

Den aard en de Beheersching

A corpus-driven study of inflection in prepositional constructions and Standard Language Ideology

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Chapter 1

Introduction

The eighteenth century saw the implementation of the first national language policy in the Netherlands. Following the drafting of a new constitution in 1798, an "Agent van Nationale Opvoeding" (Agent of National Education) was appointed and instructed to create a refined, civilized and uniform Dutch. The agent, Johan Hendrik van der Palm, appointed Professor Matthijs Siegenbeek and the minister Petrus Weiland to respectively create a set of spelling regulations and a grammar of Dutch. Siegenbeek's "Verhandeling over de Nederduitsche spelling" was published in 1804, Weiland's "Nederduitsche spraakkunst" appeared a year later.

Together, these two documents form the *schrijftaalregeling*, the first official codification of Dutch. As such they were not only meant for the administrative domains of government, but also for the use in education. However, it is unclear whether the standard set by Siegenbeek (1804) and Weiland (1805) actually had any effect on nineteenth century Dutch. One of the goals of the NWO/Vidi project "Going Dutch: The Construction of Dutch in Policy, Practice and Discourse (1750-1850)" is to investigate the influence of the first national language policy on actual language use in the nineteenth century.

Weiland (1805) is not just a prescriptive rule book. It is also an instrument in the ongoing efforts to refine the Dutch language. It features a (partially) reconstructed case system, something all civilized languages were supposed to have, as well as several grammatical features that had never before been part of (spoken) Dutch. The grammar insisted for instance on a separation of function of the pronouns "hen" and "hun", something that has not caught on even in present-day Dutch.

This thesis will investigate the influence of the schrijftaalregeling on the written language, focusing on the usage of inflection in prepositional constructions. The title of this work is a quote from Weiland's description of the nature of prepositions and the influence they exert on the case of their complement, which will be examined in Chapters 3 and 4. First, however, Chapter 2 delves into the nature and influence of prescriptive grammar through Standard Language Ideology. Chapter 3 then discusses the development of prepositional constructions and Chapter 4 will describe the normative traditions that lead up to Weiland's seminal grammar, focusing on the relation between prepositions and inflection. Chapter 5 describes the methods applied with respect to corpus analysis. Results are reported in Chapter 6. Lastly, Chapter 7 comprises a discussion of the results and concluding remarks.

Chapter 2

Theoretical framework

2.1 Historical background¹

The national language policy of 1805 stemmed from the rising nationalism of the eighteenth century. Tensions had been rising in the Dutch Republic since the start of the eighteenth century. The Spanish and Austrian wars of successions had driven the United Provinces to their economic knees, leaving the Republic all but bankrupt. Understandably, this resulted in widespread anger and dissatisfaction. In the second half of the eighteenth century public debates became more and more polarising, and more and more public. The public outrage came to a head following the American Revolutionary War and the subsequent declaration of independence of the United States in 1776. The Dutch greatly angered the English by selling weapons to the American revolutionaries, all the while proclaiming neutrality. English threats whipped the Dutch into a frenzy of belligerence, ultimately leading to a declaration of war in 1780.

As the naval might of the Republic was long gone, the Dutch were thoroughly routed by the British, losing their fleet and overseas possessions in the process. The disaster of the war was easily blamed on the monarchy. A new republican movement gained prominence after the war doing just that. Members of this movement called themselves *Patriotten* (patriots). Through the novel use of journals and newspapers the Patriots managed to inflame a large part of the Dutch population, creating an atmosphere of national solidarity that encompassed even formerly shunned groups such as Catholics. Militias were formed, after the example of the new United States of America.

Starting in 1784, clashes between the Patriotic militias and supporters of the monarchy became more frequent. The situation became so threatening that Stadtholder Willem V fled to the city of Nijmegen. Boosted in their confidence, the patriots arrested Wilhelmina of Prussia, the stakeholder's wife, when she was on her way back to The Hague. This greatly insulted her brother, Frederick William II, king of Prussia. The subsequent invasion of a large Prussian army restored the reign of Orange and forced many patriots into voluntary exile.

2.1.1 French revolution

Two years after Wilhelmina's arrest, the French Revolution broke out (1789). The Patriots in exile were greatly inspired by the revolutionary ideology espoused by the French. Most

¹this section is based on (Kloek & Mijnhardt, 2001:25-35)

importantly, they took from it the notion of a unified nation-state, which would allow for a national government able to enforce nationwide reform. In January 1795 the French invaded the Dutch Republic, and were welcomed as liberators. Stadtholder Willem V fled to England, leaving the country to the Patriots and the French.

The new Batavian Republic required an equally new constitution, in order to abolish the old federal structure. The first National Assembly was formed which proved, unfortunately, to be as slow and cumbersome as the previous government. It would take until 1797 before a propositional constitution was written, which was promptly rejected by a referendum. This debacle lead a number of unitarian radicals to commit a coup d'état. The second National Assembly did not contain supporters of the old Republic, but comprised staunch unitarians. Within a few months this new and radical administration drafted a constitution which was voted into law in 1798.

The Assembly of 1798 introduced concepts that would be on the agenda for decades to come. It quickly became clear that a national government could exert its influence in areas that were previously out of reach. A number Governmental agents were appointed, and tasked with the implementation of national policy in new areas of national interest. Among these was an Agent for National Education, who was tasked to improve the Dutch language.

2.2 Elite, Civil and National Grammars

According to an anecdote, the public sessions of the new National Assembly were directly responsible for the apparent need of a national language policy For the first time, the public was able to witness the deliberations of their spokespersons. Consequently, it was shocked to find that many representatives were lacking in eloquence and spoke a rural dialect to boot (Van der Wal & Van Bree, 2008:288).

The accuracy of this anecdote notwithstanding, it is true that rural dialects were a target of ridicule throughout the eighteenth century. Many a *klucht* made fun of characters by giving them a lower class accent. At the start of the nineteenth century the Low Countries were engaged in a process of nation-building. The Enlightenment ideal of "one nation, one language" was driving the need for a national language (Patrick, 2010:180–181). In this light it is no surprise that the main goal of eighteenth century grammarians consisted of the development and regulation of Dutch. They were of the opinion that their mother tongue, although of the highest quality, was being sorely abused by its speakers (De Bonth, 1998). The grammarians looked towards the revered authors of the seventeenth century, Hooft and Vondel, for justification of their prescriptions. Consequently, the rules and regulations tended towards the archaic, resulting in a conflict between written and spoken varieties of Dutch (Van der Horst, 2008b:1352; Van der Wal & Van Bree, 2008:296).

According to Rutten (2012), the grammatical tradition of the Netherlands during the eighteenth century is characterized by changes in its social function, which changes from a leisurely practise to something more akin to a national duty (Noordegraaf, 2004; Rutten, 2016). The first period is characterized as a period of *elite grammar*. From the start of the century until approximately 1740, the practise of grammar was a pursuit of the higher levels of society. Accordingly, the target audience of grammarians at consisted of the elite authors of literary prose and poetry. A prime example of this is Balthazar Huydecoper's *Proeve van taal- en dichtkunde op Vondels herscheppingen van Ovidius*.

Laaten wy dan, wy allen, zeg ik, die ons den naam van Dichter toeëigenen, edelmoediglijk met elkanderen handelen, en de Kunst herscheppen in eene Deugd, dat is, zelfs doen, wat wy anderen in zoetvloeiende vaarzen voorzingen.

[Let us then, we all, I say, who take possession of the name of Poet, treat each other magnanimously, and re-create the Art into a Virtue, that is, do what we sing others in our sweet-flowing verses.] (Huydecoper, 1792:XXXV).

Huydecoper admonishes his fellow poets to be noble in dealing with each other, because it is their duty to recreate and improve the Art of Poetry. A telling characteristic of the prescriptivism of this period is *vondelianism*, the justification of language norms by calling upon the works of notable authors such as the poet Vondel (De Bonth, 1998; Rutten, 2016).

The most influential grammarian of this is Arnold Moonen. His *Nederduitsche Spraekkunst* was published in 1706. Moonen dedicates a considerable amount of space to the case system. He describes a system that, like Latin, consists of six cases table 2.1. This system includes the vocative and ablative, cases that have never been present in Germanic. Both cases have no real characteristics of their own. The vocative is identical to the nominative, but with an interjection ("O!") rather than a determiner. The ablative is identical to the dative, but uses the preposition *van* in stead of *aan*. Despite the artificial nature of the system, it remains the status quo until publication of Weiland's grammar in 1805.

Case	Latin	Moonen	Van Belle	Elzevier
1	Nominativus	noemer	noemer	werker
2	Genitivus	teeler	afdaaler	eigenaar
3	Dativus	geever	toebrenger	ontvanger
4	Accusativus	aenklager	lijder	lijder
5	Vocativus	roeper	roeper	toehoorder
6	Ablativus	neemer	voorzetter	derver

Table 2.1: Case names in eighteenth century grammars

Names given to the cases provide insight into the changing nature of grammar writing during the eighteenth century. The grammars written by Moonen, Séwel and Ten Kate are examples of grammars aimed at an elite audience. Séwel, for instance, makes this explicit by sticking to the Latin case terms "om den Geleerden tegemoet te komen" ("to satisfy the scholars") (Séwel, 1712:178). To help the ongeletterden ("illiterate") Séwel gives the Dutch terms as well, but he refers them to Moonen's grammars if they wish to learn more. Throughout his grammar Séwel uses Latin to clarify usage of the case system, a language that the illiterates certainly would not understand.

Around 1740, the middle classes are incorporated into the target audience of grammarians. Rutten (2012) calls this the period of *civil grammar* as in this period grammar is a civil pursuit, a mark of civilized citizens. Prescriptive grammars rephrased to be more accessible. Exemplary in this regard is the issue of the case system Despite the phonological reduction of case endings in Dutch, the case system is still held in high esteem. This is problematic for those who are unfamiliar with Latin. Grammarians become aware of this issue and try to alleviate it in different ways. Van Belle (1755), for instance, introduces new terms for genitive, dative, accusative and ablative (table 2.1). Elzevier (1761) criticizes Moonen because he finds his grammar obscure and confusing for students. Moonen has

translated the Latin case names more or less literally into Dutch and hence arrives at such names as *geever* ("giver") for the dative. Elzevier finds this very confusing, because the element of the sentence that is marked by the dative is not the one that "gives", but the one that receives (Elzevier, 1761:53).

Voor eerst zullen wy van de Naemvallen spreken, die zes in 't getal zyn, en in 't Latyn deze namen hebben:

Nominativus

Genitivus

Dativus

Accusativus

Vocativus

Ablativus

De Heer Monen heeft in zyne Spaekkunste die woorden slechts naer de letter overgezet zonder een genoegzame verklaringe daer by te geven, en dus geen kleine deur van verwarring voor de leergierige jeugd' opengezet

[First we will speak of the Cases, which are six in number, and are called in Latin:

ſ...1

In his Grammar, Sir Moonen has translated these words to the letter, without giving a satisfactory explanation with them, and so has opened no small door of confusion for the inquisitive youth] (Elzevier, 1761:50)

In the final decades of the eighteenth century, the function of grammar becomes a socializing one. Rutten (2012) uses the term *national grammar* to characterise this period. "Proper" grammar becomes a duty of every citizen, and education becomes the instrument of choice to instill it in the lower classes. The following excerpt by Van Bolhuis (1799) demonstrates the belief that a common language is a necessity when it comes to civilization.

[...] Hoe weinig toch is de gemene burger in staat, om zuiver in zijne eigene taal te spreken, en te schrijven? Hoe nodig is het dan, dat hij zich hier op toelegge? En hoe zal er ene algemene beschaving te wachten zijn, ten zij men de scholen in dit opzicht hervorme?

[How little ability has the common citizen, to speak and write his own language? How necessary is it then, that he educates himself in this? And how may any general refinement be expected, unless we reform the schools in this respect?] (Van Bolhuis, 1799:IX)

Grammars written by Van Bolhuis (1799), Wester (1799) and Van Varik (1799) are explicitly written to be used in schools, and all three emphasize the importance of having command of one's own language. Bolhuis' audience are students of Dutch, and both Van Varik and Wester aim their work specifically at "inexperienced" children, and hence profess to write as comprehensible as possible. The cases receive not as much attention as they did in previous grammars. The system that is presented, however, is a somewhat simplified version in which the genitive is the only case with actual inflection on the noun, and

the other cases are marked through their determiner. The cases are referred to with their ordinal numbers (eerste naamval, tweede naamval, etc.).

2.3 Standard Language Ideology

The different periods within the prescriptive traditions of the eighteenth century can be seen as stages in the implementation of standardisation (Milroy & Milroy, 2002). Selection of the standard takes place during the period of elite grammar, shown by the *vondelianism* exhibited by grammarians such as Moonen.

According to Rutten (2016), the prototypical standard language is associated most closely with neutrality. Before its acceptance as the standard, the would-be standard language can be considered neutral in the sense that it functions as a medium for interdialectal communication. It is generally marked for specific register, such as literature or religion (Rutten, 2016:28, 29). The grammars written by grammarians during the first period target written language in a specific genre. During the period of civil grammar the standard variety is adopted by the middle class. The simplification of grammars and an increased focus on the role of language in education leads to leads to a wider acceptance of the of the standard by an influential part of society and starts its diffusion through the speech community.

The political and social upheaval of the latter part of the eighteenth century lead to rapid developments in the standardisation process. An important part of these developments is the rise of Standard Language Ideology (SLI). Lippi-Green (2012) defines SLI as "a bias toward an abstracted, idealized, homogeneous spoken language which is imposed and maintained by dominant bloc institutions and which names as its model the written language, but which is drawn primarily from the spoken language of the upper middle class". It manifests itself in the belief that a nation requires a standard language in order to function.

Lippi-Green specifically mentions the written language as model for the standard. It is telling that the first national language policy is called the *Schrijftaalregeling* (Rutten, 2018). Officially, the standard language was meant for use in administration and education. However, as Lippi-Green (2012) argues that "The educational system may not be the beginning, but it is the heart of the standardization process". She further argues that the aim of institutionalized policy is to formally initiate children into the linguistic prejudices (and hence, language ideology) of the middle classes, with as final aim the devaluation and suppression of all that is not associated with the privileged class. The first signs of the devaluation of non-standard varieties show up in 1800, with the publication of H.W. van der Ploeg's essay titled *Het Belang van Waare Volksverlichting* [The importance of true enlightenment of the people], in which the author argues that the *Platte Taalen* [vulgar languages] are hindrances to the education of the young and that the only way to reach the true enlightenment of the people is through the elimination of non-standard varieties (Rutten, 2016:50).

A similar belief is demonstrated in Bolhuis' mention of the common citizen's *own language*. It indicates that the neutrality of the would-be standard is no longer the neutrality of a shared space. Instead it has become the neutrality of unmarkedness (Rutten, 2016:30). In other words, the standard language is no longer bound to a specific domain, but instead it has become the default Other varieties are now considered marked, and by extension inferior. Bolhuis wrote his grammar as an entry for a contest organized by the Maatschappij tot Nut van 't Algemeen (Society for Public Advancement, 't Nut), an influential public soci-

ety espoused an inclusive ideology of public civilization and argued strongly for education reform. In its 1798 report *Algemeene Denkbeelden over het Nationaal Onderwijs* [General Ideas regarding National Education], 't Nut advised the government that the teaching of native Dutch was indispensable not only for the children, but for the entire nation (Rutten, 2012). The implementation of the national language policy that followed this report completed the codification of the standard.

2.4 Language history from below

In line with current historical-sociolinguistic research, this study aims to investigate the history of Dutch "from below". As we saw in previous sections, traditional grammars tend to describe an ideal standard that does not necessarily reflect daily usage.

The grammars focus on texts written by the elite and ignore the minority languages and registers. In Early Modern times, literacy was no longer the privilege of the elite. Language and literacy were viewed as socializing factors, a view that led to literacy drives and resulted in widespread literacy among "ordinary" people. Diary-writing is well-documented, even among the lower ranks. Letter-writing took the place of personal conversation when distance made the latter impossible (Elspaß, 2012:160). Ego-documents such as these have traditionally largely been ignored in favor of the writings of the higher classes and "official" sources such as journals and newspapers. This practise has led to an increasing gap between language history as written and language as it was used.

The concept of language history from below comprises the use of ego-documents written by the lower and middle classes. It can be argued that these texts are the closest we can get to the spoken language of the time (Elspaß, 2007). Although written language is different from speech, this difference is not a function of the medium but rather one of distance. Texts are situated on a scale of immediacy, with a private conversation on the one (most immediate) extreme and a legal contract on the other (most distant). Whether a text is more immediate or more distant depends on variables such as formality, distance in space or time, setting, familiarity of the communicating partners, spontaneity, and topic. Social class is important because whereas elite or professional writers are influenced by normative traditions, the semi-literate lower classes are not. It follows that the written language of those lower classes is less influenced by convention or tradition, and hence it is as close to spoken language as we are going to get (Elspaß, 2012:156–160).

Weiland claimed that the rules of grammar must be found rather than invented, he based his grammar primarily on the written language of the previous century. The result was an archaic mixture of reconstituted cases and grammatical inventions (Kloek & Mijnhardt, 2001:437; Van der Wal & Van Bree, 2008:291). Until recently, the literature has assumed that Weiland's efforts concluded the standardization of Dutch. This is doubtful, however, not in the least because the effects of the new language policy on Dutch have not really been investigated (Rutten, 2016). In this light, the "Going Dutch"-project functions as a kind of policy evaluation "après la lettre".

Chapter 3

Loss of inflection and emergence of prepositional constructions

3.1 Loss of inflectional morphology

This study is concerned with the relationship between prepositions and accusative case in eighteenth century Dutch. Dutch, like other Germanic languages, had already lost much of its inflectional morphology in a process that is called *deflexion*. Hence, this chapter will provide a short discussion of deflexion and the consquences it had for the case system of Dutch

Loss of inflectional morphology is one of the efining characteristics of the Germanic language group (Willemyns, 2013:46). Most commonly it is thought that it is caused by the shift from a free accent in Proto-Indo-European to fixed initial stress. This process led to the phonological reduction of vowels in unstressed syllables. Proto-Germanic nouns were arranged in stem-classes according to final vowel. Hence, when this vowel changed into *schwa*, vital information necessary to determine case endings was lost (Willemyns, 2013:27).

The absence of morphological marking often leads to the development of configurational syntax, as was the case in a number of Indo-European languages (Hewson & Bubenik, 2006:9). In Germanic, prepositional constructions were substituted for case marking (Van den Toorn et al., 1997:47). Deflexion is a common theme in the Germanic language family. By the end of the middle ages, the mainland Scandinavian languages (Danish, Norwegian, Swedish) had lost most of their inflectional morphology. English had lost its case system even earlier, somewhere between the tenth and the thirteenth century. All Germanic languages, save for Faroese, Icelandic and German, have to some degree replaced their case systems with prepositional phrases (Berg, 2013:179; Blake, 2001:176).

3.2 Deflexion

In most Indo-European languages cases are governed by prepositions (Booij, 2007:106). This means that if a preposition precedes a noun, it determines the case of that noun. In German, for instance, accusative and dative case are governed by the prepositions as listed in table 3.1.

Table 3.1: German prepositions

Prepositions	Case
für, durch, bis, gegen, ohne, um, entlang	Accusative
mit, nach, bei, seit, von, zu, auSSer, aus, gegenüber, gemäß	Dative S. Aggregative
an, auf, hinter, neben, in, über, unter, vor, zwischen	Dative & Accusative

The situation was much the same in Middle Dutch: a preposition could assign accusative case (1), dative case (2)or both (4), and sometimes genitive case (3).

(1) up die vaert on die ACC trip

(Van der Wal and Quak, 1994:78)

(2) met luder sprake with louder.DAT voice

(Van der Wal and Quak, 1994:78)

(3) binnen huzes inside the house.GEN

(Van der Wal and Quak, 1994:78)

(4) a. in der zalen in the ACC hall ACC

b. tote in die zalein=to the.DAT hall.DAT

(Van der Wal and Quak, 1994:78)

The question is: how did we go from a case system with cases and prepositions to prepositions only? The emergence of prepositional constructions is intertwined with the loss of inflectional morphology mentioned above. However, it starts much earlier than that. Van der Horst (2008a:460) posits that prepositions originate from local adverbs by way of grammaticalization. He estimates that this process must have taken place long before the classical. A somewhat more elaborate discussion can be found in Hewson & Bubenik (2006). They argue that prepositions, at least in Indo-European languages, originate from particles they call "preverb-cum-adverbial". Hewson & Bubenik (2006)'s position is based on a comparison between Homeric and Classical Greek. Homeric Greek does not yet contain prepositional constructions (Hewson & Bubenik, 2006), but uses preverbs or adverbials to denote relationships between nouns that are marked with a preposition in Classical Greek. According to Booij & Van Kemenade (2003:2), the originins of both preverbs and prepositions are adverbial, because in many Indo-European languages preverbs behave both as preverbs ánd as prepositions.

There is a chicken-or-egg debate going on regarding the origins of prepositional constructions and loss of inflection. On one hand, it can be argued that a reduction of morphological marking created a need for configurational marking. On the other hand, it is possible that prepositional marking was "invented" and replaced inflection because it was easier. We do know, however, that the deflexion in Germanic languages is caused because of the switch to word-initial stress, causing the phonological reduction of case endings and

consequently the loss of information (Van der Wal & Van Bree, 2008:34). Finally, the function of inflectional markers was taken over by configurational syntax, i.e. by adpositions and fixed word order (Hewson & Bubenik, 2006:9; Van der Wal & Van Bree, 2008:142).

3.3 Prepositions

The loss of morphological inflection in Old and Middle Dutch is demonstrated (indirectly) by the increasing number of prepositions in Dutch. Table 3.2 lists the prepositions found in each of the languages. There are 35 prepositions attested in Old Dutch. This amount increases to 62 in the Middle Dutch period, and again to 95 in Early Modern Dutch. The number of prepositions does not increase markedly in Modern Dutch, which can be seen as an indication that the process of deflection has been completed.

Table 3.2: Prepositions in the different stages of Dutch (Van der Horst, 2008a, 2008b)

Old Dutch	Middle Dutch	Early Modern Dutch	Modern Dutch
af/ana	aan	a	a
aftir/after	achter	aan	aan
an	aen/ane	aangaande	aangaande
ane ("without")	aen	aangezien	aangezien
angegin	behalve	aanrakende	achter
bi	behouden	ane	achtervolgens
bisuthan	beneden	achter	behalve
bit	beneven,	achtervolgens	behoudens
boven	beoosten	af	belangende
enzuischan	bi	afzonderlijk	beneden
er	besuden	behalve	beneven(s)
fore/fur	bet/bit	behoudens	betreffende
hinder	bi	belangende	betrekkelijk
iegen	binnen	beneden	bezijden
in	boven	beneven(s)	bij
ingegan	buiten,	beoosten	binnen
mit	door/dor/dore	bezijden	boven
na	eer	bij	buiten
om/umbe,	hangende	binnen	conform
onder/under	hent	blijkens	contra
ont/unt	hinder	boven	dankzij
op	in	buiten	door
over	jegen(s)	conform	doorheen
sunder	langs	contra	gaande
te	ment	dankzij	gaandeweg
thuro/thurg	met	door	gedurende
totes	metgaders	doorheen	gemerkt
umbe	mids	eer	getuige
under	na/naar	gedurende	gezien
unithar	naast	gemerkt	halverwege
unt	nader	getuige	hangende

Old Dutch	Middle Dutch	Early Modern Dutch	Modern Dutch
untes	neven,	hangende	in
uphon	niettegenstaande	hinder	ingeval
uz	nopende	in	ingevolge
van/fan	om	ingeval	inzake
vore	omtrent	ingevolge	jegen(s)
	ondanks	jegen(s)	krachtens
	onder	langs	langs
	ont	langsheen	langsheen
	onthier	manck	langszij
	op	met	lopende
	over	mits	met
	overmids	mitsgaders	middels
	seder(t)	na/naar	midden
	sint	naarmate	mits
	sindert	naarvolgens	na
	sonder	naast	naar
	te	nabij	naarmate
	tegen	neven(s)	naast
	tenden	niettegenstaande	nabij
	thent	nopende	namens
	tot,	nopens	nevens
	tussen	om	niettegenstaande
	uit	omstreeks	nopens
	ute	omtrent	om
	van	onaangezien	omstreeks
	vanwege	ondanks	omtrent
	vermits	onder	onaangezien
	voor	oon	ondanks
	voorbij	op	onder
	want/went	over	op
	weder	overeenkomstig	over
		overmits	overeenkomstig
		per	per
		rakende	qua
		relatief	rakende
		rondom	rondom
		samt	sedert
		sedert	sinds
		sinds	spijt
		sonder	staande
		spijt	te
		staande	tegen
		te	tegenover
		togon	=
		tegen	tenzij

Old Dutch	Middle Dutch	Early Modern Dutch	Modern Dutch
		terzijde	tijdens
		tenden	tot
		tot	trots
		trots	tussen
		tussen	uit
		uut	van
		uit	vanaf
		uitgeseid	vanuit
		van	vanwege
		vanuit	vermits
		vanwege	versus
		vermits	via
		volgens	vis-à-vis
		voor	volgens
		voorbij	voor
		wegens	voorbij
		weder	voorlangs
		zamt	wat betreft
		zonder	wegens
			zamt
			zonder

Van der Horst (2008a) observes a marked increase in the number of *voorzetselvoorwerpen* [prepositional objects], i.e. prepositional constructions consisting of a verb that combines with a fixed preposition. This pattern is not productive in the early stages of Dutch, although Van der Horst (2008a:253) observes that the verb OD *geloven aan* ("to believe in") is a precursor of the prepositional construction. According to Duinhoven (1989), prepositional objects are the endpoint the ongoing trend of deflexion. Duinhoven argues that the function of morphological inflection is transferred to (syntactic) objects through semantic bleaching and lexicalisation of adjuncts. In this Duinhoven agrees with Hewson & Bubenik (2006), who argue that loss of inflectional morphology (deflexion) leads to the emergence of configurational syntax. That is, The meaning that was carried by case endings is transferred to a fixed structure of lexical elements. The emergence of prepositional objects as reported in Van der Horst (2008a) demonstrates this development.

Chapter 4

Normative Traditions

4.1 Introduction

Despite the loss of morphological inflection in the spoken language, the normative traditions in the Netherlands emphasized the usage of case in the written standard until well in the twentieth century (Van der Horst, 2008b:1353).

We know from Ten Kate's *Aenleiding tot de kennisse van het verhevene deel der nederduitsche sprake*, a systematic study of Ten Kate's contemporary Dutch, the use of case was restricted to the upper registers of usage. Ten Kate distinguishes three levels of language use. The most formal register, the "sublime" style, is used by scholars and the like and is characterized by an almost exaggerated use of inflection. One step down is the "solemn" register, which approaches daily usage but remains dignified. In practise, this means fewer inflections and more prepositional constructions. The lowest register is the common style. In this style inflections are completely replaced by prepositional constructions. Ten Kate emphasizes that the common style should not not be confused for vulgar (street)language, but that it represents normal, daily usage (Ten Kate, 1723:334, 2001:17).

Weiland (1805) breaks with the grammatical traditions of the eighteenth century by restricting the case system to four cases, where his predecessors insisted on a system of six. Weiland removes the vocative and ablative because he finds no basis for them in the language (Weiland, 1805:73). He argues that there can be only as many cases as there are distinct noun forms, and since the vocative and the nominative share a form they are also the same case. The ablative is denoted by a preposition rather than inflection and should not be considered a separate case either (Weiland, 1805:74). Remarkably, Weiland maintains the "standard" Germanic cases, nominative, genitive, dative and accusative, although there is no evidence of these in the language either (Van der Wal & Van Bree, 2008:291). This illustrates once again that the standard is based on the usage and traditions of the past.

Weiland's (1805:197) claim is that all prepositions govern the accusative. He admits that in the past the genitive could occur after a preposition as well. People are allowed to keep using these expressions, but not to add new uses. According to the new rule, prepositions are always followed by a noun in the accusative case.

[...] beheerschen echter, naar het tegenwoordige gebruik, onze voorzetsels alleen den vierden naamval; terwijl de tweede en derde naamval gevormd wordt, of door verbuiging, of door voorzetsels, welke den vierden naamval regeren.

[...] in accordance with contemporary custom, our prepositions govern only the fourth case; while the second and third case will be formed, either by inclination, or by prepositions, which then govern the fourth case.

This section will explore the normative tradition of the eighteenth century, with regard the usage of case and prepositional constructions. Its goal is to identify a possible path that led Weiland to aformentioned claim regarding the accusative. The normative corpus used in this study are listed in table 4.1. The grammars are selected based on their occurrence in the literature (e.g. Krogull et al. (2017), Rutten (2012)) and represent the periods of elite (Moonen, Séwel, Ten Kate), civil (Van Belle, Elzevier, Van der Palm, Stijl) and national grammar (Bolhuis, Van Varik, Wester, Weiland).

Table 4.1: Normative corpus

Author	Title	year
Moonen	Nederduitsche spraekkunst	1706
Séwel	Nederduytsche spraakkonst	1712
Ten Kate	Aenleiding tot de Kennisse van het Verhevene Deel	1723
	der Nederduitsche Sprake	
Van Belle	Korte Schets der Nederduitse Spraakkonst	1755
Elzevier	Drie Dichtproeven benevens een Proef van een Nieuwe	1761
	Nederduitsche Spraekkonst	
Van der Palm	Nederduitsche spraekkunst, voor de jeugdt	1774
Stijl	Beknopte Aanleiding tot de Kennis der Spelling,	
	Spraakdeelen, en Zinteekenen van de Nederduitsche	
	Taal	
Van Bolhuis	Beknopte Nederduitsche Spraakkunst	1792
Van Varik	Rudimenta, of Gronden der Nederduitsche Spraake	1799
Wester	Bevatlyk Onderwys in de Nederlandsche Spel- en Taalkunde,	1799
	voor de Schooljeugd	
Weiland	Nederduitsche spraakkunst	1805

4.2 Cases

This section describes the prescribed usage of the cases throughout the eighteenth century. The normative traditions of Dutch proved to be stable (Rutten, 2012:44), and little difference was found between the individual grammars. Hence, the tables in this section contain a synthesis of the inflectional paradigms found in the normative corpus.

4.2.1 Nominative

The nominative gives an object its name and denotes its "true" meaning (Moonen, 1706; Séwel, 1712). Starting with Ten Kate (1723), later grammarians see the nominative as the working or acting case, hence Elzevier names it the *worker*. Its form is identical to the current usage, see table 4.2. Because the nominative shows the true form of a noun it is categorized as the "straight" case. Its form must be bent to obtain the other cases.

Table 4.2: Inflection of the nominative

Number	Masculine	Feminine	Neuter
singular plural	de vroome man een vroome man de vroome mans de vroome mannen	de groote vrouw een groote vrouw de groote vrouwen	het jonge kint een jong kint de jonge kinders de jonge kinderen

4.2.2 Genitive

At the start of the eighteenth century the genitive is attributed the same meaning as its Latin counterpart. According to Moonen the genitive demonstrates the ownership, attributes, gender or nature of each thing (Moonen, 1706:84). Ten Kate (1723:324) struggles with his definition, because he cannot find a unifying sense that ties up the different uses of the genitive. He settles for the idea that the genitive combines two substantives into one, e.g. the nouns *liefde* and *God* can be combined into *liefde Gods* ("love of God"). Van Belle uses the term *afdaler* ("descender") instead of "genitive", and defines it as denoting "a case as it descends from something or someone". This probably relates to Moonen's use of the term *teler*, "cultivator", denoting parentage. Later grammars, starting with Elzevier (1761), use the term *eigenaar*, "owner". The function of the genitive is limited to ownership.

The actual case forms are stable throughout the eighteenth century. The genitive is the only case with a distinctive case ending, the masculine and neuter singular cases ending is -s, the feminine singular ends in -e. Note, however, that the feminine ending disappears during the civil grammar period, starting with Elzevier (1761).

Table 4.3: Inflection of the genitive

	Masculine	Feminine	Neuter
singular	des vroomen mans	der groote vrouw(e)	des jongen kinds
	van den vroomen man	van de vroome vrouw(e)	van het jonge kind
	eens vroomen mans	eener vroome vrouw(e)	eens jongen kinds
	van eenen vroomen man	van eene vroome vrouw(e)	van een jong kind
plural	der vroome mannen	der groote vrouwen	der jonge kinderen
	van de vroome mannen	van de groote vrouwen	van de jonge kinderen

In addition to the inflected form there is also the possibility of a prepositional construction *van* ("of"). Strikingly, the accusative form is used in this construction, e.g.:

- (5) a. de goede smaak eens appels the good taste an.gen apple.gen 'the good taste of an apple'
 - b. de goede smaak van eenen appel the good taste of an.ACC apple

(Stijl, 1776:82)

4.2.3 Dative

The dative denotes an indirect object, and generally indicates a transfer of something to someone. This is reflected by the terms used for this case, *geever*, *toebrenger* and *ont-vanger*.

Moonen is of the opinion that the (archaic) -e ending in the masculine and neuter dative singular remains the proper way to form the dative, but allows his readers to omit it. Séwel, Ten Kate, and Van Belle keep the -e as a stylistic option. Elzevier, however, maintains that the archaic form should be used because it maximalizes the difference between cases. Van der Palm and Stijl follow Elzevier's lead, but Bolhuis and the other grammarians of the later eighteenth century hardly mention it.

Number	Masculine	Feminine	Neuter
singular	den vroomen man(ne)	der groote vrouw(e)	den jonge kinde
	aan den vroomen man	aan de groote vrouw	aan het jonge kind
	eenen vroomen man(ne)	eener groote vrouw(e)	eenen jongen kinde
	aan eenen vroomen man	aan eene groote vrouw	aan een jong kind
plural	den vroome mannen	der groote vrouwen	den jonge kinderen
	aan de vroome mans/mannen	aan de groote vrouwen	aan de jonge kinderen

Table 4.4: Inflection of the dative

According to Van der Horst (2008a, 2008a:1354) grammars in the eighteenth century differ in their rules for the feminine dative singular. Some grammars prescribe *de*, others *der*. It is, however, the case that all grammarians (save for Moonen) approve of either. The catch is that *de* occurs mainly in the prepositional form. Like the genitive, the dative can also be formed using a preposition, e.g.:

(Stijl, 1776:83)

Similarly, the form that is used is that of the accusative, hence the article *de*. The grammars of Elzevier, Van der Palm and Stijl differ in this respect. E.g. *bloeme* in (6b) is the dative form rather than the accusative. It is quite possible, however, that this kind of usage is due to an exaggerated focus on the dative form, because the article *eene* does belong to the accusative.

4.2.4 Accusative

Like the other cases the accusative is semantically and formally stable throughout the eighteenth century. Moonen (1706) calls it the *Aenklager*, a literal translation of the Latin accusativus. Later grammars use the terms *lijder* (sufferer), bewerktwordende persoon of zaak ("affected person or case"), or the more general "fourth case". As in Latin the accusative denotes the direct object of a sentence. Table 4.5 shows the way it inflects.

Table 4.5: Accusative inflection

Number	Masculine	Feminine	Neuter
singular plural	den vroomen man eenen vroomen man de vroome mans	de groote vrouw eene groote vrouw de groote vrouwen	het jonge kind een jong kind de jonge kinderen
plural	de vroome mans de vroome mannen	de groote vrouwen	de jonge ki de jonge ki

4.2.5 Vocative

The vocative denotes an object that is being invoked or addressed. The case is identical to the nominative, except it has an interjection rather than a determiner.

Table 4.6: Inflection of the vocative

Number	Masculine	Feminine	Neuter
singular plural	O vroome man O vroome mans O vroome mannen	O groote vrouw O groote vrouwen	O jong kind O jonge kinders O jonge kinderen

4.2.6 Ablative

The ablative is similar to an inverted dative. Whereas the dative represents the concept of movement *towards* a thing, the ablative denotes movement *away from*. E.g. the following example.

(7) ik ligtte den zadel van het paerd I lifted the.MASC.ABL of the horse (Séwel, 1712:181)

Table 4.7: Paradigm of inflections in eighteenth century Dutch

Number	Masculine	Feminine	Neuter
singular	van den vroomen man	van der groote vrouwe	van het jonge kint
	van eenen vroomen	van eene groote	van een jong kint
	man	vrouwe	
		van de groote vrouwe	van den jonge kinde
plural	van den vroomen	van den groote	van den jongen
	mannen	vrouwen	kinderen

the ablative generally has the same form as the dative. A major difference with the dative is that the ablative involves the compulsory preposition *van*. During the elite and civil grammar periods, the ablative ends in *-e* similar to the dative. Towards the end of the century this ending also disappears.

Van Belle (1755) gives an interesting definition of the ablative. Van Belle calls it *het voorzettend geval* ("preposing case") or *voorzetter* ("prepositor") and argues that this case

comprises all constructions that involve a preposition. His view is that it makes sense to see prepositional constructions as a single case rather than alternative forms of the genitive or dative, because the grammatical relation is determined by the preposition and all prepositional constructions have the same case ending (Van Belle, 1755:26).

4.3 Determiners

Determiners are the most reliable indicators of case in Early Modern Dutch. Especially when towards the end of the century the distinct ending of the dative (and ablative) disappears, the inflection of the determiners remains stable.

Table 4.8: Articles, singular

Case	Masculine	Feminine	Neuter
Nominative	een, de	eene, de	een, het
Genitive	eens, des	eener, der	eens, des
Dative	eenen, den	eener, der	eenen, den
Accusative	eenen, den	eene, de	een, het
Vocative			
Ablative	van eenen, van den	van eene, van der	van eenen, van een, van het, van den

Table 4.9: Articles, plural

Case	Masculine	Feminine	Neuter
Nominative	de	eene, de	de
Genitive	der	eener, der	der
Dative	den	eener, der	den
Accusative	de	eene, de	de
Vocative			
Ablative	van de	van eene, van der	van de

There is little difference between the inflections of the determiners. The feminine inflections are the same for singular and plural and differ only from the masculine plural in the dative. The neuter plural is also identical to the masculine, but its singular dative and ablative inflect differently. There is little change in the inflection of pronouns throughout the eighteenth century, hence table 4.10 and table 4.11 show only the paradigm for the possessive prounoun mijn ("my").

Table 4.10: Singular inflection of the possessive pronouns

Case	Masculine	Feminine	Neuter
Nominative	myn	myne	myn
Genitive	myns	myner	myns
Dative	mynen	myne	mynen
Accusative	mynen	myne	myn

Case	Masculine	Feminine	Neuter
Vocative			
Ablative	van mynen	van myne	mynen

Table 4.11: Plural inflection of the possessive pronouns

Case	Masculine	Feminine	Neuter
Nominative	myne	myne	myne
Genitive	myner	myner	myner
Dative	mynen	(aan) myne	mynen
Accusative	myne	myne	myne
Vocative			
Ablative	van myne	van myne	van myne

4.4 Prepositions

Prescriptions regarding the form, function and usage of prepositions are quite stable throughout the eighteenth century. As a matter of fact, the following definition given by Ten Kate is in use until this day (cf. Van der Horst (2008a)).

de praepositiones zijn een zeker slag van plaatselijke adverbia die ook dikwijls hunnen opzigt hebben op het einde, het middel, de oorzaek en plaats der bewerkte zaken als wanneer ze ook bij de nomina of bij de pronomina geschikt worden en van die eene verbuigigng van casus begeeren (als, onder den duim, binnen's huis, met hem, enz:), terwijle de andere adverbia gemeenlijk op geene verandering van casus zien.

the preapositiones are a certain kind of local adverbia which may als often have their view on the purpose, the means, the cause and the place of the affected cases as when they are placed by the nomina or the pronomina and desire of those an inclination of case (such as, under the thumb, inside the house, with him, etc:), while the other adverbia do not usually require any change of case (Ten Kate, 1723:323).

The term "preposition" is taken rather literally: the category comprizes all elements that are placed in front of another word. Hence, bound morphemes such as *be-, ge-, er-, ver*-are categorized as *inseperable prepositions*. Ten Kate's definition concerns the *seperable* prepositions, such as the ones in table 4.12. Ironically, these may occur before as well as after the noun, as most grammarians take pains to assure. All grammars are in agreement regarding the meaning and function of prepositions: they denote semantic relations in a sentence and, more importantly, govern the case of the noun. Tables 4.12 and 4.13 list the prepositions given in the grammars included in the normative corpus.

 Table 4.12: Prepositions given by Moonen, Séwel, Ten Kate, and Van Belle

Mod. Dutch	Moonen	Séwel	Ten Kate	Van Belle
aan	aen	aan		aan
achter	achter	achter	agter	agter
af		af		
behalve	behalve	behalve		
beneden	beneden	beneden	beneden	
benevens	beneffens			
bij	by	by	bij	by
binnen	binnen	binnen	binnen	
boven	boven	boven	boven	
buiten	buiten	buiten	buiten	
dichtbij		dichtbij		
door	door	door	door	door
en			en	
in	in	in		in
jegens				
langs	langs			
met	_	met		met
na	na	na	na	na
naar	naer	naar		
naast			naast	
nabij			naby	
nevens	neffens/nevens		J	neffens
om	om	om	om	
omtrent	omtrent	ontrent	omtrent	
onder	onder	onder	onder	
op	op	op	op	op
over	over	over	over	over
rondom	rontom	rondom	rontom	rondom
sedert	sedert	sederd		
sinds	sint	sint		
te		te		
tegen	tegens	tegen	tégen(s)	tegens
tegenover	5	tegenover	3 ()	3
ten		ten		
ter	ter			
toe	001	toe		
tot		tot	tot	tot
tussen	tusschen		tussen	tusschen
van	van		0400011	van
van vanwege	vanwege		vanwege	vanwége
valiwege volgens	vanwege volgens		varivege	valiwege volgens
voigens	voigens		voor	voigens
			voorby	
voorbij	voorbij		voorby	voorby
wegens	wegens		wegens	wégens

Mod. Dutch	Moonen	Séwel	Ten Kate	Van Belle
zonder	zonder			zonder

 Table 4.13: Prepositions given by Elsevier, Van der Palm, Stijl, and Bolhuis

Mod. Dutch	Elsevier	Van der Palm	Stijl	Bolhuis
aan				aan
achter	achter	achter	achter	achter
af				
behalve	behalven	behalven	behalven	
beneden	beneden	beneden	beneden	beneden
benevens	beneffens	beneffens		
bij	by		by	bij
binnen	binnen	binnen	binnen	binnen
boven	boven	boven	boven	boven
buiten	buiten	buiten	buiten	buiten
dichtbij				
door	door	door	door	
en				
in	in	in		in
jegens		jegens		jegens
langs	langs	langs	langs	langs
met				
na	na	na	na	na
naar	naer	naer	naar	naar
naast			naast	
nabij				
nevens	neffens		neffens	nevens
om	om	om		om
omtrent	omtrent	omtrent	omtrent	omtrent
onder	onder	onder	onder	
op		op	op	op
over	over	over	over	
rondom	rondom		rondom	
sedert	sedert	sedert		sedert
sinds		sints		
te				
tegen	tegen(s)		tegen	
tegenover				
ten		ten		
ter		ter		
toe				
tot	tot	tot		
tussen	tusschen	tusschen		
van				
vanwege				

Mod. Dutch	Elsevier	Van der Palm	Stijl	Bolhuis
volgens	volgens	volgens		
voor		voor		
voorbij	voorbij			
wegens				
zonder				

There is little difference between grammars in the normative corpus with respect to the governed cases. Van Belle (1755) is again the exception here, because he contrives the ablative as the case that all prepositional constructions are in. The other grammars argue that all inflected cases are to some degree governed by prepositions, although the accusative is the default. Ten Kate describes it as a function of register: the formal registers generally use the inflected form, whereas the normal register sticks to the prepositional form.

The genitive is governed by van ("of"). Several grammars justify this by appealing to harmony: if the noun ends in /ə/, /s/ or /t/ the genitive ending in -s can be hard to pronounce (Van der Palm, 1769:11; Séwel, 1712:181). Others, e.g. Moonen (1706:287) recommend the use of van to avoid repetition of genitives.

In the earlier grammars, the dative is governed by *aan* ("to"). Starting with Stijl (1778:139) prescriptions also include *voor*.

According to Moonen (1706), the ablative is governed by the prepositions *met*, *van*, *uit* and *zonder*. Stijl (1778) adds *door* and *in*.

Several prepositions govern more than one case. *Van*, for instance, governs the genitive and the ablative. This conflict is easily solved, however, because the semantics of these cases differ considerably (Van der Palm, 1769:11; Séwel, 1712:181), e.g.:

- (8) a. de breete van het huys the width of.gen the house.GEN
 - b. de steen viel van 't huys.GEN the stone dropped of.ABL the house

(Séwel, 1712:182)

The prepositions *voor* and *in* cause a similar problem. When *voor* occurs in a temporal sense it governs the accusative, as in (9a). Otherwise it governs the ablative. By the time Stijl (1778) is published, however, the benefactive sense of (9b) is merged with the dative.

- (9) a. Abel storf voor zijnen ouders Abel died before his.ACC.PL parents
 - b. David Vluchtte voor zijnen Zoone
 David fled for his.abl.masc.sg son.masc.abll

(Moonen, 1706:307)

The difference between accusative and ablative is even slighter in the case of *in*. The contrast here is that (10a) is directive, whereas (10b) is.

(10) a. hy gaet den ganschen rustdag in de kerk he goes the.MASC.ACC entire.MASC.ACC resting day in the church 'He spends the entire Sunday in church'

b. hy zit in de kerk
he sits in the.FEM.ABL church
'He is sitting in the church'

(Van der Palm, 1769:40)

Van der Palm (1769) is the last grammarian to pay serious attention to this matter. The grammarians following him (Stijl (1778), Van Bolhuis (1799), Van Varik (1799), Wester (1799)) seem not to care too much. Weiland (1805:375) even calls it "een willekeurige onderscheiding" ("an arbitrary distinction").

A final issue that occupies the earlier grammarians is the usage of the prepositions *ten* and *ter*, said to be shortenings of *te den* and *te der* (resp. masculine and neuter singular, feminine singular "to the"). *Ten* and *ter* can be used instead of *aan*, *bij*, *naar*, *op* and *tot* and when this happens the noun, usually in the accusative, has to be in the dative or accusative (Moonen, 1706:313, 316).

4.5 Discussion

The purpose of this chapter was to trace out the prescriptive traditions of the eighteenth century. Additionally, it serves to determine whether Weiland's assertion that all prepositions govern the accusative is in line with the normative tradition, or if it is an invention.

According to all of the grammars that were consulted, use of case is to be preferred over prepositional constructions. Nevertheless, prepositional constructions for the genitive and dative have been part of the prescriptive tradition since at least Moonen (1706). The genitive can be formed using the preposition van ("of"), the dative using van ("to"). The ablative has the same form as the dative.

The grammarians preceding Weiland maintain that a prepositional construction is a form of the case whose function it assumes. Hence, (11b) is a genitive, and (12b) is a dative. Note, however, that the in both examples the prepositional object has the form of the accusative case.

- (11) a. de dikte des masts the thickness the MASC. GEN mast. GEN
 - b. de dikte van den mast the thickness of the.MASC.ACC mast

(Séwel, 1712:181)

- (12) a. het wierd der gemeynte voorgesteld it was the.FEM.DAT congregation proposed
 - b. het wierd aan de gemeynte voorgesteld it was to the.FEM.ACC congregation proposed

(Séwel, 1712:182)

At first glance, it appears that Weiland invents a new rule when he posits that *following current usage*, *prepositions govern only the accusative*. As 11 and 12 demonstrate, his assertion is a rephrasing of the normative tradition. The main difference is that Weiland argues that, while prepositions have the same function as cases, prepositional constructions are not case forms because they do not involve morphological inflection (Weiland, 1805:72). The only grammarian to suggest a similar system is Van Belle, who uses the ablative as a repository for all prepositional constructions. Other grammarians categorize

prepositions with the case their semantic function represents. Hence, where a construction such as (11b) is a genitive according to the eighteenth century grammarians, Weiland calls it an accusative.

Chapter 5

Methodology

5.1 The Going Dutch Corpus

In light of the concept of bottom-up historical sociolinguistics, the *Going Dutch* project investigates the interplay between language planning, that is, the implementation of normative regulations on a national level, and patterns of variation and change in Dutch during the eighteenth century and nineteenth century (Krogull et al., 2017:168). To this end, a corpus was compiled consisting of three different genres of texts. Two of these genres comprise ego-documents written by people from all layers of society. The third genre represents written language from the public sphere and consists mainly of newspapers. The composition of the corpus allows for comparison between the language of immediacy and the language of distance (Elspaß, 2012:157).

The corpus consists of two diachronic cross-sections. Period 1 (1770–1790) and Period 2 (1820–1840) represent the generations before and after the implementation of the policy. A third factor that influences variation is *space*. The *Going Dutch* corpus covers seven regions of the northern Netherlands, including Friesland, Groningen, North Brabant, North Holland, South Holland, Utrecht, and Zeeland. Lastly, the inclusion of ego-documents allows for the incorporation of gender as a variable (Krogull et al., 2017:168–170)

This study uses a subset of the *Going Dutch* corpus. It focuses on sources originating in the northernmost peripheral regions Friesland and Groningen, and those originating in Noord-Holland representing the center. Table 5.1 show the composition of this subcorpus.

Table 5.1: Composition of the subcorpus

	Period 1 (1770–1790)	Period 2 (1820–1840)	Total
Genre			
Private letters	44 294	46 996	91 290
Diaries and travelogues	30 414	31 481	61 895
Newspapers	15 164	15 175	30 339
All	89 872	93 652	183 524
Region			
North Holland	30 256	32 382	62 638
Friesland	30 758	30 947	61 705
Groningen	28 858	30 323	59 181
All	89 872	93 652	183 524
Gender			
Female	18 014	26 254	44 268
Male	56 694	52 223	108 917
All	74 708	78 477	153 185

5.2 Extraction

This study is concerned with prepositional objects in any position of the sentence. Prepositional constructions were extracted from the texts using the following procedure. A list of prepositions was obtained by combining prepositions described in table 3.2 (Ch. 3) with prepositions described in the eighteenth century grammars (??, Ch. 4). In order to deal with the many spelling variants in the corpus, a POS-tagger was written using the Natural Language Toolkit for Python (Bird et al., 2009). The tagger was trained on the gold standard of the "Brieven als Buit"-project¹ (Rutten & Van der Wal, 2014). All tokens tagged as preposition were retrieved and added to the list. The prepositions were lemmatized manually, yielding a set of 120 lemmas. Table 5.2 shows a portion of the set. The entire list of prepositions is included in Appendix I.

Table 5.2: Lemmatized prepositions

Lemma	Variants	
a	a, á, â	
aan	aaen, aan, aar, aeen, aen, am, an, ane	
achter	achter, aagter, achtr, agter	
aangaande	aangaande, aangaanden, aangaende, aengaan, aengaende, aengaenden, aengeaende, angaand, angaande, angaende, angande	
betreffende	betreffende, bet, betreft	
betrekkelijk	betrekkelijk, betrekkelyk	

 $^{^{1}} Retrieved\ from\ https://ivdnt.org/downloads/taalmaterialen/tstc-bab-gouden-standaard$

Lemma	Variants
buiten	buiten, beuijten, beuten, buidtten, buijte,
	buijten, buijtten, buite, buiten, buyte, buyten,
	bvijten, bööten
binnen	binnen, bienen, biennen, bijnen, bijnnen, bine,
	binen, binne, binnen, binnens, bjnnen, bynnen
blijkens	blijkens, blykens
boven	boeven, bofen, boouen, boove, booven, bouen, bove,
	boven, bowen

The prepositions were used to create concordances of prepositions with 50 characters of context on either side. This process yielded 20 679 text fragments. Figure 5.1a gives an idea of the distribution of prepositions within the corpus, figure 5.1b demonstrates the distribution of determiners. Note that in both categories the distribution is heavily skewed, with few high frequency and many low frequency items.



Figure 5.1: Wordclouds showing the distribution of prepositions and determiners in the sample.

Usage of inflection must be inferred from the preposition's object. The high number of prepositions occurring in the corpus makes "manual" analysis unfeasible. The aforementioned POS-tagger was employed to retrieve the information necessary to identify prepositional constructions in which the preposition is directly followed by its (inflected) complement. Due to the irregularities in eighteenth and nineteenth century spelling and punctuation, however, this proved equally unfeasible.

A solution was found in Weiland's remark that case is primarily assigned by determiners (Weiland, 1805:73). As the previous chapter has shown cases in Early Modern Dutch, with the exception of the masculine genitive singular, could no longer reliably be distinguished based on case ending. According to the presriptive literature, however, determiners did retain distinguished case forms. Hence, the set of concordances was narrowed down by filtering out all prepositional constructions in which the preposition was not immediately followed by an article, demonstrative pronouns, or possessive pronoun. this procedure resulted in a set of 8049 text fragments. To further facilitate the manual analysis of the

prepositional constructions, a stratified sample of 40% was taken from these fragments. This procedure resulted in a corpus for analysis of 3220 text fragments. Stratified sampling is performed to ensure that each category present in the data is proportionally represented in the sample. A normal sampling procedure would result in severe overrepresentation of male authors and authors from Noord-Holland, because these categories are by far the largest. In the final sample each category provided 40% of its total amount of contributions.

5.3 Annotation

The constructions were annotated for grammatical gender, case form, and number. Based on these details they were judged to be either consistent (correct) or inconsistent (incorrect) with Weiland (1805). Inconsistent constructions were additionally annotated with the form that would be correct according to Weiland (1805).

Constructions were excluded from the corpus according to the following criteria:

- text contains a conjunction rather than a prepositional construction, e.g. om dat, na dat;
- text contains a personal pronoun rather than a determiner, e.g. voor haar, aan mij;
- determiner refers to a proper name, e.g. *Den Haag* or *Den Bosch*, or to a proper name of a person, e.g. *Van der Wal*;
- text is unintelligible.

Grammatical gender was determined using the *Woordenboek der Nederlandsche Taal* (Instituut voor de Nederlandse Taal (2018), WNT). In cases where the WNT listed more than one grammatical gender, either case form was considered to be in accordance to Weiland's grammar, e.g. according to the WNT the noun *weg* ("way") is both feminine and masculine. Hence, both *de weg* and *den weg* are considered correct. If a dictionary entry contained information regarding frequency of use, the most frequent grammatical gender was considered to be correct.

Based on these criteria, 220 sentences were excluded from the sample. The final corpus used in this study contained 2998 prepositional constructions. Its composition is shown in table 5.3.

Table 5.3: Composition of the sample (number of sentences)

	Period 1	Period 2	All
Gender			
Female	204	338	542
Male	866	927	1793
all	1070	1265	2335
Region			
Friesland	433	527	960
Groningen	461	499	960
Noord-Holland	495	583	1078
all	1389	1609	2998
Genre			
Diaries	583	664	1247
Letters	487	601	1088
Newspapers	319	344	663
All	1389	1609	2998

5.4 Statistical analysis

Several factors prevented a robust statistical approach, mostly related to the distribution of the data. Chiefly, the distribution of prepositions and determiners resemble a power law distribution, with few high frequency elements and many low frequency ones. Consequently, when the constructions were aggregated with respect to all categories present in the data, there were a large number of categories with a frequency of either zero or one. According to the assumptions of the family of logistic (regression) analyses, expected frequencies of all categories must be above zero, and no more than 20% of frequencies is allowed to be below 5. Unfortunately, the data included in the sample violated this assumption.

As demonstrated in the following chapter, incorrect sentences make up 18.5% of the sample. Because of this, some categories appear to be correlated either 100% or 0% with either judgement. This phenomenon, called *complete separation* prevents generalized linear model algorithms from converging. Recent literature (Barth & Kapatsinski, 2018; Gries, n.d.; Kimball et al., 2018) suggest the application of (logistic) mixed models as a way to deal with similar problems inherent to the statistical nature of natural language corpora. However, it is unclear if this approach would allow for the apparent rarity of incorrect constructions in the data. Additionally, the added difficulty of these methods proved to be beyond the scope of this analysis (Eager & Roy, 2017). Hence, the first part of the analysis, concerned with the influence of linguistic factors on adherence to prescriptive grammar, favours an exploratory analysis of grammatical gender, error types, and frequency over statistical inference.

The second part of this study is concerned with socio-linguistic factors that influence usage. As such it is concerned with the variables Origin (of the author), Gender (of the author), Period (1, (1770–1790) and 2, (1820–1840)), Genre (of the text) and Judgement. The

interplay between these variables is analysed using log-linear analysis. This technique can be considered an extension of the Chi-square test for independence (Field et al., 2012:829). It is used when data contains multiple independent discrete variables with 2 or more levels. The goal of log-linear analysis is to find association and interaction patterns (Agresti, 2013:350), by fitting the data with different models of independence and evaluating their fit (Friendly & Meyer:178).

There are several types of baseline models that function as null-hypotheses about independence relations between variables. Chiefly, these consist of models of complete independence, joint independence, conditional independence, and no independence. With one of these models as baseline, additional interaction terms are added until the model achieves significant fit (Friendly & Meyer:178). Models are evaluated with a Chi-square goodness of fit test (likelihood ratio). A non-significant likelihood ratio indicates that the model accurately predicts the frequencies in the data.

Chapter 6

Results

This chapter presents the results of a case study into the influence of Weiland (1805) on nineteenth century Standard Dutch. The comparison of prescriptive grammars in Chapter 4 led to the conclusion that, as far as the accusative is concerned, Weiland (1805) did not introduce a new set of rules. Hence, the results reported below are not necessarily a consequence of innovations in prescriptive grammar. Nevertheless, it is possible that linguistic and social factors introduce differences in the patterns of usage encountered in our corpus.

The first section of this chapter investigates the characteristics of commonly made errors (6.1.1), the presence of frequency effects (6.1.3), and the effect of phonetic context on case endings (6.1.2). Section 6.2 describes the influence of author gender, region of origin, genre, and period.

6.1 Linguistic factors

6.1.1 Common errors

A minority of the observations in the sample is incorrect, only 18.5% is incorrect. It must be stressed that terms such as "error" and judgements such as "correct" or "incorrect" that are used in this chapter are meant exclusively in the context of Weiland (1805). Hence, they should be considered abbreviations of the sentence "(not) in accordance with Weiland (1805)". Nevertheless, for the sake of brevity the shorter forms will be used rest of this chapter.

The focus of this case study is the use of morphological inflection in prepositional constructions, in the light of the *schrijftaalregeling*. According to Weiland (1805), prepositions govern the accusative. Hence, every construction in which a different case is observed is considered incorrect. Example (13) is an example of such usage.

(13) * langs eener anderen weg afdalende along a.fem.dat other.fem.dat road descending "descending by another road"

This example demonstrates selection of an incorrect case. The dative expresses a transfer of something and is not appropriate in this context. Errors such as this one are rarely observed in the sample.

Errors that are more likely to occur are errors regarding grammatical number and gender. Example (14) demonstrates the former type. Here, the plural *husgenoten* is preceded

by the masculine singular pronoun *mijn*, whereas the proper form would have been the plural *mijne*.

- (14) * en sprack over Symion tot myn husgenoten and spoke about Simeon to my.masc.nom.sg housemates.masc.pl "and spoke about Simeon to my housemates"
- (15) * De Regeering liet hier op door eene Commissie dit aanraden the government let hereupon by a.fem.acc committee.masc this counsel "hereupon, the government had a committee counsel this"

The error in (15) concerns the latter type: incorrect grammatical gender. Here, the feminine form of the indefinite article, *eene*, refers to the masculine *commissie*. The proper form would have been the masculine article *eenen*.

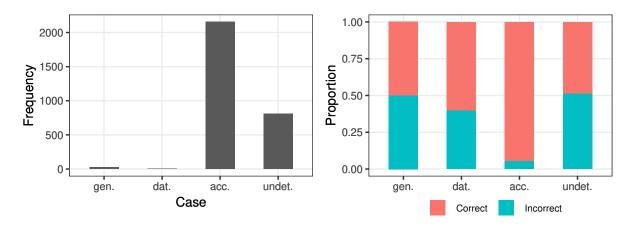


Figure 6.1: Distribution of cases

As noted, errors in case selection occur seldom in in the sample, as figure 6.1 shows. The first panel indicates that the genitive and dative cases occur respectively 13 (0.87%) and 5 (0.17%) times. The accusative, on the other hand, was used in 71.9% of sentences. Other cases, such as the nominative, vocative and ablative, were not encountered during the analysis. The remaining 27% of the sentences consists of constructions in which case could not be determined.

The second panel demonstrates that incorrect sentences are generally of the second type: incorrect inflection. 51.5% of the constructions with undetermined case (labeled "undet.") are incorrect. Of these, 51.6% are incorrect because they have an object in the singular. The remaining 48.4% of undetermined constructions consists of plural constructions. four of which are incorrect. The low number indicates that authors are unlikely to apply an incorrect form in the case of a plural construction. Unsurprising, as the accusative plural is identical for all three grammatical genders.

The correctness of prepositional constructions with genitive or dative case is a matter of chance. The remaining observations consist of prepositional constructions with an object in the accusative. Of these, 123 (5.7%) are incorrect. On the whole, it seems that authors before and after the implementation of Weiland (1805) are more likely to err in selecting the proper case form, than they are in selecting the proper case.

Figure 6.2a shows that case forms are more often incorrect due to inappropriate grammatical gender (96%) than to erroneously selected number (4%). Figure 6.2b indicates

that constructions with a masculine object are incorrect approximately 50% of the time, whereas those with a feminine object are incorrect in 14% of the cases. The proportions of incorrect constructions with a neuter or plural object are even smaller: 2% and 6% respectively.

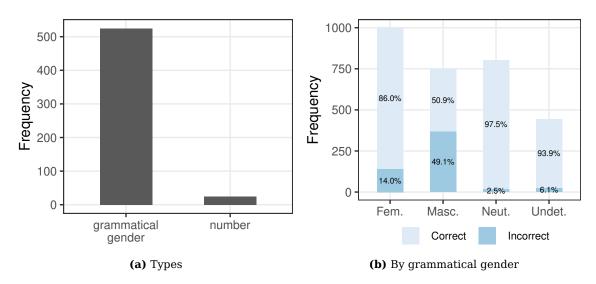


Figure 6.2: Errors

Focusing on feminine and masculine objects, it appears that the errors generally concern incorrect inflection of an article or a possessive pronoun. The bulk of errors made with masculine objects consists of incorrectly inflected articles. Approximately 50% of cases is incorrect, compared to 9% of similar constructions with a feminine object. Figure 6.3 shows that the masculine errors primarily concern the usage of the articles de and een, where according to Weiland (1805) den and eenen are appropriate. Similarly, the feminine errors are due to use of een as well.

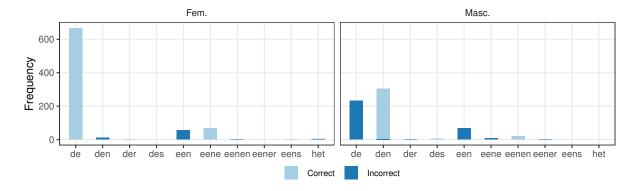


Figure 6.3: Articles

A similar pattern can be observed concerning the possessive pronouns. Figure 6.4 shows that the unmarked form (*zijn*, *mijn*, *haar*, *uw*, *hun*) occurs often and with each grammatical gender, while according to Weiland (1805) it is only correct in the accusative neuter. Especially striking is the low amount of observations of the masculine forms *zijnen*, *mijnen* and *haaren* ("his", "mine", "hers").

The pronouns *hun* and *uw* ("their", "your") deviate from this pattern. constructions, the correct form *hunnen* occurs in 85.7% of observations. The correct form of *uw* occurs in 80% of the feminine constructions, but only 37.5% of the time in masculine constructions. Note, however, that these pronouns, as well as forms of *haar*, are quite infrequent. On one hand, this may indicate a frequency effect where the more frequent possessive pronouns are experiencing deflection faster than the infrequent ones. On the other, it is possible that there is not enough data in the sample for a reliable conclusion.

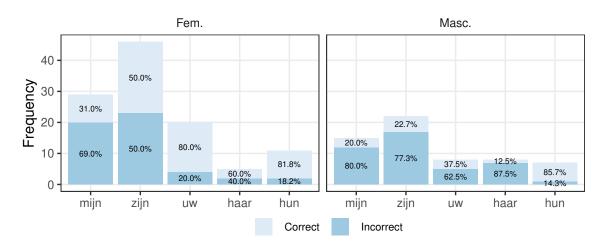


Figure 6.4: Usage of possessive pronouns

On the whole, however, there appears to be a clear preference for the unmarked form of the possessive pronouns. This is not surprising, given the developments concerning morphological inflection in the language (Chapter 2). More so, considering that the differences between the marked and unmarked forms depends on the presence of a phonetically unassuming phoneme, i.e. /ə/ or /ən/.

6.1.2 Phonetic context

A potential source of errors is the phonetic environment of the prepositional construction. It is assumed that the onset of the first syllable following the determiner constrains the coda of the final syllable of that determiner. For instance, an initial vowel might prompt a speaker to select either the masculine or unmarked ending where a feminine ending would have been appropriate, see for instance (16).

(16) op een andere plaats gebragt on a.NEUT.ACC other place.FEM brought "brought to another place"

Here, the proper form for the indefinite article would have been the feminine eene.

The other way around, an initial consonant might invite a final vowel in the preceding syllable. In (17), for instance, the correct article for the masculine noun *burgemeester* is *den*, rather than *the*.

(17) de Jongste Zoon van de Burgemeester the.masc.nom youngest.masc.nom son.masc of the.fem.acc mayor "the mayor's youngest son"

If the phonotactics of Dutch influence selection of case form, it is expected that the determiners ending in a vowel will be followed by a word that starts with a consonant (V:C), more often than by a word with an initial vowel (V:V,), and vice versa for determiners with final consonant (C:V - C:C). Figure 6.5 shows no such pattern, however. The dominant patterns overall are C:C and V:C. Constructions with the V:C pattern are more frequent than those exhibiting the V:V pattern. However, C:V is much less frequent than C:C. In other words, the majority of words following a determiner has an initial consonant, hence it appears that the phonotactics of Dutch do not favour a specific case ending.

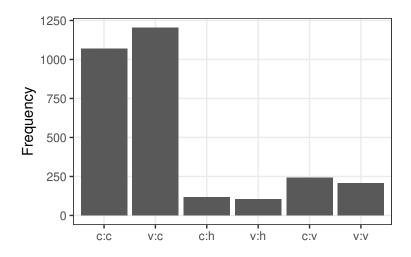


Figure 6.5: Phonetic contexts (initial phoneme:final phoneme)

6.1.3 Frequency effects

One of the difficulties encountered during corpus research is that language data often displays a power law distribution. Zipf's law (Zipf, 1949), states that for a given word in a natural language its frequency is inversely proportional to its rank. This means that in general, the most frequent item in a corpus is approximately twice as frequent as the second most frequent item. For language, this effect can be attributed to what Barth & Kapatsinski (2018:101) call a "rich-get-richer" effect: the more often a word is used, the more it is likely to be used again. Another term for this effect is entrenchment.

Constructions that are deeply entrenched are easier to access than those that are less entrenched. Consequently, highly frequent items tend to behave differently from medium and low frequency items. For instance, one such effect is that highly frequent items are more resistant to change, whereas low frequency items are more likely to contain innovations (Barth & Kapatsinski, 2018; Bybee, 2001). If the correctness of use of a prepositional construction in the sample is subject to a frequency effect, there should be a difference between frequent and infrequent constructions.

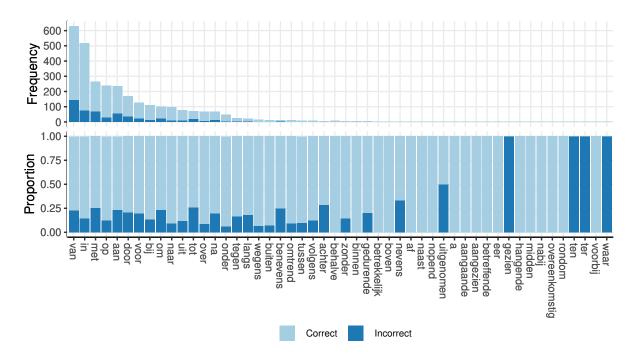


Figure 6.6: Distribution of prepositions

Figure 6.6 shows that the frequency distribution of prepositions resembles a power law distribution. Of the 50 different prepositions that occur in the sample, five occur more than 200 times, five occur between 200 and 99 times, and five occur between 99 and 49 times. the remaining 35 types occur less than 49 times, most of them no more than once.

The lower panel of figure 6.6 demonstrates that frequency is not necessarily associated with correctness. The 15 most frequent prepositions display similar proportions of correct and incorrect sentences. They vary around a mean of 20.2%, but this variation is not related to frequency. The less frequently occurring prepositions display a similar pattern of correctness: of the 15 prepositions that occur once four are incorrect, approximately 25%.

6.2 Socio-linguistic factors

6.2.1 Log-linear analysis

In what follows the terms *Period, Origin, Gender* and *Judgement* are used to refer to the model terms. Table 6.1 lists the the log-linear models that were considered. Terms are specified using their first letter. Two or more letters between brackets indicate an interaction term (Friendly & Meyer:178).

The data in the category Genre violated the assumptions of log-linear analysis, because the data from newspapers had no metadata concerning the gender of the author. Initial analysis indicated that the variable was not part of a significant higher order interaction, hence it has been excluded from the analysis (Field et al., 2012:838) and will be dealt with in a separate section.

Table 6.1: Log-linear models

AIC	BIC	LR Chisq	Df	Pr(>Chisq)	
445.30	452.36	289.897	18	< 2.2e-16	***
245.95	261.27	76.556	11	6.81e-12	***
394.68	406.47	231.286	14	< 2.2e-16	***
186.31	206.34	8.916	7	0.2588	
	445.30 245.95 394.68	AIC BIC 445.30 452.36 245.95 261.27 394.68 406.47 186.31 206.34	445.30 452.36 289.897 245.95 261.27 76.556 394.68 406.47 231.286	445.30 452.36 289.897 18 245.95 261.27 76.556 11 394.68 406.47 231.286 14	445.30 452.36 289.897 18 < 2.2e-16

The conditional independence of Period, Origin, and Gender was adopted as a baseline model. Conditional independence equals the null-hypothesis that each of the terms Period, Origin and Gender is individually associated with Judgement, but not with the other terms. For instance, it hypothesizes that the differences that exist between Period 1 and 2 concerning grammatical correctness are independent of author gender and/or region of origin. Figure 6.7 shows that this model must be rejected because it leaves a significant amount of residual deviance. Each square in the plot represents a category in the data. Significant residual deviance is indicated by colors. Blue denotes that the observed frequency of a category exceeds the expected frequency, whereas red means that the observed frequency is less than the expected frequency.

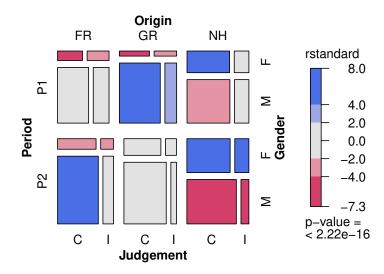


Figure 6.7: Conditional independence. Colors represent the residual deviance

The mosaic plot indicates that there are associations between all four variables, hence a term representing the joint independence of Period, Origin, and Gender was added. Joint independence represents the null-hypothesis that Period, Origin and Gender interact with each other, independently of Judgement. On its own this model is not a good fit either. The combination of conditional and joint independence proves to be a good fit to the data, with $\chi^2(7)=8.92, p=0.26$ (Table 6.1).

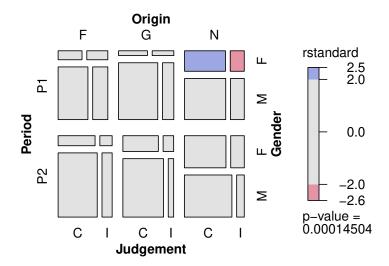


Figure 6.8: Residual deviance in the final log-linear model

The rest of this section examines the associations between Gender, Origin, and Period with Judgement. Table 6.2 shows the terms that make up the model, with empty lines separating different independence hypotheses. The *Deviance* column shows the amount of deviance accounted for by the inclusion of a term. Note that this is equal to the χ^2 statistic for the $2 \times n$ contingency table of the variables that make up the term. *Resid. Dev* is the measure of deviance still present in the model.

The NULL-term represents a model without terms and serves as a starting point. The

four separate terms represent the model of complete independence. They are followed by the three terms that represent conditional independence of Period, Origin and Gender given Judgement. The final term represents the joint independence of Judgement and the other three variables. The inclusion of the Conditional independence model suggests that the separate terms are also independently associated with Judgement. What follows will show that the variation in the data is explained by the notion that these associations hold, but that they differ in the way they manifest with regard to the three regions in the corpus.

Table 6.2: Interaction terms

	Df	Deviance	Resid. Df	Resid. Dev
NULL	23	1765.29		
Dania I	1	16.20	22	1740.00
Period	1	16.30	22	1748.98
Origin	2	9.30	20	1739.68
Gender	1	706.67	19	1033.01
Judgement	1	743.11	18	289.90
Period:Judgement	1	32.57	17	257.33
Origin:Judgement	2	16.57	15	240.76
Gender:Judgement	1	9.47	14	231.29
Period:Origin:Gender	7	222.37	7	8.92

6.2.2 Period and Judgement

There is a significant association between the period in which a sentence was written, and grammatical correctness, $\chi^2(1)=32.57,\,p<0.001.$ The way these two variables influence one another will be investigated using *odds ratios*. The following section will demonstrate this process, which will be applied in the rest of the chapter.

Table 6.3: Distribution of sentences over periods

Period 1	Period 2	Total
771 (72.06%)	1037 (81.98%)	1808 (77.43%)
299 (27.94%)	228 (18.02%)	527 (22.57%)
1070 (100.00%)	1265 (100.00%)	2335 (100.00%)
	771 (72.06%) 299 (27.94%)	771 (72.06%) 1037 (81.98%)

Odds ratios represent the change of odds in favour of an event, in this case a correct sentence, when a certain condition, here the period of writing, changes. The term "odds" is not used as a synonym for chance, but is defined as the probability of an event happening divided by the probability of that event not happening. Mathematically, odds are defined as:

$$odds = \frac{P(event)}{1 - P(event)}$$

The odds ratio, then, is defined as:

$$\Delta odds = \frac{odds_j}{odds_i}$$

The probability of a correct sentence in Period 1 is 72.2% (table 6.3), i.e. a proportion of .722. The odds in favour of a correct sentence are:

$$\frac{P(event)}{1 - P(event)} = \frac{.722}{1 - .722} = \frac{.72}{.28} = 2.57$$

Similarly, the odds in favour of a correct sentence in Period 2 are .82/.18 = 4.56. Thus, the odds ratio for correct sentences by period is:

$$\frac{odds_{Period\ 2}}{odds_{Period\ 1}} = \frac{4.56}{2.57} = 1.77$$

This means that in Period 2, the odds in favour of a correct sentence are 1.77 times higher than they are for Period 1. The 95% confidence interval (calculated with R) associated with the odds ratio is 1.45, 2.15, hence we are 95% confident that the true odds ratio in favour of a correct sentence in the population (i.e. our corpus) lies between 1.45 and 2.15.

6.2.3 Origin and Judgement

Figure 6.9 shows the proportions of correct and incorrect sentences in each region, All three regions contribute roughly one-third of the sentences, with Noord-Holland contributing the majority of sentences by a small margin of approximately 4%. There is a significant association between region of origin and the level of grammatical correctness, $\chi^2(2)=16.57,\,p<0.001.$ Figure 6.9 shows the effect.

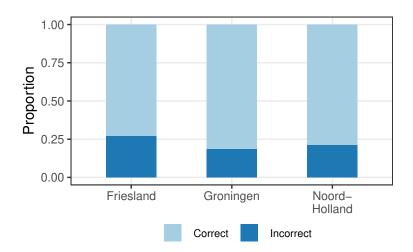


Figure 6.9: Distribution of sentences over regions

Authors from Friesland appear to contribute more incorrect sentences than those from either of the other regions: the odds in favour of a correct sentence by an author from Friesland are 0.61 (0.48, 0.78) times less compared to those from Groningen, and 0.73 (0.58, 0.91) times less compared to sentences from Noord-Holland. Additionally, sentences that originate from Groningen are 0.81 (0.66, 1.08) times less likely to be *incorrect* compared to those from Noord-Holland.

6.2.4 Gender and Judgement

Figure 6.10b shows that there is a large difference in absolute frequencies of sentences written by male and female authors. Although sentences by either gender are more likely by far to be correct, female authors are more likely to have used an incorrect construction than their male counterparts. There is a significant association between author gender and level of correctness, $\chi^2(1)=9.47,\ p<0.01$. The effect appears to be that male authors are 1.42 (1.14, 1.79) times more likely to produce a correct sentence compared to female authors.

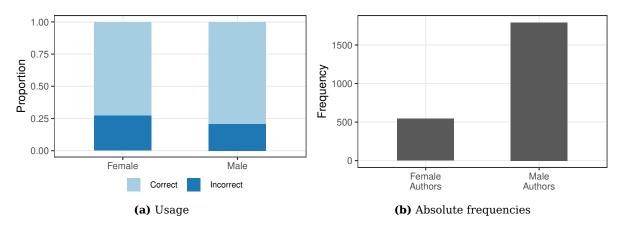


Figure 6.10: Distribution of sentences over author gender

6.2.5 Interaction of Period, Region, and Gender

The previous sections have shown that Period, Region and Gender are associated with Judgement. The effects of these associations are broad, however, and as demonstrated earlier in this chapter, the interaction of Period, Origin and Gender is needed to resolve the residual deviance.

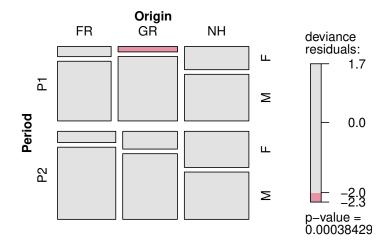


Figure 6.11: Residual deviance when controlling for Judgement

Figure 6.11 shows that if the association with Judgement is ignored, there remains significant residual deviance concerning female authors from Groningen. Figure 6.12 shows that this is likely due to the amount of female authors in that region in Period 1, which is very small. I.e. the rate of female to male authors is .08 (0.06, 0.13) for Groningen, while for Friesland it is 0.17 (0.12, 0.23) and 0.50 (0.40, 0.62) for Noord-Holland. A sentence from Noord-Holland is 6.25 times as likely to be written by a female author, and a sentence from Friesland 2.12 times.

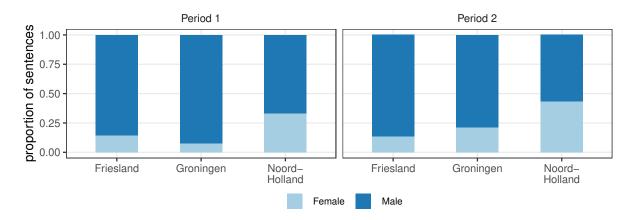


Figure 6.12: Distribution of author gender over regions in Period 1 and 2

The ratio of female to male authors from Groningen changes markedly in Period 2. To facilitate comparison, the odds ratios of author gender is shown in figure 6.13. The dotted line represents odds of 1, that is, no change in odds. The odds ratio for sentences from Friesland is 0.92 (0.60, 1.39), indicating that the proportion of female authors decreases in Period 2. The odds in favour of female authors from Noord-Holland increase by a factor 1.53 (1.16, 2.02). The proportion of female authors from Groningen, however, increases by a factor 3.20 (2.03, 5.04). Note that the error bars for Groningen are large, which indicates that the estimate is not as reliable as those reported for the other regions. This might be a result of the lack of data for female authors.

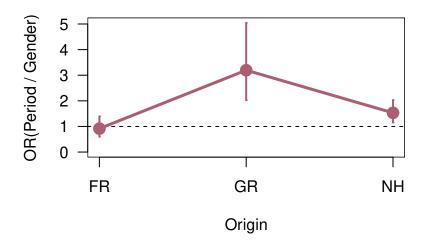


Figure 6.13: Odds ratios for author gender and period

The female-to-male authors rate is not only quite small in Groningen, but also relatively large in Noord-Holland. It is 0.5 in Period 1, which equals a proportion of sentences by female authors of 33%. In Period 2, the proportion of female authors grows to 43%. In fact, the proportion of female authors from Noord-Holland is 3.75 (3.07, 4.58) times larger than that of Friesland and Groningen combined, collapsing over periods (figure 6.14).

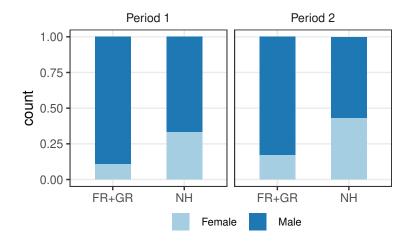


Figure 6.14: Distribution of sentences over gender of the author

The differences between regions with regard to the distribution of author gender are linked to the increase in absolute numbers of sentences. Figure 6.15 shows that each region exhibits a distinctive pattern of growth. The sentences from Friesland show very little change in the amount of sentences by female authors, whereas the frequency of male authors increases. Among sentences from Groningen, the frequency of male authors decreases, whereas female contributions increase. Finally, among sentences from Noord-

Holland the frequency of female authors increases, whereas the amount of male contributions shows no growth.

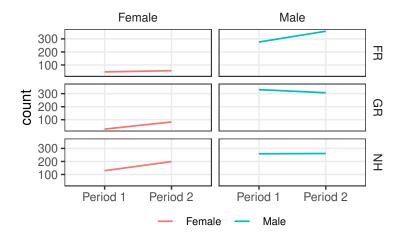


Figure 6.15: Change in absolute number of sentences per gender, region and period

The way each region differs with respect to the distribution of male and female authors influences the association of Judgement with Period, Origin, and Gender. The effect does not change, but the effect size does. Figure 6.16 shows the odds in favour of a correct sentence for each author gender, per region. The lines represent the odds ratio in such a way that the slope of the line represents the magnitude of change between periods: the steeper the slope, the more change.

The odds ratios for sentences by male authors show the same trend in each region: as expected, the odds in favour of a correct sentence are better in Period 2. The same goes for sentences by female authors, save for those from Noord-Holland, for which the odds do not change. This means that Noord-Holland differs from Friesland and Groningen in two respects: sentences by female authors do not improve as much as their male counterparts do, and sentences by female authors do not improve as much as those from Friesland and Groningen. Note, however, that the odds in favour of a correct sentence by a female authors are approximately equal in period 2.

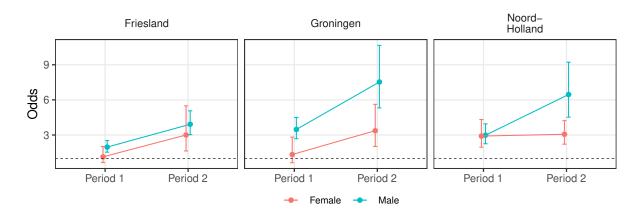


Figure 6.16: Change in odds in favour of correct sentences per gender and period, by region

6.2.6 Genre and Judgement

This section will zoom in on the influence of genre on the adherence to Weiland (1805). The data in our corpus comprises three genres, viz. private letters, diaries and travelogues, and newspapers. These three genres represent different levels of intimacy. Letters are a standin for private conversation, and hence represent the most intimate type of communication in our corpus. Newspapers constitute the other end of the scale, as the example of public communication. Diaries and travelogues are considered to be somewhere in the middle, as they are generally written with some kind of audience in mind (Elspaß, 2012).

Before we go on, we take a minute to describe several problems encountered in the data. The previous section omitted the influence of the Genre variable, because there were too many zero-frequency categories in the data. This is a structural issue: female or male newspaper authors do not exist in our data. Another issue, however, is the fact that the sample does not contain sentences from diaries by female authors from Friesland or Groningen, see Figure 6.17.

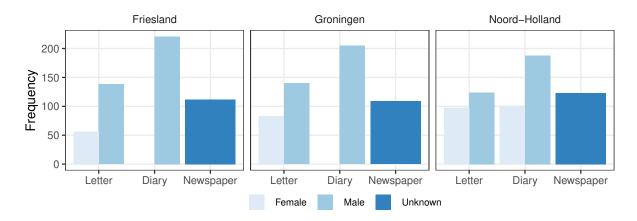


Figure 6.17: Distribution of genre over gender and region

This is not a structural issue, because the sample contains female diary-authors from Noord-Holland. A common solution to problems like this is to continue sampling until all categories have at least several cases (Field et al., 2012:837). However, it appears that there are no diaries by female authors from Friesland and Groningen in the entire "Going-Dutch"-corpus, hence better sampling cannot be the solution here. Alternatively, it is possible to ignore or remove certain dimensions of variables. In this case, it is possible to analyse the effect of Origin on Gender on the level of private letters, as shown in figure 6.18.

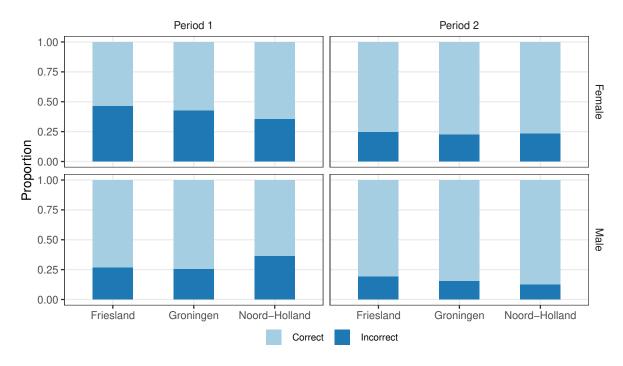


Figure 6.18: Distribution of correctness over private letters

Another issue found with our data is the scarcity of incorrect sentences. The previous section has shown that correct sentences dominate the sample. As is shown in ??, there are very little incorrect sentences among the data originating from newspapers. This means that newspapers are too strongly correlated with correctness that the algorithms used to perform Log-Linear Analysis or Logistic Regression will not be able to converge (Kimball et al., 2018).

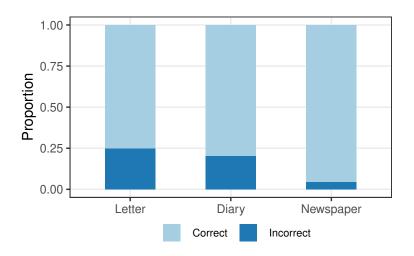


Figure 6.19: Distribution of usage over genres

Association of Genre and Judgement

As discussed in Elspaß(2012), the level of intimacy has bearing on the amount of attention that is paid to correctness in the "official" sense of the word. A public display of language

that contains mistakes might not be taken seriously, no matter the content. Private language is less concerned with the preservation of face, and as such requires less attention to the rules.

Given the ordering private > private/public > public, it is expected that letters will produce more incorrect propositional constructions when compared to dairies and travelogues (subsumed under diaries in what follows). The latter will in turn contain more mistakes than newspapers do. Given the results of the previous section it is to be expected that the association of Genre with Judgement is the same for each region.

A significant relationship between genre and grammatical correctness was found ($\chi(2) = 118.5~p < .001$). Figure 6.19 shows that in both periods, the majority of incorrect sentences originates from private letters. The effect is further broken down in figure 6.20.

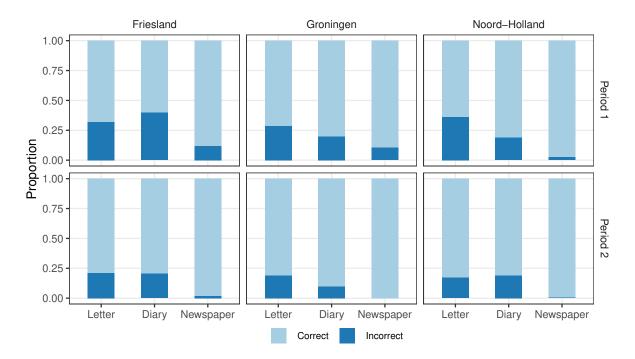


Figure 6.20: Usage by genre, over Period and Origin

The situation in Friesland is divergent in Period 1, as sentences originating from diaries are incorrect more often than those from letters, whereas the other two regions confirm the expectation that the level of grammatical correctness follows the level of intimacy. In Period 2, Frisian sentences have caught up with those from Noord-Holland (proportionally, at least). In this period, however, the data from Groningen shows a different pattern, viz. the proportion of incorrect diary-sentences is approximately half that of the other provinces. Figure 6.21 shows the odds ratios for Judgement and Period in each region, that is, the difference in the proportion of correct sentences between Period 1 and Period 2. The dashed line denotes an odds ratio of 1, which signifies no change.

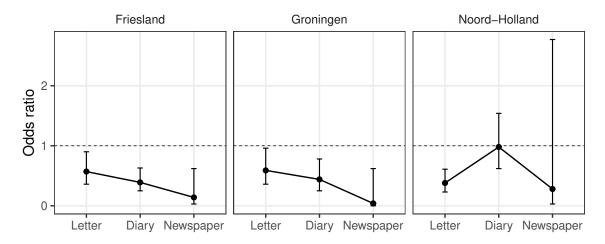


Figure 6.21: Odds ratios of Usage and Period by genre and region

Note that the category newspaper for Noord-Holland has a very large error bar. Error bars show the 95% confidence level, i.e. they show the interval in which the true odds ratio is located. The confidence interval is very large, which would normally indicate that there very little confidence in the result. In this case, however, it is due to the very low frequency of incorrect sentences from newspapers: 3 in Period 1 and 1 in Period 2.

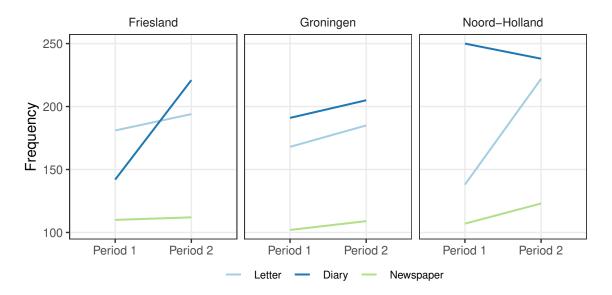


Figure 6.22: Change in absolute frequencies

The odds ratios for Friesland and Groningen show that the more intimate genre improves slower the more public genres, with diaries as an intermediate between letters and newspapers. The "jump" in the line towards 1 for diary-sentences from Noord-Holland indicates that the proportions of correct and incorrect sentences are more or less the same in Period 2. Figure 6.22 shows that the absolute frequencies of letter-sentences increases drastically in Period 2, whereas the number of sentences from diaries decreases slightly.

Chapter 7

Discussion

The aim of this study was to investigate the influence of the national language policy that was implemented by the government of the Batavian Republic at the beginning of the nineteenth century. As such, it is part of a larger tradition of historical sociolinguistic studies concerned with the process of standardisation.

The *schrijftaalregeling* officially applied to the written language of (public) administration and education. However, as Lippi-Green (2012:68) points out, these areas are instrumental in the maintenance of a standard language. The effect was of the implementation of the language policy was examined by means of a case study of the use of inflection in prepositional constructions. The study has taken the form of a corpus analysis, performed on a subset of the diachronic, multi-genre corpus that was compiled in the context of the "Going Dutch"-project. Two dimensions of usage were considered. First, the influence of linguistic factors was investigated (Chapter 6.1), followed by an examination of social factors that may influence usage (Chapter 6.2).

The use of inflection in prepositional constructions is of interest because the semantic function of case is often transferred to prepositional constructions as a result of the process of deflexion. It is generally assumed that in the case of Dutch, this process was completed around the close of the Middle Ages. Nevertheless, the use of inflection was kept alive in the grammatical traditions of the time, which, especially in the eighteenth century, were based primarily on the works of Vondel and other influential literary figures of the previous centuries.

Weiland argues that prepositions should always be followed by the accusative. Initially, this rule was considered to be an invention, as the grammars of the eighteenth century assigned prepositional constructions to the genitive, dative, accusative and ablative. However, closer examination of the normative traditions of the eighteenth century in Chapter 4 revealed that each of these constructions took the form of the accusative case. Hence, Weiland's rule concerning prepositions can be considered to be in line with the grammatical tradition.

7.1 Linguistic factors

Section 6.1 found that the majority of observations consisted of constructions with an object in the accusative case (71.4%). Dative objects occurred in 0.9% of observations, genitive objects in 0.2% of cases.

The majority of errors made by authors in both periods consisted of incorrect inflections of masculine articles and possessive pronouns. 49% of the masculine constructions observed did not adhere to Weiland (1805). The most frequent errors concern the use of the masculine definite article (*de* instead of *den*) and the feminine and masculine indefinite article (*een* instead of *eene* / *eenen*). It was also found that in errors involving the possessive pronouns *mijn*, *zijn*, *haar*, the uninflected form was most frequently used, independent of the grammatical gender of its referent.

Section 6.1.3 ruled out the influence of entrenchment on correctness. That is, it was demonstrated that frequency of use is not correlated with adherence to Weiland (1805). The percentage of incorrect sentences among the prepositions that were observed at least 50 times varies around a mean of 20%. This indicates that the most frequent prepositions do not occur more or less often in incorrect constructions than less frequent ones do.

The third factor under investigation was the influence of phonotactics on case selection. Section 6.1.2 demonstrated that determiners with a final consonant precede an initial consonant in 35.7% of observations. Determiners with final vowels precede an initial consonant 40% of the time. Hence, it appears that there is no relation between case ending and initial phoneme of the complement.

These findings lead to the conclusion that adherence to the prescribed variants is not related to the linguistic factors investigated in the study. Instead, they indicate that errors made by authors in both periods may be related to a lack of familiarity with the standard. Due to the loss of inflection in earlier stages of Dutch, these forms did not occur in the spoken variety of Early Modern Dutch (Ten Kate (1723), Chapter 4). Hence, the only way to become familiar with them is through contact with the (written) standard.

7.2 Sociolinguistic factors

The findings in Section 6.2 indicate that grammatical correctness is significantly associated with Period, that is, the prepositional constructions that were written after the implementation of the national language policy in 1805 are significantly more likely to be correct according to Weiland (p < 0.001). Male authors are more likely to produce a correct sentence when compared to female authors (p < 0.01). Grammatical correctness is significantly associated with the region of origin of the author (p < 0.001). Although the three provinces contribute an equal amount of sentences to the sample, sentences by Frisian authors are more likely to be incorrect compared to the other provinces. Authors from Groningen, on the other hand, are less likely to be incorrect compared to the others.

The joint Independence of Period, Origin and Gender from Judgement manifests itself in differences concerning the distribution of female and male authors and the rate of correct to incorrect sentences across periods. Few sentences written in Friesland or Groningen in Period 1 have a female author, whereas female authors contribute one third of the sentences from Noord-Holland in that Period. In Period 2 the odds in favour of a female author given a sentence from Groningen are tripled, while they decrease for sentences from Friesland. The odds increase for sentences from Noord-Holland as well, but not as dramatically.

The distribution of author gender over region per period affects the association with Judgement. It does not influence the direction of the effect, but it does change the magnitude. That is, the odds in favour of a correct sentence increase equally for female and male authors in Friesland, whereas they differ in Groningen and Noord-Holland. Male authors from the latter provinces have a larger odds ratio with regards to correct sentences, and

they differ with respect to the odds ratio for female authors, which is 1 in Noord-Holland, reflecting that they have not improved over time.

Finally, it has been shown that grammatical correctness, at least where it concerns prepositional constructions, is correlated with genre. Specifically, genres that are more intimate, i.e. closer to a personal conversation, invite more incorrect sentences compared to genres that are more public. The overall trend of improvement in Period 2 holds for genres as well, although they differ with respect to the magnitude of change. Letters improve less than diaries, which in turn improve less than newspapers. Additionally, the observed frequency of incorrect sentences from newspapers, approaches zero in Period 2 across the board. This is a strong indicator of the genre-effect.

7.3 Conclusion

The case study was unable to provide evidence for the influence of Weiland (1805) on Dutch in the nineteenth century, because with respect to inflection in prepositional constructions the grammar is in line with the grammatical traditions of the previous century.

The corpus analysis regarding case usage in prepositional constructions did show the effects of the ongoing standardization process. Grammatical correctness increases in Period 2, irrespective of region or gender. Nevertheless, the distinction between peripheral regions (Friesland, Groningen) and central regions (Noord-Holland) proved to be salient. The peripheral regions Friesland and Groningen are behind the more central region Noord-Holland in terms of female participation. However, they experience a comparable increase in productiveness and adherence to the standard. This indicates that the implementation of the language policy caused the educational system to improve. The diffusion of the standard variety, driven by the ideals of the *national grammar* period improved access to education for all layers of society.

Male authors from Noord-Holland show considerable increase in grammatical correctness in Period 2, but female authors from that region do not. However, female authors from the peripheral regions show improvement that is equal to or better than their male counterparts. This suggests that despite the changes with respect to language education, there are factors in play that limit the development of female authors. Speculatively, we might say that one of these factors could be related to genre. Results show that non-standard usage decreases according to the degree of intimacy associated with the genre. The lack of diaries written by female authors seems to suggest that female authors produce less content in the more public, that is less intimate, genres than male authors do. That is, it is possible that male authors keep improving because they have more contact with the standard variety, whereas female authors are limited to genres in which grammatical correctness is not as important. Note, however, that due to the limited information that is available with respect to author gender, this can be nothing more than speculation.

Bibliography

- Agresti, A. (2013). Categorical Data Analysis. New York: Wiley.
- Barth, D., and V. Kapatsinski. (2018). Evaluating Logistic Mixed-Effects Models of Corpus-Linguistic Data in Light of Lexical Diffusion. In D. Speelman, K. Heylen, & D. Geeraerts (Eds.), Mixed-Effects Regression Models in Linguistics (pp. 99–116). Springer.
- van Belle, J. (1755). *Korte Schets Der Nederduitse Spraakkonst*. Amsterdam: Christoph Henrich Bohn, Boek- en Papier Verkooper.
- Berg, I. (2013). Stages in Deflexion and the Norwegian Dative. In T. Dag (Ed.), *Historical Linguistics 2013. Selected Papers from the 21st International Conference on Historical Linguistics* (pp. 179–194). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Bird, S., E. Loper, and E. Klein. (2009). *Natural Language Processing with Python*. OReilly Media Inc.
- Blake, B. (2001). Case. Cambridge: Cambridge University Press.
- van Bolhuis, L. (1799). *Beknopte Nederduitsche Spraakkunst*. Leiden: D. du Mortier en zoon, J.H. de Lange & J. Oomkens.
- de Bonth, R. (1998). De Aristarch van T Y, de Grammatica Uit Balthazar Huydecopers Proeve van Taal- En Dichtkunde (1730). Maastricht: Shaker Publishing B.V.
- Booij, G. (2007). *The Grammar of Words. An Introduction to Morphology*. Oxford: Oxford University Press.
- Booij, G., and A. van Kemenade. (2003). Preverbs: An Introduction. In *Yearbook of Morphology*. Dordrecht: Springer.
- Bybee, J. (2001). Phonology and Language Use. Cambridge: Cambridge University Press.
- Duinhoven, A. (1989). Het Voorzetselvoorwerp. Een Zinspatroon in Wording. *De Nieuwe Taalgids*, 40–55. Retrieved from https://www.dbnl.org/tekst/_taa008198901_01/_taa008198901_01_0006.php
- Eager, C., and J. Roy. (2017). Mixed Effects Models are Sometimes Terrible. arXiv E-Prints, arXiv:1701.04858. Retrieved from http://arxiv.org/abs/1701.04858
- Elspaß, S. (2007). Germanic Language Histories from Below (1700-2000). (S. Elspaß, N. Langer, J. Scharloth, & W. Vandenbussche, Eds.). Berlin: Mouton de Gruyter.
- Elspaß, S. (2012). The Use of Private Letters and Diaries in Sociolinguistic Investigation. In J. M. Herández-Campoy & J. C. Conde-Silvestre (Eds.), *The Handbook of Historical Sociolinguistics* (pp. 156–169). Chicester: Wiley-Blackwell.
- Elzevier, K. (1761). *Drie Dichtproeven Benevens Een Proef van Een Nieuwe Nederduitsche Spraekkonst.* Haarlem: J. Bosch.
- Field, A., J. Miles, and Z. Field. (2012). *Discovering Statistics Using R.* London: SAGE publications.
- Friendly, M., and D. Meyer. (). Discrete Data Analysis with R. Chapman and Hall/CRC.

- Gries, S. T. (n.d.). The Most Underused Statistical Method in Corpus Linguistics: Multi-Level (and Mixed-Effects) Models. *Corpora*, (10-1), 95–125.
- Hewson, J., and V. Bubenik. (2006). From Case to Adposition. The Development of Configurational Syntax in Indo-European Languages. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- van der Horst, J. (2008a). Geschiedenis van de Nederlandse Syntaxis. Dl. 1. Leuven: Universitaire Pers Leuven.
- van der Horst, J. (2008b). *Geschiedenis van de Nederlandse Syntaxis. Dl. 2.* Leuven: Universitaire Pers Leuven.
- Huydecoper, B. (1792). Proeve van Taal- En Dichtkunde. In Vrijmoedige Aanmerkingen Op Vondels Vertaalde Herscheppingen van Ovidius. (F. van Lelyveld & N. Hinlopen, Eds.) (2nd ed.). Leiden: A. en J. Honkoop.
- Instituut voor de Nederlandse Taal. (2018). Woordenboek Der Nederlandsche Taal. Retrieved October –2018, from http://gtb.inl.nl/search
- ten Kate, L. (1723). Aenleiding Tot de Kennisse van Het Verhevene Deel Der Nederduitsche Sprake. Alphen aan den Rijn: Canaletto.
- ten Kate, L. (2001). Aenleiding Tot de Kennisse van Het Verhevene Deel Der Nederduitsche Sprake. Eerste Deel. (J. Noordegraaf & M. van der Wal, Eds.). Alphen aan den Rijn.
- Kimball, A., K. Shantz, C. Eager, and J. Roy. (2018). Confronting Quasi-Separation in Logistic Mixed Effects for Linguistic Data: A Bayesian Approach. *Journal of Quantitative Linguistics*.
- Kloek, J., and W. Mijnhardt (Eds.). (2001). 1800. Blauwdrukken Voor Een Samenleving. Den Haag: Sdu Uitgevers.
- Krogull, A., G. Rutten, and M. van der Wal. (2017). Relativisation in Dutch Diaries, Private Letters and Newspapers (1770–1840). In T. Säily, A. Nurmi, M. Palander-Collin, & A. Auer (Eds.), *Exploring Future Paths for Historical Sociolinguistics* (pp. 157–186). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Lippi-Green, R. (2012). English with an Accent. Language, Ideology and Discrimination in the United States. London, New York: Routledge.
- Milroy, J., and L. Milroy. (2002). *Authority in Language: Investigating Standard English*. London, New York: Routledge.
- Moonen, A. (1706). Nederduitsche Spraekkunst. Amsterdam: Francois Halma.
- Noordegraaf, J. (2004). A Matter of Time: Dutch Philosophy of Language in the Eighteenth Century. In T. Shannon & J. Snapper (Eds.), *Janus at the Millennium: Perspectives on Time in the Culture of the Low Countries.* (pp. 211–225). Lanham, MD: University Press of America.
- van der Palm, K. (1769). *Nederduitsche Spraekkunst, Voor de Jeugdt.* Rotterdam: Reinier Arrenberg.
- Patrick, D. (2010). Language Dominance and Minorization. In J. Jaspers, J. Östman, & J. Verschueren (Eds.), *Society and Language Use*. Amsterdam, Philadelphia: John Benjamins.
- Rutten, G. (2012). 'Lowthian' Linguistics Across the North Sea. *Historiographia Linguistica*, (1), 43–60.
- Rutten, G. (2016). Standardization and the Myth of Neutrality in Language History. *International Journal of Sociology of Language*, (242), 25–57.
- Rutten, G. (2018). Matthijs Siegenbeek in Defence of Dutch. In R. Honings, A. van Kalmthout, & G. Rutten (Eds.), Language, Literature and the Construction of a Dutch National Identity (1780-1830). Amsterdam: Amsterdam University Press.

- Rutten, G., and M. van der Wal. (2014). Letters as Loot: A Sociolinguistic Approach to Seventeenth- and Eighteenth-Century Dutch. Amsterdam: John Benjamins.
- Séwel, W. (1712). Nederduytsche Spraakkonst. Amsterdam: Robert Blokland.
- Siegenbeek, M. (1804). Verhandeling over de Nederduitsche Spelling, Ter Bevordering van Eenparigheid in Dezelve. Amsterdam: Johannes Allart.
- Stijl, K. (1778). Beknopte Aanleiding Tot de Kennis Der Spelling, Spraakdeelen, En Zinteekenen van de Nederduitsche Taal. Groningen: Jan Oomkens.
- van den Toorn, M., W. Pijnenburg, J. Leuvensteijn, and J. van der Horst (Eds.). (1997). Geschiedenis van de Nederlandse Taal. Amsterdam: Amsterdam University Press.
- van Varik, G. (1799). Rudimenta, of Gronden Der Nederduitsche Spraake. Leiden: D. du Mortier en zoon.
- van der Wal, M., and C. van Bree. (2008). *Geschiedenis van Het Nederlands*. Houten: Spectrum.
- Weiland, P. (1805). Nederduitsche Spraakkunst. Amsterdam: Johannes Allart.
- Wester, H. (1799). Bevatlyk Onderwys in de Nederlandsche Spel- En Taalkunde, Voor de Schooljeugd. Groningen: Jan Oomkens.
- Willemyns, R. (2013). Dutch. Biography of a Language. New York: Oxford University Press.
- Zipf, G. (1949). Human Behavior and the Principle of Least Effort. Cambridge (Mass.): Addison-Wesley.

Appendix I

Lemmatized Prepositions

Lemma	Variants
a	a, á, â
aan	aaen, aan, aar, aeen, aen, am, an, ane
achter	achter, aagter, achtr, agter
aangaande	aangaande, aangaanden, aangaende, aengaan,
	aengaende, aengaenden, aengeaende, angaand,
	angaande, angaende, angande
aangemerkt	aangemerkt, aenmerckende
aangezien	aangezien, aengezien
aanrakende	aanrakende, aenrakende
achtervolgens	achtervolgens
ad	ad
af	af, aff
afzonderlijk	afzonderlijk, afzonderlyk
ala	ala, a la
benevens	beneffens, beneefens, beneeffens, benees,
	beneeuens, beneeven, beneevens, beneewens,
	benefens, beneff, beneffen, beneffens, beneffes,
	beneffs, benefvens, beneuens, beneuenst, beneues,
	benevan, beneven, benevens, benneffens
behalve	behalve, bealven, behalf, behalfen, behaluen,
	behalve, behalven, behalwen
bij	bij, bee, beeij, bei, beij, bej, bey, bi, bie,
	bijer, by, bye
behoudens	behoudens
belangende	belangende
beneden	beneden, beneeden, bennen
beoosten	beoosten
bezijden	bezijden, besijen, bezyden
betreffende	betreffende, bet, betreft
betrekkelijk	betrekkelijk, betrekkelyk
buiten	buiten, beuijten, beuten, buidtten, buijte,
	buijten, buijtten, buite, buiten, buyte, buyten,

Lemma	Variants
	bvijten, bööten
binnen	binnen, bienen, biennen, bijnen, bijnnen, bine,
	binen, binne, binnen, binnens, bjnnen, bynnen
blijkens	blijkens, blykens
boven	boeven, bofen, boouen, boove, booven, bouen, bove,
	boven, bowen
conform	conform
contra	contra
dankzij	dankzij, dankzy
dichtbij	dichtbij, dichtby, dijchtbij
dicht	dicht, digt, digte, dijcht, dijchte
door	door, dooer, dor, dorr, dueer, duer, dur, dóór,
	deur
eer	eer
ex	ex
gaande	gaande, gaende
gaandeweg	gaandeweg, gaendeweg
gedurende	gedeuren, gedeurende, gedurende, geduurende
gemerkt	gemerkt
getuige	getuige
gezien	gezien
halven	haen, halven, halverwege, halwen
hangende	hangende
hinder	hinder
jegen	jegens, iegen, iegens, jean, jegen, jegens
in	in, ijn, im, jn
ingeval	ingeval
ingevolge	ingevolge
inzake	inzake, ins
krachtens	krachtens
langs	lanckxt, langs
langsheen	langsheen
langszij	langszij, langszy
lopende	lopende
met	med, medt, mee, meet, met, mett, mette
middels	middels
midden	midden
midts	midts, miet, mijt, mit, mits, mitt
mitsgaders	mitsgaders
na	na, naa, nae, naer
naar	naar, nar, naars
naarmate	naarmate, naermate
naarvolgens	naarvolgens, naervolgens
naast	naast, naaste, naest, nagest, nast
nabij	nabij, naby

nevens nevens, neefens, neemen, neemens, neeuens, neevens, neffens, neffes, nefvens, neuens, neven niettegenstaande niettegenstaande, niettegestaande nopend nopende, nopens om om, ome, omme omstreeks omstreeks omtrend omtrend, omtrendt, omtrent, omtret, ontren, ontrend, ontrendt, ontrent onaangezien onaangezien, onaengezien ondanks onder onders, ondr op op, oop, ob, ohp, opt, up over over, hoover, oouer, oover, ouer, oufer, oveer, over, ower, uver overeenkomstig overeenkomstig overmits per per, paer, par, pe, pr pro qua qua rakende rakende
niettegenstaande niettegenstaande, niettegenstaende, niettegestaande nopend nopende, nopens om om, ome, omme omstreeks omstreeks omtrend omtrend, omtrent, omtret, ontren, ontrend, ontrendt, ontrent onaangezien onaangezien, onaengezien ondanks onder onder, onders, ondr op op, oop, ob, ohp, opt, up over over, hoover, oouer, ooven, oover, ouer, oufer, oveer, over, ower, uver overeenkomstig overmits overmits per per, paer, par, pe, pr pro qua qua
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over over, hoover, oouer, oover, ouer, oufer, oveer, over, ower, uver overeenkomstig overmits overmits per per, paer, par, pe, pr pro pro qua qua
overeenkomstig overeenkomstig overmits overmits per per, paer, par, pe, pr pro qua qua
overeenkomstigovereenkomstigovermitsovermitsperper, paer, par, pe, prproproquaqua
overmits overmits per per, paer, par, pe, pr pro pro qua qua
per per, paer, par, pe, pr pro pro qua qua
pro pro qua qua
qua qua
rakende rakende
relatief relatief
rond rond
rondom rondom, rontom, ronttom
samt samt, zamt
sedert, tsedert, tsedert, tseederd, tseedert,
tzedert
sinds sinds, sind, sint, sints, sunt
zonder zonder, sonder, sunder
spijt spijt, spijk, spyt
staande staande, staende
sub sub
tegen tegen, tee, teege, teegen, teeges,
teeghen, tege, tegens, teghen, teugen,
tueghen, tégen
teegenstaande teegenstaande, teegenstaende, teegestaendtaende,
tegenstaande, tegenstaende
tegenover tegenover
ten ten
tenden tenden
tenzij tenzy tenzy
ter ter
terzijde terzijde, terzyde, thussen
tijdens tijdens, tydens
tot tot, to, tod, toet, too, toot, tott, tót, ttot

Lemma	Variants
trend	trend, trendt, trent
trots	trots
tussen	tueschen, tuschen, tussche, tusschen, tusse,
	tussen, dussen
uit	uit, udt, uidt, uijdt, uijet, uijt, ujit, ujt, ut,
	uten, uut, uwit, uyd, uydt, uyt, vijt, vit, vut,
	vyt, wit, wt, wyt
uitgenomen	uitgenomen, uytgenomen
uitgezegd	uitgezegd, vijtgeseijt
van	van, uaen, uan, va, vae, vaen, vam, von, fan
vanaf	vanaf
vanuit	vanuit
vanwege	vanwege, vanwége
vermits	vermits, vermiedts, vermis
versus	versus
via	via
volgens	volgens, volgen, volgends, volghen, volghens,
	volgens, uolgens
voorbij	voorbij, voorby
voorlangs	voorlangs
voor	voor, uoor, uor, uore, voer, voo, vooer, vooor,
	voor, vor, vuer, vuert, woorfoor, for
wan	wan
wegens	wegens, weege, weegen, weegens, weeghen, weeghens, wege, wegen, weges, weghen, wengen, wégens