THE ENGLISH POSTURE VERBS:

THEIR DEMISE AND THE UNBOUNDEDNESS OF THE ENGLISH LANGUAGE

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Abstract

This thesis investigates whether the demise of the cardinal posture verbs (CPVs): *sit, stand,* and *lie,* in Modern English can be ascribed to the rise of the [*be* +V-*ing*] construction. Using the data from the Penn Parsed Corpus of Early Modern English and the Penn Parsed Corpus of Modern British English, together comprising a period from 1500 to 1914, the frequency with which the CPVs occur have been found to nearly half in size whereas the frequency of the [*be* + V-*ing*] construction increases by more than a tenfold. There is a strong negative relationship between these constructions (τ = -0.733) but not significant ($p < 0.055$). However, the combined coefficient of the three CPVs cumulated improves compared to the correlation coefficient of each of the CPVs individually ($r = 0.13$ for *sit*, $r = -0.67$ for *stand,* and $r = -0.64$ for *lie*). A definite semantic clash between the CPVs and the [*be* +V-*ing*] construction has been found unlikely. Instead, competition within the functional-semantic domain of ongoingness in Modern English potentially lead to a period of attraction between these two construction types and possibly more, e.g. *be busy* and *keep V-ing*. Moreover, the English language became unbounded due to a larger change in the English aspectual system (Los, 2012). The other Germanic languages are bounded languages which use the CPVs richly but have no progressive that is equivalent to the [*be* +V-*ing*] construction. The typological switch in English may have, therefore, influenced the halted grammaticalisation of the CPVs and the thriving grammaticalisation of the [*be* +V-*ing*] construction and alike constructions.

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1. Introduction

In Germanic languages, such as Dutch, Danish, Swedish and Norwegian, posture verbs (e.g. SIT, STAND and LIE) are commonly used to express ongoing events and often constitute the most grammaticalised form of progressive aspect in those languages. Thus, it does not appear unreasonable to assume that it is a feature of all Germanic languages that posture verbs can be used in combination with a main verb in order to present a situation as 'ongoing'. However, this assumption is not borne out by Present-Day English (henceforth PDE), where posture verbs are not used to express ongoingness, and the highly grammaticalised [*be* + V-*ing*] construction is used instead.

In earlier studies (Newman, 2002, 2009; Newman & Rice, 2004; Lesuisse & Lemmens, 2018), it has been shown that the cardinal posture verbs (CPVs) *sit, stand,* and *lie* in PDE are far less grammaticalised than CPVs in the other Germanic languages. In the Modern English period (1500-1920), *sit, stand,* and *lie* showed signs of grammaticalisation before declining in overall usage. What caused this decline of the CPVs in the English language is hitherto unclear. A possible hypothesis, as proposed by Lesuisse and Lemmens (2018), is that the rise of the [*be* + V-*ing*] construction may have caused the grammaticalisation of the CPVs to end, but this hypothesis is not further explored in their study.

In this dissertation, then, the observed decrease of grammaticalized CPVs in English is investigated further. The period of interest is the Modern English period, which is when the most grammaticalised usages of the CPVs have been found. More specifically, this dissertation aims to address the following research questions:

Has the [*be* + V-*ing*] construction had an influence on the demise of the CPVs in the Modern English period and is there a relationship between all the progressive forms

that occurred in that time: do all these forms go at the cost of each other, or did the English language overall become more unbounded (Los, 2012)?

I. Does the increase of the [*be* + V-*ing*] construction occur simultaneously to the decrease of the CPVs?

II. If so, how does this relate to what is known about other progressive constructions that occurred between 1500 and 1900?

To address this question, the frequency of the CPVs will be systematically compared to that of [*be* + V-*ing*] in all subsections of the Penn Parsed Corpus of Early Modern English (1500-1710; PPCEME) and the Penn Parsed corpus of Modern British English (1700-1914; PPCMBE). Furthermore, this study also considers the possibility that other constructions e.g. *be busy* V-*ing* and *keep* V-*ing,* may have had an influence on the grammaticalisation of the CPVs.

The general structure of this work is as follows. This dissertation operates within the framework of Grammaticalisation Theory, which will be briefly introduced in Section 2. In this section, I will pay specific attention to two key concepts: frequency and competition (Section 2.1. and 2.2., respectively). Section 3 contains a literature review about the cardinal posture verbs in English and in the other Germanic languages. In Section 4, the characteristics of the corpora are presented, as well as the method used for collecting and analysing the data. Both the results and the discussion of these results can be found in Section 5. First, the results concerning the CPVs and the [*be* + V-*ing*] construction are presented and discussed individually (Sections 5.1. and 5.2., respectively). Subsequently, in section 5.3. the results of the CPVs and the [*be* + V-*ing*] construction are interpreted in relation to each other. Finally, to the results of this study are discussed in light of the literature on other progressive constructions that were used in the Modern English period. The concluding remarks shall close this work in Section 6.

2. Theoretical Background: Grammaticalization theory

The present study mainly operates within grammaticalisation theory (henceforth GT) of which the main principles and concepts are explained in the present section. Two aspects of GT, the role of frequency in GT and the loss of grammaticalised expressions by means of competition, are discussed in more detail, as these two aspects play a significant role throughout this study.

2.1. Grammaticalisation Theory

In essence, GT is the study of grammatical forms or 'grams', which are not seen as static but as entities which are subject to change: grams develop gradually out of lexical forms or combinations thereof (Bybee et al., 1994). Such developments have a number of characteristics which are both regular over independent instances of grammaticalisation and cross-linguistically (Hopper & Traugott, 1993).

GT is often used to refer to one of two things: (i) a term which is used to refer to the process, i.e. grammaticalisation, whereby lexical items and constructions in certain linguistic contexts come to serve grammatical functions and, once grammaticalised, continue to develop new grammatical functions (Hopper & Traugott, 1993, p.18). This process is studied by all kinds of historical linguists and their study of grammaticalised/grammaticalizing items differs between the different branches of linguistics to which they subscribe. This is, therefore, not to be confused with GT, (ii), which is a research framework that adopts a specific approach in studying the relationships between lexical, constructional, and grammatical material in language, diachronically and synchronically, both in particular languages and cross-linguistically (Hopper & Traugott, 1993, p.18).

As is the case in this definition, it is not enough to state that grammaticalisation is the process by which lexical items become grammatical morphemes. Rather, there is an agreement within GT that it is important to state that "this process occurs in the context of a

particular construction", i.e. morphosyntactic string (Bybee, 2003). In other words, it is not the case that any lexical item grammaticalises; instead the context of a particular lexical item is crucial for grammaticalisation to occur (Bybee, 2003).

While GT is studied both synchronically and diachronically, the main perspective, as it is in the present study, is historical. This entails that the focus is on the investigation of the sources of grams and the steps of change which they undergo over time. These steps, or pathways of change, occur along a single continuum, or cline, which moves from lexical to more grammatical. Such a cline is typically represented as in (1).

(1) A. Content word > B. grammatical word > C. clitic > D. inflectional affix

(cf. Hopper & Traugott, 1993, p.7)

The points on this cline are in a way arbitrary and linguists tend to disagree which and how the points are to be defined. The relative positions on the cline, however, are far less disputed because they cannot be arranged in a different order (Hopper & Traugott, 1993). The basic assumption is, therefore, that there is a relationship between the stages A and B where A occurs before B, but not vice versa. It can be said that, prototypically, grammaticalisation is a unidirectional process. However, there are those that argue against the unidirectionality of grammaticalisation (see Hopper & Traugott, 1993, ch.5.7. for counter examples to unidirectionality).

Grammaticalisation, e.g. the diachronic change whereby lexical items become grammatical items, involves four interrelated, smaller changes:

i.   Desemanticization (or "bleaching," semantic reduction): loss in meaning content.

ii.   Extension (or context generalization): use in new contexts.

iii.   Decategorialization: loss in morphosyntactic properties characteristic of the

source forms, including the loss of independent word status (cliticization,

affixation).

iv.   Erosion (or "phonetic reduction"): loss in phonetic substance.

(Heine, 2003, p.579)

In isolation these changes are by not markers of grammaticalisation per se and it is

also not the case that all changes occur when a particular item is grammaticalizing. For

example, the Modern English auxiliary verb *can*, which is derived from the Old English main

verb *cunnan* meaning 'to know'. In Old English, *cunnan* was mostly used to denote mental

ability, thus taking a human agent as subject. It fitted into three semantic classes of main

verbs: verbs of mental or state activity, verbs describing skills, and verbs of communication

(Bybee, 2003). First, the meaning of mental ability bleached and became merely ability, still

taking human subjects. Due to this *can* was able to extent, or generalise, and thus came to

belong to a fourth semantic verb class: verbs of overt actions and activities. Presently, *can*

denotes that enabling conditions exist in general, this includes inherent abilities of the agent,

but also factors from the external world (Bybee, 2003). Moreover, *can* is not limited to

human agents, it can now also take on passive and inanimate subjects. Phonologically, c*an*

underwent erosion from Old English onwards as it lost its final inflectional syllable (*cunnan,*

cann, canst, cunnon, cunne) (Bybee, 2003). Moreover, in high frequency contexts, such as

after the pronoun *I, can* is often reduced to [kŋ] or [ŋ] in Modern English (Bybee, 2003).

2.1.1. Frequency. In diachronic GT studies, the frequency of occurrence of a certain

linguistic expression is often used and seen as an indicator of its grammaticalisation (Hopper

& Traugott, 1993). While Traugott and Trousdale (2013) see frequency more as a

consequence of grammaticalisation than a cause, Bybee (2003) suggests that frequency is not

merely a result of grammaticalisation, but it is also one of the primary contributors to the

entire process of grammaticalisation. Frequency can thus be seen an active force which instigates all the aforementioned changes that occur in grammaticalisation.

The role of frequency on the grammaticalisation process manifests itself in different ways. According to Bybee (2003) it is especially (i) and (ii), *bleaching* and *generalisation* in Bybee's (2003) terms, in which frequency comes into play. As the process of grammaticalisation unfolds, grams become more abstract and more general in their meaning as well as more applicable and more frequently used. However, it is difficult to exactly establish which precedes which. For example, a lexical item or content word has an inherent meaning, and it is this inherent meaning that bleaches during the grammaticalisation process. In other words, specific meaning features drop off, leaving only a semantic core (Bybee, 2003). Because of this, the range of the gram usually expands allowing it to be used in more contexts, and thus increasing the frequency with it is used. However, Bybee (2003) also notes that "a stimulus loses its impact if it occurs very frequently" (p.605). Habituation is thus also the mechanism behind desemanticisation.

The question remains what the precise role of frequency may be. This is often discussed in diachronic corpus research on grammaticalization in particular because an increase in frequency is not something that is exclusively associated with grammaticalisation. Therefore, Mair (2004) sets out to shed more light on the relationship between grammaticalisation and increase in frequency, suggesting that grammaticalisation may not be accompanied by a simultaneous all-encompassing increase in discourse frequency. Whenever such an increase does occur, it should be seen as a delayed symptom of earlier grammaticalisation. In other words, when an increase in frequency clearly occurs this entails that grammaticalisation has already taken place. This is evident from, for example, the grammaticalisation of *be going to*. The grammaticalised usage of *be going to* as a future maker was established in the 17th century which is before the overall frequency of *be going to*

rose dramatically: this started in the latter half of the 19th century (Mair, 2004). Increase in frequency is thus a symptom of grammaticalisation, and not the cause. This is confirmed by studies of low-frequency grammaticalisation phenomena, such as *let alone* which grammaticalised without an increase in frequency (Neels, 2017). Instead, high pragmatic salience and the form's relative frequency of co-occurrence were key factors in the grammaticalisation process of *let alone*. However, Mair (2004) states that changes in proportional or relative frequency do always come into play during the central phase of the grammaticalisation process (Mair, 2004).

 2.1.2. Competition. Often, grammaticalised morphemes remain stable for long periods of time. Nonetheless, it is possible for grammaticalised markers to disappear again. It is important to stress here is that the loss of a grammatical marker does not exclusively happen when it has evolved to the end of the grammaticalization cline: linguistic expressions do not by default thick every step that is on the cline, some proceed longer than others. This can involve the loss of both form and function, but it can also be the case that only the form is lost while its function is retained (Hopper & Traugott, 1993). However, the loss of form alone occurs more commonly than loss of form and function.

 Hopper & Traugott (1993) explain that when "two or more forms exist for the same function, one is eventually selected at the expense of the others" (p.172). A common metaphor to explain how the loss of a form occurs is that of competition between grammatical forms: if two forms are used for the same function, they are considered to be competing over that function. De Smet et al. (2018) stress the importance of relating competition to "the broader constructional networks" which the functionally similar expressions are a part of (p.201) as these determine whether functional change arises. Traditionally, GT does not often consider grammaticalizing forms in light of functionally similar forms and/or their constructional networks. In (diachronic) Construction Grammar

(CxG) (see, for example Traugott & Trousdale, 2013) constructional networks do play a role in motivating and constraining language change, which has paved the way for competition-based reasoning (Fonteyn & Walkden, 2019). In this respect, CxG has influenced GT slightly as increasingly more attention paid to the co-evolution of functionally similar forms in GT.

Typically, competition between functionally similar forms is thought of in a relatively narrow manner, e.g. either one will win at the expense of the others, this is called substitution, or the functional domain over which the expressions compete is divided which entails that each expression has found its unique functional niche, i.e. differentiation (Traugott & Trousdale, 2013; De Smet et al., 2018). A third option, however, as argued by De Smet et al. (2018), is that when two expressions show functional overlap, they become even more similar over time, "as if being attracted to each other" (p.203). While attraction may seem contradictory to the concept of competition discussed above, it can actually be logically explained by means of analogy. Analogy refers to the process by which one expression's behaviour is modelled after that of another which it resembles (De Smet, 2018, p.217). This causes the functionally similar expressions to exchange features and thus to become more alike. However, some restrains that keep functionally similar expressions from becoming full synonyms do operate here.

3. Posture verbs and Progressives in English

The present section contains a literature review regarding the function and status of posture verbs in English and the general development of the [*be* + V-*ing*] construction. First, the use of cardinal posture verbs is discussed in present and previous stages of the English language. Subsequently, the use of posture verbs in English is contrasted to that of posture verbs in the other Germanic languages, and different hypotheses regarding the divergent status of posture verbs in English are discussed. Finally, the [*be* + V-*ing*] construction is briefly discussed with the aim to establish the time line of its grammaticalisation path.

3.1. Posture Verbs

3.1.1. Cardinal Posture Verbs. The posture verbs *sit, stand,* and *lie* are typically referred to as cardinal posture verbs, henceforth CPVs. These three verbs are called 'cardinal' because they refer to the three basic human postures. Moreover, *sit, stand,* and *lie* occur with the highest frequency of all the verbs that are labelled as posture verbs in the English language (Lesuisse & Lemmens, 2018; Newman, 2009).

In most languages, posture verbs offer an interesting domain of study as they often "enter into constructions which seem to have very little to do with either the static configuration of a theme or its dynamic positioning" (Newman & Rice, 2004, p.352). Posture verb predicates often desemanticise which allows them to come to express more functional relations relating to location, tense/aspect, existence, voice, classification, deixis, and social status (Newman, 2002). In PDE, CPVs appear to have barely grammaticalised into such functional domains, thus contrasting with their Germanic counterparts (German to a lesser extent than Dutch and the Scandinavian languages) where posture verbs are used as location markers, but also as auxiliaries to express progressive aspect (Lesuisse & Lemmens, 2018).

However, a study on the usage CPVs in the Modern English period (1500-1920) by Lesuisse and Lemmens (2018) shows that English did use the CPVs in a way that is not too

different from the usages in contemporary Dutch and Scandinavian. Especially in Old and Middle English, they find that the CPVs were amply used in locational contexts, which is an extension of the sense CPVs prototypically express. Lesuisse and Lemmens (2018) label these usages as the locational construction which consists of a *Subject + CPV + locative complement*, as in "*the student's desk stood by the window*" (p.45). The CPVs' locational usages thus consist of a Figure (*the student's desk*) which is located with respect to a second entity, the Ground (*the window*) (Lesuisse & Lemmens, 2018).

Lesuisse and Lemmens (2018) schematically illustrate this semantic extension of CPVs from their lexical meaning to their usage in locational contexts. The human posture *stand* can typically be defined as 'being in an upright position', on one's (human) feet (Lesuisse & Lemmens, 2018). This can then be explained in terms of 'being on one's base' and thus in a vertical position (see Figure 1). *Stand* becomes detached from being solely vertical because mental scanning away from the base allows for rotation, e.g. "an image schematic transformation" (Lesuisse & Lemmens, 2018, p.48). As a result, *stand* can refer to plants which grow upwards, as in (2), but also to the direction in which facial hair grows, as in (3) (Lesuisse & Lemmens, 2018).
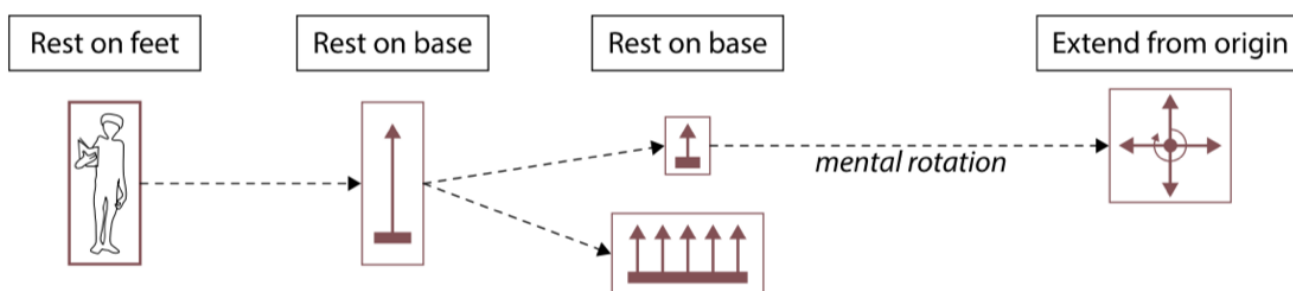

Figure 1. semantic extension of *stand*

(2) If fyer ... cacche ... the <u>corn</u> ***stondynge*** in feeldis. (1382)

(3) His <u>mustachies</u> ... ***standing*** as stiffe as if he wore a Ruler in his mouth.

(1592)

(Lemmens, forthc., p.136-137)

In contrast, *sit* used to refer to the location of small animals, e.g. insects and birds. As can be deduced from Figure 2, the posture of these small animals is not too dissimilar from that of a sitting or crouched human being. Moreover, Lesuisse and Lemmens (2018) find other usages of *sit* in older English data which mainly referred to "being in a fixed position" or "being (closely) contained" (p.49). This extension is motivated by means of metonymy "(i) from the (partial) containment when sitting (snugly) in a chair to the larger space or (ii) from the close contact with the chair's surface to mere contact" (p.49). This allows *sit* to be used to say, for example, that a ring sits on one finger, as in (4), an instance where contemporary English now simply used the verb 'to be'. Sentence (5) illustrates the usage of *sit* with close contact.
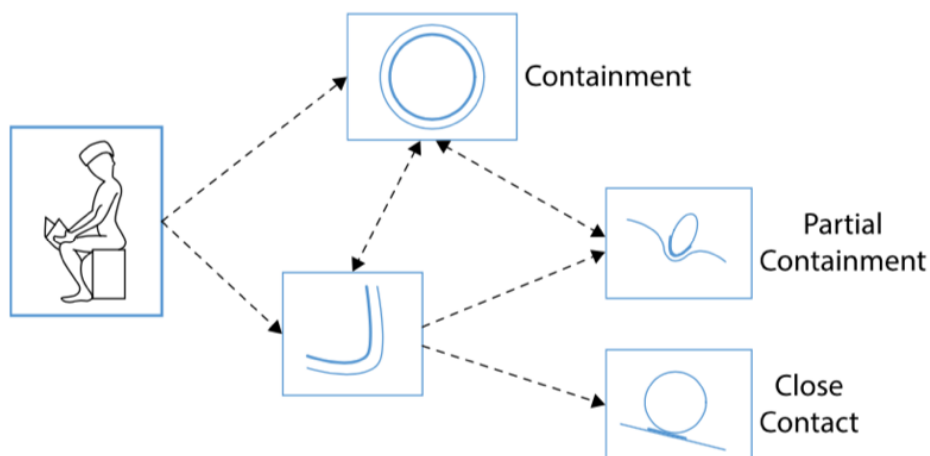

Figure 2. semantic extension of *sit*

(4)   Which <u>Ring</u> ... where it on a finger ***sat.*** (1390)

(5)   A <u>Coat</u> that ***sits*** close to the Body. (1687)

(Lemmens, forthc., p.138)

Lie, on the other hand, is used to express entities that are not on their base and where a more horizontal orientation is expected but not mandatory. *Lie* was also used to express "the location (i) of round or symmetrical objects; (ii) of saliently elongated or horizontally extending entities like roads, bridges, and metaphorical extensions thereof, such as lines or frontiers; and (iii) of substances that readily assume a horizontal extension under the force of gravity" (Lesuisse & Lemmens, 2018, p.49). The reason why round or symmetrical objects used to be coded with *lie* has to do with the absence of 'dimensional differentiation', represented as DIM-LESS in Figure 3, e.g. these objects have no clear distinction as to whether their base is horizontal or vertical, as in (6). Due to this absence of dimensional differentiation, *lie* is also used to talk about abstract entities, such as choices, explanations, and causes (Lesuisse & Lemmens, 2018). Moreover, *lie* was also commonly used to refer to the locations of cities, villages, and their metaphorical extensions, as in (7).
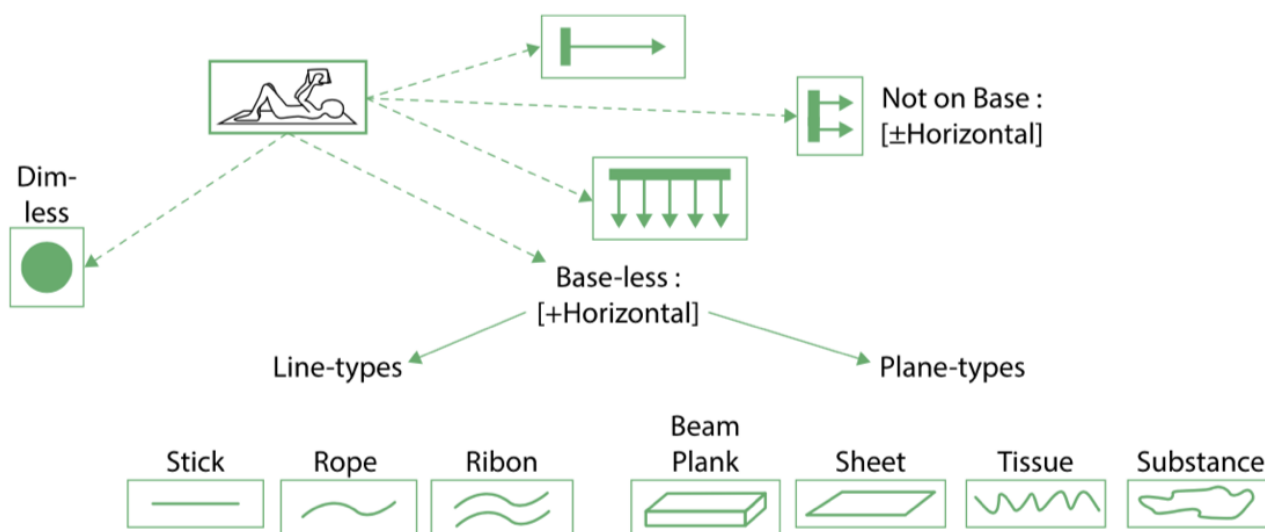

Figure 3. semantic extension of *lie*

(6)   His <u>blod</u> on erth sced ***lijs***. (1300)

(7)   There ***lies*** your <u>way</u>. (1596)

(Lemmens, forthc., p.137)

Concerning the frequency of these locational usages of the CPVs in the Modern English period (1500-1920), Lesuisse and Lemmens (2018) find that *sit* has always been much more restricted in its use in the locational construction than *stand* and *lie. Sit*, however, does noticeably decline from 1500 to 1920 with a distinct decrease in the 17th century. Lesuisse and Lemmens (2018) saw a similar trend for *stand*, of which the overall growth clearly decreased in the second half of the 17th century and also towards the end of the 18th century. The locational usages of *lie*, however, increased. This is due to its metaphorical entrenchment as a locational construction, e.g. *lie* increasingly occurred with an abstract Figure and/or Ground ("The difficulty *lies,* as it always does…", Lesuisse & Lemmens, 2018, p.58). These usages are still common in PDE.

In sum, Lesuisse and Lemmens (2018) found that the locational usages of the CPVs were firmly established in the Modern English period but that they statistically significantly declined, the metaphorical usages of *lie* being the exception to the overall trend. Due to this decline, the CPVs may have not been able to further entrench as basic locative verbs which ultimately blocks any further grammaticalization (Lesuisse & Lemmens, 2018).

3.1.2. CPVs in the Germanic languages. In other Germanic languages (Dutch, Norwegian, Swedish, and Danish in particular, German to a lesser extent), CPVs are still used as basic locative markers which conceptualise the position of entities in space (Lesuisse & Lemmens, 2018; Newman, 2002). The traces of the locational usages of the CPVs are still visible in contemporary English. However, they are limited in usage, especially when compared to the extensive use of CPVs as locational markers in Dutch (Newman, 2002).

(8)   a. **There's a lamp** (standing) **in the corner.**

b. **The book's** (lying) **on the table.**

c. **The book's** (standing) **on the shelf.**

d. **The clothes are** (lying) **in the drawer.**

(9)   a. **Er staat/**is **een lamp in de hoek.**

        b. **Het boek ligt/**is **op de tafel.**

        c. **Het boek staat/**is **op de plank.**

        d. **De kleren liggen/**zijn **in de la.**

(Newman, 2002, p.9 based on Van Oosten, 1982, p.138).

Illustrated by the sentences in (8) and (9) are the different preferences in English and Dutch concerning these locational expressions. In English, the verb 'to be' and the present progressive form of the CPVs can be used. The preference, however, goes to the alternatives without the CPVs; using 'to be' in these cases is also more colloquial. In Dutch, both 'to be' and a CPV as a main verb are possible alternatives, however, the sentences with 'to be' are much less idiomatic and thus are the sentences with the CPVs the preferred form. The preference in these two languages is, thus, opposite (Newman, 2002).

A noteworthy property of the Dutch CPVs in locational constructions is what facilitates the choice for one of the three posture verbs. As can already be seen from the sentences in (9), the restrictions and definitions of the semantic extension of the locational usages in earlier stages of English also apply to the Dutch CPVs. In sentence (9b), as opposed to sentence (9c), the book is said to is said to lie, *ligt,* on the table whereas it stands, *staat,* on the shelf. When a book is said to stand (with *staan*) this implies that the book is on its base, e.g. in an upright position. When a book is said to lie (with *liggen*), this implies that the book is either on its front or its back. However, while these usages are clearly representative of the human postures associated with the CPVs, as Lemmens (2002) discusses, Dutch also uses posture verbs "to code cases where the referent's ontological dimensions seem to conflict with the dimensions intuitively associated with the posture verb" (p.103).

(10) *De takken staan haaks op de stam.*

        'The branches stand at right angle on the trunk.'

(11) *Er zit suiker in mijn koffie.*

'There sits sugar in my coffee.'

(12) *Het appartementsgebouw ligt op de hoek.*

'The apartment building lies on the corner.'

In the sentences (10) to (12) the posture verb does not denote the actual posture of the subject. While in such cases the choice of a posture verb appears to be random to non-Dutch speakers, Lemmens (2002) discusses the interesting principles that allow for such a distribution. To discuss these in detail would surpass the scope and the aim of the paper. What is relevant to take away from this is the semantic shift that the CPVs have undergone. Some of these usages still show a clear overlap with the schematic representations of *sit, stand,* and *lie* in earlier usages, as with the use of *zitten* in (11) where the sugar is contained in the coffee and that of *staan* in (10) where mental rotation allows for the branches to stand. In (12), however, the choice for *liggen* is peculiar as an apartment building can be said to have a base and thus *staan* may be expected here.

So far there is still significant overlap between contemporary Germanic and earlier stages of English. However, Germanic languages have also developed a way to express progressive aspect by means of CPVs auxiliaries. Note that German differs here: while locative usages do occur in German, CPV constructions with progressive aspect have not been attested[1].

(13) Dutch (Lemmens, 2005, p.184)

'Ik zit te lezen'

I   sit to read

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[1] German has a number of other constructions to express progressive aspect of which the *am*-progressive is the most frequent one. However, the *am*-progressive is infrequently used when compared to the Germanic equivalents (Anthonissen et al., 2019).

'I am reading'

(14) Norwegian (Kuteva, 1999, p.195)

Jeg sitter og   snakker.

I   sit   and talk

'I am talking.'

(15) Swedish (Kuteva, 1999, p.196)

Han sitter och   läser.

He   sits   and   reads

'He is reading.'

(16) Danish (Kuteva, 1999, p.195)

Han ligger og   kører rundt hele   natten.

He   lies   and drives round whole night

'He has been driving all night long.'

Even though there is a slight difference in the actual construction, e.g. Dutch using a

CPV with an infinitival complement linked by the infinitival participle *te*, whereas

sit/stand/lie + and + main verb is the construction used in the Scandinavian languages, the

function and meaning are the same across these languages. They all express a

continuative/durative/progressive meaning (Kuteva, 1999).

Kuteva (1999) discusses this process of auxiliation of CPVs and sketches their

possible grammaticalization process. The first prerequisite is that the CPVs are used as

"unmarked/canonical encodings of the spatial position of physical objects" where the CPVs

function very much like locative markers (p.205). This is the case for Dutch and the

Scandinavian languages as well as Old and Middle English. However, as we know,

contemporary English prefers to use 'to be' instead of the CPVs when referring to the spatial

position of objects. The loss of the 'postural' semantics of the CPVs in their canonical usages is the first stage of their desemanticisation (Kuteva, 1999). Once this is established, the CPVs can be used with both animate and inanimate objects. What allows the CPVs to become associated with continuative/durative/progressive meaning is the reanalysis of the verb compliment (Kuteva, 1999). In the first stage of the grammaticalisation process, the verb compliments are restricted to expressing activities which are compatible with the posture expressed by the CPV. Later, the compliment also takes on activities which are less compatible with the posture, or activities which do not imply a posture at all (Lemmens, 2005a). According to Kuteva (1999), it is exactly this loss of the association with the actual human posture that allows for the constructions (SIT/STAND/LIE + AND + main verb[2]) to become exclusively associated with continuative/durative/progressive meaning.

3.1.3. CPVs in English Copular Constructions. From the literature discussed in Section 3.1.2, it is clear that contemporary Dutch and the Scandinavian languages have a much more elaborate posture verb system than contemporary English. In other words, English appears to be the odd one out within this language family. Dunn et al. (2007, as cited in Lesuisse & Lemmens, 2018, p.45) point out this asymmetry in the following way:

> In fact, if one compares English *sit, stand, lie,* and *hang* to [...] Dutch *zitten, staan, liggen,* and *hangen*, one is struck by the fact that the two sets of verbs are cognate and very close in meaning, yet the Dutch set forms a real positional verb system, while the English set does not. It may be that languages like English … have a potential positional verb system, while Dutch [has] an actual positional verb system. (p.189)

Similarly, Lemmens (2005a) suggests a continuum of posture verb usages among the Germanic languages, with Dutch – having a high obligation to use CPVs – being on the one

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[2] Kuteva (1999) also mentions here that Dutch used to have the 'sit'/'stand'/'lie' + and + main verb construction until the sixteenth century after which it was replaced by the 'sit'/'stand'/'lie' + *te* + infinitive construction as in (9).

end, and English – with a low obligation to use CPVs as locative markers – on the other. The Scandinavian languages and German straddle in the middle.

However, Lesuisse and Lemmens (2018) find that in Modern English (1500-1920) there used to be more grammaticalised usages of CPVs too. Besides CPVs that were used in either postural or locational constructions, Lesuisse and Lemmens (2018) establish that the CPVs also occurred in copular constructions. These were either nominal (*Subject + CPV + Noun:* "[He] stood Grandfather to my little girl") or adjectival (*Subject + CPV + Adjective:* "Convention committees sit supreme over them") (p.45). These copular constructions build on the basic locative usages and are, therefore, the most grammaticalised form of the CPVs attested in the English language (Lesuisse & Lemmens, 2018).

In order to study the degree of grammaticalization of the copular construction, Lesuisse and Lemmens (2018) measure the degree of productivity of the copular construction by means of hapaxes and types[3]. What their results yielded is a decrease for the number of types of *stand* as well as a decrease in its productivity. *Sit* increases in both number of types and productivity in Early Modern English. In Late Modern English, however, the global productivity rate decreases. What this entails is that, for both *stand* and *sit,* a number of adjectives may have formed fix collocations with a CPV, which remain to be used over time. For *lie*, on the other hand, an increase in productivity is observed: the number of types decreases in Early Modern English, but again increases in Late Modern English. This means that *lie* occures with a large number of different adjectives but that these do not reoccur often enough to become fixed expressions (Lesuisse & Lemmens, 2018).

In sum, Lesuisse and Lemmens (2018) found that the CPVs were used in copular constructions; yet, their usage was very constrained and restricted to fixed expression of

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[3] For a detailed discussion of their research method see Lemmens and Lesuisse, 2018, p.58-59.

which most were still related to the CPVs' experiential clusters[4]. This anthropocentric meaning of the CPVs, in particular in the nominal copular constructions, has not bleached completely. Thus, it appears that "the English CPVs did show patterns of (budding) grammaticalisation, but they may not have reached a full grammaticalised status." (Lesuisse & Lemmens 2018, p.65).

3.1.4. The Demise of CPVs in English. The question that remains now is why the CPVs in English did not continue to grammaticalise. Lesuisse and Lemmens (2018) consider three possible hypotheses for the demise of the CPVs. One of the three hypotheses is that the CPVs in English may have disappeared due to the influence of the French language. It is well-known that the English language has borrowed immensely from French. According to Lesuisse and Lemmens (2018) this includes "verbs relating to either motion or location, such as *enter, exit, place, situate,* etc." (p.52). Such verbs are said to not fit well with the pattern of the Germanic languages because the above-mentioned verbs express the path or location, while Germanic languages verbs typically express the manner of motion or location because the path is expressed in a satellite, e.g. a nonverbal element which is associated with the verb (Ameka & Essegby, 2013). However, this hypothesis turns out to be quite unlikely because the (manner of) motion verbs are still used productively. Moreover, according to Lesuisse and Lemmens' (2018) corpora and OED search, the posture verbs were still used as location verbs even after the peak of the French influence in the 12th century.

The second hypothesis is based on Newman (2009), who argues that English posture verbs develop locative meanings in relatively limited ways. The cause of this limited extension may be ascribed to a fluctuation in the meaning interpretations of the CPVs, e.g. the posture verbs have both action and stative interpretations (Newman, 2009). The action

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[4] According to Newman (2002), experiential clusters are groups of characteristics that are associated with sitting, standing, or lying postures.

interpretation, i.e. inchoative aspect, for *sit* refers to the transition from an upright position to a seated one on, for example, a chair. The state interpretation is in contrast with this, in this interpretation *sit* would refer to the continuing state of being seated in, for example, a chair (Newman, 2009). In the 16th century, the particle *down* played a role in distinguishing these two interpretations, where *sit down* was favoured with the inchoative meaning and *sit* with the state interpretation. However, a strict lexical separation of these two interpretations of *sit,* as well as those for the other posture verbs *stand* (up) and *lie* (down), never emerged. That is why there are also instances where a posture verb without a particle refers to a dynamic event of getting into a sitting, standing, or lying position (Newman, 2009; Lesuisse & Lemmens, 2018). The same holds for instances where the posture verb, followed by a participle, refers to a state. Hence, neither of the constructions can be exclusively associated with one interpretation. According to Newman (2009), it is precisely this fuzziness which prevented the CPVs to grammaticalise further.

Newman's (2009) hypothesis was tested by Lesuisse and Lemmens (2018), who compared the events CPV constructions with and without particles refer to. Lesuisse and Lemmens (2018) find that, indeed, the static use of the CPVs dominates the dynamic usages. On the whole, they also found that the bare construction, e.g. without particle, refers to static events and that the construction with a participle expresses dynamic events. The fuzziness put forward by Newman (2009) is also attested by Lesuisse and Lemmens (2018), because there are instances where the bare construction refers to dynamic events and instances where the construction with a particle refers to a static one. However, while the rise of these non-prototypical usages is very limited, they do co-occur with the overall decrease of the locative and copular uses of the CPVs. Thus, the evidence that Lesuisse and Lemmens (2018) find in support of Newman's hypothesis is minimal. The question, therefore, still remains if that rise is the triggering factor for the decrease of the CPVs.

The third hypothesis is that the demise of the CPVs was caused by changes in the aspectual system of the English language, i.e. the rise of the *-ing* form. In contemporary English, the *-ing* form solely occurs with stative verbs, with the exception of the CPVs. When CPVs are used in combination with the *-ing* form, (17) (also, see (8)), they denote a temporary situation whereas in (18) the base form of the CPV denotes a more permanent state (Lesuisse & Lemmens, 2018, p.53).

(17)   *She was sitting on the sofa.*

(18)   *The statue stands in the park.*

Compare this to Dutch where posture verbs cannot occur in the most grammaticalised progressive construction of the Dutch language, e.g. the '*aan het'*-construction (Booij, 2004; Lemmens, 2005a; 2005b, p.4):

(19)   *Ik ben aan het staan / liggen / zitten**

I   am   at   the   stand / lie   / sit

I am standing/lying/sitting.

The picture that emerges, then, is that "at the time the *-ing* form came into being, its semantics were in conflict with the static semantics of the CPVs, disfavouring their use in locative contexts"[5] (Lesuisse & Lemmens, 2018, p.53). The fact that none of the other Germanic languages have developed an equivalent of the *-ing* progressive, as found in the English language, may have allowed for the CPVs to grammaticalise further[6].

In order to discover whether the [*be* + V-*ing*] construction had an effect on the CPVs, it shall need to be verified whether the rise of the [*be* + V-*ing*] construction converges with the demise of the CPVs. Lesuisse and Lemmens (2018) suggest, based on an explorative pilot study by Lemmens (2005b), that these two constructions do not converge. In the pilot study,

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[5] This semantic conflict is further discussed in the next section.
[6] Note that, after the English [*be* + V-*ing*], the Dutch *'aan het'*-construction is said to be the most grammaticalised progressive construction of the Germanic languages, however, it has nowhere near grammaticalised as much as [*be* + V-*ing*] (Lemmens, 2005a; Booij, 2004).

Lemmens (2005b) researched the usage of *sit* between the 14ᵗʰ century until the 20ᵗʰ century. The data, a small sample of fiction texts, showed that the overall frequency of *sit* actually increases between the 14ᵗʰ century and the 20ᵗʰ century. The same holds for the usage of *sit* with human and human-like Figures. The literal usages of *sit* increase but *sit* decreases when used locationally and metaphorically. This data therefore suggests that the demise of the CPVs does not converge with the rise of the progressive *-ing* form. However, Lemmens' (2005b) pilot study limits itself to *sit* and, according to Lesuisse and Lemmens (2018), *sit* is the CPV that is actually used most restrictedly in comparison to *stand* and *lie.* It is thus insufficient to reject this hypothesis on the basis of Lemmens' (2005b) study. For this reason, the present study shall verify the hypothesis by comparing the decrease of the [*be* + V-*ing*] construction with the frequency of all three CPVs.

3.2. The [*be* + V-*ing*] Construction

What has been established in this literature review so far is that the usage of the CPVs in English differs significantly from that in the other Germanic languages. Three possible reasons for this difference have been discussed, of which the relationship between the rise of the *-ing* form and the demise of the CPVs seemed the most plausible scenario. However, in order to investigate this relationship further, some background on the semantics and development of the [*be* + V-*ing*] construction in Modern English needs to be established first.

The progressive construction [*be* + V-*ing*] has been studied extensively (i.a. Bybee et al., 1994; Curme, 1913; Denison, 1993; De Groot, 2007; Ebert, 2000; Elsness, 1994; Jesperson, 1949; Killie, 2014; Kranich; 2010; Petré, 2015; 2017; Smith, 2007). While there are many aspects of the development of this construction that remain unclear or unresolved, there appears to be some form of an agreement as to when progressive aspect became entrenched with the construction: the grammaticalisation of the construction as a progressive maker presumably started in the Early Modern English period (c. 1500-1700). The

construction shows a marked increase from the 16th century onwards and the usage of [*be* + V-*ing*] become systemic and grammatically obligatory after the 18th century (Kranich, 2010; Killie, 2012; Petré, 2015; Strang, 1982 as cited in Lemmens, forthc.).

Before the 17th century the *-ing* form was mostly unsystematic. However, Petré (2015) and Killie (2014) establish four main usages of the [*be* + V-*ing*] construction at that time. First, the most frequent usages of the *-ing* form in earlier periods are the stative usages. In essence, [*be* + V-ing] is stative when it does not have a progressive quality, i.e. the phases of the situation expressed are all identical (Petré, 2015). Semantically, then, "the construction denotes a(n often temporary) quality of a non-agentive subject" (Petré, 2015, p.39). Second, the [*be* + V-*ing*] construction is more process-oriented and verbal in its durative use. Semantically, the durative *-ing* form is used when an agent sustains an ongoing event for a limited amount of time. The subject in the durative context is, therefore, more agent-like (Petré, 2015). Third and most common in PDE is the focalised use of [*be* + V-*ing*]. The focalised progressive expresses the notion of an event as going on at a single point in time, this is the focalisation point (Killie, 2014; Petré, 2015). Another and fourth usage of [*be* + V-*ing*] is its narrative usage which views an event as a completed whole (Killie, 2014; Petré, 2015). This narrative usage was used in Old English but was already rare in Middle English, after which it disappeared completely (Killie, 2014).

There are different accounts regarding the exact change that the [*be* + V-*ing*] construction underwent in the Middle English period. An interesting account is that of Petré (2015) who argues that the functional change of [*be* + V-*ing*] was made possible by a contextual/co-textual change. In Middle English, the focalised usage of [*be* + V-*ing*] increases, even sharply so between 1421-1500 and 1501-1570. However, this appears to have gone at the cost of the stative usage as these decrease (Petré, 2015; Killie, 2014). According to Petré (2015) it is especially in this context that the use of [*be* + V-*ing*] changes. Both the

stative and the focalised usage, with respects to grounding, are associated with

backgrounding material.[7] The increase of the focalised use co-occurs with an overall increase

of backgrounding adverbial clauses. After this increase of focalised usages in adverbial

clauses from 1500 until 1570, [*be* + V-*ing*] also expands to main clauses from 1570 until

1640 (Petré, 2015, p.46). This happens because when [*be* + V-*ing*] occurs in (past-tense)

adverbial clauses, the focalisation point is in the main clause which provides the topic time of

the ongoing situation expressed by [*be* + V-*ing*]. In this way, the information that was

conveyed changed from affirming a property of a non-agentive subject to that of "giving

information on what was going on when something else happened" (Petré, 2015, p.48). Due

to this semantic extension of [*be* + V-*ing*] with respects to ongoingness, the [*be* + V-*ing*]

construction with progressive meaning could be used in other clause types as well.

In other words, in the Early Modern English period, as shown by Petré (2015), [*be* +

V-*ing*] was already becoming more prone to ongoingness due to the increase in focalised

usages. Overall, however, the construction was still used similar to that of Old and Middle

English (Kranich, 2010). From the second half of the 17th century, the aspectual use of [*be* +

V-*ing*] becomes increasingly more predominant (Kranich, 2010). From the late 18th century,

the clear grammatical status of [*be* + V-*ing*] leads to its extension across the verbal paradigm

(Kranich, 2010). As the [*be* + V-*ing*] construction became the way of introducing ongoing

activity into narrative, it became confided to topics with a human (or human-like) agent and

activity verbs because dynamic situations require an constant input of energy which needs to

be supplied (Kranich, 2010; Strang, 1982 as cited in Lemmens, forthc.).

3.2.1 Semantic Clash with the CPVs. While the usages of the CPVs are mainly

stative, we have seen that they could also be interpreted as expressing an activity (nonetheless

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[7] Backgrounded material overlaps with the foregrounded events and comment on these. Where foregrounded events take place at the topic time, backgrounded events do no relate to the topic time. As a result, foregrounded events are often perfective whereas backgrounding material is often imperfective. Moreover, foregrounded material is typically found in the main clause and backgrounded events in subordinate clauses (Petré, 2015).

heavily associated with maintaining the particular posture expressed by the CPV). Moreover, the CPVs could be used with both animate and inanimate subjects. It is especially this overlap between the CPVs, when used to describe a stative but ongoing situation, and [*be* + V-*ing*], when becoming associated with agentivity and temporal ongoingness, that may have discouraged the CPVs to grammaticalise further. The semantic clash between the CPVs and [*be* + V-*ing*] is most conflicting for contexts with inanimate subjects (Lemmens, 2005b; forthc.). As a result, according to Lemmens (2005b; forthc.), the CPVs were discouraged from use with inanimate objects first. Therefore, a more exclusive orientation of the CPVs towards human subjects may be expected in the overall demise. Moreover, if the demise of the CPVs is to be attributed to the rise of [*be* + V-*ing*], then this rise should co-occur or slightly precede the demise of the CPVs (Lemmens, forthc.).

3.3. Conclusion

This literature review has summarized the most important aspects of the development of both CPVs and the [*be* + V-*ing*] construction in the Modern English period. It has been established that the overall usage of the CPVs, i.e. locational as well as the copular usages, decrease in the Modern English period, with the copular usages decreasing specifically in the 17th century. The [*be* + V-*ing*] construction, on the other hand, showed a marked increase from the 16th century onwards. From the 18th century onwards, the [*be* + V-*ing*] construction became more systematic and obligatory. It is interesting to compare these developments because the two construction types appear to be in conflict with one another semantically (Lesuisse & Lemmens, 2018; Lemmens, forthc.). It is expected that this semantic conflict resulted in a more exclusive orientation of the CPVs towards animate objects. However, the proposed relationship between the CPVs and the [*be* + V-*ing*] construction has not been attested yet. It thus unclear if and how much of an influence the [*be* + V-*ing*] construction has

had on the development of the CPVs. Predicted is that this influence mostly occurred on a semantic level.

In order to determine whether the [*be* + V-*ing*] construction had an influence on the CPVs, that may have caused the demise of the CPVs, the frequency of the constructions needs to be established over the course of the Modern English period. This is most effective and representative by means of one the same data set. The distribution of animate and animate objects among these constructions can give an insight into whether a semantic clash occurred between these two construction types.

4. Methodology

In the present section the characteristics of the corpora are described as well as their compatibility for this research (Section 4.1). The process by which the data has been retrieved is discussed in Section 4.2.

4.1. Corpora

The era of interest in the present study is the Modern English period, as the decrease of the CPVs and the increase of the [*be* + V-*ing*] construction took place during this time period. For this reason, the Penn Parsed Corpus of Early Modern English (PPCEME) as well as the Penn Parsed Corpus of Modern British English (PPCMBE) (Kroch et al., 2004; 2010) have been selected as the corpora from which the data described in Section 4.2 is retrieved.

The PPCEME covers a time span from 1500 until 1710 and consists of over 1.7 million words. The PPCMBE ranges from 1700 until 1914 and has just under one million words: 948,895. Each corpus is also divided into three sub-periods which each cover 70 years. In the PPCEME these periods are labelled in the name of the text, in the PPCMBE this is not the case. Labels were therefore created (see Table 1). These evenly distributed sub-periods are beneficial for diachronic studies, as they allow the analyst to estimate the frequency of constructions in six more fine-grained stages. Both corpora are genre-balanced and made up of the same diverse range of genres (e.g. biblical, drama and comedy, law, letters, science, history, etc.). All the texts from both corpora are available as parsed, POS-tagged, and unannotated. AntConc (Anthony, 2019) was used to search for the data.

PERIOD	LABEL	WORD COUNT
PPCEME		**1,737853**
1500-1569	E1	567,795
1570-1639	E2	628,363
1640-1710	E3	541,595
PPCMBE		**948,895**
1700-1769	M1	298,764

1770-1839	M2	368,804
1840-1914	M3	281,327

Table 1: Corpora with sub-periods and word count

4.2. Data

For the CPVs, the data was collected by using the regular expressions search option of AntConc to search for the myriad spelling variations, established by using the OED, that exist for *sit, stand,* and *lie*, as well as the different spellings for their past and future tenses. All instances of the relevant CPVs have been used for this study, i.e. no distinction has been made between CPVs occurring in locative or copular constructions. For the [*be* + V-*ing*] construction, the data was collected by using the POS-tagged versions of the texts. By doing this, precision may have had the upper hand over recall as it allowed the data to be searched specifically for any form of the verb *to be* directly followed by a verb as a present participle. This way, the vast majority of the results were relevant but more deviant, and perhaps interesting, instances were missed. This may include instances of adjectival complementation by means of *-ing* participle clauses (Quirk et al., 1985).

The next step was to remove any unnecessary noise from all the data. For the CPVs this mostly meant that their nominal counterparts needed to be removed. Especially important for the CPV *lie* was to remove instances where *lie* was used as meaning 'to tell a lie' or 'an untrue statement'. For the [*be* + V-*ing*] construction this generally entailed that the instances where a comma was placed between *to be* and the present participle were removed. Some usages of Latin made their way into the data set, these were removed as well. This resulted in the following absolute frequencies for each construction per subperiod:

	Sit	*Stand*	*Lie*	[*be* + **v-***ing*]
PPCEME	401	1062	774	507
1500-1569	160	419	251	95
1570-1639	120	399	269	156
1640-1710	121	244	254	246

PPCMBE	231	453	280	1043
1700-1769	41	194	151	293
1770-1839	110	151	73	375
1840-1914	80	108	56	363

Table 2: absolute frequencies

After the data collection, all relevant tokens were further labelled as having either an animate or an inanimate subject. Subjects were considered to be animate if they represented beings that are alive, which encompasses human, human-like, and animal subjects, but also includes God and spirits or ghosts. Plants, dead bodies, and representative bodies that consist of individuals, such as committees and the parliament, were labelled as inanimate. These choices were made because most of the (consulted) literature do not explicitly demarked these categories while many ambiguous cases exist. For this reason, the present study set clear boundaries with respects to animacy.

The total number of relevant instances for both the CPVs as well as the [*be* + V-*ing*] construction were manageable, hence all of them have been used to analyse. In order to analyse this data quantitively, the normalised frequencies of each construction were calculated per subperiod by means of the following formula:

$$\frac{\#token\ pattern}{total\ \#\ of\ words\ subcorpus} \times 100,000$$

The relative frequencies of the CPVs have been calculated as well, these can be found in Appendix A.

Finally, while the main aim of the study is to attest the frequency of occurrence for both the CPVs and the [*be* + V-*ing*] construction, an eye was kept out for interesting instances, including the different types of usages of the CPVs as described by Lesuisse and Lemmens (2018) in Section 3.1.1. and 3.1.3.. Moreover, as it has been suggested that the CPVs are the only stative verbs which are compatible with the [*be* + V-*ing*] construction, instances where the verb in the [*be* + V-*ing*] construction is a CPV were marked as well.

5. Results & Discussion

In the present section, the data from the CPVs will be presented and discussed in Section 5.1.1 and 5.1.2., respectively. The findings for the [*be* + V-*ing*] construction are presented in Section 5.2. The results of both the CPVs and the [*be* + V-*ing*] construction are placed alongside of each other and correlated in Section 5.3. These are, then, also discussed in light of other changes that occurred in the Modern English period.

5.1. Cardinal Posture Verbs

5.1.1. Results. Figure 4 shows the normalised frequencies of *sit* over the six sub-periods. The overall frequency of *sit* remains the same. However, *sit* does fluctuate a little as it gradually decreases until the start of the 18th century. In the 18th century, the occurrence of *sit* almost doubles which brings it back to nearly the same frequency of first sub-period (1500-1569). This increase was also attested in the pilot study of Lemmens (2005b; forthc.). The distribution of *sit* with animate and inanimate objects remains largely the same, with *sit* occurring with animate subjects between 92.68% and 84.55% over all subperiods.
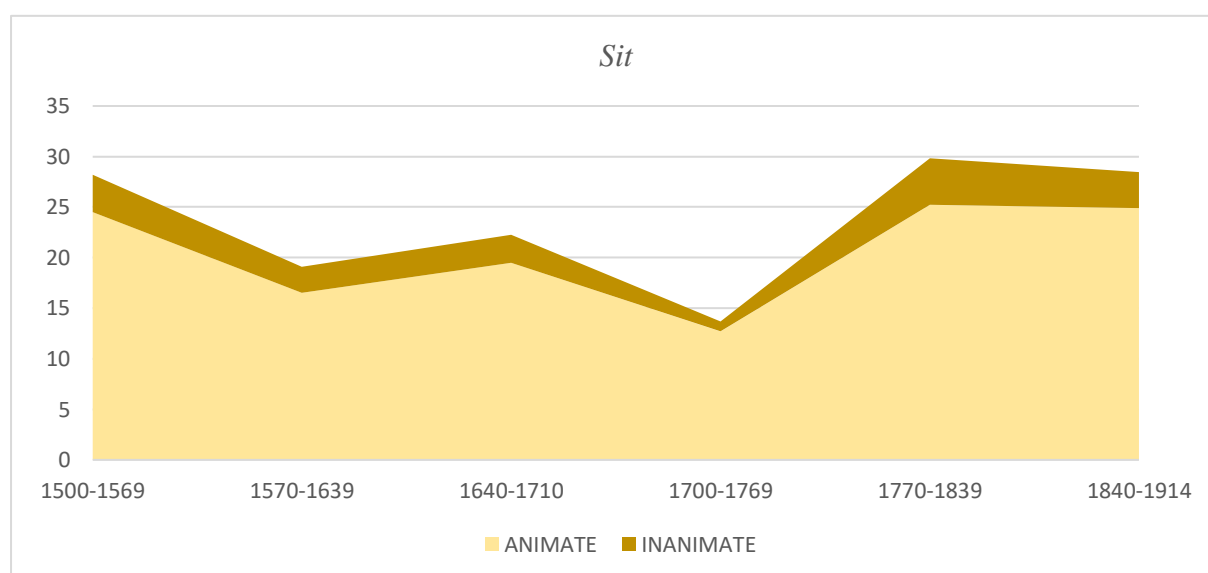
Figure 4: Normalised frequency *sit*

The frequency of *stand* (Figure 5) decreases over the entire Modern English period to nearly half its size (39.45% in subperiod 1500-1569 to 23.84% in 1840-1914). However, in the latter half of the 17th century usages of *stand* increase, peaking during the change of the century, 42.83% in subperiod 1700-1769, after which it decreases again over the 18th century. Overall *stand* typically occurs with animate objects whose frequency over the centuries follows the same patterns as that of *stand* in general. However, towards the 20th century, *stand* almost occurs with as much animate objects as inanimate ones (52.77% with animate and 47.23% with inanimate objects in subperiod 1840-1914).
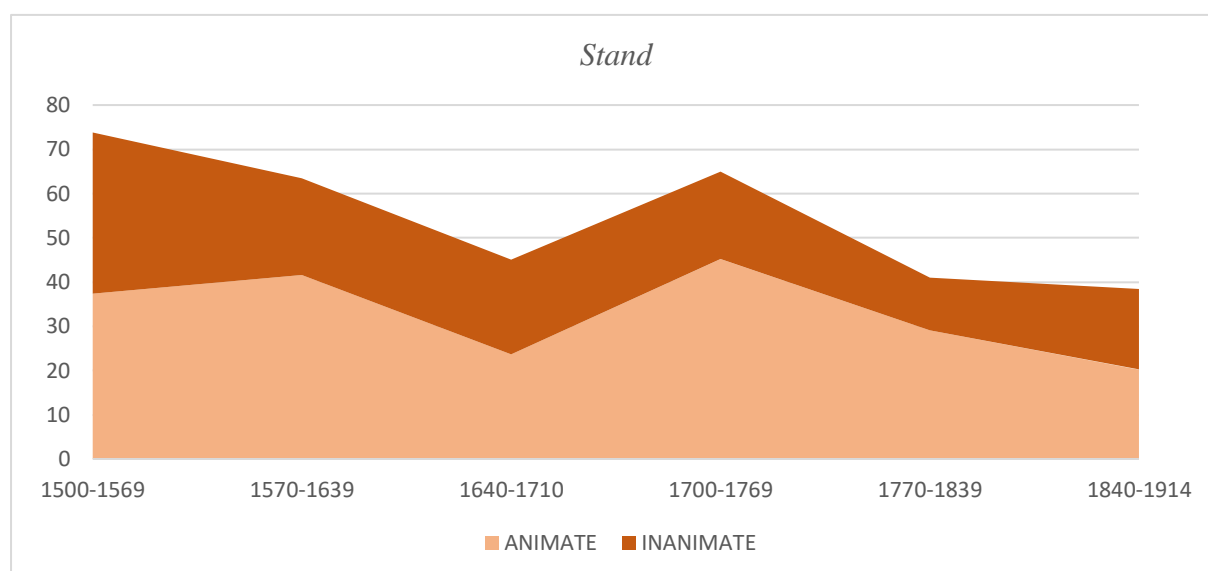
Figure 5: Normalised frequency *stand*

The frequency of *lie* decreases as well, to less than half its size from the 16th century towards the end of the 18th century (32.43% in subperiod 1500-1569 and 20% in 1840-1914) (see Figure 6). This decrease is less gradual than that of *stand*, *lie* sharply decreases during the beginning of the 18th century. During this period, inanimate objects take the upper hand over animate objects and remain more frequent throughout the remainder of the Modern English period (70.63% animate and 29.37% inanimate in 1570-1639 to 32.14% animate and 67.86% inanimate in 1840-1914).
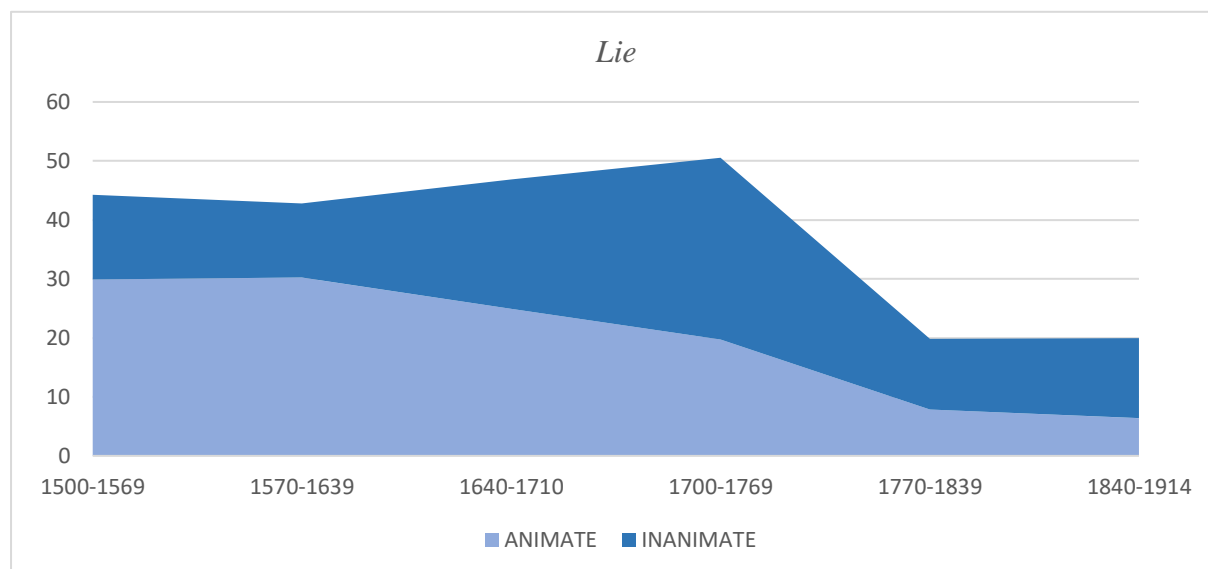
Figure 6: Normalised frequency *lie*

In Figure 7 the total frequencies of the three CPVs are visible alongside of each other. The picture that emerges is that both *stand* and *lie* clearly decrease from the start of the 18th century whereas the frequency of *sit* fluctuates over the Modern English period but in the end, the frequency of occurrence remains more or less the same.
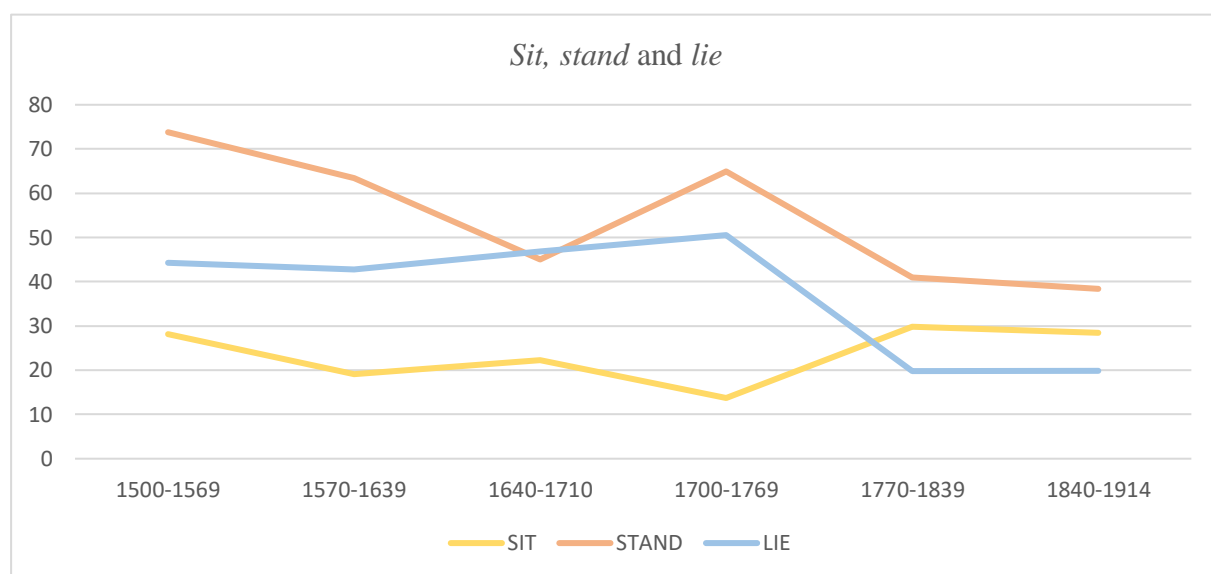
Figure 7: Normalised frequencies of the total occurrences of *sit, stand,* and *lie*

5.1.2. Discussion. While the present study has made no distinction in which type of construction the CPVs were used, as was done in Lesuisse and Lemmens (2018), an eye was kept out for examples of the different construction types in which CPV occurred in the Middle English period in this data set. Some are mentioned here to illustrate the variation and richness of the usages of the CPVs in the Modern English period. The complete list of significant instances can be found in Appendix B.

Example (20) to (22) clearly illustrate the locational construction (Lesuisse & Lemmens, 2018) in which the CPVs can occur. In such constructions one entity is located with respects to a second entity. These entities can also be abstract, as in (20) and (22), these are then the metaphorical locational constructions.

(20)   *Paleness **sits** on every face.* (Carlyle, 1837)

(21)   *It was after dinner, when pyes **stood** in the oven to coole for supper.* (Armin, 1608)

(22)   *Creed **lay** here in Barker's bed.* (Pepys, 1666-1667)

Example (23) and (24), on the other hand, illustrate what Lesuisse and Lemmens (2018) call the copular construction, the most grammaticalised construction in which the CPVs occurred. Here the subject is followed by an CPV which in turn in either followed by an adjective, as in (23), or a noun, as in (24):

(23)   *As the medicine **sat** easy upon the stomach ...* (Bardsley, 1807)

(24)   *... so that the Huguenots could not tell what to make of their good Protectress, who had even gone so far as to **stand** Godmother to Charles's new-born daughter.* (Kimber, 1742)

A number of other interesting patterns were found among the data as well. *Sit* is often found followed by *and* + verb, as in (25) and (26). This construction has not been found for *stand* or *lie* and is reminiscent of the progressive reading we see in present-day Scandinavian of CPV auxiliaries, see (14), (15), and (16).

(25)　　*And there one may <u>sit and drink</u> cocoa-nut milk.* (Reade, 1863)

(26)　　*There we'll <u>sit and sing</u> whilst this showr falls so gently upon the teeming earth.* (Walton, 1676)

Another pattern that is visible for the CPVs is that of a CPV followed by a present participle, as in (27) and (28). In some cases, the CPV itself is also written as a present participle, as in (29) where the two participles are linked by *and*.

(27)　　*... while the Generall <u>sat sleeping</u> this afternoon at the Counciltable.* (Pepys, 1666-1667)

(28)　　*… and there <u>stood eating</u> the pie.* (Armin, 1608)

(29)　　*… and solemnly join the Commons <u>sitting and waiting</u> in their Church.* (Carlyle, 1837)

Instances such as (29) are still found in PDE. Newman and Rice (2004) find that this construction, in PDE, occurs with all three CPVs. These constructions always occur with the posture verb mentioned before the other verb. This usage is reminiscent of how CPV are often used, in many languages, as general locational predicates. The CPV, as in (29), functions to locate an entity which is further described by the following verb. While the frequencies of these patterns in Newman and Rice's study (2004) "indirectly reflect the physical and

conceptual realities about human postures", and the activities linked to these by means of the verb in the second position, the CPVs in PDE are yet to undergo full grammaticalisation (p.369).

What these sentences (20) to (29) suggest is the potential the CPVs already had in the Middle English period to grammaticalise as progressive markers. Additional to the metaphorical, locational, and copular constructions discussed in Lesuisse and Lemmens (2018), more constructions have been found in which the CPVs behave in interesting and perhaps progressive ways. Examples (25) and (26) are reminiscent of the constructions found in present-day Scandinavian whereas (27) to (29) show a pairing of the CPVs with the verbal *-ing* ending. This pairing appears somewhat unexpected and contrary to the suggested semantic clash between the CPVs and the [*be + V-ing*] construction. Although the verbs ending in *-ing* in these sentences do not occur with *to be*, it remains significant that these stative CPVs combine here with more active verbs and therefore allow for a progressive reading. However, in order to interpret these constructions accurately, further research regarding their semantics and frequency is needed.

In term of animacy, examples (20) and (23) are exceptions to an overall pattern, because *sit* is actually compatible with inanimate objects in a very restricted way. As already established in the literature review, *sit* is the most restricted of the three CPVs (Lesuisse & Lemmense, 2018; Lemmense 2005b; forthc.). This observation is corroborated by the results of the present study, which confirms that the frequency of *sit* is relatively low over the entire Modern English period. This is especially striking in comparison to the other two CPVs, *stand* and *lie*, which are almost equally compatible with animate and inanimate objects. In the 17th century, however, the number of inanimate objects that are used with *lie,* clearly increases (see Figure 6). Lesuisse and Lemmens (2018) attested a similar trend which revealed that "*lie* got entrenched in its metaphorical locational use with abstract Figures or Grounds [,]

[a]llowing a wide range of abstract inanimate entities" (p.58) as in (22). In fact, in Lesuisse and Lemmens' study (2018) *lie* occurs the most in metaphorical ways of the three CPVs. The same appears to be true in the present data set.

It is quite striking that *sit* is more restricted than *stand* and *lie* and that *sit* hardly shows any fluctuation with respects to animate and inanimate objects. In Dutch, *zitten* ('to sit') is the CPV that has gone the furthest in its semantic bleaching (Lemmens, 2005a). According to Lemmens (2005a) this is in line with what is known about CPVs in other, unrelated, languages. In PDE, *sit* is actually the most frequent CPV, followed by *stand* (Newman & Rice, 2004). This is also reflected among the progressive constructions found in Dutch: *sit* is the most frequent (together with the *aan het*-construction) followed by *stand* and *lie* (40.93% for *sit,* 44% for *aan het,* 9.82% for *stand,* and 1.99% for *lie*) (Anthonissen et al., 2019). According to Newman & Rice (2004), this may reflect "a (vague) intuition that sitting is privileged experientially and linguistically". Sitting and standing are also postures in which we typically find ourselves multiple times a day whereas a horizontal position is mostly associated with sleeping (p.364). Hence, it may not be implausible to assume that *sit* increased in usage, and thus become the most frequent of the three CPV in PDE, as humans throughout time began to find themselves in seated positions more often. It does not explain, however, why *sit* is restricted in its usage with inanimate objects. Both Newman (2009) and Newman and Rice (2004) study the compatibility of the CPVs in PDE with inanimate objects. Newman (2009) does so in combination with the noun *house* and find that both *sit* and *stand* are used with *house*, however, *stand* more so than *sit.* Newman and Rice (2004) reach a similar conclusion: the verbs which are most frequent in their usage, *sit* and *stand*, occur the least with inanimate objects whereas the least frequent CPV, *lie*, occurs the most with inanimate objects.

5.2. The [*be* + V-*ing*] construction

The results of the frequency of the [*be* + V-*ing*] construction in the PPCEME and the PPCMBE result in a picture (see Figure 8) that is every similar to what has been established in the literature. From the 16th century until the start of the 18th century there is a clear increase, remarkably so in the latter half of the 17th century. The construction has been said to become systemically and grammatically obligatory after the 18th century: the current data does not seem to disprove this as the [*be* + V-*ing*] construction increases even more in the first half of the 19th century. Moreover, while the construction largely occurs with animate subjects, inanimate subjects become more frequent too.
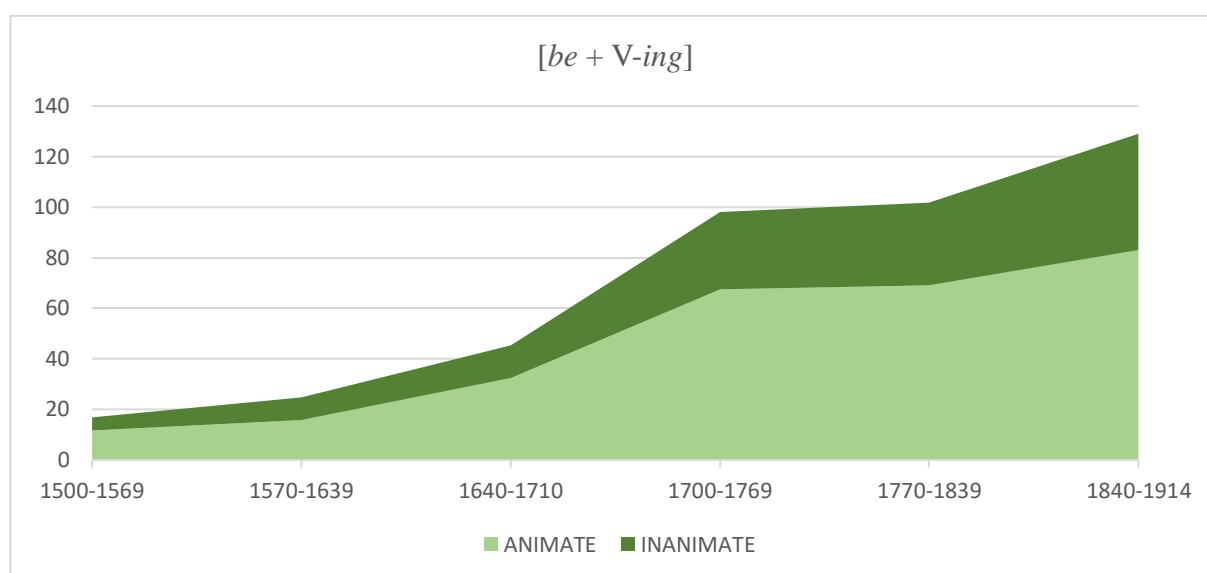
Figure 8: Normalised frequency of the [*be* + V-*ing*] construction

When analysing the data, the instances where the verb of the [*be* + V-*ing*] construction was a CPVs have been marked. While the total number of such instances were very small (see Figure 9), they do increase over the entire Modern English period. Sentences (30) to (32) are used to illustrate what those instances look like (see Appendix C for all the instances). The constructions appear to be locational and the CPV are used postural, e.g. they refer to actual position of the subject. This does not differ too much from the way the CPVs

are used in the [*be* + V-*ing*] construction in PDE. However, the data set of the present study is too small to make any statements regarding this data. It is an interesting trend to point out nonetheless because sentences (27) to (29) already hinted to a pairing between the CPVs and the [*be* + V-*ing*] construction although *to be* was not present in these examples. Here, however, it appears that a full pairing, or merge perhaps, between the two constructions occurred.

	1500-1569	1570-1639	1670-1710	1700-1769	1770-1839	1840-1914
[be + CPV + -ing]	0.7	0.48	0.55	4.01	3.35	5.69
[be + V-ing]	16.73	24.82	45.42	98.07	101.68	129.03
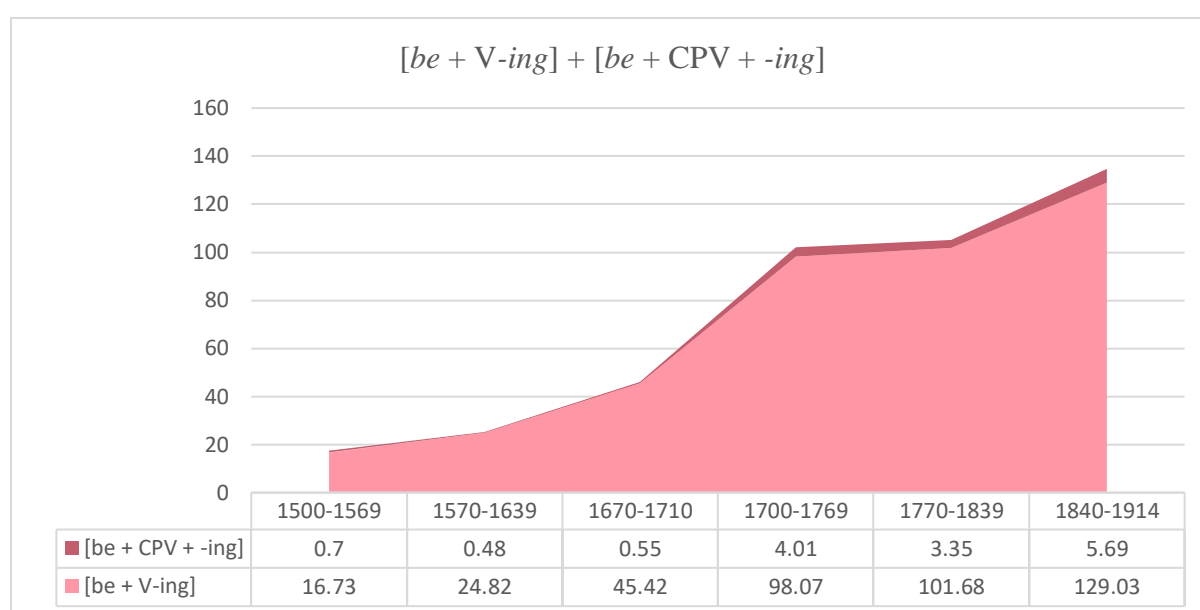
Figure 9: Normalised frequencies of [*be* + V-*ing*] and [*be* + CPV + -*ing*]

(30) *"... and he sat drinking his Ale, in the next room **were sitting** very merrily over a Bowl of Punch, a Company of jovial Drunken Sea-men."* (Penny, 1684-1687)

(31) *"But he **was lying** on his back."* (Yonge, 1865)

(32) *"George Faulkner, the printer, **was standing** at his own shop-door."* (Okeeffe, 1826).

5.3. CPVs versus [*be* + V-*ing*]

    5.3.1. Results. Having discussed both constructions individually, the question

remains what kind of picture emerges when the two are placed alongside of each other. In

Figure 10 the frequencies of *sit, stand,* and *lie* are stacked, and they show the overall decrease

in frequency to nearly half its size. The frequency of the [*be* + V-*ing*] construction runs over

the stacked frequencies of the CPVs and it shows the clear increase of six times its starting

size.
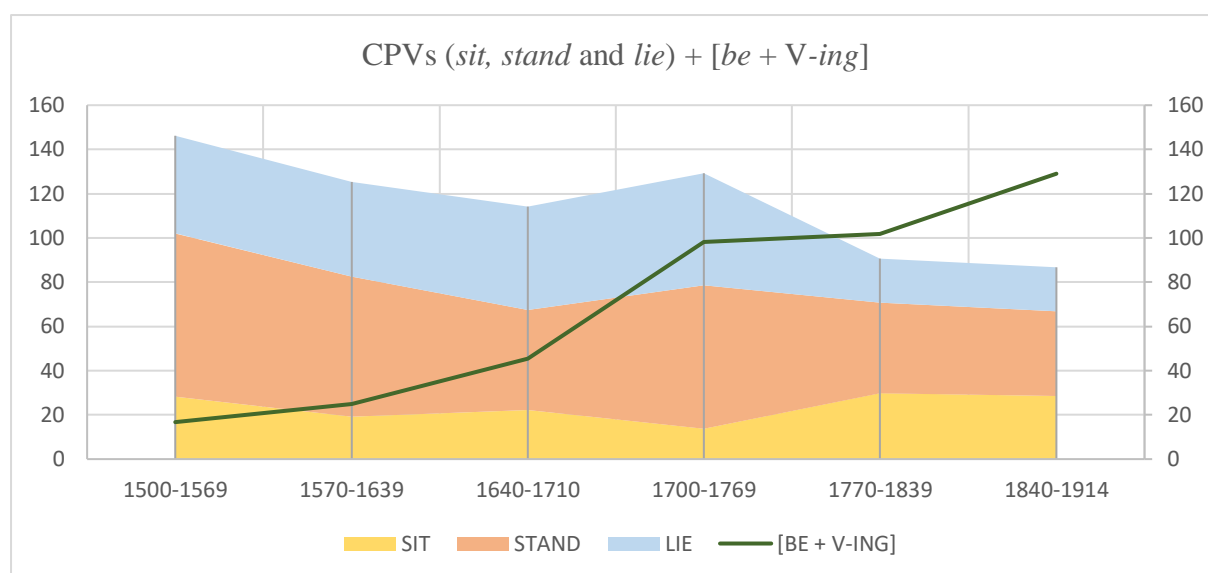
Figure 10: Normalised frequencies of *sit, stand,* and *lie* and the [*be* + V-*ing*] construction

    The relationship between the decrease of the CPVs and the increase of the [*be* + V-

ing] construction have been tested statistically by means of the Pearson Correlation

Coefficient, which indicates that there is a strong negative relationship between the demise of

the CPVs and the rise of the [*be* + V-*ing*] construction, $r = -0.774$. However, the p-value

indicates that the result is not statically significant, $p < 0.07$. Another widely used test for

trend analysis, i.e. "testing whether the increase in one type at the cost of one or more others

is statistically significant" (Petré, 2015, p.44), is Kendall's tau method. Kendall's tau method

may be better suited for this type of data as it "less sensitive to potentially problematic

distributions" (Gries, 2019, p.14). When applying Kendall's tau to the data, the result is again a strong negative relationship, $\tau = -0.733$, but it again does not reach the significance threshold ($p < 0.055$). Yet, despite the p-value being above the 0.05 threshold, the results do suggest that the combined coefficient of the three CPVs cumulated actually improves compared to the correlation coefficient of each of the CPVs individually ($r = 0.13$ for *sit*, $r = -0.67$ for *stand*, and $r = -0.64$ for *lie*).

Note that the absence of conclusive evidence does not directly mean that there is no correlation between the demise of the CPVs and the rise of the [*be* + V-*ing*] construction. For example, the research period of the present study is relatively short, 1500 until 1914, with only six measured points. There is a possibility that the relationship between the CPVs and the [*be* + V-*ing*] construction may become more conclusively visible with correlation measures if more time periods – and thus more data points– are included into the statistical analysis. For the [*be* + V-*ing*] construction, it is already known that the [*be* + V-*ing*] construction was even less frequent in older periods of English (i.a. Smith, 2007), and that the trend of increase continues after 1914 (see Leech et al., 2009), but whether the CPVs are more frequent in older period and if the decrease of the CPVs proceeds after 1914 is yet to be explored.

5.3.2. Discussion. Despite the absence of strong significant statistical evidence, it is still worth considering the apparent relation between the rise and demise in frequency of [*be* + V-*ing*] and the CPVs. From the data analysed, it emerges that, with the exception of the fourth subperiod, the CPVs decrease in frequency, while the [*be* + V-*ing*] construction gradually becomes more frequent than the three CPVs taken together.

In GT frequency plays an important role, whether it is a cause or an effect of grammaticalisation is not clear, but it does positively indicate grammaticalisation. For the [*be* + V-*ing*] construction, due to the numerous studies attributed to it, the extreme increase in

frequency is unequivocally related to the grammaticalisation process of the construction. For the CPVs, the case is less clear cut and that difficulty can partly be ascribed to the fact that each posture verb undergoes changes at its own pace. Regardless, all three CPVs are relatively high in frequency at the start of the Modern English period while at the end of that period their usage has nearly halved.

5.3.3. Competition. Furthermore, it is interesting to observe that the cumulative Pearson Correlation Coefficient of all CPVs as compared to [*be* + V-*ing*] suggests a stronger correlation than the individual CPVs by themselves (-0.774 for the CPVs taken together and 0.13, -0.64, and -0.67 for *sit, stand,* and *lie*, respectively). In other words, if one is interested in verifying the hypothesis that the demise of the CPVs to express ongoingness is related to the rise of the [*be* + V-*ing*] construction, it does not suffice to trace the development of one CPV type alone (as done by, for instance, Lemmens (2005b)). What the overall picture suggests here is that the functional-semantic domain of ongoingness in Modern English is covered by not just two, but a multiplicity of competing constructions, all of which potentially affect each other's diachronic development. Thus, it is worth considering the rise and demise of any construction in light of a (full) range of contemporary, functionally related forms.

With respects to this, it is also important to note the existence of other, functionally-related constructions in the Modern English period, which may have affected the demise of grammaticalised CPVs. One example is the *be busy* construction, illustrated in (32) and (33), which involves participles integrated as subject-controlled *-ing*-complements (De Smet, 2013).

(32)   The receptionist is *busy filling* a fifth box. (De Smet, 2013, p.102)

(33)   … and whilst the Man of the House was *busy waiting* on the other

Guests … (1693) (De Smet, 2013, p.112)

As pointed out by De Smet (2013), the *be busy* construction is an example of an integrated participle clause (IPC for short). Such IPCs do not solely occur with the adjective *busy* but in "a variety of constructions", other frequent examples being *spend* (TIME), *be happy,* and *be late* (De Smet, 2013, p. 102). However, the earliest IPCs, which date from the 17th century, are in combination with *busy* (as in (33)). Although the exact semantic interpretation differs, in either reading the *-ing*-clause further describes what the subject is busy doing (De Smet, 2013). Quirk et al. (1985), therefore, label the *-in*g-clause as a participle clause which complements the adjective *busy.* The inherent semantics of *busy,* e.g. being occupied or giving your attention to a particular thing, lends itself extremely well to a progressive-like interpretation because it needs and implies a constant input of energy which is also a characteristic of the [*be* + V-*ing*] construction. This need of a constant input of energy has significant overlap with the progressive interpretation of the CPVs. In other words, the *be busy* construction may have been a competitor of the CPVs; both competing for dominance within the same functional domain.

Another construction that emerges around the same time as *be busy* is *keep V-ing* (34), which is still frequently used as an aspectual marker in PDE (Santos, 2017). From around 1650-1700 *keep* starts to combine with *-ing* forms and from the beginning of the 19th century aspectual meaning becomes associated with the construction (Santos, 2017).

(34)   We *kept walking* to keep us warm. (1683)

(Santos, 2017, p.34)

Illustrated by these two constructions is the assumption that the Modern English period allowed a multitude of constructions which expressed ongoing activity. In fact, what these constructions seem to suggest is that the grammaticalisation of the [*be* + V-*ing*] construction may have led to an outburst of verbal *-ing* forms. Although the above-mentioned

constructions, according to the consulted literature, increase in frequency during the Modern English period while the CPVs decrease in frequency, the number of progressive-like constructions is remarkable and there may be more constructions that occurred during this period that are not known to us yet.

It is assumed that functionally similar constructions may compete with one another where, typically, one is selected at the expense of the other, e.g. substitution (Hopper & Traugott, 1993). If there is a relationship between the CPVs and the [*be* + V-*ing*] construction, then substitution may have played a role here. However, there are many different elements to the theory of competition which are not fully understood yet. For instance, during the period 1640-1710 and 1700-1769, there is small increase in the frequency of the CPVs. De Smet et al. (2018) discuss, besides substitution and differentiation, that functionally similar expressions may actually become more similar by means of attraction. It may have been the case that, as the [*be* + V-*ing*] construction grew more frequent, there was a period of attraction where the two constructions copied some of each other's behaviour. This could be a reason for the increase in CPVs occurring in the [*be* + V-*ing*] construction as well as the other significant CPVs constructions (see (19) to (28)). Moreover, Lemmens (2005b) finds, in his pilot study, that for the frequency of different forms of *sit* (these include *sit, sat,* and *sitting*), over a period from 1350 until 1950, *sitting* did not occur until 1600 after which it increases slowly but steadily.

However, it needs to be remembered here that Lesuisse and Lemmens (2018) concluded that while the CPVs do show some patterns of grammaticalisation in the Modern English period, they did so in restricted ways and they definitely did not reach a fully grammaticalised status. Moreover, Lemmens (2005b; forthc.) states that the semantic clash between the CPVs and the [*be* + V-*ing*] construction could be indicated by a more exclusive orientation of the CPVs towards human subjects. The current data, however, shows no

evidence for such an orientation. According to the current data, the overall distribution among the CPVs of animate and inanimate objects fluctuates throughout the Modern English period, but in the end, it remains mostly the same (see Table 4, 5 and 6). Based on these results, it appears to be unlikely that either a semantic clash between the CPVs and the [*be* + V-*ing*] construction and/or competition between these two, and possible other, constructions are solely responsible for the demise of the CPVs in the Modern English period.

5.3.4. Typological Switch. Instead, a fairly recent theory by Los (2012) may be relevant in explaining what caused the observed increase in constructions describing on-going activity but discouraged the CPVs to further grammaticalise. Los' (2012) theory connects seemingly unrelated changes to one large change in the English aspectual system: due to the loss of the verb-second word order in Old and Middle English, the English language has changed from a 'bounded language' to an 'unbounded' one.

According to Los (2012), the loss of verb-second, a word order pattern still found in Modern Dutch and German where the finite verb moves into the second position in the main clause, in Old and Middle English had a profound effect on the syntax and information structure of English. When the finite verb is placed in the second position of a sentence, the first position is multifunctional because it can host variously focused material which then provides links to the previous discourse (Los, 2012). The loss of this placement of the finite verb thus affects the options that remain possible for the first position. This results in a reduce of word order options available to speakers "for positioning discourse linkers, contrastive focus, and the positioning of new information" (Los, 2012, p.24). Los (2012) argues that these changes compromised the information structure of the language in such a way that new syntactic constructions arose as a form of therapy.

The English language underwent a typological switch due this loss of verb-second syntax because it plays a role in the way speakers encode information (Los, 2012).

Depending on the syntactic structures that are available, languages differ in how events and scenes are narrated and described. Hence, some languages are 'bounded' whereas others are 'unbounded' (Los, 2012). Verb-second languages, such as Modern Dutch and German, are bounded languages because an event is followed from within whereas speakers of an unbounded language, such as Modern English, follow an event from without, comparable to a camera recording a scene (Los, 2012; Petré, 2015), (35) and (36) respectively (von Stutterheim, 2002, p.25 as cited in Los & Starren, 2012, p.1).

(35) *Auf einmal hört der Lehmmann Wasser tropfen*	(36) *The man is hearing the sound of dripping water*
Und dann gräbt er nach dam Wasser	*And he is digging for the water*
Bis der Sand dann unter ihm nachgibt	*And the sand is caving under him*

Hence, in bounded languages the narrative is divided into a "sequence of temporal segments, each requiring an explicit temporal marker", i.e. the topic time is reset with every new discourse move as is visible from (34) by *auf einmal* (suddenly)*, und dann* (and then)*,* and *bis* (until) (Los, 2012, p.30). In unbounded languages, on the other hand, topic time is anchored at a particular point at the beginning of the narrative and this is then maintained throughout the whole event. The event is described in unbounded terms because it is open-ended and therefore, in English, progressive aspect is used. Verb-second is seen as one of the grammatical options that facilitate boundedness whereas a grammaticalised progressive is connected to unboundedness (Los, 2012).

The image that emerges is that the loss of verb-second syntax was one of the factors that initiated the typological switch in English from a bounded to an unbounded language (Los, 2012). This switch is not fully understood yet. There are many other factors that may have contributed to this and/or syntactic constructions that have emerged due to this change – some of these constructions include rare passives and stressed-focus clefts, as well as a

number of seemingly unrelated chances (Los, 2012; Petré, 2015). The grammaticalisation of progressive aspect of the [*be* + V-*ing*] construction is certainly one of the syntactic constructions that has emerged as a result of the switch.

With respect to the CPVs, it is known that the other Germanic languages use CPVs both in locational constructions and progressive-like constructions and that these languages operate (albeit small individual differences (Los, 2012)) according to verb-second word order. The English language is the exception to this, it neither has verb-second word order nor are CPVs used with any significance, anymore. Instead, English prefers the verb *to be,* where other Germanic languages opt for the CPVs, and it has a highly grammaticalised construction to express progressive aspect, which the other Germanic languages lack. It, therefore, seems more probable that the loss of verb-second word order had an effect on the functionality of the CPVs in the English language. When the English language switched from a bounded language to an unbounded one, the CPVs may have been discouraged to grammaticalised further which resulted in their demise whereas there was an increase in progressive aspect, mainly expressed by means of the [*be* + V-*ing*] construction.

While the present study has found interesting examples where the CPVs occur in other constructions, besides locational and copular ones, where a progressive reading can be applied, progressive aspect becomes increasing expressed by means of either the [*be* + V-*ing*] construction or other constructions coupling with a verb ending in *-ing*. This is also the case for the CPVs which in some constructions occur alongside other verbs that end in *-ing*. More interestingly, the CPVs, stative verbs as they are, also increasing occur as the verb in the [*be* + V-*ing*] construction, which typically only allows active verbs, from the Middle English period onwards. Therefore, it does not appear unreasonable to infer that the typological switch, which allowed the [*be* + V-*ing*] construction to flourish, in turn instigated a multitude of varying progressive constructions, all coupling with the verbal *-ing* ending. These

constructions took the upper hand within the functional domain of ongoingness in the Modern English period. Perhaps this is what caused the CPVs to remain in the margins where they can still be found to the present day.

All in all, it appears fair to state that up until this point there is no clear-cur explanation for the demise of the CPVs which thrived in a turbulent period of the English language. During this period many interesting, and to this day unexplainable, things happened of which perhaps more than expected can be related to the large change in the aspectual system of the English language.

6. Conclusion

First and foremost, this study has shown that, counter to what Lesuisse and Lemmens (2018) assumed, there is an overlap in time regarding the demise of the CPVs and the rise of the [*be* + V-*ing*] construction. During the Modern English period (1500-1900), the frequency with which the CPVs occurred nearly halved in size whereas the frequency of the [*be* + V-*ing*] construction increased by more than a tenfold. There is a strong negative relationship between this rise and demise (r = -0.774). Statistically, the relationship between these two constructions is not significant ($p < 0.07$). Kendall's tau gave a similar negative relationship (τ = -0.733) but a stronger p-value ($p < 0.055$). The combined coefficient of the three CPVs cumulated, however, actually improves compared to the correlation coefficient of each of the CPVs individually (r = 0.13 for *sit*, r = -0.67 for *stand,* and r = -0.64 for *lie*). This reinforces the assumption that it does not suffice to trace the development of one CPV type alone (as done by, for instance, Lemmens (2005b) because what the overall picture suggests here is that the functional-semantic domain of ongoingness in Modern English is covered by a multiplicity of competing constructions, all of which potentially affect each other's diachronic development.

It has been proposed that, if there is in fact a relationship between the demise CPVs and the rise of the [*be* + V-*ing*] construction, there would have been a semantic clash between the two which must have discouraged the CPVs to grammaticalise further. The CPVs would become more exclusively associated with human subjects as a result of this clash (Lemmens, 2005b; forthc.). The results of the present study, however, indicate that the CPVs do not show a clear orientation towards human subjects over the course of the Modern English period. This does not necessarily exclude the possibility that there has been a semantic conflict between the CPVs and the [*be* + V-*ing*] construction. The present study found significant instances where CPVs and verbs ending in -*ing* were used alongside of each other as a sort of

pair. These instances allow a progressive reading. Moreover, the frequency of the [*be* + CPV + -*ing*] constructions, which are still present in PDE, increase over the course of the Middle English period. This seems to suggest that there has actually been some form of contact or attraction between the CPVs and the [*be* + V-*ing*] construction which may explain why the CPVs are the exception to the fact that the [*be* + V-*ing*] construction typically occurs with active verbs. This may be an interesting avenue to further research.

In order to answer the research questions, the present study has considered the possibility that other changes that occurred during the Modern English period may have contributed to the demise of the CPVs. Over the course of the Modern English period, there appears to have been an increase in constructions that combined with the verbal -*ing* and/or expressed on-going events, i.a. *be busy V-ing* and *keep V-ing*. Competition has been considered as the mechanism responsible for these increases and the decrease of the CPVs, but this is insufficient.

Instead, these changes may be attributed to a larger change in the English aspectual system which, due to the loss of verb-second word order in Old and Middle English, resulted in a typological switch (Los, 2012). This entailed that English become an unbounded language as opposed to a bounded one. This switch is not fully understood yet and it is believed that many, seemingly unrelated changes occurred as a result of this switch. New constructions arose as a form of therapy and the grammaticalisation of the [*be* + V-*ing*] construction is one of those constructions. Verb-second word order is still used in the other Germanic languages, as do the CPVs where they often occur in progressive-like constructions. That is something which the other Germanic languages do not have: a fully grammaticalised progressive. In other words, the demise of the CPVs and the rise of the [*be* + V-*ing*] construction do not appear to be directly related to each other. Instead, the present

study has found reason to assume that they may still be related to one another but then with respects to what initiated their distinctive change in frequency.

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Appendix A

Absolute and relative frequencies of the CPVs. Divided per CPVs and animacy.

SIT	Total		Animate		Inanimate	
	Absolute (n)	Relative (%)	Absolute (n)	Relative (%)	Absolute (n)	Relative (%)
PPCEME	401		349	87.03	52	12.97
E1	160	39.9	139	86.88	21	13.12
E2	120	29.93	104	86.66	16	13.34
E3	121	30.02	106	87.6	15	12.4
PPCMBE	231		201	87.01	30	12.99
M1	41	17.75	38	92.68	3	7.32
M2	110	47.62	93	84.55	17	15.45
M3	80	34.63	70	87.5	10	12.5

STAND	Total		Animate		Inanimate	
	Absolute (n)	Relative (%)	Absolute (n)	Relative (%)	Absolute (n)	Relative (%)
PPCEME	1062		601	56.59	461	43.41
E1	419	39.45	212	50.97	207	49.03
E2	399	37.57	261	65.41	138	34.59
E3	244	22.98	128	52.46	116	47.54
PPCMBE	453		299	66	154	34
M1	194	42.83	135	69.59	59	30.41
M2	151	33.33	107	70.86	44	29.14
M3	108	23.84	57	52.77	51	47.23

LIE	Total		Animate		Inanimate	
	Absolute (n)	Relative (%)	Absolute (n)	Relative (%)	Absolute (n)	Relative (%)
PPCEME	774		495	63.95	279	36.05
E1	251	32.43	170	67.73	81	32.27
E2	269	34.75	190	70.63	79	29.37
E3	254	32.82	135	53.15	119	46.85
PPCMBE	280		106	37.86	174	62.14
M1	151	53.93	59	39.07	92	60.93
M2	73	26.07	29	39.73	44	60.27
M3	56	20	18	32.14	38	67.86

Appendix B

Complete list of notable CPVs from the data set

Data		Animacy	Comment	Text	Period
ne many Lordes assembled in the tower , and there	sat in counsaile , deuising the honorable solempnite	animate	?	moreric-e1-h.txt	E1 (1500-1569)
mother dere STEVENSO-E1-P2,49.245 And there she	sat sewing a halter , or a bande , With no other	animate	CPV + ing	stevenso-e1-p2.txt	E1 (1500-1569)
, after our vii psalmes and the letany said , to	sit and talke and be mery , beginning first with othe	animate	CPV and V	mroper-e1-p1.txt	E1 (1500-1569)
6.192 upon oon of them ower Savyr Criste vsed to	sitt and preche to hys Discipls , TORKINGT-E1-H,36.193	animate	CPV and V	torkingt-e1-h.txt	E1 (1500-1569)
. Chap . LATIMER-E1-H,27P.172 for Paule was no	sittynge bishoppe , but a walkinge and a preachynge byshop	animate	CPV-ing	latimer-e1-h.txt	E1 (1500-1569)
ch whiche had made good chere the nyght afore | &	syttyn vp late & came to y=e= churche to here	animate	CPV-ing?	merrytal-e1-p2.txt	E1 (1500-1569)
shall brynge y=e= to a place where he	syttyth drynkyng with other felowes & had y=e= capons in	animate	CPV + -ing	merrytal-e1-h.txt	E1 (1500-1569)
ockt , clapt him in the stocks , where the fellow	sat a long houre farming his mouth ; ARMIN-E2-P2,30.4	animate	?	armin-e2-p2.txt	E2 (1570-1639)
4V.248 though I can say but litle , I wil	sit and heare you . GIFFORD-E2-H,B4V.249 <font>	animate	CPV and V	gifford-e2-h.txt	E2 (1570-1639)
yet on Twesdaies and Thursdaies the King himselfe	sits in Judgement of all causes : COVERTE-E2-H,37.162	animate	metaphorical?	coverte-e2-h.txt	E2 (1570-1639)
MARKHAM-E2-P1,1,95.100 but taking a tree , will	sitte and looke after the game , which fault to amend ,	inanimate	CPV and V	markham-e2-p1.txt	E2 (1570-1639)
3.293 and then home , PEPYS-E3-P1,7,423.294 and	sat and talked a little by the fire's side	animate	CPV and V	pepys-e3-p1.txt	E3 (1500-1569)
Neale's chamber , PEPYS-E3-H,7,410.36 and there	sat and talked awhile - Sir Edwd. Walker being there	animate	CPV and V	pepys-e3-h.txt	E3 (1500-1569)

P2,8,322.64 and to the office , where some of us	sat busy all the morning . PEPYS-E3-P2,8,322.65 At n	animate	CPV + busy	pepys-e3-p2.txt	E3 (1500-1569)
Pot of Ale ; PENNY-E3-P2,209.317 and as he	sat drinking his Ale , in the next room were sitting	animate	CPV + -ing	penny-e3-p2.txt	E3 (1500-1569)
.59 After dinner I away to the office , where we	sat late upon Mr. Gaudens accounts - Sir J. Mennes	animate	CPV + ADJ	pepys-e3-p1.txt	E3 (1500-1569)
infinite disgrace to us . PEPYS-E3-H,7,416.159 I	sat long , talking with them . PEPYS-E3-H,7,416.160	animate	CPV + ADJ	pepys-e3-h.txt	E3 (1500-1569)
other merchants' loss . PEPYS-E3-P1,7,403.37 We	sat long at supper , PEPYS-E3-P1,7,403.38 and then t	animate	CPV + ADJ	pepys-e3-p1.txt	E3 (1500-1569)
s gone down thither this day , while the Generall	sat sleeping this afternoon at the Counciltable . PE	animate	CPV + -ing	pepys-e3-h.txt	E3 (1500-1569)
all others were at rest , he alone so sadly	sat waking on a cold Stone ? MILTON-E3-P1,X,156.58 <	animate	CPV + -ing	milton-e3-p1.txt	E3 (1500-1569)
sed ye constables with there clogge shooes : whoe	sate drinkeinge all night in ye roome by mee soe	animate	CPV + -ing	fox-e3-p1.txt	E3 (1500-1569)
E3-P1,46.228 <font> Ber. <$$font> Nothing - but	sit and cry . VANBR-E3-P1,46.229 <font> Aman. <$$f	animate	CPV and V	vanbr-e3-p1.txt	E3 (1500-1569)
WALTON-E3-P1,231.225 there $we $'ll {TEXT:we'll}	sit and sing whilst this showr falls so gently upon	animate	CPV and V	walton-e3-p1.txt	E3 (1500-1569)
id , quoth he , PENNY-E3-P1,78.389 why dost thou	sit so sad ? PENNY-E3-P1,78.390 Thou art not old	animate	?	penny-e3-p1.txt	E3 (1500-1569)
437 Mrs. Barker amused us , while the gentlemen	sat enjoying their ciboucs and coffee , with showing	animate	CPV and V	montefiore-1836.txt	M2 (1770-1839)
y . HAYDON-1808,1,22.444 Sir William made Wilkie	sit for his head , HAYDON-1808,1,22.445 while this w	animate	?	haydon-1808.txt	M2 (1770-1839)
my poor Dame and I had to	sit talking of indifferent matters ; CARLYLE-1835,2,2	animate	CPV and V	carlyle-1835.txt	M2 (1770-1839)
, with a thin house in disconsolate humour ,	sits sleepless , with lights unsnuffed ; - waiting wha	animate	?	carlyle-1837.txt	M2 (1770-1839)
myself , having already told you of <P_2,256>	sitting over my papers , and struggling with my	animate	CPV-ing	carlyle-1835.txt	M2 (1770-1839)

in the hinges ! CARLYLE-1835,2,261.109 - Jane is	sitting sewing here ; CARLYLE-1835,2,261.110 she sends y	animate	CPV-ing + -ing	carlyle-1835.txt	M2 (1770-1839)
uid ! " CARLYLE-1835,2,285.453 You can fancy me	sitting there in the old scribbling way , as	animate	CPV-ing	carlyle-1835.txt	M2 (1770-1839)
and weak . BARDSLEY-1807,26.242 As the medicine	sat easy upon the stomach , and had brought	inanimate	Copular	bardsley-1807.txt	M2 (1770-1839)
had a grand high phaeton , in which	sat the most beautiful young girl that could	inanimate	Copular?	okeeffe-1826.txt	M2 (1770-1839)
lady in the land could wish to	sit down in ? COLMAN-1805,52.1061 The $bed $'s {TEX	inanimate	CPV + ADJ	colman-1805.txt	M2 (1770-1839)
broad France . CARLYLE-1837,1,149.337 Paleness	sits on every face ; confused tremor and fremescence ;	inanimate	metaphorical	carlyle-1837.txt	M2 (1770-1839)
of a Lama , it is placed upright ,	sitting in an attitude of devotion , his legs	inanimate	CPV-ing	turner2-1800.txt	M2 (1770-1839)
at perpetual war with themselves ; their crimes	sitting so heavy upon their consciences , that there	inanimate	CPV-ing	boethri-1785.txt	M2 (1770-1839)
. TURNER2-1800,261.411 The image is represented	sitting upon cushions , TURNER2-1800,261.412 and has the	inanimate	CPV-ing	turner2-1800.txt	M2 (1770-1839)
LYLE-1837,1,140.81 and solemnly join the Commons	sitting waiting in their Church . CARLYLE-1837,1,140.82	inanimate	CPV-ing + -ing	carlyle-1837.txt	M2 (1770-1839)
brought every tenant and servant that could	sit a horse . OMAN-1895,382.52 The infantry were the	animate	?	oman-1895.txt	M3 (1840-1914)
e kingdom ; READE-1863,223.558 and there one may	sit and drink cocoa-nut milk , and take	animate	CPV and V	reade-1863.txt	M3 (1840-1914)
I recollected my own school life , to	sit and listen to twenty of our sixty	animate	CPV and V	thring-187x.txt	M3 (1840-1914)
nd wisdom secretly . ' BENSON-190X,105.30 Now I	sit writing , in great thankfulness and contentment .	animate	CPV + -ing	benson-190x.txt	M3 (1840-1914)
' is one of these . POORE-1876,173.205 A man	sits or sleeps in a draught with his	animate	CPV + V	poore-1876.txt	M3 (1840-1914)
vailing . VICTORIA-186X,1,233.513 {ED:...} I am	sitting and writing <paren> as I do most	animate	CPV-ing + -ing	victoria-186x.txt	M3 (1840-1914)

ittle touches of softening and consciousness that	sat oddly enough on her sister . YONGE-1865,177.470	inanimate	?	yonge-1865.txt	M3 (1840-1914)
3.295 In grave contrast with their shrill sorrow	sat the men , also naked , in the chief	inanimate	?	reade-1863.txt	M3 (1840-1914)
. MEREDITH-1895,19,157.523 An implacable reason	sits in its place , with a keen blade	inanimate	?	meredith-1895.txt	M3 (1840-1914)
71 <font> R. Royster . <$$font> Howe long they	stande prating ? UDALL-E1-P2,L1189.372 Why comst thou n	animate	CPV + -ing	udall-e1-p2.txt	E1 (1500-1569)
er , jentylman ussher unto the ladye Elizabethe ,	stoode talkynge with me . UNDERHILL-E1-P2,136.24 In the	animate	CPV + -ing	underhill-e1-p2.txt	E1 (1500-1569)
rcers , and others , UNDERHILL-E1-P2,156.272 and	stoode talkynge with them UNDERHILL-E1-P2,156.273 and c	inanitmate	CPV + -ing	underhill-e1-p2.txt	E1 (1500-1569)
and all , with suche breade and drinke also as	stoode vpon the table . HARMAN-E1-P2,46.145 When the g	inanitmate	location	harman-e1-p2.txt	E1 (1500-1569)
not , I dare not do it , mine owne conscience	standing against it . MROPER-E1-P1,521.110 If I had <par	inanitmate	metaphorical	mroper-e1-p1.txt	E1 (1500-1570)
, that he was as dead as a doore nayle -	standing on tip-toe , looking toward the door to behold	animate	funny	armin-e2-h.txt	E2 (1570-1639)
lockt her husband out . DELONEY-E2-P1,23.453 He	stood calling with the candle in his hand to come	animate	CPV + -ing	deloney-e2-p1.txt	E2 (1570-1639)
to the arm-pits , ARMIN-E2-H,14.184 and there	stood eating the pie . ARMIN-E2-H,14.185 The cooke co	animate	CPV + -ing	armin-e2-h.txt	E2 (1570-1639)
about the church , whereuppon many buildings did	stand , HAYWARD-E2-H,90.208 and incloased it with a st	inanimate	locational	hayward-e2-h.txt	E2 (1570-1639)
he last day of this present Session of Parliament	stand indicted of any wilfull Murder , and which yet be	animate	?	stat-1580-e2-p2.txt	E2 (1570-1639)
them a handfull . CLOWES-E2-P1,40.142 Let these	stand infused 12. houres , CLOWES-E2-P1,40.143 then b	inanimate	?	clowes-e2-p1.txt	E2 (1570-1639)
abbey , up the hill , to Cannegate <paren> which	stood entering to Edenborough , as Ludgate doth to Lond	inanimate	CPV + -ing	armin-e2-p1.txt	E2 (1570-1639)
MIN-E2-P2,35.198 It was after dinner , when pyes	stood in the oven to coole for supper : ARMIN-E2-	inanimate	location	armin-e2-p2.txt	E2 (1570-1639)

, I was willed by him to consider how Matters	stood in this Isle , what Honour I had received of	inanimate	metaphorical	thoward2-e2-p1.txt	E2 (1570-1639)
were , being the place where other Creatures ears	stand <$$paren> are placed its two black shining goggle	animate	location	hooke-e3-h.txt	E3 (1640-1710)
$thee {TEXT:Prithee} $do $n't {TEXT:don't}	stand prating , VANBR-E3-H,39.299 but look upon his Wo	animate	CPV + -ing	vanbr-e3-h.txt	E3 (1640-1710)
XINDEN-1660-E3-H,281.194 I know not how it could	stand him in 31 shillings 6d more ; unless hee spent mo	inanimate	?	hoxinden-1660-e3-h.txt	E3 (1640-1710)
had even gone so far as to	stand Godmother to <font> Charles's <$$font> new-	animate	copular	kimber-1742.txt	M1 (1700-1769)
in . STEVENS-1745,53.946 - <bracket> <font> She	stands wiping her Eyes ; STEVENS-1745,53.947 he comes S	animate	CPV + -ing	stevens-1745.txt	M1 (1700-1769)
that all my Oaths and Vows must	stand for nothing . DAVYS-1716,41.589 I wish I had	inanimate	metaphorical	davys-1716.txt	M1 (1700-1769)
look very odd ; MONTAGU-1718,80.36 their houses	stand in rows , many thousands of them so	inanimate	location	montagu-1718.txt	M1 (1700-1769)
certainly can intercept more sunshine , would but	stand out of my way , which he is	inanimate	metaphorical?	walpole-174x.txt	M1 (1700-1769)
incommodes the Bees , occasions the Rain to	stand upon the Hives , and so they rot	inanimate	metaphorical	maxwell-1747.txt	M1 (1700-1769)
with a Mug of Small Beer that	stood upon the Dresser , 'till she looks like	inanimate	location	davys-1716.txt	M1 (1700-1769)
thing was so silent that my hair	stood up , could not at this moment put	inanimate	extension	haydon-1808.txt	M2 (1770-1839)
side of this world the people are	standing and moving about with their feet towards	animate	CPV + -ing	faraday-1859.txt	M3 (1840-1914)
LBOT-1901,95.90 Such examples show us how things	stand . TALBOT-1901,95.91 God forbid that I should sp	inanimate	metaphorical?	talbot-1901.txt	M3 (1840-1914)
few hours , give water that has been	standing in the stable some hours , SKEAVINGTON-184X,29.	inanimate	location	skeavington-184x.txt	M3 (1840-1914)
the lowest point when the image is	standing upright ; FARADAY-1859,21.210 and we may be cert	inanimate	extension	faraday-1859.txt	M3 (1840-1914)

nd also , as I understand , your adversaries will	lay a fine against you , which fine is parcell of	animate	?	gascoigne-1500-e1-p1.txt	E1 (1500-1569)
the Princes or of any other p~sones , set	lying and being within the Kinges dominion of Wales or	animate	CPV-ing AND V-ing	stat-1540-e1-p1.txt	E1 (1500-1569)
the master of the Centurion lyke an yl husband	lay a shore so that we left hir behynd in	animate	?	madox-e2-p1.txt	E2 (1570-1639)
s belly could containe , yet it neuer offended or	lay heauy vpon the stomacke , no more then {it_would_	inanimate	metaphorical	jotaylor-e2-h.txt	E2 (1570-1639)
a short time a number of spots , which before	lay hid in the flesh , CLOWESOBS-E2-P2,43.94 and hee	inanimate	metaphorical	clowesobs-e2-p2.txt	E2 (1570-1639)
used to lie ; OATES-E3-H,4,74.C2.162 and there	lay a Gentlewoman there , that I knew . OATES-E3-H,4	animate	location	oates-e3-h.txt	E3 (1640-1710)
ating of them is , in <font> November <$$font> to	lay a Branch of that Years growth into the Earth ,	inanimate	extension	langf-e3-h.txt	E3 (1640-1710)
y eyes being sore . PEPYS-E3-P1,7,422.271 Creed	lay here in Barker's bed . PEPYS-E3-P1,7,422.272 27	inanimate	metaphorical	pepys-e3-p1.txt	E3 (1640-1710)
the king . BURNETCHA-E3-H,1.2,158.236 The matter	lay in a secret and remiss management for six <P_1.2,	inanimate	metaphorical	burnetcha-e3-h.txt	E3 (1640-1710)
of Memory , as well as of Seeing and Hearing ,	lay in the Mind : BURNETROC-E3-P1,67.175 and so it	inanimate	metaphorical	burnetroc-e3-p1.txt	E3 (1640-1710)
Yellow , even in that part of the Powder that	lay nearest the top of the Crucible , yet having purp	inanimate	metaphorical	boylecol-e3-p2.txt	E3 (1640-1710)
NBR-E3-P1,66.680 I never knew where the Pleasure	lay of being prais'd by the Men : VANBR-E3-	inanimate	metaphorical	vanbr-e3-p1.txt	E3 (1640-1710)
wonder at the delusion under which they	lie ; WOLLASTON-1793,31.240 and may pity them for no	animate	metaphotical	wollaston-1793.txt	M2 (1770-1839)
, 1806 . STATUTES-1805,45,550.64 Action not to	lie for such refusal . STATUTES-1805,45,550.65 Prin	inanimate	?	statutes-1805.txt	M2 (1770-1839)

Appendix C

Complete list of [*be* + CPV + *-ing*]

Data		Animacy	CPV	Text	Period
goeth/VBP to/P hys/PRO$ pastures/NS to/TO see/VB hys/PRO$ Cattayle/NS ,/, or/CONJ when/P hee/PRO	is/BEP sittyng/VAG at/P home/N by/P hys/PRO$ fire/N side/N ,/, or/CONJ els/ELSE when/P he/	animate	SIT	fisher-e1-p1.pos	E1 (1500-1569)
,/, <$$paren>/CODE ij/NUM of/P yow/PRO shall/MD sarve/VB ./. "/" MOWNTAYNE-E1-H,208.244/ID There/EX	were/BED standynge/VAG by/RP ij/NUM bretheryn/NS ,/. MOWNTAYNE-E1-H,208.245/ID and/CONJ they/PRO ,/, herynge/VAG my/PRO$	animate	STAND	mowntayne-e1-h.pos	E1 (1500-1569)
V he/PRO sayeth/VBP vnto/P you/PRO ,/, do/DOI it/PRO ./. TYNDNEW-E1-H,2,1J.117/ID And/CONJ ther/EX	were/BED stondynge/VAG theare/ADV ,/, six/NUM waterpottes/N+NS of/P stone/N after/P the/D maner/N of/P	animate	STAND	tyndnew-e1-h.pos	E1 (1500-1569)
nt>/CODE ,/, &c./FW ,/, and/CONJ <font>/CODE Drynke/VBI thys/D <$$font>/CODE ,/, &c./FW ,/, ther/EX	where/BED standynge/VAG by/RP ,/, to/TO see/VB and/CONJ here/VB ,/, sartayne/ADJ sarvynge/VAG men/NS belongyng/VAG to/	animate	STAND	mowntayne-e1-p1.pos	E1 (1500-1569)
them/PRO ,/, saying/VAG ,/, Behold/VBI ,/, the/D men/NS whom/WPRO ye/PRO put/VBD in/P prison/N ,/,	are/BEP standing/VAG in/P the/D Temple/NPR ,/, and/CONJ teaching/VAG the/D people/NS ./. AUTHNEW-E2-P1,5,20A.1508/ID 26	animate	STAND	authnew-e2-p1.pos	E2 (1570-1639)
,/. AUTHNEW-E2-P1,2,1A.1173/ID and/CONJ it/PRO filled/VBD all/Q the/D house/N where/WADV they/PRO	were/BED sitting/VAG ./. AUTHNEW-E2-P1,2,1A.1174/ID 3/NUM AUTHNEW-E2-P1,2,1A.1175/ID And/CONJ there/EX appeared/VBD vn	animate	SIT	authnew-e2-p1.pos	E2 (1570-1639)
y/PRO fire/VBP themselves/PRO+N in/P the/D firmament/N :/. ARMIN-E2-P2,40.319/ID whether/WQ it/PRO	bee/BEP sitting/VAG to/ADVR neere/ADJ the/D sunne/N in/P the/D day/N ,/, or/CONJ couching/VAG to/	inanimate	SIT	armin-e2-p2.pos	E2 (1570-1639)

me/N ;/. PEPYS-E3-H,7,413.90/ID so/ADV to/P Westminster/NPR hall/NPR ,/, where/WADV the/D Lords/NS	are/BEP sitting/VAG still/ADV ./. PEPYS-E3-H,7,413.91/ID I/PRO to/TO see/VB Mrs./NPR Martin/NPR ,/, who/WPRO is/	animate	SIT	pepys-e3-h.pos	E3 (1640-1710)
eetinge/N there/ADV &/CONJ ye/D womens/NS$ meetinge/N ./. FOX-E3-P2,116.349/ID And/CONJ as/P I/PRO	was/BED lyeinge/VAG in/P my/PRO$ bed/N :/, ye/D worde/N of/P ye/D Lord/NPR <P_117>/CODE came/	animate	LIE	fox-e3-p2.pos	E3 (1640-1710)
and/CONJ as/P he/PRO sat/VBD drinking/VAG his/PRO$ Ale/N ,/, in/P the/D next/ADJS room/N	were/BED sitting/VAG very/ADV merrily/ADV over/P a/D Bowl/N of/P Punch/N ,/, a/D Company/N of/	inanimate	SIT	penny-e3-p2.pos	E3 (1640-1710)
the/D Room/N ./. WESLEY-174X,13.57/ID <font>/CODE William/NPR Sitch/NPR <$$font>/CODE 's/$ Wife/N	was/BED $Lying/VAG $in/RP {TEXT:Lying-in}/CODE :/. WESLEY-174X,13.58/ID but/CONJ that/D was/BED all/	animate	LIE	wesley-174x.pos	M1 (1700-1769)
./. DODDRIDGE-1747,31.253/ID There/EX is/BEP indeed/P+N a/D Possibility/N ,/, that/C while/P he/PRO	was/BED sitting/VAG in/P this/D Attitude/N ,/, and/CONJ reading/VAG in/P this/D careless/ADJ	animate	SIT	doddridge-1747.pos	M1 (1700-1769)
efus'd/VBD it/PRO ,/. DEFOE-1719,210.292/ID and/CONJ rose/VBD up/RP ,/, <font>/CODE for/CONJ I/PRO	was/BED sitting/VAG on/P the/D Ground/N <$$font>/CODE ,/, in/P Order/N to/TO go/VB	animate	SIT	defoe-1719.pos	M1 (1700-1769)
s/BED a/P Lee/N ?/. HOLMES-TRIAL-1749,71.1350/ID <font>/CODE A./N <$$font>/CODE Yes/INTJ ,/, I/PRO	was/BED standing/VAG before/P the/D Foremast/N ,/, just/ADV by/P the/D Collar/NS of/P	animate	STAND	holmes-trial-1749.pos	M1 (1700-1769)
nding/VAG at/P this/D Time/N ?/. HOLMES-TRIAL-1749,71.1348/ID <font>/CODE A./N <$$font>/CODE I/PRO	was/BED standing/VAG upon/P the/D Forecastle/N ./. HOLMES-TRIAL-1749,71.1349/ID <font>/CODE Q./N <$$font>/CODE Was/	animate	STAND	holmes-trial-1749.pos	M1 (1700-1769)
/NS engaged/VAN with/P the/D Enemy/N when/P you/PRO left/VBD off/RP ,/, and/CONJ	were/BED lying/VAG to/RP ,/, towards/P nine/NUM o'Clock/P+N ?/. HOLMES-TRIAL-1749,83.1580/ID <font>/CODE A./	animate	LIE	holmes-trial-1749.pos	M1 (1700-1769)

other/OTHER Freehold/ADJ+N Estate/N ,/, sworn/VAN by/P the/D said/VAN Oath/N to/TO	be/BE lying/VAG and/CONJ being/BAG at/P some/Q Parish/N ,/, Town/N or/CONJ Place/N ,/,	inanimate	LIE	statutes-1745.pos	M1 (1700-1769)
,/, whom/WPRO the/D Gentleman/ADJ+N who/WPRO stands/VBP here/ADV in/P his/PRO$ Shirt/N	is/BEP lying/VAG in/P Bed/N with/P ,/, is/BEP none/Q of/P her/PRO ?/. '/' FIELDING-1749,3,9.376/ID <	inanimate	LIE	fielding-1749.pos	M1 (1700-1769)
/TO ascertain/VB by/P their/PRO$ known/VAN and/CONJ usual/ADJ Names/NS <$$font>/CODE <$$paren>/CODE	is/BEP lying/VAG or/CONJ being/BAG ,/, or/CONJ issuing/VAG out/RP of/P Lands/NS ,/, Tenements/NS ,/,	inanimate	LIE	statutes-1745.pos	M1 (1700-1769)
$ Death/N for/P some/Q Hours/NS ./. KIMBER-1742,257.C1.7/ID But/CONJ as/P the/D Parliament/N	was/BED sitting/VAG ,/, all/Q they/PRO could/MD do/DO ,/, was/BED to/TO send/VB a/D	inanimate	SIT	kimber-1742.pos	M1 (1700-1769)
/BED ,/, to/TO make/VB the/D best/ADJS Use/N of/P it/PRO while/P it/PRO	was/BED standing/VAG ./. "/" WESLEY-174X,29.428/ID So/ADV I/PRO began/VBD expounding/VAG the/D Tenth/ADJ Chapter/	inanimate	STAND	wesley-174x.pos	M1 (1700-1769)
CONJ three/NUM Topsails/NS ,/, and/CONJ Foresail/N ;/. HOLMES-TRIAL-1749,25.414/ID her/PRO$ Head/N	was/BED standing/VAG towards/P the/D Enemy/N ./. HOLMES-TRIAL-1749,25.415/ID <font>/CODE Q./N <$$font>/CODE Might/	inanimate	STAND	holmes-trial-1749.pos	M1 (1700-1769)
15.927/ID <font>/CODE Mr./NPR Gurney/NPR ./, <$$font>/CODE In/P ordinary/ADJ cases/NS ,/, they/PRO	are/BEP standing/VAG at/P the/D bar/N by/P themselves/PRO+N ;/. WATSON-1817,1,115.928/ID here/ADV the/	animate	STAND	watson-1817.pos	M2 (1770-1839)
/N the/D younger/ADJR Mr./NPR Watson/NPR rose/VBD from/P the/D waggon/N ,/, having/HAG	been/BEN standing/VAG immediately/ADV behind/P the/D elder/ADJR Mr./NPR Watson/NPR ,/. WATSON-1817,1,146.1672/ID and/CON	animate	STAND	watson-1817.pos	M2 (1770-1839)

D he/PRO not/NEG so/ADVR loose/ADJ in/P the/D hinges/NS !. CARLYLE-1835,2,261.109/ID -/, Jane/NPR	is/BEP sitting/VAG sewing/VAG here/ADV ;/. CARLYLE-1835,2,261.110/ID she/PRO sends/VBP you/PRO both/Q her/PRO$	animate	SIT	carlyle-1835.pos	M2 (1770-1839)
/CONJ walked/VBD to/P that/D part/N of/P the/D bar/N where/WADV I/PRO	was/BED sitting/VAG ./. BOSWELL-1776,57.837/ID I/PRO did/DOD not/NEG look/VB towards/P him/PRO ,/, having/HAG	animate	SIT	boswell-1776.pos	M2 (1770-1839)
/WPRO had/HVD probably/ADV been/BEN tumbled/VAN into/P bed/N by/P his/PRO$ companions/NS ,/,	was/BED sitting/VAG up/RP between/P the/D sheets/NS ,/, warbling/VAG as/ADVR much/Q as/P	animate	SIT	dickens-1837.pos	M2 (1770-1839)
ough/P Parliament-street/NPR+NPR ,/, Dublin/NPR ,/, George/NPR Faulkner/NPR ,/, the/D printer/N ,/,	was/BED standing/VAG at/P his/PRO$ own/ADJ shop-door/N+N ;/. OKEEFFE-1826,1,17.180/ID I/PRO was/BED	animate	STAND	okeeffe-1826.pos	M2 (1770-1839)
/D length/N of/P his/PRO$ chain/N ./. OKEEFFE-1826,1,10.106/ID One/ONE day/N ,/, when/WADV I/PRO	was/BED standing/VAG watching/VAG the/D noble/ADJ bird/N of/P Jove/NPR ,/, an/D unlucky/ADJ	animate	STAND	okeeffe-1826.pos	M2 (1770-1839)
-1836,150.277/ID As/P we/PRO passed/VBD near/ADJ the/D city/N ,/, groups/NS of/P Turks/NPRS	were/BED sitting/VAG around/ADV ,/, enjoying/VAG their/PRO$ pipes/NS and/CONJ the/D evening/N air/N ,/, <	animate	SIT	montefiore-1836.pos	M2 (1770-1839)
/VB our/PRO$ landing/N fruitless/ADJ ,/, he/PRO returned/VBD to/P his/PRO$ wives/NS ,/, who/WPRO	were/BED standing/VAG on/P the/D shore/N much/Q terrified/VAN ./. COOK-1776,27.473/ID The/D Captain/N	animate	STAND	cook-1776.pos	M2 (1770-1839)
/BEN sued/VAN out/RP ,/, commenced/VAN ,/, or/CONJ prosecuted/VAN if/P such/SUCH Court/N shall/MD	be/BE sitting/VAG ,/, or/CONJ ,/, if/P such/SUCH Court/N shall/MD not/NEG be/BE sitting/VAG ,/,	inanimate	SIT	statutes-1835.pos	M2 (1770-1839)
/N shall/MD be/BE sitting/VAG ,/, or/CONJ ,/, if/P such/SUCH Court/N shall/MD not/NEG	be/BE sitting/VAG ,/, to/P any/Q Judge/N of/P either/Q of/P the/D Superior/ADJ	inanimate	SIT	statutes-1835.pos	M2 (1770-1839)

fortable/ADJ home/N ./. MONTEFIORE-1836,158.388/ID The/D Pelorus/NPR English/ADJ brig/N of/P war/N	was/BED lying/VAG in/P the/D harbour/N ,/, besides/P several/Q French/ADJ vessels/NS ,/, and/CONJ	inanimate	LIE	montefiore-1836.pos	M2 (1770-1839)
/BEN wounded/VAN in/P the/D head/N by/P a/D splinter/N ,/. SOUTHEY-1813,192.372/ID and/CONJ	was/BED sitting/VAG on/P a/D gun/N ,/, encouraging/VAG his/PRO$ men/NS ,/, when/P ,/, just/ADV	inanimate	SIT	southey-1813.pos	M2 (1770-1839)
<$$font>/CODE were/BED not/NEG unavailing/ADJ ./. VICTORIA-186X,1,233.513/ID {ED:...}/CODE I/PRO	am/BEP sitting/VAG and/CONJ writing/VAG <paren>/CODE as/P I/PRO do/DOP most/QS days/NS <$$	animate	SIT	victoria-186x.pos	M3(1840-1914)
/C on/P the/D other/OTHER side/N of/P this/D world/N the/D people/NS	are/BEP standing/VAG and/CONJ moving/VAG about/RP with/P their/PRO$ feet/NS towards/P our/PRO$	animate	STAND	faraday-1859.pos	M3(1840-1914)
./. WILDE-1895,69.813/ID As/P she/PRO passes/VBP by/P Sir/NPR Robert/NPR Chiltern/NPR ,/, who/WPRO	is/BEP standing/VAG close/ADJ to/P the/D door/N ,/, she/PRO pauses/VBP for/P a/D	animate	STAND	wilde-1895.pos	M3(1840-1914)
is/BEP lounging/VAG in/P an/D armchair/N+N ./. WILDE-1895,39.6/ID Sir/NPR Robert/NPR Chiltern/NPR	is/BEP standing/VAG in/P front/N of/P the/D fireplace/N+N ./. WILDE-1895,39.7/ID He/PRO is/	animate	STAND	wilde-1895.pos	M3(1840-1914)
/D girl/N to/P such/SUCH a/D young/ADJ man/N ./. MEREDITH-1895,19,143.191/ID But/CONJ he/PRO	was/BED lying/VAG on/P his/PRO$ back/N ,/, the/D posture/N for/FOR memory/N to/TO	animate	LIE	meredith-1895.pos	M3(1840-1914)
N was/BED not/NEG quite/ADV what/WPRO they/PRO expected/VBD ./. YONGE-1865,165.171/ID Violetta/NPR	was/BED sitting/VAG in/P her/PRO$ "/" slantingdicular/ADJ "/" position/N on/P her/PRO$ chair/N placed/VAN	animate	SIT	yonge-1865.pos	M3(1840-1914)
/NPR of/P God/NPR ./. ERV-NEW-1881,1,20J.65/ID Again/ADV on/P the/D morrow/N John/NPR	was/BED standing/VAG ,/, and/CONJ two/NUM of/P his/PRO$ disciples/NS ;/. ERV-NEW-1881,1,20J.66/ID and/CONJ	animate	STAND	erv-new-1881.pos	M3(1840-1914)
/C the/D island/N was/BED under/P a/D cloud/N ,/, and/CONJ that/C all/Q	were/BED living/VAG in/P great/ADJ temperance/N ./. READE-1863,226.656/ID Dysentery/N in/P an/D epidemic/ADJ	animate	LIE	reade-1863.pos	M3(1840-1914)

/VBP me/PRO of/P an/D adventure/N of/P my/PRO$ own/ADJ ./. FAYRER-1900,11.256/ID We/PRO	were/BED lying/VAG off/P Hogg/NPR Island/NPR ,/, New/NPR Providence/NPR ,/, in/P the/D Bahamas/NPRS ,/.	animate	LIE	fayrer-1900.pos	M3(1840-1914)
DJ ,/, we/PRO kill/VBP you/PRO ./. '/' "/" READE-1863,213.274/ID One/ONE evening/N ,/, as/P we/PRO	were/BED sitting/VAG in/P a/D mission-house/N+N at/P Corisco/NPR with/P the/D	animate	SIT	reade-1863.pos	M3(1840-1914)
d/VAN '/' ,/, said/VBD I/PRO ./. BOETHJA-1897,149.340/ID '/' So/ADV ,/, then/ADV ,/, if/P thou/PRO	wert/BED sitting/VAG in/P judgment/N ,/, on/P whom/WPRO wouldst/MD thou/PRO decree/VB the/D	animate	SIT	boethja-1897.pos	M3(1840-1914)
/D Puritan/ADJ party/N than/P an/D out-of-date/ADJ House/N which/WPRO had/HVD	been/BEN sitting/VAG more/QR than/P seven/NUM years/NS ./. OMAN-1895,398.428/ID Instead/P+N of/P disbanding/	inanimate	SIT	oman-1895.pos	M3(1840-1914)
2.486/ID and/CONJ after/P a/D few/Q hours/NS ,/, give/VBI water/N that/C has/HVP	been/BEN standing/VAG in/P the/D stable/N some/Q hours/NS ,/. SKEAVINGTON-184X,29.C2.487/ID the/D	inanimate	STAND	skeavington-184x.pos	M3(1840-1914)
/P gravity/N is/BEP at/P the/D lowest/ADJS point/N when/P the/D image/N	is/BEP standing/VAG upright/ADJ ;/. FARADAY-1859,21.210/ID and/CONJ we/PRO may/MD be/BE certain/ADJ when/P	inanimate	STAND	faraday-1859.pos	M3(1840-1914)
most/ADV to/P a/D man/N ./. TROLLOPE-1882,159.27/ID Our/PRO$ fleet/N ,/, the/D meanwhile/ADJ+N ,/,	was/BED lying/VAG at/P the/D Bosphorus/NPR ,/. TROLLOPE-1882,159.28/ID and/CONJ all/Q England/NPR was/BED	inanimate	LIE	trollope-1882.pos	M3(1840-1914)
lady/N from/P the/D great/ADJ gate/N to/P the/D Master's/N$ Lodge/N ,/,	was/BED standing/VAG out/RP ,/, there/EX being/BAG a/D party/N at/P the/D Lodge/N ./.	inanimate	STAND	benson-190x.pos	M3(1840-1914)