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The historical development of the Dutch posture-verb progressive construction: including a comparison with German

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Chapter 1 General introduction

1.1 Background

1.1.1 Introduction

This dissertation explores the grammaticalization of posture verbs in Dutch and German. The three kinds of posture verbs that are of importance for this study are shown in (1), in Modern Dutch and Modern German. These three verbs reflect the most common physical positions encountered in daily life, and are referred to as *cardinal posture verbs* by Lemmens (2005).¹

- (1) a. [Modern Dutch] *staan* 'to stand', *zitten* 'to sit', *liggen* 'to lie'
b. [Modern German] *stehen* 'to stand', *sitzen* 'to sit', *liegen* 'to lie'

Posture verbs are found cross-linguistically, and serve as common sources for semantic extension, leading to not only polysemy of the verbs (e.g. use as a locative verb) but also their development toward aspectual markers (Newman 2002: 12-17). One example of a posture verb used as an aspectual marker is observed in Modern Dutch. As various studies point out (Van den Hauwe 1992, Ebert 2000, Lemmens 2005, Behrens et al. 2013, among others), the posture verbs given in (1a) (i.e. *staan*, *zitten*, and *liggen*) can be used to express progressive aspect, as in the following examples.

- (2) a. Ik **zat te lezen**.
'I was (sitting and) reading'
b. Ik **stond te wachten**.
'I was (standing and) waiting'
c. Ik **lag te slapen**.
'I was (lying and) sleeping' (Lemmens 2005: 184)²

¹ The term *cardinal posture verbs* is intended to reflect the fundamental role of the standing, sitting, and lying postures in the physical world (Lemmens 2005). Since this research is not concerned with other, marginal posture verbs (e.g. (Dutch) *knielen* / (German) *knien* 'to kneel'), the term *posture verbs* will be used here to refer to the cardinal posture verbs (i.e. *staan*, *zitten*, *liggen* in Modern Dutch and their equivalents in Middle Dutch and *stehen*, *sitzen*, *liegen* in Modern German).

² Emphases in the examples are all mine. The examples are also sometimes adapted in order to maintain consistent style and punctuation.

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The construction highlighted in the examples in (2) expresses that the activity indicated by the verb after *te*, which is an infinitive marker, continues while the agent typically holds the posture denoted by the posture verb.

Earlier examples of posture verbs used as aspectual markers can be found in Middle Dutch (around 13th–15th century). Compared with the Modern Dutch construction presented in (2), the Middle Dutch construction has a different structure. In the Middle Dutch construction, posture verbs (*staen* ‘to stand’, *sitten* ‘to sit’, and *liggen* ‘to lie’) do not take an infinitive clause with *te*, but are coordinated with the following verb by a coordinating conjunction *en* or its older form *ende*, as shown in (3).

- (3) a. Doe **stond** Elegeast **en loech**
‘then, Elegast was standing and laughing’
b. De porters **saten** alle gemeenlike **ende aten**
‘the inhabitants were all sitting and eating together’
c. Daer die coninc **lach ende sliep**
‘when the king was lying and sleeping’
(Duinhoven 1997: 439; translations mine)

In the instances in (3), each posture verb (here in the past tense forms *stond* ‘stood’, *saten* ‘sat’, and *lach* ‘lay’) is linked to another verb (*loech* ‘laughed’, *aten* ‘ate’, and *sliep* ‘slept’) by a coordinating conjunction *en(de)*. Although formally coordinated, the construction expresses ‘durative aspect’ (‘duuraspect’) through the extension of the stative semantics of the posture verb to the verb following the coordinating conjunction (Duinhoven 1997: 439). For example, as Duinhoven (1997: 439) explains, the example given above as (3a) describes the situation where Elegast, who was standing, laughed for a while when king Karel took out a coulter (a knife-like blade of a plow). In short, the sentence describes the event as ongoing and hence progressive in meaning. In this way, the Dutch posture verbs in (3) can be seen as functioning as progressive markers.

This Middle Dutch construction with a posture verb and a coordinating conjunction has a formal equivalent in Modern German. Proske (2019), for example, provides some formally comparable instances extracted from spoken German data, as shown in (4).

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function as lexical verbs, are used as progressive auxiliaries. The acquisition of this auxiliary function by posture verbs can also be understood as grammaticalization of the lexical posture verbs into aspectual markers.

Grammaticalization has both a diachronic and synchronic dimension. A given linguistic item develops diachronically and this historical path of development may be attested as synchronic variation in the language (Lehman 1985). This research aims to answer the question of how posture verbs develop from a lexical verb to an aspectual marker, from both diachronic and synchronic perspectives. In the present research, the Dutch construction is investigated diachronically (cf. (2 & 3)) and the German one synchronically (cf. (4)).

The diachronic pathway of the Dutch posture-verb construction is described on the basis of historical textual data and examined principally with reference to observations from the literature on this construction in Dutch (cf. section 1.3.3.) and the steps of development proposed for posture-verb progressive constructions in other languages (cf. sections 1.3.2. & 2.1.1.). The research objectives for the investigation of the Dutch posture-verb progressive construction are to describe its historical development and to propose a corresponding step-by-step pathway of grammaticalization (cf. section 1.4.). As for German, the reportedly emergent status of the construction will be described and evaluated in terms of degree of grammaticalization, by comparing the described situation with the grammaticalization pathway proposed for Dutch (cf. Chapter 5). By pursuing these research objectives, this research will yield insight into both the diachronic change and the synchronic variation of the posture-verb construction.

The methodology employed in this research is in principle quantitative. More specifically, the research uses corpora to collect data, and the data is described in terms of the frequency and ratio of instances with and without a certain linguistic feature and analyzed using statistical tests. Details regarding the corpora and statistical methods used will be provided in Chapter 2.

In the rest of this chapter, the foundation will be laid for further discussion of the posture-verb progressive constructions in Dutch and German. First, the progressive constructions in Modern Dutch and Modern German will be characterized in general terms (1.2.1.) Then the posture-verb construction in each language will be outlined (1.2.2. & 1.2.3.). Section 1.3. sheds light on the historical development of posture verbs by presenting general theories of grammaticalization (1.3.1.) and auxiliation (1.3.2.) of posture verbs. Section 1.3.3. focuses on how the historical development of

the Dutch posture-verb progressive construction is explained in the literature. In section 1.4., the research objectives for my investigation of the Dutch posture-verb progressive construction are outlined in detail. Lastly, section 1.5. provides an overview of the structure of the rest of the dissertation.

1.2 Progressive constructions in Modern Dutch and Modern German

This section provides background information on progressive constructions in Modern Dutch and Modern German, focusing on the posture-verb progressive construction for Dutch and the so-called pseudo-coordinate construction with posture verbs for German.

1.2.1 Overview of progressive constructions in Dutch and German

As outlined in the previous sections, this research is concerned with progressive constructions. Progressive constructions are used to express progressive aspect, which means that they describe an event as ongoing or in progress (Behrens et al. 2013).³ Progressive aspect is not particularly well represented in Germanic languages, except for English with its *be V-ing* construction, according to Ebert (2000: 605). The author suggests that the low degree of grammaticalization of progressive markers in Germanic languages except for English is reflected 'on the one hand in the optionality of the markers, on the other in a variety of alternative forms' (*ibid.*: 605). Optionality of markers is observed for both Dutch and German, since aspectually unmarked sentences, such as *zij schreef een brief* in Dutch and *sie schrieb einen Brief* in German (lit. 'she wrote a letter'), are open to a progressive interpretation, i.e. 'she was writing a letter', indicating that

³ Closely related to the progressive is the continuous/durative aspect. According to Mair (2012: 806ff.), the progressive is usually reserved for dynamic verbs, which typically convey the notion that the process or activity referred to is of limited duration, exhibits change in intensity, and is normally under conscious control of some agent. Non-progressive continuous aspectuality, on the other hand, covers stative predicates, which do not have any volitional agent involved and therefore do not usually occur in the imperative. In this study, these two aspects are not distinguished, since the languages under investigation (i.e. Dutch and German) do not distinguish them.

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progressive aspect need not be overtly marked. German is especially reluctant to mark progressive aspect in a linguistically overt manner: the language is, in general, well-known for a low frequency of aspectual constructions (Stutterheim et al. 2009, Flecken 2011, Krause 2012, Behrens et al. 2013) and ‘Standard German usually leaves progressive aspectuality implicit’ (Mair 2012: 804).

The latter feature, namely, the variety of progressive markers, is also attested in both Dutch and German. Based on large-scale questionnaires on progressive constructions in Germanic languages, Ebert (2000) identifies three types of progressive constructions available in Dutch (5a, b, and c) and two in German (6a/b, and c). First, the progressive constructions in Dutch are given in (5).

- (5) a. Hij zit de krant te lezen.
 ‘he is reading a/the newspaper’ (Ebert 2000: 608)
 b. Ze is aan het koken.
 ‘she is cooking’ (*ibid.*: 608)
 c. Ria is bezig haar fiets te herstellen.
 ‘Ria is fixing her bicycle’ (Van den Hauwe 1992: 2)

As shown in (5), Dutch expresses progressive aspect with the combination of a posture verb and an infinitive marker *te* (5a), with a prepositional phrase headed by *aan* ‘at’ (5b),⁴ or with the adverb *bezig*, meaning ‘busy’ (5c).

The progressive constructions in German are shown in (6).

- (6) a. Sie ist am Kochen.
 ‘she is cooking’ (Ebert 2000: 608)

⁴ The prepositional construction with *aan het V* is a major alternative to the posture-verb progressive construction. The difference between the constructions is briefly summarized as follows. The prepositional construction has more focus on the ongoing process itself, while the posture-verb progressive locates the process in a spatio-temporal frame (Lemmens 2015). According to Lemmens, the former is more grammaticalized and can be thus characterized by its processual focus and the latter is less grammaticalized and has a situational focus. See also Boogaart (1991), Ebert (2000), and Behrens et al. (2013) for more detailed characterizations in terms of comparison of the progressive constructions and Van den Hauwe (1992) and Boogaart (1999) for a comprehensive view and description of each Dutch progressive construction.

- b. Paula ist beim Singen.⁵
 'Paula is singing'
 c. Sie ist dabei, 6 Pfund Kartoffeln zu schälen.
 'she is peeling six pounds of potatoes' (Ebert 2000: 610)

German uses a prepositional construction with *am* 'at the' (as in (6a)), *beim* 'by the' (as in (6b)), or *im* 'in the', as well as the so-called 'busy' construction with *dabei* 'by there' (as in (6c)), which has a marginal status. However, the language does not use a postural construction with an infinitive clause as a complement (**er lag zu schlafen* lit. 'he lay to sleep').⁶

As can be seen from (5) and (6), both languages have several ways to mark progressive aspect in a linguistically overt way; according to Ebert, this could be associated with the low degree of grammaticalization of the progressive markers in both languages. The following section (1.2.2.) focuses on the postural construction in Modern Dutch, as given in (5a).

1.2.2 The posture-verb progressive construction in Modern Dutch

As already seen in (2) and (5a), the progressive construction with a posture verb includes one of the verbs *staan*, *zitten*, and *liggen*, an infinitive marker *te*, and a complement verb, as shown in (7).

- (7) a. Zij **stond** op de hoek **te wachten**.⁷
 'she was (standing and) waiting at the corner'
 b. Hij **zat** een brief **te schrijven**.
 'he was (sitting and) writing a letter'

⁵ grammis (IDS Mannheim), 'Grammatik in Fragen und Antworten: Darf man Ich bin am Schreiben schreiben? – Bereichert die Verlaufsform (der Progressiv) das Deutsche?', accessed 19.7.2021, <https://grammis.ids-mannheim.de/fragen/4551#typ12>.

⁶ For German, it should be noted that the use of progressive constructions is more common in some dialectal, regional, and informal variations, such as the *Rheinische Verlaufsform*, than in the standard language (Ebert 2000: 610, Behrens et al. 2013: 101). See also section 1.2.3. on regional variations of the German construction with posture verbs.

⁷ Examples without a source indication are constructed by the author. Forms that are unacceptable or questionable in present-day Dutch will be indicated by an asterisk or a question mark, respectively.

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- c. Het kind **lag te slapen**.
'the child was (lying and) sleeping'

This section outlines the major syntactic and semantic characteristics of this construction.⁸

In terms of syntax, there are two well-known phenomena that can be observed with regard to this construction. The first is the option to omit the infinitive marker *te*. As explained in *Algemene Nederlandse Spraakkunst* (henceforth ANS, 18.5.4.1.ii) the infinitive marker *te* is omissible or even preferably omitted in some environments, as can be seen in the examples reproduced here in (8).

- (8) a. Wim **zit te slapen**.
'Wim is (sitting and) sleeping'
b. *Wim **zit slapen**.
'lit. Wim sits sleep'
c. Wim heeft de hele les **zitten te slapen**.
'Wim was (sitting and) sleeping for the whole lesson'
d. Wim heeft de hele les **zitten slapen**.
'Wim was (sitting and) sleeping for the whole lesson'
e. Als die jongens de hele les **zitten te slapen**, zullen ze niet veel opsteken.
'If the boys are (sitting and) sleeping for the whole lesson, they will not learn a lot'
f. Als die jongens de hele les **zitten slapen**, zullen ze niet veel opsteken.
'If the boys are (sitting and sleeping) for the whole lesson, they will not learn a lot'
g. ?Wim schijnt de hele les te **zitten te slapen**.
'Wim seems to (sit and) sleep for the whole lesson'

⁸ The same structure is also possible with other verbs, such as *lopen* 'to walk, run' and *hangen* 'to hang' (cf. ANS: 18.5.4.2., Lemmens 2005). These variants are not taken into consideration in this research, in order to restrict the scope to one semantic category of verbs, namely, cardinal posture verbs (see also Lemmens 2005 and Anthonissen et al. 2019 for differences in usage between the posture-verb progressive and the motion-verb progressive with *lopen*). Moreover, *lopen*, as a motion verb, seems to have followed a different path of development compared to the posture verbs (cf. footnote 32 in this chapter). Therefore, the verb is not diachronically comparable with the posture verbs.

h. Wim schijnt de hele les te **zitten slapen**.

'Wim seems to (sit and) sleep for the whole lesson'

(ANS: 18.5.4.1.ii; translations mine)

Omission of *te* is possible when the posture verb appears in the clause-final verbal complex directly before the complement verb cluster (hence it is impossible in (8b)). In the circumstance where the verbs are postposed, *te* is omissible in the following three situations: (i) when the posture verb is governed by another verb which takes an infinitive without *te* (such as the auxiliaries *kunnen* 'can', *zijn* 'to be', and *hebben* 'to have', see (8c) and (d)); (ii) when the posture verb is in the indicative, plural, present tense form, which formally coincides with the infinitive form (see (8e) and (f)); or (iii) when the posture verb is governed by another verb which takes an infinitive with *te* (like *schijnen* 'to seem'). In the last case, the presence of a second *te* is even undesirable according to the literature (see (8g) and (h)).

The necessity that the temporal auxiliaries *zijn* and *hebben* take a complement verb in the infinitive, as shown in *zitten (te) slapen* in (8c) and (d), is known as the *infinitivum pro participio* (IPP) effect. As a general rule, the IPP effect requires a past participle to be replaced by an infinitive when the clause-final verbal complex contains more than one verb (ANS: 18.5.4.2.), as in *zitten (te) werken* in (9a).

(9) a. Ton heeft de hele middag aan zijn bureau **zitten (te) werken**.

'Ton was (sitting and) working the whole afternoon at his desk'

b. *Ton heeft de hele middag **gezetten** aan zijn bureau **(te) werken**.

lit. 'Ton has the whole afternoon sat at his desk (to) work'

(ANS.: 18.5.4.2.; translations mine)

As can be seen in the examples in (9), the posture verb *zitten*, which usually appears in its past participle form *gezetten* under the temporal auxiliary *hebben*, is in its infinitive form *zitten* in (9a) due to the IPP effect. The necessity of using the infinitive form can be observed in the ungrammaticality of a sentence like (9b), in which the posture verb is in the past participle form (*gezetten*). The appearance of the IPP effect is considered a good indication that the verb in the infinitive has auxiliary or auxiliary-like status (Van der Horst 2008: IV 9.5.1.3., Cavirani-Pots 2020: 27f.).

In terms of semantics, the posture-verb progressive construction in Modern Dutch is characterized by the fact that the posture verbs in these constructions are semantically not fully bleached. Lemmens (2005: 211), for example, states that the Modern Dutch posture-verb construction is 'very

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much tied to the verb's stative and locational character'. This means that the postural meaning is mostly retained, requiring the activity indicated by the complement verb to be compatible with the posture encoded by the main verb (e.g. *ik lig te slapen* 'I was lying and sleeping' but **ik lig te wandelen* 'I was lying and walking', see also Behrens et al. 2013 and Lemmens 2005: 203ff.).

At the same time, there is evidence that the construction may be grammaticalizing further in this respect (Hoekstra 1999, Lemmens 2005: 209), as can be seen from such examples as *ik zat te lopen* 'I was walking' (Coppen 2009: 164) and *[o]mdat ik achter een trein aan zit te hollen, heb ik de trein waar ik eigenlijk in hoor te zitten gemist* '[b]ecause I was running for a train, I missed the one that I actually had to be on' (Lemmens 2005: 205), where the compatibility of the posture indicated by the posture verb (here, sitting) and the activity illustrated by the complement motion verb (here, walking or running) is lost.⁹ This possible development seems to be (still) generally limited and marginal, meaning that motion verbs as a complement verb in the construction are still restricted.

There are certainly other cases where the posture verbs seem to be desemantized, such as *lig/zit niet te zeuren* 'stop whining' (Ebert 2000: 628), where the agent is not strictly required to be in the posture designated by the posture verb. With this kind of sentence, the irritation or annoyance of the speaker is expressed, and it is hence labeled as 'emotive' (*ibid.*: 628) or 'non-neutral' and 'expressive' (Van den Hauwe 1992: 13, see also Overdiep 1919: 384, Anthonissen et al. 2019, De Wit et al. 2020, ANS: 18.5.4.2.). In sum, then, except for some marginal grammaticalized cases and the emotive use, the construction usually requires compatibility between the posture indicated by the posture verb and the activity indicated by the complement verb; this is therefore adopted as a general feature of the construction.

Besides the compatibility of the posture and the activity, some other semantic features of the construction can be observed concerning the complement verb. First, the construction accepts both atelic and telic verbs. The compatibility of atelic verbs with this construction is reported by Behrens et al. (2013), who observe that the construction is often used to describe situations without temporal development. This type of situation includes activities like fishing, jogging, swimming, or playing an instrument, which are highly continuous without step-by-step change. Such activities

⁹ With such examples, Lemmens (2005: 205) also argues that *zitten* is the verb that shows most semantic bleaching, in line with typological observations that regard the 'sit' verb as most subject to grammaticalization.

also do not have an inherent endpoint, in the sense that the ‘endpoint coincides with the cessation of the activity’ (*ibid.*: 111). These situations can therefore be characterized as atelic events and can be described using the posture-verb progressive construction (e.g. *hij zit te vissen* ‘he is (sitting and) fishing’). At the same time, the authors point out that the use of the construction is not excluded for telic events, that is, change-of-state situations with an inherent endpoint (e.g. a candle burning down, a man peeling potatoes), although telic verbs feature in this construction far less often than atelic verbs. Second, Ebert (2000) points out that verbs of low dynamicity in particular, such as ‘wait’, seem to be more compatible with the construction (*ibid.*: 111, 622; e.g. *zij stond te wachten* ‘she was (standing and) waiting’). In short, according to the literature, the Dutch posture-verb construction can involve both telic and atelic complement verbs, but atelic verbs and verbs with low dynamicity are preferred.

Furthermore, based on general properties of the progressive aspect, which typically presents a dynamic event as ongoing and continuous, the construction is usually incompatible with stative and punctual situations (Ebert 2000: 614f.). Stativity is incompatible since it does not involve temporal development and hence cannot be progressive (e.g. **ik sta te weten* lit. ‘I stand to know’).¹⁰ Punctuality indicates that the event is momentaneous and non-durative and hence difficult to interpret as ongoing or continuous. The combination of a progressive construction and a punctual event usually yields an iterative interpretation, in other words, that the event is repeated (e.g. *he is knocking on the door*).

¹⁰ In English, not all stative verbs are equally incompatible with the progressive V-ing construction. Quirk et al. (1985: 200) distinguish two stative situation types, namely, qualities (i.e. ‘relatively permanent and inalienable properties of the subject referent’) and states (i.e. less permanent or temporary situation of the subject referent); they point out that the former is excluded as a progressive sentence (**Mary is being a Canadian*) and the latter too, but to a lesser degree (*?Mary is having a bad cold*). In cases where the progressive construction takes a stative verb as a complement verb in English, as in *[s]he’s being silly* (Freund 2016: 51), the momentary and temporary behavior of the subject is indicated (Atasever Belli 2018: 122f.). The posture-verb progressive construction in Dutch also seems to reflect this dichotomy but in a more subtle manner (cf. **ze zat getrouwd te zijn* lit. ‘she sat married to be’ and *??ze zat het koud te hebben* ‘she was (sitting and) feeling cold’ lit. ‘she sat it cold to have’). Since stative verbs are generally only very marginally acceptable as a complement verb in the Dutch posture-verb progressive construction, stative verbs will be regarded here as generally incompatible with the construction.

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In sum, the posture-verb progressive construction preferably takes an atelic dynamic verb of low dynamicity as a complement verb, and requires that the activity described by the complement verb is compatible with the posture indicated by the posture verb. Motion verbs and stative verbs occur less frequently or not at all in the construction. Momentaneous events are incompatible with progressive aspect, but momentaneous verbs can occur in the construction with an iterative interpretation.

These selection restrictions on the complement verb are reflected in observed distributions of complement verbs in the construction. According to Lemmens (2005: 197), who drew his data from a corpus of contemporary Dutch (i.e. the subcorpus of contemporary Dutch prose (1970–1995) of the INL corpus), the most frequent complement verbs per posture verb are those given in Table 1. In this table, the frequency of each verb is given in the column ‘N’, along with the corresponding percentage of the total number of complement verbs in the dataset. Totals are provided in the bottom row.

It is notable that *wachten* ‘to wait’ is the most frequent complement verb with all three posture verbs.¹¹ This observation aligns with proposals from the literature that verbs with low dynamicity cohere well with the posture-verb progressive construction. Turning to the posture verbs themselves, it can be seen that *staan* frequently co-occurs with verbs with relatively high dynamicity, such as *dringen* ‘to jostle’, *springen* ‘to jump’, and *trappelen* ‘to stamp’; however, it should be noted that some of these verbs form a fixed expression with an idiomatic meaning (e.g. *staan te trappelen* ‘be excited, keen’, *staan te springen* ‘be eager’, *staan te popelen* ‘be eager’) and therefore do not truly reflect variety in the complement verbs of the posture-verb progressive construction.¹² The author explains the compatibility of *staan* with highly dynamic verbs by pointing out that the standing posture is the starting position for dynamic activities and has a close connection with dynamicity. The verb *staan* also occurs with perceptual verbs (e.g. *kijken* ‘to watch’) and communicative verbs (e.g. *praten* ‘to talk’). These two types of verbs are also frequently found with *zitten* (e.g. *kijken*, *praten*, and *luisteren* ‘to listen’). In addition, the verb *zitten* often appears with verbs describing activities that are usually conducted in a sitting posture, such as reading,

¹¹ Lemmens (2005: 197f.) further points out that *wachten* can also be used in the prepositional progressive construction (e.g. *Ik ben aan het wachten* ‘I am waiting’) but its occurrence is limited compared to the posture-verb progressive. See also footnote 5 for the difference between the postural and prepositional constructions.

¹² Note that *zitten er aan te komen* ‘be on the way, coming’ is another such idiomatic expression.

thinking, meditating, writing, eating, and drinking. *Liggen* is characterized by its strong orientation toward *slapen* and other verbs that express resting (e.g. *rusten* 'to rest'). Such activities are, according to the author, typically associated with *liggen* as a resting posture.

Table 1. Most frequent co-occurring verbs with each posture verb in the posture-verb progressive construction in Modern Dutch (based on Lemmens 2005: 197)

<i>staan</i>	N	%	<i>zitten</i>	N	%	<i>liggen</i>	N	%
<i>wachten</i> 'to wait'	120	18.2	<i>wachten</i> 'to wait'	147	27.8	<i>wachten</i> 'to wait'	45	24.7
<i>kijken</i> 'to watch'	56	8.5	<i>kijken</i> 'to watch'	29	5.5	<i>slapen</i> 'to sleep'	44	24.2
<i>trappelen</i> 'to stamp'	38	5.8	<i>lezen</i> 'to read'	18	3.4			
<i>dringen</i> 'to jostle'	27	4.1	<i>eten</i> 'to eat'	18	3.4			
<i>opwachten</i> 'to wait (for someone)'	23	3.5	<i>springen</i> 'to jump'	18	3.4			
<i>springen</i> 'to jump'	21	3.2	<i>praten</i> 'to talk'	13	2.5			
<i>juichen</i> 'to cheer'	19	2.9	<i>spelen</i> 'to play'	12	2.3			
<i>popelen</i> 'be anxious'	16	2.4	<i>luisteren</i> 'to listen'	11	2.1			
<i>praten</i> 'to talk'	15	2.3	<i>mediteren</i> 'to meditate'	10	1.9			
<i>spelen</i> 'to play'	15	2.3	<i>schrijven</i> 'to write'	10	1.9			
<i>pronken</i> 'to prance, flaunt'	11	1.7	<i>aankomen</i> 'to arrive, happen'	10	1.9			
<i>slapen</i> 'to sleep'	10	1.5						
verbs with N<10	287	43.6	verbs with N<10	233	44.0	verbs with N<10	93	51.1
TOTAL	658			529			182	

In sum, Table 1 shows that the most frequent complement verbs express activities that are compatible with the posture. In other words, the posture

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verbs in the construction do not seem to be fully desemantized, as pointed out above.¹³ It is also confirmed that dynamic verbs, such as *wachten*, frequently co-occur with posture verbs while stative verbs and motion verbs do not.

In conclusion, this section has summarized some syntactic and semantic characteristics of the posture-verb progressive construction in Modern Dutch. With regard to syntax, the omission of the infinitive marker *te* and the IPP effect have been discussed. As for the semantic features of the construction, it has been shown that posture verbs still retain their postural meaning. This entails that the activity described by the complement verb needs to be compatible with the posture indicated by the posture verb. Furthermore, the complement verb is typically a dynamic verb and not a stative or a motion verb.

1.2.3 Posture-verb progressive construction in the context of pseudo-coordination

As seen in the previous section, the posture-verb progressive construction in Modern Dutch is formed with the infinitive marker *te*. However, in a previous stage of the language, a comparable posture-verb construction was formed with the coordinating conjunction *en*, or its earlier form *ende*, as shown in (10).

- (10) Walewein **lag en sliep** 'Walewein was lying and sleeping'
(Van der Horst 2008: 418; translation mine)

This type of postural construction, which consists of a posture verb, a coordinating conjunction, and a complement verb, is still present in some of the Germanic languages, like Norwegian and Swedish, and is called a pseudo-coordinate construction. The pseudo-coordinate construction

¹³ Sentences in which the posture verb and the complement verb are identical (e.g. *ik zit hier maar te zitten* 'I am just sitting here' (lit. 'I sit here just to sit')) can also be regarded as showing semantic bleaching of posture verbs, since division of function can be assumed between the verbs (i.e. the first as an aspectual marker devoid of postural meaning and the second as a lexical verb that does have a postural meaning). This kind of structure is theoretically not impossible but seems to be infrequent according to Lemmens (2005). In my database, too, no such instances were found with the construction involving *te*.

formally overlaps with a regular coordinate structure but behaves in some respects as a single complex phrase and has a unified meaning that combines both conjuncts. This section outlines pseudo-coordination and illustrates its Dutch and German forms.

Pseudo-coordination, also known as verbal hendiadys, typically refers to a phenomenon in which a coordinated two-verb sequence exhibits some features typically associated with monoclausal structures. Cross-linguistically, the second verb typically does not have an overt subject, and the first verb belongs to a more or less closed set of verbs, including posture verbs (cf. Hilpert & Koops 2008: 244f., Heycock & Petersen 2012: 260ff.).¹⁴ Both verbs in pseudo-coordination can be finite, i.e. parallel in conjugation, as in (10), but not necessarily, as shown by example (11) from Channel Islands English.

(11) They had one who **sat** there **and talk** about things.

(Rosen 2014: 114)

In this example, the parallelism of conjugation is clearly violated: the verb *sat* is in the past tense form, while *talk* is in a form which can be interpreted as infinitival.

Semantically, the two verbs collectively encode one event and the construction is hence ‘monopredicative’ (Hopper 2008: 255). This also entails that negators and adverbials (including adverbs, prepositional phrases, and noun phrases) ‘have scope over both verbs’ (*ibid.*: 255, Lødrup 2019: 92). Often, the first verb may be semantically bleached (Wiklund 1996, Hilpert & Koops 2008), as can be seen from the Swedish example in (12) with the posture verb *sitta* ‘to sit’.

(12) Vi bara **satt och pratade**.

‘we were just talking’ (Hilpert & Koops 2008: 243)

The authors explain that, as indicated by the English translation, the postural meaning of the verb is not prominent in this sentence, although it is not impossible to emphasize it.

¹⁴ This groups includes ‘unspecific verbs of motion (“come” and “go”), verbs of posture and change of posture (“sit (down)”, “stand (up)”, “lie (down)”) and some other intransitive verbs (e.g., Engl. *try*), but also the transitive verb meaning “take” (Proske 2019: 116f., cf. Kinn et al. 2018: 80).

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In Germanic languages, the dominant form of the structure is the one with two finite verbs, as in (10), which can be observed in Mainland Scandinavian (Wiklund 1996, Lødrup 2019, Kinn et al. 2018), Insular Scandinavian (Jóhannsdóttir 2006 on Icelandic, Heycock & Petersen 2012 on Faroese), Afrikaans (De Vos 2005, Cvirani-Pots 2020), English (Ross 2013), and German dialects (Höder 2011, 2012); meanwhile, the coordination of a finite verb and an infinitive, as in (11a), is found in Channel Islands English (Rosen 2014), and some Swedish, Northern Norwegian, and Dutch dialects (Wiklund 1996, Haslinger & Van Koppen 2003, Heycock & Petersen 2012).

In Dutch, pseudo-coordination with posture verbs, as shown in (10), was present in the Middle Ages, where it is said to have functioned as a progressive construction (cf. (3)). The construction died out in the standard variety in the 18th century (see 1.3.3. for further discussion). In Modern Dutch, pseudo-coordinate constructions are still present in the West Flemish dialects but are only possible with the complement verb in the infinitive, as in *Marie zit stoofperen en schillen* 'Marie is sitting and peeling cooking pears' (Barbiers et al. 2008: 34, translation mine; see also Haslinger & Van Koppen 2003).¹⁵ In short, in the standard variety of Modern Dutch, there is no pseudo-coordinate construction with posture verbs.¹⁶

German pseudo-coordinate constructions are mainly found in Low German dialects (Höder 2011, 2012). For the standard language, Proske (2017, 2019) investigated the construction with (*hin-/her-*)*kommen* 'to come (to/from)', *gehen* 'to go', (*da*)*stehen* 'to stand (there)', (*da*)*sitzen* 'to sit (there)', *sich hinstellen* 'to stand up', *sich hinsetzen* 'to sit down', and *nehmen* 'to take'¹⁷ in spoken German data and concluded that the construction is still emergent, but nonetheless present in the language. Some examples with possible semantic bleaching of the first verb were already given as (4) at the beginning of this chapter; additional examples are shown in (13).

- (13) a. wenn du **hingehst und** Leistung **zeigst**, (...).
'if you go and perform well' (Proske 2019: 123)

¹⁵ Note that De Bo (1873: 302), on the other hand, observed that both types of pseudo-coordinate construction (i.e. with a finite and an infinitive complement verb) were possible in the 19th-century West Flemish dialects, although the one with two finite verbs was more frequent.

¹⁶ True coordination (e.g. *ik zit op de bank en lees een boek* 'I sit on the couch and read a book') is certainly possible but is not interpreted as a progressive construction.

¹⁷ These verbs correspond to those that frequently form pseudo-coordination cross-linguistically (see footnote 14).

- b. ich glaube nicht dass Herr Geißler **sich** jetzt **hinstellen** wird **und**
sagen wird
 ‘I don’t think that Mr. Geißler will now stand up and say’
 (*ibid.*: 125)
- c. abends in der Bar **steht** der **da** **und** **beobachtet**
 ‘in the evening at the bar, he stands there and observes’
 (*ibid.*: 128)

Proske argues, for example, that *hingehst* in (13a) ‘only marks purposefulness’ (2019: 123) and not literal motion, which is the original lexical meaning of the verb. In (13b), according to the author, the combination of *sich hinstellen und sagen* (‘to stand up and say’) means ‘to claim’, with *sich hinstellen* adding the meaning of determinedness to *sagen* ‘to say’ (*ibid.*: 125). With regard to (13c), the author explains that the posture verb with the particle (i.e. *dastehen*) serves to highlight the temporal extension of the activity described by the following verb (*beobachtet* ‘observes’) and makes the situation easier to visualize (*ibid.*: 127).¹⁸ As can be seen from these examples, the two-verb sequence can be interpreted in a monopredicative way, in which the second verb functions as a main verb and the first verb adds ‘aspectual, modal and other subjective meaning’ to the interpretation of the sentence (*ibid.*: 116). This backgrounding of the lexical meaning of the first verb can be taken to indicate that the pseudo-coordinate structure is emergent in German.

To conclude, this section has explained the linguistic phenomenon of pseudo-coordination and its realization in Dutch and German. In Middle Dutch, there was a pseudo-coordinate progressive construction with posture verbs. In addition, there are still some regional variants in the modern West Flemish dialects. The corresponding construction in German does not show a high degree of grammaticalization; however, the German construction does seem to be undergoing some semantic cohesion.

1.3 Grammaticalization of the posture-verb progressive construction

The previous section (1.2.) mainly described the progressive constructions with posture verbs in Modern Dutch and Modern German. As discussed in 1.2.1., Modern Dutch has a relatively grammaticalized posture-verb

¹⁸ See also 5.1. for further discussion on the German pseudo-coordinate construction specifically with posture verbs.

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progressive construction, as exemplified in (14a). Additionally, in an earlier period, the language even had a pseudo-coordinate progressive construction with a posture verb, as shown in (14b).

- (14) a. Zij **stond** zwijgend uit het raam **te kijken**.
'she was silently standing and looking out of the window'
b. Ende Hela **sat en at** over sijn tafel in Thersen
'and Elah was sitting and eating at his table in Tirzah'
(Van der Horst 2008: 644; translations mine)

The development of the Dutch posture-verb progressive construction includes two major changes. First, posture verbs must have grammaticalized to express progressive aspect. Second, it seems the construction underwent a structural change from a pseudo-coordinate structure with *en(de)* (cf. (14b)) to a fully monoclausal one with *te* (cf. (14a)). The first point is related to grammaticalization and auxiliatation of lexical verbs, which will be elaborated on in 1.3.1. and 1.3.2., respectively. Section 1.3.3. presents what is already known about the characteristics of the older type of construction with *en(de)* and how it was replaced by the newer type with *te*, based on the descriptions in the literature.

1.3.1 Grammaticalization theory

Grammaticalization can be characterized as a gradual increase of the grammatical function of a given linguistic unit. As Hopper & Traugott (2003: 2) put it, "grammaticalization" refers most especially to the steps whereby particular items become more grammatical through time' (cf. Heine et al. 1991: 2). Examples of grammaticalized linguistic items include the *be going to* construction in English, the motion verb *gaan* 'to go' as an auxiliary of the future tense in Dutch, and the Japanese suffix *-miru* 'try to', which derives from the verb *miru* 'to see'.

The series of changes that a given linguistic item undergoes is said to form a *cline* (Hopper & Traugott 2003: 6), which can often be attested cross-linguistically. Diachronically, a cline corresponds to a natural pathway along which forms evolve, or 'a schema which models the development of forms' (*ibid.*: 6). In the same spirit, Heine et al. (1991) proposed the notions of *grammaticalization channels* and *grammaticalization chains*, the former referring to a specific path along which the form develops and the latter referring to

the internal structure or conceptual links within these channels. Grammaticalization is therefore typically understood to entail the step-by-step development of a given item acquiring more grammatical function over time. In what follows, this gradual pathway of development will be called a *grammaticalization path*.

According to Heine (2003: 578f.), grammaticalization can be characterized as involving ‘four interrelated mechanisms’: (i) semantic reduction, (ii) extension (or context generalization), (iii) decategorization, and (iv) phonetic reduction (erosion). Each relates to a different aspect of language, namely, to (i) semantics, (ii) pragmatics, (iii) morphosyntax, and (iv) phonetics/ phonology, respectively. The author admits that none of these mechanisms are specific to grammaticalization but that ‘they can be said to constitute different components of one and the same general process’ (*ibid.*: 579).

With relation to the grammaticalization of the posture-verb progressive construction in particular, it is useful to briefly elaborate on the two types of reduction just mentioned, namely semantic and phonetic reduction. Firstly, semantic reduction (semantic generalization, bleaching, erosion; Bybee et al. 1994: 6) refers to the phenomenon that the lexical meaning of a linguistic element becomes lost through grammaticalization. In case of the English *be going to* construction, the construction lost its direct connection with the lexical meaning of *go* (i.e. ‘move (toward a destination)’) and gained a future meaning through grammaticalization (Hopper & Traugott 2003: 2f.). In this way, the original lexical meaning of the verb *go* is considered as backgrounded or lost, which can be formulated as semantic bleaching of the verb.

Semantic bleaching has consequences on the collocate diversity of the construction (cf. Correia Saavedra 2019: 49f.), since, as Traugott (2010: 277) puts it, the reduction or bleaching of the semantics ‘naturally leads to loosening of constraints on co-occurrence’. As a result, a sentence like *I am going to like Bill*, which includes a complement verb that is semantically incompatible or unlikely with the motion meaning of *go*, becomes possible (Hopper & Traugott 2003: 3). Contrariwise, the variety of collocates of a given grammatical constructions can be used to evaluate how grammaticalized the construction is. Hilpert (2008: 17), for example, argues in his study on future tense markers (e.g. *be going to*) that ‘the change of collocational patterns in specific constructions is a useful diagnostic of language change, which allows for the detailed description of the development and change of grammatical constructions’. In short, the

variation in co-occurrence can serve as a measure of how semantically bleached the construction is and hence how grammaticalized it is.

Phonetic reduction, on the other hand, refers to ‘the reduction or loss of segmental material and a reduction in the length of the gram’ (Bybee et al. 1994: 6). One example of this phenomenon is *gonna*, a reduced form of (*be*) *going to* (Hopper & Traugott 2003: 3). Reduction is typically caused by a linguistic element losing independent tone or stress due to grammaticalization, and results in the loss or merge of consonants and vowels of the grammaticalizing item(s).

Linguistic items that serve as the source of grammaticalization are typically those that refer to fundamental human experiences, such as ‘the physical state, behaviour, or immediate environment of man’, and frequently appear in human thought and communication (Heine et al. 1991: 33). These embodied experiences are employed as concrete reference points to understand more abstract concepts, which are associated with the concrete concepts. The physical experiences described by posture verbs are certainly fundamental ones, and such verbs are cross-linguistically frequent in use due to their status as basic vocabulary items (Newman 2002). These characteristics of posture verbs make them well-qualified as sources of grammaticalization.

1.3.2 Auxiliation of posture verbs

The mechanism of decategorization, mentioned by Heine (2003: 578f.), is also observed in the grammaticalization of the posture-verb progressive construction. In particular, the grammaticalization of the posture verbs can be understood as their decategorization from lexical verbs to auxiliaries (Hopper & Traugott 2003: 106-109); in other words, their *auxiliation*. Auxiliation refers to ‘the process of complex lexical verb structures developing over time into auxiliary grammatical structures’ (Kuteva 2001: 2). One well-known example of this phenomenon is when a verb develops into a tense/aspect/modality (TAM) marker, a process summarized in the Verb-to-TAM auxiliation chain (Heine 1993). Posture verbs developing into auxiliaries of progressive aspect certainly fall under the definition of Verb-to-TAM auxiliation.

The auxiliation of posture verbs is not uncommon cross-linguistically, and is found in various languages around the world, such as North-Germanic languages, Bulgarian, Kabyle (Berber), Imoda (Papuan), and Kxoe

(Kuteva 1991, 2001, Newman 2002). Kuteva (1999, 2001) argues that the languages that employ a posture-verb aspectual structure also use posture verbs as unmarked and ‘canonical encodings’ of the spatial position of physical objects. Indeed, she proposes that the general use of posture verbs for spatial configuration paves the way for their auxiliation. The following paragraphs present a step-by-step overview of Kuteva’s theory.

The use of posture verbs as canonical spatial verbs usually implies that the language in question has an elaborate system of spatial semantics; that is, a system that reflects the nature of the located entity and the location in a detailed way. For example, Dutch posture verbs can be used as locative verbs and can reflect, for instance, whether an object assumes a vertically salient position (e.g. *de boeken staan in de kast* ‘the books are standing in the bookshelf’) or a horizontally salient position (e.g. *de boeken liggen op het bureau* ‘the books are lying on the desk’; see Lemmens 2002 and Van Staden et al. 2006 for more detailed descriptions of the spatial use of posture verbs). On the other hand, there are languages that do not use verbs to distinguish different spatial configurations and only use a copula, such as Kikuyu. This kind of language is said to have covert marking of spatial semantics. According to Kuteva (1999, 2001), elaborate and covert marking form poles of a continuum, as illustrated in Figure 1.

Figure 1. Covert-to-elaborate marking of spatial semantics and canonical linguistic means used (based on Kuteva 2001: 58)

Covert marking		Elaborate marking		
Kikuyu	Ewe	English	Swedish	Tzeltal
←—————→				
copula	copula	adpositions	adpositions	adpositions
	nominally derived postpositions		posture verbs	posture verbs paronymic terms

As shown in Figure 1, the use of posture verbs for spatial semantics is restricted to the languages associated with elaborate marking (Swedish and Tzeltal in the figure). Based on this observation, there is a correlation between the use of posture verbs as canonical spatial verbs and the elaborate marking of spatial semantics in the language.

In the languages that have elaborate marking of spatial semantics, the use of posture verbs for spatial expressions eventually ‘elevates the

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corresponding verb structures to the status of basic, most common verb expressions and makes them thus appropriate source structures in auxiliariation' (Kuteva 2001: 45). In other words, the frequent use of posture verbs as spatial verbs opens up the possibility for the verbs to develop into auxiliaries. The development of posture verbs from canonical spatial verbs into 'continuative/durative/progressive auxiliaries' is demonstrated by Kuteva (1999, 2001) with an example from Bulgarian, which is summarized in Table 2. According to Kuteva, the auxiliariation of the Bulgarian posture verbs begins with the stage where the verbs only denote human postures (Stage 1 in Table 2) and ends with the construction with progressive aspect (Stage 4 in Table 2).

Table 2. Grammaticalization path of the Bulgarian posture-verb progressive construction (based on Kuteva 2001: 72)

Stage	Characteristics
Stage 1	(i) Bodily posture plus simultaneous verb situation (biclausal) [[S _{anim} PV Adv] CC [V ²]] ¹⁹
Stage 2	(ii) Ambiguity between: (ii-a) Spatial position of objects plus simultaneous situation described by the second verb (biclausal) [[S _{inanim} PV Adv] CC [V ²]] (ii-b) Continuative/durative/progressive (monoclausal) [S _{inanim} PV _{aux} Adv CC V ²]
Stage 3	(iii) Continuative/durative/progressive (monoclausal) [S _{inanim} PV _{aux} CC V ² (Adv)]
Stage 4	(iv) Continuative/durative/progressive (monoclausal) [S _{anim/inanim} PV _{aux} CC V ² (Adv)]

At Stage 1, posture verbs (PV) are only used in their postural meaning with animate agents (as indicated by S_{anim} in the table), are typically modified for location by an adverbial (Adv), and are linked by a coordinating conjunction (CC) to another verb (V²), which results in a biclausal structure. A sentence such as *Ana sedi na divana i piše pismo, a bašta i sviri na piano* 'Ana is sitting on the couch and is writing a letter whereas her father is playing the piano' (Kuteva 1999: 207, 2001: 68) is, according to the author, interpreted with the posture verb (*sedi* 'sits') indicating the posture of the agent and the second verb (*piše* 'writes') indicating a co-occurring

¹⁹ The abbreviations used in this dissertation are summarized in the section 'Abbreviations'.

event. At Stage 2, the posture verbs have extended their meanings to encode spatial configuration and co-occur with inanimate subjects (S_{inanim}). At this stage, the verbs can be coordinated with another verb in a biclausal structure as demonstrated in (ii-a) in Table 2. However, another interpretation is also available; specifically, posture verbs start to acquire continuative/durative/progressive aspect, developing into progressive auxiliaries with a monoclausal structure, as indicated by PV_{aux} in the table (see (ii-b) in Table 2). Kuteva proposes that the use of posture verbs as canonical locative verbs facilitates this development. As a result of posture verbs extending their semantics to the spatial meaning and being used in this meaning frequently, the specific association of these verbs with human posture is blurred, and the focus is laid more on the verbs' inherent semantics of temporal unboundedness. Foregrounding of this temporal meaning correspondingly emphasizes the aspectual profile of posture verbs and facilitates the verbs' development into progressive auxiliaries. At Stage 3, the verb sequence with an auxiliariated posture verb, a coordinating conjunction, and a following verb—now functioning as a complement verb—is unambiguously interpreted as a progressive construction, and gains more cohesion. Increased cohesion can also be observed as a formal change, in that the verb sequence is less frequently interrupted. In line with this, the adverbials, which at earlier stages were placed between the posture verb and the coordinating conjunction, are now placed after the whole sequence, as can be seen in the extraposed Adv in (iii) in Table 2 (Kuteva 1999: 208). Due to the fixed monoclausal interpretation at this stage, the extraposed adverbials modify the whole verb sequence and not just individual verbs. The co-occurrence of the adverbials also seems to become optional at this stage (as indicated in the table by parentheses). This is probably due to the fact that the spatial semantics of posture verbs have become backgrounded, such that they no longer require a locative modifier. The last step in the process is the lifting of the selectional restriction on the subject. At this stage (i.e. Stage 4 in Table 2), the subject can be either animate or inanimate with a monoclausal interpretation. The verb sequence also often occurs with temporal adverbials, such as 'all the time' or 'all day long', emphasizing the durative aspect of the construction, although their occurrence is 'redundant rather than necessary' (Kuteva 1999: 209, 2001: 71).

According to the author, the grammaticalization of the Bulgarian posture verbs is fundamentally based on the assumption that the semantic expansion of the verbs and their frequent use as a locative verb facilitated the backgrounding of their postural semantics and the foregrounding of their temporal aspect (Kuteva 1999: 208, 2001: 69), eventually resulting in the

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development of posture verbs into progressive auxiliaries. Consequently, the auxiliiation of posture verbs is, according to Kuteva, inevitably connected to the frequent occurrence of posture verbs as locative verbs, which can be linked to the elaborate marking of spatial semantics in the language.²⁰

In conclusion, this section has outlined auxiliiation as grammaticalization of a lexical verb into an auxiliary. The example of auxiliiation of posture verbs in Bulgarian was discussed in detail, based on Kuteva (1999, 2001) 's proposals. Kuteva suggests a correlation between the auxiliiation of posture verbs and explicit spatial marking in the language and proposes a grammaticalization path for the Bulgarian posture verbs as an example of how such verbs develop into aspectual markers.

Kuteva's analysis may be applicable to the Dutch posture verbs. The Dutch language is known for its elaborate spatial marking system with posture verbs functioning as canonical locative verbs (Lemmens 2002, Van Staden et al. 2006); furthermore, the verbs can indeed be used as progressive auxiliaries. At the same time, the path proposed by Kuteva is not intended to be universal (2001: 73), and each language may have an individual scenario. For example, after the verbs were grammaticalized to progressive auxiliaries, the Dutch posture-verb construction additionally underwent a structural change to an unambiguously monoclausal structure, taking an infinitive clause as a complement. Hence, not all the details of the grammaticalization path for the Bulgarian posture verbs apply to the development of the Dutch posture verbs; however, the development of the Dutch posture-verb progressive construction could also be structured as a step-by-step development, similar to that of the Bulgarian posture-verb progressive construction as shown in Table 2. A tentative grammaticalization path for the Dutch posture verbs will be proposed in Chapter 3. The current state of knowledge regarding the development of the Dutch posture verbs will be presented in the next section, which summarizes findings in the literature on the historical development of the Dutch posture-verb progressive construction.

²⁰ It should be noted that the languages that have an elaborate marking system of spatial semantics do not necessarily have progressive auxiliaries derived from posture verbs. Rather, elaborate marking serves as a 'prerequisite' for further development of posture verbs into progressive auxiliaries (Kuteva 1999: 205).

1.3.3 Historical development of the Dutch posture-verb progressive construction

As outlined in the beginning of 1.3., the development of the Dutch posture-verb construction involves two significant changes. The first is the auxiliatation of the lexical posture verbs, a change like the one demonstrated for Bulgarian in the previous section (1.3.2.). The second is the replacement of the coordinating conjunction *en(de)* by the infinitive marker *te* and the concomitant obligatorization of the infinitive form of the complement verb, as demonstrated in (14), repeated here as (15).

- (15) a. Zij **stond** zwijgend uit het raam **te kijken**.
 'she was silently standing and looking out of the window'
 b. Ende Hela **sat en at** over sijn tafel in Thersen
 'and Elah was sitting and eating at his table in Tirzah' (= (14))

The intervening element connecting the verbs, namely *te* in (15a) and *en* in (15b), will henceforth be referred to as the *connector*. The change from (15b) with the connector *en* to (15a) with the connector *te* is not merely a case of replacement but rather a change in structure, from pseudo-coordination with two verbs with parallel conjugation to a single complex phrase with the second verb obligatorily in the infinitive form.

The pseudo-coordinate sentence in (15b) represents an older type of construction, which employs the coordinating conjunction *en(de)* as a connector. Typically, both of the verbs are finite, as demonstrated in (15b), but it may have been possible for the second verb to be an infinitive in Middle Dutch, as Weijnen (1971) points out with the following example (16).

- (16) Dan **sittet** convent **ende knaghen** / een ey of enen vulen harinc
 'then the nuns/monks sit (lit. 'then the convent sits') and eat an egg
 or a rotten herring' (Weijnen 1971: 110; translation mine)

The author's interpretation is that the posture verb (*sitten*) is in the third person singular form *sittet* with an enclitic article (= *zit* + *het*²¹ 'sits the'), while the verb after the connector *knaghen* 'to gnaw, to eat' is in the infinitive.

While there is indeed disagreement in conjugation between the verbs in this example, it is also possible to interpret *knaghen* as a plural form of the verb, disagreeing with *sittet* only in number, as Stoett (1889: §207) suggests.

²¹ The expressions after '=' shows the form in Modern Dutch.

Examples like (18) with a deviant word order thus reveal that the verbs form a clause bracket (cf. *tangconstructie* ‘pliers construction’) with a middle field between the two verbal elements (De Schutter 1994: 465ff., ANS: 21.1.1.1.; further discussion of the clause bracket is found in 3.1.3.).

Additionally, in Middle Dutch, the connector *ende* seems to be phonologically reduced to *en* in some cases of the construction, as seen in example (18b) from the 15th century (cf. Duinhoven 1997: 572, footnote 639). According to Van der Horst (2008: 644), the use of *en* in the posture-verb construction is attested in Late Middle Dutch (1350–1500), when the *ende* form was still dominant as a coordinating conjunction (*ibid.*: Chap. 13). The early attestations of *en* instead of *ende* in the construction could be linked to phonological reduction related to the grammaticalization of the construction. As discussed in 1.3.1., phonological reduction is one of the major changes accompanying grammaticalization.²⁶

At the same time, the reduction of *ende* to *en* in Dutch is also part of the general development of the coordinating conjunction. In Middle Dutch, *ende* was the most frequent form of the coordinating conjunction (Van der Horst 2008: 13); in the 16th century, the *en* form started to increase in frequency, and in the 17th century, both forms were used side by side, even in the same text written by the same author. Van der Horst (2008: 1292) remarks that there is no apparent system determining the choice between *ende* and *en* in that century. In the 18th century, the modern *en* form was dominant, while the use of *ende* became increasingly scarce. In short, the formal development of the coordinating conjunction from *ende* to *en* mostly took place in the 16th and 17th centuries; this development apparently occurred after the replacement of *ende* with *en* in the Middle Dutch posture-verb construction. It is certainly unparsimonious to analyze the development of this form as a connector (i.e. in the posture-verb construction) as distinct and independent from its development as a coordinating conjunction (i.e. outside the construction). On the other hand, phonological reduction of *ende* to *en* in the construction may be a good indication of grammaticalization if it could be

²⁶ Phonological reduction of the connector in pseudo-coordination is observed in other languages as well, including English (i.e. *and*: [ən(d)] > [n]), as in [*w*]ho will John go [n] catch? (De Vos 2005: 49) and Afrikaans, as in [*w*]at sit Jan [en]/[n] lees? ‘What is Jan reading?’ (*ibid.*: 150f.). De Vos (2005: 95) points out that the fact that a connector fulfills a functional role and hence ‘falls under the low-stress contour of the unstressable pseudo-coordinative predicate’ makes the reduction of the connector characteristic of pseudo-coordination.

argued that it happened at a different time from the replacement of the coordinating conjunction.

In terms of desemanticization, posture verbs also show some bleaching (Leys 1985). Van der Horst (2008) and Strengholt (1970) provide examples where the posture denoted by the posture verb is incompatible with the activity described by the following verb. These examples are given in (19) and (20) below, and are drawn from the Late Middle Dutch period (1350-1500) and the 17th century, respectively.

- (19) Ende die olde vaders **lagen ende arbeiden** om den steen af te doen ende die scriftuer te verstaen
 ‘and the old leaders were (lit. lying and) working to remove the stone and to understand the Scripture’
 (Van der Horst 2008: 644; translation mine)

- (20) a. De vierde **leyt en loopt** met velen en met luyten
 ‘the fourth (person) is (lit. lying and) walking with fiddles and with lutes’
 b. ligh ghij noch te bedde / Daer ick soo vroegh op **ligh en wroet**?
 ‘are you still lying in bed while I am (lit. lying and) working this early in the day?’
 (Strengholt 1970: 127, 128; translations mine)

In (19), the activity of removing the stone and reading the Scriptures is typically not understood as done in a lying posture. Similarly in (20a), the action *lopen* ‘to walk’ is not compatible with the lying posture indicated by the posture verb, and nor is the action *wroeten* ‘to work hard’ in (20b).²⁷ The semantic incompatibility indicates that the meaning of *liggen* as a posture verb is backgrounded in these cases. This entails that the posture verb is desemanticized, meaning that the verb is used merely as an aspectual marker. Considering the strong semantic compatibility of the posture verb and complement verb in the modern posture-verb progressive construction (cf. section 1.2.2.), these sentences are remarkable, although we will see that there were not in fact many comparable instances found in the database for this research (cf. section 4.2.3.).

In data from the 17th century, evidence for the monoclausal structure of the construction is also attested in cases where two or more [*en(de)* V]

²⁷ With these examples, Strengholt (1970: 127) further points out that *liggen* is the most semantically bleached verb in the construction, compared to *staan* and *zitten*.

coexisted in the 17th century. In that century, the construction with *te* grew in frequency and competed with the older type of construction, eventually replacing it.

There are various proposals for the origin of the posture-verb progressive construction with *te*, and there seems to be no consensus on this point. The four main proposals are as follows. The first is from Van der Horst (2008), which is probably based on Van den Toorn (1975). Van der Horst (2008: 880) argues that the *te* construction emerged from the particle *te* with a purpose meaning ('finale betekenis'), like *om te* 'in order to' in Modern Dutch.²⁹ According to this hypothesis, a sentence like *hij zat te lezen* (lit. 'he sat to read') was first interpreted as 'he is sitting in order to read' but gradually lost its purpose meaning, eventually being reinterpreted as 'he is sitting and reading'.³⁰ Once reinterpreted, this form with *te* was semantically comparable with the older pseudo-coordinate construction with *en(de)*, which was eventually entirely replaced by the newer construction with *te*. According to Van den Toorn (1975: 261ff.), two factors could have facilitated this change. The first is the rise of a one-to-one form-meaning correspondence of the [*om te* V_{inf}] phrase with the purpose meaning, consequently diminishing the use of the [*te* V_{inf}] form to express the purpose meaning (cf. Van der Horst 2008: 869). Second, Van den Toorn (1975: 262f.) further emphasizes that the existence of the *en(de)* construction facilitated the emergence of the construction with *te* by introducing the concept of a grammaticalized posture-verb progressive construction. Van der Horst (2008: 880) also points out that the use of *te* as a verb introducer in the sentence pattern of [V *te* V_{inf}] (e.g. *schijnen te zijn* 'seem to be') probably facilitated the development.

Another perspective on the origin of the construction is based on the assumption that the adverbial function ('adverbiale functie') of the infinitives serves as an origin of reinterpretation (Duinhoven 1997: 216). Duinhoven seems to acknowledge that the *te* construction may have its origin in the final *te* (*ibid.*: 441), but he also proposes another way that the

444), on the other hand, suggests that the *te* construction already existed with a hint of a durative meaning in Middle Dutch, but on a small scale.

²⁹ Note that the infinitive originating from purposive forms is a common trend observed cross-linguistically (Haspelmath 1989).

³⁰ Van der Horst (2008: 880) also suggests that the reason why German and English equivalents of the posture-verb progressive construction (with *zu/to* 'to' corresponding to Dutch *te*) do not exist is that the infinitive markers in these language retain their purpose meaning more strongly than their Dutch equivalent, thus impeding reinterpretation of the verbal complex to have a progressive meaning.

construction with *te* could have emerged. Middle Dutch allowed a construction with a finite verb and an infinitive, i.e. a [V_{fin} ... V_{inf}] structure (e.g. *daer wandelt die joncfrouwe met haren camerieren spelen* ‘there walks the lady, playing with her maids’ (*ibid.*: 216; translation mine)), in which the second verb in the infinitive (here, *spelen* ‘to play’) describes an activity that co-occurs with the activity indicated by the first motion verb (here, *wandelt* ‘walks’). According to the author, the infinitive verb in this construction has a function comparable to that of an adverbial, in the sense that it modifies the first verb and specifies the co-occurring activity. In other words, the combination of a verb and a modifying infinitive yields a monopredicative interpretation where the second verb modifies the first. The author argues that this adverbial function of verbs in the infinitive can also be observed in a sentence like *hi bleef liggen rusten* ‘he stayed lying and resting’ (*ibid.*: 216), if we interpret *rusten* (‘to rest’) as modifying *liggen*. In the following step, Duinhoven suggests that the adverbial profile of the infinitives was emphasized by inserting the preposition *te*, resulting in a structure such as [V_{aux} ... PV_{inf} *te* V_{inf}] (1997: 216). In the last stage of development, the posture verb was relocated to the clause-second position as a main verb, leading to sentences like *hij ligt te rusten* ‘he is lying and resting’, *zit te drinken* ‘is sitting and drinking’, and *staat te bidden* ‘is standing and praying’.

Van Pottelberge (2002) suggests two problems with this account. The first is that it may not be possible to compare the structure [V_{fin} ... V_{inf}] of a motion verb with juxtaposed verbs in the infinitive in clause-final position (i.e. [V_{aux} ... PV_{inf} V_{inf}]) with posture verbs. For the comparison to be meaningful, posture verbs also need to be attested in a structure like [PV_{fin} ... V_{inf}], i.e. **hij zit lezen* (lit. ‘he sits read’) or **zij lag slapen* (lit. ‘she lay sleep’), which Van Pottelberge reports is not found³¹ in his database.³² The second

³¹ There are some exceptions, like *Ende als de heylighe Catholicksche mannen in de Tavernen sitten drincken ende clincken* ‘and when the holy Catholic men sit and drink and clink (glasses) in the dining hall’, in which the posture verb is in the present plural form and postposed because of the verb-final word order induced by the subordinate clause. As discussed in 1.2.2., this type of example meets one of the criteria for omission of *te* in Modern Dutch, which is probably also applicable in this context. Apart from this type of sentence, no instances with the structure [PV_{fin} V_{inf}] were found in Van Pottelberge’s database.

³² The change from [V_{fin} V_{inf}] to [V_{fin} *te* V_{inf}] seems to have happened with *lopen*. According to Van der Horst (2008: 888), between the 13th and 16th centuries *lopen* could only be combined with an infinitive verb without *te*, but in the 17th century it acquired the possibility to combine with an infinitive with *te*. This change associated the verb *lopen* with the posture verbs used in the progressive construction with *te* (cf.

point is the infrequency of the structure [V_{aux} ... PV_{inf} *te* V_{inf}], such as **had zitten te beiden* (lit. 'had sit to wait') and *?bleef liggen te rusten* (lit. 'stayed lie to rest'; *ibid.*: 161).³³ This means that the proposal that *te* was inserted between the infinitives cannot be verified with data.

Van Pottelberge (2002) instead proposes that the *en(de)* construction in the perfect-tense form served as a transition point from the *en(de)* construction to the *te* construction. In his theory, the *en(de)* construction in the perfect tense with the IPP effect and omitted connector (e.g. *hij heeft zitten eten* lit. 'he has sit eat') was reinterpreted as the perfect form of the *te* construction (i.e. [PV *te* V_{inf}]). According to the author, the reinterpretation may have occurred by means of analogy with the verbs that would take a *te* phrase and show the IPP effect in the perfect tense. Based on the analogy, the posture-verb construction with *en(de)* in the perfect tense (i.e. [V_{aux} ... PV_{inf} V_{inf}]) was interpreted as a perfect form of the *te* construction and restructured in the form [PV_{fin} *te* V_{inf}] in the verb-second word order, so that the original connector *en(de)* was replaced by *te*. The author sees the widespread distribution of the sentences with the structure [V_{aux} ... PV_{inf} V_{inf}] as a favorable environment for this analogical development. On the other hand, he also admits one defect of this theory (*ibid.*: 163), namely, the non-existence of verbs that could function as a model for analogy. According to the author, in the 16th and the 17th century (the emerging period of the *te* construction) there were no verbs that took a [*te* V_{inf}] phrase and showed the IPP effect in the perfect tense. In other words, transformation from [V_{fin} *te* V_{inf}] to [V_{aux} ... V_{inf} V_{inf}] and vice versa seems not to have been a common pattern of sentence formation in the language at the time. Nonetheless, Van Pottelberge points out that the insertion of *te* belongs to general trends in the language in terms of how a complement verb cluster is formed. According to the author, from the Middle Dutch period there was a general increase in the

Van Pottelberge 2002: 153f., 168ff.). Furthermore, the difference in development between *lopen* and the posture verbs could indicate that the *te* construction (formed with posture verbs, with *lopen*, and with *hangen*; cf. footnote 4) arose independently of the *en(de)* construction (which was formed with posture verbs but not with *lopen*). The relation between the older and the newer construction will be discussed in section 4.5.2.

³³ In fact, Van Pottelberge (2002: 161) argues that forms like **had gezeten te beiden* (lit. had sat to wait) and *?bleef liggen te rusten* (lit. 'stayed lie to rest') have never existed as progressive constructions in the language. However, the latter (i.e. [V_{aux} ... PV_{inf} *te* V_{inf}]), is not necessarily impossible, although *te* is better omitted in Modern Dutch (cf. ANS: 18.5.4.1.ii), and was indeed mostly omitted in my database too. That is why I speak here of infrequency rather than impossibility.

tendency for auxiliary-like verbs to take a *te* phrase, which may have facilitated the auxiliary posture verbs to take a [*te* V_{inf}] phrase (cf. IJbema 2003: 80ff.).

The three proposals outlined above do not appear to assume a simple replacement of the connector; however, this is not theoretically excluded. For example, if the construction with an [*en(de)* V_{inf}] phrase existed in Middle Dutch, as Weijnen (1971) suggests, the replacement of *en(de)* by *te* (i.e. [PV *en(de)* V_{inf}] > [PV *te* V_{inf}]) may have been possible. It could further be argued that the *-t* suffix of posture verbs in the third person singular form (i.e. *staat*, *zit*, *ligt*) may have been the driving force for this replacement. Under this view, the *-t* ending may have combined with *en*, forming the sequence [PV-*ten* V_{inf}], which eventually developed to [PV *te* V_{inf}] by *ten* being reduced to *te* and reinterpreted as an infinitive marker (i.e. [PV *en* V_{inf}] > [PV-*ten* V_{inf}] > [PV *te* V_{inf}]). Van Pottelberge (2002: 161) is, however, skeptical of this scenario, as he was not able to find sentences that would reflect the intermediate steps of such changes in the 16th and 17th century.

In sum, the literature offers various explanations for how the pseudo-coordinate construction with *en(de)* was replaced by the monoclausal construction with *te*. Van den Toorn and Van der Horst's proposal views the *te* construction as a development from a construction where *te* had a purpose meaning. Their suggestion does not offer an explanation for why the construction with *te* gained popularity over the older *en(de)* form from the 17th century onwards. Meanwhile, Duinhoven's proposal suggests that the infinitive was first used to modify posture verbs in the same manner as adverbials, with *te* later added between the posture verb and the following verb. However, this theory seems to lack empirical evidence, according to Van Pottelberge. Van Pottelberge instead seeks the origin of the *te* construction in the reanalysis of the *en(de)* construction when both the posture verb and the following verb are in the infinitive and are postposed to clause-final position. His theory emphasizes the role of analogy but, at the same time, lacks the verbs that could function as models for analogy. The last way of thinking, which views *te* as emerging from *en(de)* via a form change, has reportedly insufficient supporting data. In short, while a number of possible accounts have been put forward, in particular by Van der Horst, Duinhoven and Van Pottelberge, scholars have yet to reach a consensus regarding the origin of the posture-verb progressive construction with *te*.

One last point to mention regarding the historical development of posture verbs is the disappearance of the *en(de)* type of posture-verb construction with aspectual semantics. As the newer type of construction

with *te* became dominant, the older one with *en(de)* not only gradually became less frequent but also eventually went lost as a progressive construction. Consequently, a sentence like *?hij lag en sliep* (lit. 'he lay and slept') is not interpreted as a progressive construction in Modern Dutch. According to Van Pottelberge (2002: 165), the word order where elements are preposed, as in **zij zat de krant en las* (lit. 'she sat the newspaper and read'), was the first feature to be lost. The author cites an example from around 1790 as the last example of this word order in the *Woordenboek der Nederlandsche Taal* (henceforth WNT), which is given in (22).

- (22) Ik **zit** vast heen en weer **en kyk**
 'I am firmly sitting and looking back and forth'
 (Van Pottelberge 2002: 165; translation mine)

In (22), the adverbial *heen en weer* 'back and forth', which specifies the manner of *kyk* (= *kijk*, 'look'), is placed after the posture verb and before the connector *en*. As discussed above, this word order is impossible unless the construction has a monoclausal structure. According to Van Pottelberge's investigation based on the WNT, this sentence pattern seems to have disappeared at the end of the 18th century.³⁴

Van Pottelberge points out that some pseudo-coordination-like sentences are still found in the 20th century, as in (23).

- (23) a. Een rij Van[sic.] kinderen **zit en zingt** zij aan zij
 'a row of children is sitting and singing (lit. sits and sings) side by side'
 b. Als ik **zit en arbeid**, (...)
 'when I am sitting and working (lit. sit and work)'
 (Van Pottelberge 2002: 165; translations mine)

The sentences apparently have a coordinate structure, while the progressive interpretation is not totally ruled out. As Van Pottelberge (2002: 165f.) puts it, the possibility to form a sentence in this manner is not entirely lost in Modern Dutch,³⁵ but it is no longer used systematically.³⁶

³⁴ Note that a structure like *Marie zit aardappelen en schilt* (lit. 'Marie sits potatoes and peels') was still possible in Zeeland (Noord/Zuid Beveland) as a marginal construction in the 20th century according to Gerritsen (1991: map 40, 41).

³⁵ Although it is marginally acceptable, Zwart (2011: 121) remarks that the present-day language 'lacks the quasi-serial conjunction type of English *go and buy, try and save*', which also seems to apply to the verbal coordination with posture verbs.

In conclusion, this section (1.3.3.) has summarized the existing accounts of the historical development of the posture-verb progressive construction in Dutch. First, the syntactic and semantic features of the construction with *en(de)* were explained, and it was confirmed that the construction has a pseudo-coordinate character, in the sense that it coincides formally with regular coordination but shows some indications of a monopredicative interpretation. Second, the replacement of this *en(de)* type of construction by a monoclausal one with *te* was discussed in terms of when it is likely to have emerged, and some proposals from the literature were presented concerning how the change may have taken place. Lastly, the further development of the *en(de)* construction was described from the perspective of the disappearance of its variant with aspectual semantics.

The insights provided in this section, along with those concerning grammaticalization in 1.3.1. and auxiliation of posture verbs in 1.3.2., are all crucial for understanding how the Dutch posture-verb construction developed diachronically, and for establishing a grammaticalization path for the construction. As explained in 1.1, the aim of this research is not only to develop a grammaticalization path based on the literature, but also to test its validity with the help of corpus data. These two objectives are explained in further detail in the next section.

³⁶ Van Pottelberge (2002: 164) describes the disappearance of the progressive *en(de)* construction as degrammaticalization of the construction, but it could be argued that this phenomenon does not fulfill the criteria for degrammaticalization. According to Norde (2009: 120f.), '[d]egrammaticalization is a composite change whereby a gram in a specific context gains in autonomy or substance on more than one linguistic level (semantics, morphology, syntax, or phonology)'. There are four basic characteristics of degrammaticalization: counterdirectionality, novelty, infrequency, and discontinuity. The disappearance of the progressive *en(de)* construction does not meet the prerequisite of novelty. Novelty entails that degrammaticalization 'must result in a novel gram' (*ibid.*: 121). In the case of the Dutch posture-verb construction with *en(de)*, the two uses of posture verbs—as lexical verbs and as aspectual markers—have always coexisted and there is no evidence that the lexical verb use newly arose from the modal verb use. In other words, if the change merely involves a process of more grammaticalized uses becoming marginalized (or even obsolete) while less grammaticalized uses increase in frequency, it 'will not qualify as a case of degrammaticalization' (*ibid.*: 122). Thus, the development of the Dutch posture-verb construction is better characterized as the construction with a coordinate interpretation becoming dominant and the subordinate variant becoming marginalized, and vice versa, over time. As a consequence, the historical development of the *en(de)* construction does not qualify as degrammaticalization based on Norde's definition.

1.4 Research objectives for the investigation of the Dutch posture-verb progressive construction

As outlined in 1.1., the research objectives regarding the Dutch posture-verb progressive construction include a description of its historical development and a theory regarding the process by which it became grammaticalized. In other words, this research is concerned with constructing a tentative grammaticalization path and testing and adjusting it based on observations from corpus data, so that the final grammaticalization path describes the historical development of the construction.

First, a provisional grammaticalization path will be proposed on the basis of general characterizations of pseudo-coordination (cf. section 1.2.3.), grammaticalization (cf. section 1.3.1.), and auxiliatization of posture verbs (cf. section 1.3.2.), also taking into account the descriptions in the literature on this construction (cf. section 1.2.2. & 1.3.3.). The proposal for this putative grammaticalization path will include sequential steps, similar to the grammaticalization path proposed by Kuteva for Bulgarian posture verbs (cf. Table 2 in 1.3.2.).

Establishing a grammaticalization path aligns well with the view of the development of the construction as a stepwise process. Indeed, this perspective is evident in Hopper & Traugott's definition of grammaticalization: "[G]rammaticalization" refers most especially to the *steps* whereby particular items become more grammatical through time' (Hopper & Traugott 2003: 2; emphasis mine). At the same time, however, the information on the Dutch posture-verb progressive construction has not yet been structured in a sequential manner. As seen in 1.3.3., some relevant phenomena and instances of the construction have been reported in the history of the language, but a structured pathway of development has not been proposed. This research therefore seeks to arrange the information on the posture-verb construction into sequential order to be able to delineate a step-by-step path of development, forming the basis for a proposed grammaticalization path.

The validity of the proposed grammaticalization path will be examined using a quantitative approach, based on the data extracted from corpora. This approach distinguishes the current research from previous studies, which are qualitative and based on a few examples found in texts, as shown in 1.3.3. Even Van Pottelberge, who employs the WNT and the *CD-ROM Middelnederlands* as data sources, admits that his study is not based on refined statistics ('verfijnde statistieken') but rather on overall impressions ('globale indrukken') of the frequency of various realizations of the

construction (2002: 151). Recent technical developments in the field of Dutch corpus linguistics have made frequency data more easily accessible than 20 years ago and have opened up the possibility to examine historical data from a quantitative perspective—a possibility that this research seeks to benefit from.

Moreover, since the phenomena named in 1.3.3. mostly lack quantitative verification, it is not known how common these phenomena actually were. This makes it difficult to ascertain which were the major characteristics of the construction and which characteristics were minor or sporadic. Minor characteristics with sporadic attestations can possibly arise through accidental causes or idiosyncrasies of writers or specific regions. In terms of the formation of the grammaticalization path, it is important to reflect main developments but not necessarily sporadic phenomena. In this spirit, each phenomenon named in the literature will be checked in terms of its distribution. In short, by using corpus data to quantitatively validate the relevant phenomena, the grammaticalization path can be structured so that it reflects only the major changes that the construction has undergone.

In sum, this dissertation investigates the historical development of the Dutch posture-verb progressive construction on a quantitative basis. A tentative grammaticalization path will be constructed based on the literature, and subsequently adjusted based on observations from corpus data, so that it reflects the actual changes that took place in the language.

1.5 Overview of the dissertation

This chapter has presented the goals of this dissertation and described the properties of the posture-verb progressive constructions in Modern Dutch and Modern German, as well as outlining how the current type of monoclausal construction emerged in Dutch. The development of the Dutch posture-verb progressive construction can be understood as a case of grammaticalization and auxiliatation, which presupposes a step-by-step path of change. The German equivalent of the Dutch posture-verb progressive, shown in 1.2.3., is a pseudo-coordinate construction and appears to still be at an incipient stage of (possible) grammaticalization.

This dissertation is structured as follows. Chapters 2 to 4 discuss the Dutch data and Chapter 5 the German data from a global perspective. Chapter 2 presents the data sources for the investigation of the Dutch posture-verb progressive construction, which comprise three corpora: the

Corpus Gysseling, the *Corpus Middelnederlands*, and the *Corpus literair Nieuwnederlands*. The characteristics of each corpus, including its temporal coverage and annotations, and the method of data extraction used, are outlined in Chapter 2. Chapter 3 presents the tentative grammaticalization path for the Dutch construction, mainly building on the information in 1.3. The grammaticalization path entails changes in various aspects of the construction, which are summarized in the form of hypotheses. Fourteen such hypotheses will be proposed and explained in 3.2. Chapter 4 examines each of these hypotheses based on the data extracted from the corpora. Chapter 5 reports the characteristics of the Modern German pseudo-coordinate construction with posture verbs, based on data extracted from the *DWDS-Kernkorpus 21 (2000-2010)*. Finally, Chapter 6 summarizes and discusses the results found in Chapters 4 and 5.

All the data used in this research are compiled in csv (comma separated values) files, one for Dutch ('database_nl.csv') and one for German ('database_de.csv'; Okabe 2022). The databases include all the relevant data extracted from the corpora. The manner in which the data is annotated is explained in Appendix A for Dutch and Appendix D for German. Appendixes B and C describe the general characteristics of two additional Dutch data sets, which were constructed alongside the original corpora in order to verify two particular hypotheses (cf. sections 4.2.2. & 4.2.4.). Each Appendix will be referred to in the dissertation where relevant.

