters, which might introduce new concepts ('cursing' in 23, and 'wicked advice' in 25), or prepose a temporal phrase such as the PP at alle tymes 'at all times' in (24). There are fewer cases of this type of V3 structure in *ParsT*, and thus the higher incidence of V3 in *Melibee* with both linked and unlinked subjects may be a result of text type. These sentences, which are introduced by an entire clause in the specifier position of the frame-setting phase (FrameP), modifying the "temporal

²⁰ As a reviewer highlighted, it still remains unclear whether local anchors and frame-setters, in initial position, would give rise to different types of verb movement prior to Middle English. There are examples in Old English texts such as *#Elfric's Lives of Saints I, where verb movement must have occurred to a lower domain in cases where an element such as *ana' alone' or 'only' resulted in XSV word order: *\delta uruh pet gescead ana we synd setran ponne pa ungesceadwysan nytenu' 'through that understanding alone we are better than the unreasoning animals' (*#ELS I, 150) (e.g. see Los 2016: 267). There is therefore further research to be done in determining how these specific cases of initial focus (and frame-setters, if they are also focused by evoking an alternative) in Old English might have contributed to changes in the link between IS and word order. Prior research (e.g. van Kemenade & Milicev 2005 and van Kemenade & Los 2006, as introduced earlier) state that it makes sense for verb-movement to occur to the highest layer in Old English given morphosyntactic marking is also tied to discourse-marking (e.g. focus). I thus tentatively suggest that, historically, a large number of initial focused constituents, as well as frame-setters exhibiting new information, would result in verb movement to the highest C layer, given it makes sense from an information-structural perspective.

coordinates" of the SV sentence (see Haegeman & Greco 2018: 51 for discussion on West Flemish), might reflect the text's categorisation as an apologue. Specifically, a narrative with implicit teachings of the value of mercy might require exploration of concepts through conditional clauses (e.g. *if thou take no vengeance of an oold vileynye, thou sompnest thyne adversaries*) or temporal grounding via local anchors (e.g. *after that Dame Prudence hadde spoken in this manere, Melibee answerde ...*).²¹

(23) [Whan men cursed hym], he cursed hem noght [when men cursed him] he cursed them not 'When men cursed him, he did not curse them'

The Tale of Melibee, CMCTMELI, 231.C2.556

(24) [At alle tymes] thou **shalt** blesse God ... [at all times] thou **shall** bless God 'You shall bless God at all times'

The Tale of Melibee, CMCTMELI, 222.C1.187

(25) [In wikked conseil] wommen venquisshen hir housbondes [in wicked advice] women vanquish their husbands 'A wicked piece of advice is that women vanquish their husbands'

The Tale of Melibee, CMCTMELI, 221.C1.154

Overall, in *Melibee*, there is a lower incidence of V2 word order with linked subjects in contexts introduced by a local anchor, unlike in *ParsT*. The higher rate of V3 in this case means that there is a closer link between the ordering of subject and verb, and the placement of given and new information, in *Melibee* compared to *ParsT*. Here, linked subjects occur higher than the landing site of the verb, which is in the lower layer of the split CP.

²¹ I have included a case of V3 word order here with a 'reporting' verb (e.g. 'say', 'speak', 'answer' etc.), which could be formulaic in the sense that V3 word order may be common with the use of this type of verb. However, in (21), I also show that a reporting verb could be in second position preceding the subject. It is intriguing that there is variation at this point in the history of English as to where reporting verbs are positioned alongside the subject (which extends to present-day English narratives too), and this variation appears to be reflected in *Melibee*. It might be the case that the ordering of verb and subject depends on the length of the constituent in initial position.

Verb movement type	Context	Text	Instances
		Astrolabe	23
	1	ParsT	48
V-to-C2		Melibee	23
(traditional)		Astrolabe	0
	2	ParsT	3
		Melibee	5
V-to-C1		Astrolabe	2
	2	ParsT	13
(traditional)		Melibee	3
V-to-C2		Astrolabe	5
	2	ParsT	17
(innovative)		Melibee	2
		Astrolabe	1
	1	ParsT	8
V-to-T		Melibee	13
(innovative)		Astrolabe	0
	2	ParsT	9
		Melibee	13

Table 4 A table showing each of the verb movement types (C2 = highest layer of split CP; C1 = lowest layer of split CP), along with the number of instances of these types of verb movement that occur in each Chaucerian text.

Table 4 transforms the data for each of the prose works into the number of different types of verb movement present in the texts, which are diagnosed by examining the ordering of subject and verb in different sentential environments. 'Traditional' V-to-C2 refers to movement of the verb to the highest layer of the CP, which historically resulted in V2 word order in sentences with initial syntactic operators, deictic adverbs (context 1) and newly introduced referents (context 2).²² 'Traditional' V-to-C1 refers to movement of the verb to the lowest layer of the CP, due to the fronting of a linked constituent such as a local anchor—resulting in V2 with unlinked subjects and V3 with linked subjects. 'Innovative' V-to-C2 encompasses all cases of V2 with linked subjects when a linked constituent is fronted (context 2). This type of V-to-C2 movement is an innovative word order in medieval English as linked subjects

²² Recall that 'context 1' is related to sentences introduced by syntactic operators and deictic adverbs, and 'context 2' is sentences introduced by IS-motivated constituents.

would have occurred preverbally in this context, due to the tendencies for given information to be placed before new information. Finally, 'innovative' V-to-T movement refers to cases where V3 occurs instead of V2 in contexts introduced by a syntactic operation or deictic adverb (context 1), or in contexts with unlinked subjects, introduced by IS-motivated (linked/unlinked) constituents. I now discuss the most interesting patterns from this table, in relation to the discourse-related purposes of each of the types of verb movement.

V2 word order in *Astrolabe* is predominantly introduced by initial deictic or discourse-advancing adverbs, which move the instructional arguments forward, allowing Chaucer to make continual connections with his readership regarding the workings of an astrolabe—similar to that of *Equatorie* which instructs its readers on an equatorium. Much of the verb movement occurring in the structure of both of these scientific handbooks is therefore a traditional, syntactically-driven verb movement to the highest CP layer (23 instances in *Astrolabe* and 17 instances in *Equatorie*, compared to 1 instance of V-to-T in *Astrolabe* and 0 in *Equatorie*). In cases whereby a constituent is fronted for IS-based purposes, for example, to make a local link to preceding discourse, a type of V-to-C2 word order also occurs (5 instances in *Astrolabe* and 2 in *Equatorie*; compared to 2 instances of traditional V-to-C1 in *Astrolabe* and 0 in *Equatorie*), which is innovative given the historic positioning of linked subjects preceding the verb in this context.

Similarly, ParsT also has a frequent number of innovative cases of verb movement to C2 (17 instances, compared to 13 instances of V-to-C1). It is not surprising that *ParsT* might be similar to the scientific handbooks in this regard—the discourse-advancing and pedagogical narrative of Astrolabe and Equatorie reflects a rhetoric that is very much aligned with a moral kind of instruction. For instance, Eisner (1985: 179) states that, "'technical writing' is not a medieval term. The medieval author looked on himself as a writer, usually, he hoped, in the service of God." The morally didactic argumentation of ParsT, similar to a religious treatise or sermon, could therefore be similar to the pedagogical stance taken in the astronomy works, a text not necessarily driven by science alone. *ParsT* also employs highly repetitive explanatory and persuasive devices, in the form of a multifunctional initial constituent. The left periphery in *ParsT* hosts both local anchors and frame-setters, highlighting this multifunctionality, which tend to lead to consistent V2 and V3 structure respectively (with 9 instances of V-to-T movement in 'context 2', compared to 2 instances of V-to-C2 in this environment), regardless of the IS status of the subject. On the other hand, Melibee has fewer cases of innovative V-to-C2 word order (2 instances, compared to 3 instances of traditional

V-to-C1). Instead, the text uses innovative verb movement to T in a frequent number of cases (26 instances in both 'context 1' and 'context 2'). The subject occurred frequently in a preverbal position in contexts with initial discourse-advancing adverbs, as well as in IS-related contexts with local anchors and newly introduced referents. Compared to *ParsT*, there appears to be a focus on introducing sentences with long conditional and temporal constituents, which aid the flow of the narrative and set the scene.

In light of the data presented in Table 4, could the occurrence of V2 in Chaucer's prose works be for a specific purpose? His sentences were frequently introduced by a highly multifunctional initial constituent: the first position was a place for discourse-linking, local anchoring, frame-setting, and advancing the narrative. Yet, he appears to adopt newer ways of structuring the verb and subject, regardless of the information-status of the subject (linked or unlinked), resulting in frequent verb movement to the highest CP layer with linked subjects (V2 word order), and verb movement to the TP domain (V3 word order). The use of these different structures therefore mirror what was happening in late medieval English more generally—there was no need to place the verb between older and newer information. I refer to the term 'syntacticisation' here (used by Los, Lopez-Couso & Meurman-Solin 2012; van Kemenade & Westergaard 2012: 113; Taylor & Pintzuk 2012; and Los 2015: 194-195) to describe the loss of an IS-motivated factor within the underlying representation of verb movement to C and T. Instead, V2 and V3 in Chaucer appears to be driven primarily by syntactic operations.²³

Text type is also particularly key for highlighting why V2 and V3 patterns show up in Chaucer's prose works. Innovative V2 word orders are most visible in *Astrolabe* and *ParsT*, an instructional handbook and morally didactic sermon, respectively. The V2 structures in these texts regularly begin with constituents that anchor the text locally to preceding referents, thus piecing together an argument that is consistently rooted in knowledge stated from the outset. The author and reader are regularly referenced in these V2 patterns, via the personal pronouns 'I' and 'you'. In the case of *Astrolabe*, the workings of the instrument are stated at regular intervals, with the beginning of sentences linking back to parts of the instrument (e.g. *with this X* [part of instrument] *shall you do X* [action for working the instrument]). In *ParsT*, the reader is regularly reminded of the seven deadly sins via the links made

²³ I note that the use of the term 'syntacticisation' is not without its issues, because a) the notion of information structure is already incorporated into the syntactic model, and b) many have referred to the 'syntacticisation of discourse' (e.g. Haegeman & Hill 2013; Poole 2016) to explain the process of incorporating pragmatics and information structure into the syntactic framework, or to show the interplay of the two factors.

at the beginning of sentences (e.g. *Against X* [sin], *shall you do X* [action to rectify]). Each of these arguments display a highly repeated V2 word order to engage the reader in the pedagogical or religious intentions of the text. Innovative V3 word orders, on the other hand, occur most frequently in *Melibee*, a text which weaves its argument through its narrative, with implicit morally didactic teachings. These V3 sentences begin with a narrative that frames the following context (e.g. *When X* [character] *does X* [action], *they do X* [action/consequence]). In addition, there are fewer instances of V2 when a sentence begins with a local anchor in *Melibee*. It is possible that texts which exhibit more of a narrative lead to higher variation in use of V2, compared to exhortative texts which require a high level of syntactic repetition. A further investigation into the overall discourse relations of the text might also explain the frequency of specific structures in Chaucer's works, as well as in the late medieval period.

3.2 The effect of discourse relations on the V2 of Chaucer's prose works

In this section, I analyse the discourse relations of some of the more 'innovative' word orders, V-to-C2 (resulting in V2) and V-to-T (resulting in V3), both in contexts with a multifunctional initial element which houses local anchors to the preceding discourse, and frame-setters introducing new information or looking forward to following discourse. To diagnose discourse relations, I follow insights provided by Asher & Vieu (2005) and Bech (2012):

"... discourse relations are context-sensitive; that is, relations are not coordinating 'in virtue of their content, but in terms of how they are presented in the discourse'; in other words, they are dependent on information packaging (Asher & Vieu 2005: 606)." (Bech 2012: 68)

I thus show below that it is the information status of the sentence that might provide clues for determining the discourse relations of the entire text.

Text	Verb movement type	Discourse relation		
Astrolahe	Innovative V-to-C2	Coordinating: 1 Subordinating: 4		
Astrolube	Innovative V-to-T	N/A		
	Innovative V-to-C2	Coordinating: 2		
ParsT	Innovative v-to-C2	Subordinating: 3		
	Innovative V-to-T	Coordinating: 5		
		Subordinating: 0		
	Innovative V-to-C2	Coordinating: 2		
Melibee	Innovative v-to-C2	Subordinating: 0		
	Innovative V-to-T	Coordinating: 5		
	11110vative v-to-1	Subordinating: 0		

Table 5 A table showing the results of a test to decipher whether different types of verb movement are coordinating or subordinating in Chaucer's prose works. Note: a maximum of 5 sentences were tested in each environment.²⁴

Table 5 shows an analysis of up to five cases of both verb movement types, across each of the Chaucerian prose works. I use a version of the test presented in (5) of Section 3, to see whether further discourse on earlier topics would disrupt the flow of argumentation, and therefore to test whether the analysed sentence exhibits a coordinating (foregrounding) or subordinating (backgrounding) discourse relation. As Asher & Vieu (2005: 596) state, coordinating relations may be made for the purposes of *Narration*, *Background*, *Result*, *Continuation*, *Parallel*, or *Contrast*, and some of the subordinating relations may be made for the purposes of *Elaboration*, *Explanation*, *Commentary*, or *Topic*; some of which I refer to in the below discussion.

In V2 contexts exhibiting innovative verb movement to the highest C (i.e. 'innovative V-to-C2', in Table 5), *Astrolabe* and *ParsT* primarily showed subordinating relations (4/5 and 3/5, respectively), while *Melibee* exhibited two coordinating relations. I provide an example from each text in (26-28) to show this discourse relation split.

In (26), the bolded V2 sentence provides further explanation as to why Chaucer translated the astrolabe treatise, in relation to the choice of English over Latin. The preceding discourse mentions some of the errors made in previous treatises, which introduce material that is too challenging for a tenyear old to grasp. The V2 sentence thus elaborates further as to why Chaucer writes in clear English, specifically to aid his son's comprehension: 'because your Latin is still not good enough, my little son'. An additional sentence

on the understandability of English over Latin would add further elaboration to the original topic, and thus the bolded V2 sentence is subordinate to the preceding one.

- (26) (i) Another cause is this, that sothly in any tretis of the Astrelebie that I have seyn, there be somme conclusions that wol not in alle things parformen her bihestes; and somme of hem ben to harde to thy tendir age of ten yeer to conceyve. This tretis, divided in 5 parties, wol I shewe the under full light reules and naked words in Englissh, for Latyn canst thou yit but small, my litel sone.
 - (ii) 'Another reason is that, in any treatise of the astrolabe that I have seen, there are some conclusions that do not carry out their promises; and some of them are too difficult for anyone at the tender age of ten years to understand. In this treatise, which is divided into five parts, I will write in plain English for thee, for thou cannot read much Latin, my little son.'

A Treatise on the Astrolabe, p. 662

In (27), the V2 sentence – which discusses the love and desire one should hold for one's neighbour – follows discourse on the spiritual mother and father (Adam and Eve) who we share with our neighbour. The sentence is thus subordinating, elaborating on the original topic of love as a remedy against the sin of envy. Further discussion on loving 'thy neighbour' following the V2 sentence would not go off-topic, and in fact, the text does continue to elaborate: 'you shall love him in word, and in gracious admonishing and chastising'. Unlike Astrolabe and *ParsT*, the V2 sentence in *Melibee* does not present a subordinating relation with its preceding discourse, with the only two cases of 'innovative' V2 presenting coordinating relations.

Whittle

- (27) (i) For ther is a versifiour seith that 'the ydel man excuseth hym in wynter by cause of the greete cold, and in somer by enchesoun of the greete heete.' For this causes <u>seith</u> Caton, 'Waketh and enclyneth nat yow over-muchel for to slepe ...
 - (ii) 'For there is a poet who says that "the idle man excuses himself in winter because of the great cold, and in summer because of the great heat." Because of this, Caton says, "Wake up and ensure you do not over-sleep ...'

The Tale of Melibee, p. 233

The V2 sentence in (28) presents a new step in the narrative. While it is related to the preceding philosophical advice given by Solomon (ruler of Israel and Judah), stating that in winter 'the idle man excuses himself in winter because of the great cold', there is continuation in the advice given, which at this point is presented in Cato (a Latin textbook of wisdom in the form of proverbs), in relation to oversleeping. Further discourse on the great cold of winter might disrupt the flow of the narrative, which goes on to discuss good deeds, and thus the V2 sentence presents a coordinating relation.

- (28) (i) "And truste wel that in the name of thy neighebor thou shalt understonde the name of thy brother; for certes alle we have o fader fleshly and o mooder that is to seyn, Adam and Eve and eek o fader espiritueel, and that is God of hevene. Thy neighebor artow holden for to love, and wilne hym alle goodnesse ...
 - (ii) "And you shall trust that in the name of thy neighbour, thou shall understand the name of thy brother; certainly we all have one fleshly father and one mother that is to say, Adam and Eve and also one spiritual father, and that is God of heaven.

 You are commanded to love thy neighbour and desire him in goodness ..."

The Parson's Tale, p. 304

Even though there are few examples to make concrete conclusions, it is possible that text types with a clear narrative may instead present coordinating relations regardless of the structure of the sentence. Furthermore, the 'innovative' V2 sentences appear with reporting verbs (such as 'say', 'speak', etc.), which potentially represent a formulaic structure that was highly repetitive in English and characteristic of narratives. On the other hand, the subordinating relations presented in *Astrolabe* and *ParsT*, as linked to V2 structure,

may more clearly reflect the type of text—texts which have a pedagogical or moral kind of instruction, with discourse relations that consistently require backgrounding of arguments.

I now turn to the innovative types of V3 word order, which have an initial IS-motivated constituent, alongside placement of the subject before the verb. The innovative V3 sentences analysed in ParsT and Melibee exhibit coordinating relations with the preceding discourse. Sentence (29) from ParsT presents a V3 structure with a newly introduced constituent of the trees in Paradys at the beginning of the sentence. This referent is in direct contrast with the preceding discourse, which queries why the woman cannot eat from the trees in paradise. The woman responds by saying that it is the fruit specifically that has been forbidden by God. Thus, the V3 sentence in question here presents a new step in the narrative focusing on the fruit; the more general topic of the trees in paradise is no longer available for elaboration following the sentence of analysis, thus exhibiting a coordinating relation. Similarly, the V3 sentence (30) from Melibee reflects similar discourse coordination, but for a slightly different purpose. The sentence, 'in wicked advice women vanquish their husbands' concludes the preceding discourse, discussing the praise of women for their wickedness. In fact, the following discourse goes onto discuss some examples of the positive actions of women. Thus, further explicit discussion on the wickedness of women may go off topic, meaning the V3 sentence cannot be an elaboration of preceding discourse, but rather, provides a conclusion.

- (29) (i) "Why comainded God to yow ye sholde nat eten of every tree in Paradys?" The woman answerde: "Of the fruyt," quod she, "of the trees in Paradys we feden us, but sothly, of the fruyt of the tree that is in the myddel of Paradys, God forbad us for to ete ...
 - (ii) "Why does God command unto you that you should not eat from every tree in Paradise?" The woman answered: "From the fruit," she said, "from the trees in Paradise we feed ourselves, but really, from the fruit of the tree that is in the middle of Paradise, God forbade us to eat ...'

The Parson's Tale, p. 296

Whittle

(30) (i) ...and if ye wole werken wikkednesse, and youre wif restreyneth thilke wikked purpos, and overcometh yow by reason and by good conseil, certes youre wyf oghte rather to be preised than yblamed. Thus sholde ye understonde the philosopher that seith, "In wikked conseil wommen venquisshen hir housboundes."

(ii) '...and if you will act in wickedness, and your wife restrains herself from that wicked purpose, and overcomes you by reason and by good advice, truly, your wife rather ought to be praised than blamed. Thus, you should understand the philosophy that says, "Through wicked advice, women defeat their husbands."'

The Tale of Melibee, p. 221

One of the main conclusions that can be gathered from conducting a preliminary analysis of discourse relations in Chaucer's prose works, is that the information status of the sentence is instrumental in diagnosing whether a discourse relation is subordinating or coordinating. Discourse relations can be diagnosed by looking specifically at the initial constituent; by examining whether the beginning of the sentence is anchored locally to a referent in the preceding discourse, or whether the constituent introduces a new element to advance the narrative onward. For example, the bolded sentence in (26) begins with a local anchor, this tretis, which provides a subordinating link to the preceding sentence and explains specifically why a new treatise on an astrolabe was required. Alternatively, (29) begins with a phrase that frames the following narrative and is in direct contrast with the prose that comes before. The character explains that it is the eating of the fruit which is forbidden by God, yet it is the trees in Paradise from which one must feed themselves. Reference to the trees at the beginning of the sentence thus presents a brief step away from the main narrative about the forbidden fruit. One of the main diagnostics for considering subordinating and coordinating relations in Middle English texts therefore appears to be an examination of the highly multifunctional initial position of the sentence.

How might these discourse relations relate to some of the changes occurring within the history of English, i.e. the loss of a lower verbal position for information structure, as well as positions based on the IS status of the subject, which are mirrored in Chaucer's prose works? I hypothesise that the innovative cases of V2 order with linked subjects go hand-in-hand with discourse subordination, and the innovative cases of V3, whereby the initial constituent is still multifunctional, are connected to discourse coordination. Interestingly,

these findings differ from those posited for Old English (e.g. Hopper 1979), which suggested VS order was for the purposes of foregrounding, while SV was for backgrounding. Given that the IS status of the subject no longer drove verb positioning at this point, VS and SV structure may not have been strictly tied to this dichotomy of discourse relations. Further research analysing entire texts for this particular dichotomy between verb movement and discourse relations would be able to provide additional evidence for investigating this claim. Overall, it remains clear that analysis of information packaging is useful for understanding how text type is a factor in the frequency of use of verb second across a range of sentential environments.

4 Conclusions on the effect of text type on the V2 of Middle English

There is much to think about when it comes to how text type, the presence of information structural pressures, and the structuring of discourse relations, can combine to explain the frequency in use of V2 in Middle English texts. I have shown in the above sections that the factor of text type should be central to any analysis of intra-writer variation in use of V2 in late medieval English, to capture some of the changes happening to specific types of verb movement. These changes to the landing site of the verb led to a rise in innovative structures, and thus further instability in the V2 phenomenon, which can be evidenced in Chaucer's prose works.

It is possible that the pressures arising from IS no longer existed to drive the use of V2 in Chaucer's prose works, based on the innovative use of V2 and V3, particularly in contexts where the multifunctionality of the initial constituent was still present despite their overall decline in late ME. Thus, in Chaucer's works, there may not have been much of an impact on the loss of the multifunctionality of the first position on the frequency of V2. Both preposed local anchors and frame-setters were used to forge connections with the preceding discourse and foreground the following narrative, particularly in *The Parson's Tale* (a sermon on penitence), and *The Tale of Melibee* (an apologue and allegorical narrative on mercy), respectively. In *ParsT*, there was a dichotomy between the information-structural status of the initial constituent, and the presence of an (often innovative) structuring of verb and subject. In *Melibee*, sentences introduced by conditional and temporal clauses were frequently used, which often led to V3 word order, even in contexts with unlinked subjects which might have generally led to V2 historically.²⁵ The beginning of the

²⁵ Note an earlier footnote where I refer to sentences with initial focus in Old English (e.g. sen-

sentence also remained a place for discourse operations in Chaucer's texts, in the form of short deictic adverbs. These sentences were particularly prominent in *A Treatise on the Astrolabe*, to form a type of dialogue between the author and reader, regarding the set up and use of an astrolabe. The same type of deixis was also present in a comparison text, *The Equatorie of the Planetis*, which similarly highlights the workings of an equatorium. The fact that a similar usage of V2 is present within *Astrolabe* and *Equatorie* lends support to the idea that it is the nuances of text type that determine the structure of the text, as opposed to the familiarity of the readership. Furthermore, while we might expect the texts of *ParsT* and *Melibee* to be similar in their use of V2, given that they are both morally didactic works, the way in which their arguments are presented (in the form of a sermon and apologue, respectively) highlight that V2 is being driven by the way in which information structure and discourse relations are exhibited.

I also hypothesised that the pressures of discourse relations combine with that of information structure to explain the structuring of texts in late medieval English. In particular, the dichotomy between verb positioning (VS versus SV) and discourse subordination and coordination, might reveal itself when analysing emerging types of V2 and V3, which arise from the lack of availability of verbal and subject positions based on IS. The IS status of the initial constituent aids the backgrounding and foregrounding of arguments, and it is crucial to examine the context within which these relations exist. Further qualitative research across the entirety of texts of different types might lead to additional evidence for this discourse relation dichotomy in late medieval English.

On the whole, Chaucer's different prose works appear to mirror changes to verb movement patterns that no longer relied on a verbal position based on the information-structural status of the sentence. Chaucer maintained a highly frequent V2 in contexts with deictic adverbs and local anchors, and showed evidence of V3 in contexts with frame-setters, or where a 'syntactic' V2 was growing in optionality. I have shown that Chaucer's variation in use of V2 is closely linked to the type of text and the type of argumentation he wished to present (e.g. whether that be an exhortative or pedagogical argument, or a narrative with a hidden message)—placing the reasons for syntactic change back on the authorship and the type of text they are writing, as opposed to the audience.

tences with *ana* 'only/alone' in the initial constituent); it is possible that these cases did not always lead to verb movement to the highest C in Old English, and thus resulted in V3 word order, but there were a large number of cases where it made sense for IS-linked verb movement to occur to a position demarcating focus.

How might Chaucer's prose works, and his purposes for using specific structures within texts of a particular rhetoric, coincide with discussion on the overall instability of verb second in Middle English? Chaucer's varying use of V2 highlight that there was high intra-writer variation in the use of V2 at this point in the history of English. On the inter-writer level, there was inconsistency in the use of V2, which was also dependent on the dialect of the text or author.²⁶ What is evident from the current case study is that multiple sociocultural explanations can likely account for the instability of the phenomenon, and that specific, qualitative analysis of individual texts and their authors is pertinent for understanding why syntactic change occurs generally. The nuances afforded by analysing text type can allow us to see the amalgamation of interacting forces which might lead to widespread change in the structure of V2. While quantitative analyses may show larger patterns emerging – usually related to the overall decline in use of V2 – they cannot always highlight some of the textual reasons for the use of one structure over another, and may lead to errors in our understanding of how and why the phenomenon changed in specific time periods.

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²⁶ See Kroch, Taylor & Ringe (2000); but also recent work conducted by van Kemenade, Hinterhölzl & Struik (2023) on how the grammaticalisation of verbs interacted with dialect variation, information structure, and prosody and affected V2 variation in Middle English.

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Appendix A Search queries for inverted (XVS) and non-inverted (XSV) structures in Chaucer's prose works

```
node: IP-MAT*
ignore_nodes: ,|\.|NP-VOC|INTJ*|*-LFD
query: (IP-MAT* iDomsNum 1 !CONJ*)
         AND (IP-MAT* iDomsNum 2 *MD|*HVP|*HVD|*DOP|*DOD|*BEP|*BED|*VBP|*VBD)
         AND (IP-MAT* iDomsNum 3 NP-SBJ*)
```

Figure 4 A query for an inverted, V2 structure (XVS), showing the searched environments and exclusions.

```
node: IP-MAT*
ignore_nodes: ,|\.|NP-VOC|INTJ*|*-LFD

query: (IP-MAT* iDomsNum 1 !CONJ*)
         AND (IP-MAT* iDomsNum 2 NP-SBJ*)
         AND (IP-MAT* iDomsNum 3 *MD|*HVP|*HVD|*DOP|*DOD|*BEP|*BED|*VBP|*VBD)
```

Figure 5 A query for a non-inverted, V3 structure (XSV), showing the searched environments and exclusions.

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