



Fitting in or standing out?

Subject agreement phenomena in Middle Low German

Melissa Farasyn

Proefschrift voorgelegd tot het behalen van de graad van Doctor in de Taalkunde



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Voorwoord | Preface

Net zoals sommigen beweren dat de syntaxis van het Middelnederduits een vermenging is van de Nederlandse en de Duitse syntaxis,¹ ben ik het product van twee verschillende afdelingen binnen de vakgroep Taalkunde. Hoewel ik voor het schrijven van deze dissertatie overliep van het Nederlandse naar het Duitse afdelingsgebied, heb ik het geluk en de eer me op beide afdelingen thuis te voelen. De inhoud van deze dissertatie is dan ook deels te danken aan afdelingsoverschrijdende kennis en ervaringen. Daarvoor wil ik allereerst Jacques van Keymeulen bedanken. Na het begeleiden van mijn bachelor- en mijn masterproef in de dialectlexicografie bood hij me een baan aan bij het Woordenboek van de Vlaamse Dialecten (WVD). Zijn e-mail, getiteld 'Vraag', prijkt als herinnering nog steeds bovenaan de lijst met belangrijke berichten in mijn mailbox. Telkens als ik dat zie, ben ik opnieuw oprecht gelukkig dat ik de kans heb gekregen om te werken (en later ook onderzoek te doen) aan de universiteit, en in het bijzonder aan die universiteit waar mijn hart ligt. Ik ben hem heel dankbaar voor die bijzondere kans. Uiteraard prijs ik hem ook voor zijn diepgaande kennis van de dialectologie en het enthousiasme waarmee hij die weet over te brengen.

In de maanden waarin ik bij het WVD werkte, bleek mijn reputatie helaas (nog) niet over afdelingsgrenzen heen te reiken. Toen ik op de valreep de vacature voor een

¹Voor een correcte definitie van het Middelnederduits, zie hoofdstuk 1.

positie binnen de variatielinguïstiek bij het Corpus of Historical Low German (CHLG) opmerkte en meteen een enthousiaste e-mail naar Anne Breitbarth stuurde, bleek ze niet van mijn bestaan af te weten. Toch verdient zij, die iets later mijn promotor werd, hier het belangrijkste woord van dank.² Dankzij mijn - achteraf gezien - veel te enthousiaste sollicitatiebrief leerde ik Anne kennen zoals ik haar vandaag nog steeds ken. Ze luistert naar studenten en probeert iedereen met een oprechte interesse in haar vakgebied de best mogelijke kansen te bieden om die interesse uit te diepen. Ik kan alleen maar bewonderen hoe zij ogenschijnlijk onvermoeibaar hulp biedt aan haar vele bachelor-, master- en doctoraatsstudenten. Haar scherpzinnige aanmerkingen, haar enthousiasme, haar efficiëntie, haar nooit aflatende hulp bij het nalezen en haar steun voor mij en iedereen, ook buiten 'academia', kunnen alleen maar ontzag opwekken. Ik geniet het voorrecht haar eerste doctoraatsstudente te zijn en ben daar heel trots op. Zonder haar zou deze dissertatie niet voor u liggen. Ik wens elke doctoraatsstudent een promotor zoals Anne toe.

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²In het Hoogduits is het gebruik van een uitgedrukt resumptiefpronomen mogelijk in relatiefzinnen met een antecedent in de derde persoon. In het Middelnederduits zijn zulke voorbeelden niet geattesteerd. Voor meer informatie over dit onderwerp verwijs ik de lezer graag naar hoofdstuk 4.

³See figure 5.1.

say that that interesting researcher speaking at yet another conference about historical linguistics happened to be in my supervising committee. (For introverts like myself, it was also an excellent conversation topic to avoid awkward silences at conferences). I am also grateful to Sarah Ihden, Katharina Dreessen and Fabian Barteld of the ReN project team in Hamburg, whom I could always contact for help and insightful thoughts about Middle Low German peculiarities. Special thanks for the helpful remarks and comments on the dissertation also go to the members of the examining committee.

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Melissa Farasyn
Gent, mei 2018

⁴Filibert is mijn kat.

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List of Abbreviations

:	colon
1	first person
2	second person
3	third person
φ -feature	person/gender/number feature
ACC	accusative
Add	addressee
An	anaphor
ASnA	<i>Atlas spätmittelalterlicher Schreibsprachen des niederdeutschen Altlandes und angrenzender Gebiete</i>
ASP	aspect
AUX	auxiliar
C	complementizer
CFW	central factor weight
CHA	copula head agreement
CHLG	<i>Corpus of Historical Low German</i>
CRPA	copula relative pronoun agreement
DAT	dative
DEIC	deictic
DET	determiner

DM	Distributed Morphology
EMPH	emphatic
EPH	Eastphalian
EPP	Extended Projection Principle
f	feminine
FUT	futurum
g:	gender
GEN	genitive
HA	head agreement
I	inflection
IMP	imperative
IND	indicative
INF	infinitive
irr	irregular verb
ITJ	interjection
LEX	lexical
LB	Lübeck
LF	logical form
m	masculine
MHA	modals, have and auxiliars
n:	number
n	neuter
N	noun
NEG	negation
NLS	North Low Saxon
NOM	nominative
NUM	number
OBJ	object
ONW	<i>Oudnederlands Woordenboek</i>
Op	operator
p:	person
P	phrase
prpr	preterite-present

PAST	preterite
PERS	person
PL	plural
PRT	particle
Prt	participant
REDUP	reduplication
REFL	reflexive
REL	relative pronoun
RELPART	relative particle
ReN	<i>Referenzkorpus Mittelniederdeutsch / Niederrheinisch</i>
ResP	resumptive pronoun
ResPA	resumptive pronoun agreement
RP	relative pronoun
RPA	relative pronoun agreement
S	Subject
SG	singular
st	strong verb
sw	weak verb
SUBJ	subjunctive
SVO	subject/verb/object
T	tense
TRANS	transitive
<i>u</i>	uninterpretable
V1	verb-initial
V2	verb second
VFIN	finite verb
VI	vocabulary item
WP	Wackernagel position
WPH	Westphalian
YCOE	<i>York-Toronto-Helsinki Parsed Corpus of Old English Prose</i>

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Summary in English

In this dissertation I study the syntax of Middle Low German, a group of dialects that were spoken and written in the north of Germany from the first half of the 13th century until about 1600. I will focus on three syntactic phenomena related to subject agreement. The discussion of each of these phenomena forms one of the chapters in the dissertation and can largely be read as an independent whole, although the findings of one chapter are often also important for the argumentation in the other chapters. Each phenomenon is approached both from a descriptive and from a theoretical (generative), a historical and a comparative perspective. The research results are based on data from a corpus consisting of 23 Middle Low German texts which is composed so as to be as balanced as possible. It contains texts from different periods, genres and writing languages. The dissertation is introduced by a first chapter in which I place Middle Low German in its historical context and introduce some syntactic aspects of it that will be important in the rest of the thesis. In a second chapter I present the corpus that I have studied and the way in which I have encoded the data. In the subsequent chapters the syntactic phenomena in question are discussed.

In Middle Low German it is in some cases possible to leave the subject pronoun in a finite clause unexpressed. In chapter 3 I examine the properties of such so-called referential null subjects in Middle Low German, among other things by looking at whether they occur typically in main clauses or in subordinate clauses, in a certain person or at a specific place in the syntactic structure. I show that Middle Low German on the one

hand retains characteristics of its ancestor, Old Saxon, such as the preference for leaving out subject pronouns in the main clause. On the other hand, Middle Low German is also innovative, as referential null subjects are no longer limited to the third person. Due to these characteristics, the behaviour of Middle Low German null subjects resembles the behaviour of referential null subjects in closely related languages that were spoken partly in the same period, such as Middle Norwegian and Early New High German. A special property of null subjects in Middle Low German is that they often occur in finite clauses which are linked to each other with *vmde* 'and', but in which the location of the null subject is not parallel to that of the subject in the first finite clause. In addition, the referent of the unexpressed pronoun does not necessarily have to c-command the covert pronoun. The link is not necessarily syntactic, but can also be made semantically on the basis of the previous discourse. The referential null subject can occupy two different positions in the syntactic structure, as is also the case for overt subject pronouns in Middle Low German. The majority of the unexpressed pronouns are located in SpecCP, the position in which topics occur. I argue that pronouns can have different sizes, and analyze the pronouns in SpecCP as full DPs that can remain phonetically unexpressed since they carry a [*uD*] feature. Agreement is made possible by a topic operator in the left periphery of the clauses with probes for such an uninterpretable feature. Furthermore, approximately one third of the referential null subjects occur in the Wackernagel position, the syntactic position hosting clitic pronouns. I analyse these therefore as clitic null pronouns without a D-layer, which attach to the verb to restore this layer. Because of the prevalence of referential null subjects in the topic position, which increase in frequency through time, I assume that Middle Low German is in transition towards a topic V2 language of the modern Germanic type.

In chapter 4 I elaborate on non-restrictive relative clauses with a head in the first or second person. I show that there are two patterns to construct a relative clause of that type in Middle Low German. In both cases, the finite verb agrees in person and number with an element in the first or second person, in one case with the head of the relative clause, in the other with a resumptive pronoun in the relative clause. Both types are introduced by a relative element *de*. On the basis of an in-depth study of the place and the properties of *de* and the elements which it can be combined with at the beginning of the relative clause, I argue that *de* is a relative pronoun which is underspecified for gender, person and number. Because the element is underspecified, it

can connect all the elements in the agreement chain via two types of agreement: Checking and Matching. To create agreement between the head with first or second person properties and the finite verb, it is, however, necessary that there is always a resumptive pronoun in the structure of the relative clause, either overt or covert. Consequently, I assume that there is a resumptive pronoun in the syntactic structure in both types of relative clauses, even if it is not expressed. The assumption of such a system is supported by historical evidence, as all the older Germanic languages contain elements bearing first or second person features in the left periphery or at the beginning of the middle field. Moreover, in all of these languages, the verb agrees with the head of the clause in person and number. I therefore conclude that agreement with the relative pronoun, of the kind possible today in New High German, is a newer phenomenon.

The verbal paradigm of Middle Low German is characterized by the *Einheitsplural*: all verbs that agree with a subject in the plural have the same verbal ending, viz. *-en* or *-et*. In chapter 5, however, I describe the occurrence of another verbal ending in the plural. When a subject pronoun in the first or the second person immediately follows the verb in the plural, the last consonant of the usual verbal ending that represents agreement with the pronoun is not spelled out. I show based on quantitative data and using statistical analysis that this position-dependent agreement is attested very robustly in Middle Low German. Furthermore, I investigate, on the basis of the few exceptions found in the corpus, whether this alternative ending arose in a particular environment, from which it subsequently spread. I give a comparative overview of the phenomenon in West Germanic and note that the position-dependent spell-out is possibly a phenomenon that arose before the Ingvæonic languages separated from each other. Both Old English and Old Frisian have a position-dependent spell-out with almost identical characteristics and exceptions. I show with examples that the phenomenon has been preserved in the more recent Low German (Saxon) dialects and that certain dialects have even developed two different endings in inversion that indicate the difference between the first and the second person. In these dialects there are three different endings in the plural in inversion and only one in other contexts. I conclude that neither purely phonological nor purely syntactic analyses can provide an explanation for the data, but that a combination of both can. I propose a possible parallel with Old English in which the phenomenon possibly, as it seems on the basis of frequencies in corpus data, arose due to the proximity of the verbal ending in the second person plural and the initial velar of the pronoun

in the present. Deletion of the final consonant is possible only when the verb and the personal pronoun are part of the same phonological phrase, which is not possible in non-inversion contexts, since the boundaries of phonological and syntactic phrases align with each other. The phenomenon spreads to other tenses and persons, but because of the Germanic consonant cluster *-nð* that was retained for a long time in Low German, it is not implemented in the third person. In this way, position-dependent agreement becomes a systematic change indicating the difference between a speech-act participant marker and a genuine third person marker. The speech-act participant markers for participant and addressee (i.e. the relevant markers for first or second person) can either be spelled out as one ending in both persons, as is the case in Middle Low German, or as two different endings (one for participant and one for participant + addressee), as is the case in the more recent Saxon dialects. Furthermore, I propose that there is a person cycle taking place in the Ingvæonic languages, starting from a differentiated plural in the Indo-European languages, which evolves over a period of *Einheitsplural* into a differentiated plural again.

Samenvatting in het Nederlands

In dit proefschrift bestudeer ik de syntaxis van het Middelnederduits, een groep dialecten die gesproken en geschreven werden in het noorden van Duitsland van de eerste helft van de 13^{de} eeuw tot rond 1600. Ik ga in op drie syntactische fenomenen die verband houden met subjectcongruentie. De bespreking van elk van deze fenomenen vormt één van de hoofdstukken in het proefschrift en kan grotendeels als een zelfstandig geheel gelezen worden, hoewel de bevindingen van het ene hoofdstuk vaak ook van belang zijn voor de argumentatie in de andere hoofdstukken. Elk fenomeen wordt zowel vanuit een descriptief als vanuit een (generatief) theoretisch, een historisch en een comparatief perspectief benaderd. De onderzoeksresultaten zijn gebaseerd op data uit een corpus van 23 Middelnederduitse teksten dat zo gebalanceerd mogelijk samengesteld is. Het bevat teksten uit verschillende periodes, genres en schrijftalen. Het proefschrift wordt ingeleid door een eerste hoofdstuk waarin ik het Middelnederduits in een historische context plaats en enkele syntactische aspecten ervan voorstel die belangrijk zullen zijn in de rest van het proefschrift. Vervolgens presenteer ik in een tweede hoofdstuk het bestudeerde corpus en de manier waarop ik de data gecodeerd heb. In de daaropvolgende hoofdstukken komen de syntactische fenomenen in kwestie aan bod.

In het Middelnederduits is het in sommige gevallen mogelijk om het subjectpronomen in een finiete zin onuitgedrukt te laten. In hoofdstuk 3 ga ik na wat de eigenschappen van zulke elementen, die ‘referentiële nulsubjecten’ genoemd worden, in het Middelnederduits zijn, onder andere door te kijken of ze typisch in hoofd- of in bijzinnen,

in een bepaalde persoon of op een bepaalde plaats in de zin voorkomen. Ik toon aan dat het Middelnederduits aan de ene kant kenmerken van zijn voorouder, het Oudsaksisch, behoudt, zoals de voorkeur om subjectspronomen in de hoofdzin te laten ontbreken. Aan de andere kant is het Middelnederduits ook vernieuwend, aangezien nulpronomen niet langer tot de derde persoon beperkt zijn. Het gedrag van Middelnederlandse referentiële nulsubjecten lijkt dankzij deze eigenschappen sterk op dat van nulsubjecten in nauw verwante talen die deels in dezelfde periode gesproken werden, zoals het Middelnederduits en het Vroegnieuwhoogduits. Een bijzondere eigenschap van nulpronomen in het Middelnederduits is dat ze vaak voorkomen in finiete zinnen die met *vnde* 'en' aan elkaar gekoppeld zijn, maar waar de plaats van het nulsubject niet parallel is aan die van het subject in de eerste finiete zin. Daarnaast hoeft de referent van het onuitgedrukte pronomen niet noodzakelijk een c-command-relatie met het pronomen te hebben. De link is dus niet noodzakelijk syntactisch, maar kan ook semantisch gelegd worden op basis van het voorgaande discours. Net zoals een uitgedrukt subjectspronomen twee plaatsen in de syntactische structuur van het Middelnederduits kan innemen, is dat ook voor het referentiële nulsubject het geval. Het merendeel van de onuitgedrukte pronomen bevindt zich in SpecCP, de positie waarin zinstopics voorkomen. Ik veronderstel dat pronomen verschillende groottes kunnen hebben en analyseer de pronomen in SpecCP als volle DP's die fonetisch onuitgedrukt kunnen blijven aangezien ze een $[uD]$ -feature dragen. Congruentie ontstaat doordat een topicoperator in de linkse periferie van de zin zoekt naar materiaal met zo'n oninterpreteerbaar feature. Ongeveer één derde van de nulpronomen komt verder voor in de Wackernagelpositie, de plaats waar ook clitische pronomen voorkomen. Ik analyseer die elementen daarom als clitische nulpronomen zonder D-laag, die zich aan het werkwoord hechten om deze laag te herstellen. Vanwege het belang van de nulpronomen in de topicpositie, die door de tijden heen steeds meer voorkomen, neem ik aan dat het Middelnederduits zich in een overgangsstadium bevindt richting een topic V2-taal, waartoe de meeste moderne Germaanse talen behoren.

In hoofdstuk 4 ga ik nader in op appositieve relatiefzinnen met een hoofd in de eerste of tweede persoon. Ik toon aan dat er in het Middelnederduits twee patronen voorkomen om een relatiefzin van dat type op te bouwen. In beide gevallen congrueert het finiete werkwoord in de relatiefzin in persoon en getal met een element in de eerste of tweede persoon; in het ene geval is dat met het hoofd van de relatiefzin, in het andere met een resumptief voornaamwoord in de relatiefzin. Beide types worden in-

geleid door een relatief element *de*. Aan de hand van een diepgaande studie naar de plaats en de eigenschappen van *de* en naar de elementen waarmee het element aan het begin van de relatiefzin gecombineerd kan worden, argumenteer ik dat *de* een betrekkelijk voornaamwoord is dat ondergespecificeerd is voor genus, persoon en getal. Doordat het element ondergespecificeerd is, kan het alle elementen in de congruentieketting met elkaar verbinden via twee congruentietypes: Checking en Matching. Om de eerste- en tweedepersoonseigenschappen van het hoofd te laten congrueren met het werkwoord is het echter nodig dat er altijd een resumptief voornaamwoord in de structuur van de relatiefzin aanwezig is, hetzij zichtbaar, hetzij onzichtbaar. Ik neem dus aan dat er in beide types van relatiefzinnen een resumptief voornaamwoord aanwezig is in de syntactische structuur, ook al wordt het niet uitgedrukt. De aanname van zo'n systeem wordt ondersteund door historisch gelijkaardige voorbeelden, waarin zich in alle oudere Germaanse talen elementen met eerste- of tweedepersoonskenmerken in de linkse periferie of aan het begin van het middenveld bevinden. Bovendien congrueert het werkwoord in al deze talen steeds met het hoofd van de zin in persoon en getal. Daarom beschouw ik congruentie met het betrekkelijk voornaamwoord, zoals dat vandaag de dag in het Hoogduits mogelijk is, als een nieuwer fenomeen.

Het Middelnederduits wordt in het werkwoordsparadigma gekenmerkt door het *Einheitsplural*: alle werkwoorden die congrueren met een subject in het meervoud hebben dezelfde werkwoordsuitgang, *-en* of *-et*. In hoofdstuk 5 beschrijf ik dat er tevens een andere mogelijke werkwoordsuitgang is in het meervoud. Wanneer een subjectspronomen in de eerste of tweede persoon meervoud onmiddellijk op het werkwoord volgt, wordt de laatste consonant van de gebruikelijke werkwoordsuitgang, die de congruentie met het pronomen weergeeft, niet uitgespeld. Ik toon aan de hand van kwantitatieve data en tests aan dat deze positieafhankelijke congruentie heel sterk doorgedrongen is in het Middelnederduits. Verder ga ik aan de hand van de weinige uitzonderingen die er zijn na of deze uitspelling in een bepaalde omgeving ontstaan is en zich verspreid heeft. Ik geef een comparatief overzicht van het fenomeen in het Westgermaans en stel vast dat de positieafhankelijke uitspelling mogelijk is een Invæoons fenomeen is dat ontstaan is voor de Saksische talen zich van elkaar afgescheiden hebben. Zowel het Oudengels als het Oudfries hebben een positieafhankelijke uitspelling met vrijwel identieke kenmerken en uitzonderingen. Ik toon met voorbeelden aan dat het fenomeen in de nieuwere Nederduitse (Saksische) dialecten behouden bleef en dat er zich in bepaalde dialecten zelfs twee

verschillende uitgangen in inversiecontext hebben ontwikkeld die het verschil tussen de eerste en de tweede persoon in inversie aangeven. In deze dialecten zijn er drie uitgangen in het meervoud in inversie en slechts één in andere contexten. Ik stel vast dat noch puur fonologische, noch puur syntactische analyses een verklaring voor de data kunnen bieden, maar dat een combinatie van beide dat wel kan. Ik stel een mogelijke parallel met het Oudengels voor waarin het fenomeen op basis van frequenties in corpusdata mogelijks ontstond door de nabijheid van de werkwoordsuitgang in de tweede persoon meervoud en de initiële velaar van het pronomen in de tegenwoordige tijd. Het wegvallen van de consonant kan enkel wanneer het werkwoord en het pronomen deel uitmaken van dezelfde fonologische zin, wat in de rechte volgorde niet mogelijk is aangezien grenzen van fonologische en syntactische zinnen met elkaar overeenstemmen. Via analogische expansie komt het fenomeen ook in andere werkwoordstijden en in andere personen terecht, maar het wordt vanwege de oorspronkelijk Germaanse langere consonantcluster *-nð*, die in het Nederduits lang behouden bleef, niet doorgevoerd in de derde persoon. Op die manier krijgt positieafhankelijke uitspelling een systematisch karakter dat het verschil tussen een spreker/toehoorder en een gewone derde persoonsmarkeerder aangeeft. De marker voor spreker/toehoorder (die overeenkomt met eerste tegenover tweede persoon) kan als één uitgang in beide personen uitgespeld worden, zoals in het Middelnederduits, maar ook als twee verschillende uitgangen (één voor spreker en één voor toehoorder), zoals in de nieuwere Saksische dialecten. Ik stel verder voor dat er in de Ingvæoonse talen en de talen die eruit evolueerden een persoonscongruentiecyclus aan de gang is, waarbij een gedifferentieerd meervoud in het Indo-Europees, over een *Einheitsplural* in o.a. het Oudsaksisch opnieuw naar een gedifferentieerd meervoud evolueert.

1

Introduction

1.1 Introduction

In the preface to her Middle Low German grammar, Lasch (1914) describes why it is difficult to give an overview of Middle Low German grammar. Anyone who wants to write a Middle Low German grammar has to start from scratch for the description of many phenomena, whereas a grammar is usually based on existing studies and insights into the language. This is however not possible for Middle Low German as the research into the language is minimal, certainly in comparison to what is known about Middle High German:

Für das hochdeutsche stehen zahlreiche monographien zur verfügung, in denen einzelfragen ausreichend erörtert sind: eine mittelhochdeutsche grammatik kann daher in vielen punkten zusammenfassendes und abschliessendes bringen; eine mittelniederdeutsche grammatik hingegen muss vielfach erst einen anfang bieten.¹ (Lasch, 1914: V)

What catches the eye even more is that information about Middle Low German syntax in particular is not present at all in her grammar, which is exactly the same situation as in the earlier Middle Low German grammar written by Lübben (1882). More than half a century after Lasch (1914), Peters (1973) states more or less the same as she did.

¹For High German, numerous monographs in which individual questions are adequately described are available: a Middle High German grammar can therefore provide a summary and conclusive content in many respects, whereas a Middle Low German grammar can often only provide a starting point.

The full paragraph about syntax in his article consists of only three sentences, which state that it is impossible to give an overview of Middle Low German syntax because it is still under-researched. He argues that more insights into the syntax of Middle Low German are thus urgently needed. However, even in the year 2000, Stellmacher writes that the syntax can be described based on studies of only a few individual aspects of the language. About the same is written even later in the small grammar of Middle Low German by Dietl (2002). She further argues that the syntax of Middle Low German is very close to the well-researched syntax of Early New High German. Therefore, there should not be many problems when translating Middle Low German texts.

Exactly the fact that Dietl (2002) and Lasch (1914) compare what has been written about Middle Low German to what has been written about historical stages of High German is a reflection of a factor that has in all probability played a large role in the under-researched status of Middle Low German. Many researchers believe that Middle Low German is just a little sibling of its counterparts which developed into standardized languages, and that its syntax probably does not really deviate from the High German and Dutch neighbouring languages. This has in all probability caused a lack of interest in conducting research on Middle Low German syntax. Saltveit (1970: 289) for instance writes:

Mit einem gewissen Recht stellt man sich überhaupt die Frage, in welchem Maße die Begriffe “Hochdeutsch” und “Niederdeutsch” bei der Erforschung der deutschen Sprache auf den einzelnen Ebenen ihre Berechtigung haben. Es scheint z.B. von vornherein fraglich, ob es eine Syntax gibt, die sich durch eine nach dem Grad der Durchführung gewisser Lautvorgänge gezo-gene Linie abgrenzen läßt. Bei der Erforschung grammatischer Eigenheiten wäre es vielleicht ergiebiger, in höherem Maße als bisher mit der Möglichkeit zu rechnen, daß die Grenzen grammatischer Erscheinungen anders als die der lautlichen verlaufen.²

Similarly and quite recently, referring to this passage, Rösler (1997: 235) writes:

²With a certain right, we ask ourselves the question in which measure the terms High German and Low German have their authority on the individual levels. It seems for instance questionable from the outset, whether there is a syntax which delimits itself by the degree of the execution of certain sound processes. In researching grammatical peculiarities, it might be more profitable to expect the borders of grammatical phenomena to differ from those of the phonetic ones.

Regional ausgerichtete Begriffe wie *hd.* [Hochdeutsch] und *nd.* [Niederdeutsch] scheinen für den Bereich der Syntax keine Berechtigung zu haben. Von einer spezifischen *mnd.* literatursprachlichen Syntax, die sich von zeitgenössischen *hd.* agenzen ließe, kann nicht ausgegangen werden.³

The title of this dissertation is a nod to these considerations: Does Middle Low German syntax really behave like the syntax of its neighbours which later developed into standardized languages, or does it in some way or another ‘stand out’ from those, as in having its very own syntactic properties, different from the ones in other languages? I will elaborate on this question and on how it will be addressed in this dissertation in section 1.4.

The earliest work dedicated to the syntax of Middle Low German was published by Nissen (1884). The situation of Middle Low German syntactic research has slowly been changing since the end of the 20th century. A (very) short overview of some Middle Low German syntactic properties by Härd was published in 1998. In-depth studies on specific syntactic aspects have become more frequent, they include topics such as negation (Breitbarth, 2013, 2014a,b; Breitbarth and Jäger, 2018), adverbs (Mähl, 2004), the verbal complex (Dreessen and Ihden, 2015; Mähl, 2012, 2014), multiple XP-fronting (Donhauser and Petrova, 2009; Petrova, 2012a,b), subclauses with conditional semantics (Tophinke, 2012; Tophinke and Wallmeier, 2011; Wallmeier, 2012), adverbial clauses (Wallmeier, 2015), word order (Petrova, 2013), null subjects (Farasyn and Breitbarth, 2016), the attributive genitive (Solling, 2016) and relative clauses (Farasyn, 2017).

Although I almost obligatorily started this dissertation in the tradition of introductions regretting the absence of a complete overview of Middle Low German grammar and/or syntax, I want to start it with a positive note as well. The future of Middle Low German syntactic research in fact looks brighter than ever. One of the factors that have been complicating large-scale in-depth syntactic research so far is that no syntactically annotated corpora were available until recently. Large efforts have however been made to make such corpora available in the near future. The Referenzkorpus Mittelniederdeutsch / Niederrheinisch (ReN) has recently started to publish Middle Low German texts with

³Regional terms such as High German and Low German seem to have no authorization for the area of syntax. One cannot assume a specific Middle Low German literary syntax, which delimits itself from a contemporaneous High German one.

linguistic markup online. The corpus makes it possible to search for tokens based on part-of-speech (POS) tags and morphological tags. Furthermore, the Corpus of Historical Low German (CHLG) (2014-2020), to whose project team I belong, will be the first electronically searchable corpus of Middle Low German that offers a syntactic annotation layer compatible with existing query software, facilitating the targeting of specific search requests in large amounts of Middle Low German data. This corpus will make it possible to search for complex syntactic structures. I will expand on the ReN and the CHLG and their use for this dissertation in chapter 2.

1.2 Middle Low German

Middle Low German is the name of a group of related continental West Germanic dialects. The original German term *Mittelniederdeutsch* was first used by Grimm (1822). The name consists of three components, being a temporal one (*Mittel* ‘middle’), a spatial one (*nieder* ‘low’) and a linguistic one (*Deutsch* ‘German’). The first two components will be discussed in depth in the next section(s) (Peters, 1973: 66). The latter component, *Deutsch* ‘German’, has had many different meanings over time, especially since it was used by Grimm (1840), but basically refers to the vernacular, compared to Latin. This becomes clear from the name, which derives from Old High German *diutisc*, cognate with Old Saxon *thiudisc*, which is derived from Germanic *þeudo* ‘people’, the adjective *deutsch* thus meaning ‘belonging to the people’ (Kluge and Seebold, 2011; Peters, 2017).

Temporally, the Middle Low German period follows the period in which Old Saxon was written (and spoken).⁴ Written attestations of Old Saxon arose from about 800 onwards and are attested until the 11th century. They arose due to the requirement of texts in the vulgar tongue as a consequence of religious missions. Middle Low German, in turn, has written attestations from the first half of the 13th century until about 1600 (Sanders, 1973: 33). This means that there is an attestation gap between this writing period and the one in which Old Saxon was written (Peters, 1973: 67). Texts written during this attestation gap are almost exclusively written in Latin, the main scribal language since about 800 (Peters, 1973, 1998b). A consequence

⁴Old Saxon is also called Old Low German, but henceforth I will only use the term Old Saxon to avoid confusion.

of the gap is that it makes it impossible to provide hard evidence in favor of either continuity or change between Old Saxon and Middle Low German. Furthermore, many researchers believe that the Old Saxon written documents are not representative for the real predecessor language of Middle Low German, as most text(s) (fragments) are mixed in terms of interfering High German, Old Frisian and Old Franconian language properties (see for instance Klein, 1990; Krogh, 1996; Rauch, 1970 and Scheuermann, 1985: 1286). The spoken language in the period following the Middle Low German period is called *Neuniederdeutsch* ('New Low German', sometimes also referred to as *Plattdeutsch*). The component 'Middle' in the name Middle Low German is thus temporal and refers to the language as the middle of these three main periods in Low German (Peters, 1973: 66).

Middle Low German was never fully standardized, though there was leveling of regional features to a certain extent, i.e. some regional features were reduced or attrited (Trudgill, 1986). The Middle Low German period itself can be subdivided into three periods (Peters, 2017). The early period, from 1250 until 1370, is characterized by the presence of many different scribal languages without any interregional leveling. The second period, ranging from 1370 until 1520, is called the classic period. It can be situated during the heyday of the Hanseatic League (Sanders, 1983). In the 14th century, scribal languages/writing languages emerged. They incorporated features of the surrounding dialects or adapted to influential chanceries such as the standards of the writing centres in Münster and Lübeck (Peters, 2012a,b). These interregional standards made it possible for Middle Low German to serve as an international trading language (Peters, 1973, 2003). During the third/late period, Middle Low German lost its role of the main written language in the area and was gradually superseded and replaced by Early New High German between 1550 and 1600 (Stellmacher, 2000: 69-90). Low German has however survived until today in the spoken dialects.

From a spatial perspective, Middle Low German used to be spoken in about 40% of the whole German speaking language area at the time of its greatest expansion (Peters, 2017: 2). The scope of the Middle Low German dialects was however not limited to the area in which German is spoken nowadays. From the middle of the 12th onwards until the 14th century, many farmers speaking a Middle Low German (or Dutch) dialect migrated to the East, settling in the Balto-Slavic area east of the rivers Elbe and Saale (Peters, 1973: 67). This movement is called the *Ostsiedlung* 'East

settling'. This newly originated Middle Low German language area, which started as a collection of language islands in the Slavic language area which later formed a more solid area, is called the *Neuland* 'New Land'. In a large part of that area, German is still spoken nowadays. The original area in which Middle Low German (and before that Old Saxon) was spoken is called the *Altland* 'Old Land'. Middle Low German was furthermore used in the Scandinavian area during the time of the Hanseatic League by aristocratic settlers (Peters, 1973: 67). This language contact had a great influence on the South Jutlandic dialects, Norwegian and Swedish (Braunmüller, 1996, 2004; Braunmüller and Diercks, 1993; Diercks and Braunmüller, 1993; Nesse, 2002, 2003, 2017; Norde, 1997; Zeevaert, 1992, 1995, 2009, 2012). The language further expanded in the Northwest at the expense of East Frisian (Peters, 1973: 69).

It is difficult to demarcate Middle Low German in the West from the Middle Dutch language area, as the language is part of the continental West Germanic dialect continuum (Chambers and Trudgill, 1998), with the language being enclosed between the Dutch dialect area in the West and the High German dialect area in the Southeast. Certainly in the West, from the Rhine valley onwards, the isoglosses dividing up the dialects form a fan, called the Rhenish fan, which causes the borders between the Dutch and the Low German dialects not to be abrupt, but rather subtle (Peters, 2003). In the Southeast, the Middle Low German dialects have traditionally been separated from the Early New High German ones by a more marked isogloss bundle of the stops *p, *t, *k, which became fricatives and affricates in High German, but not in Low German, i.e. by the lack of the second/High German sound shift in Middle Low German (Chambers and Trudgill, 1998). 'Low' in the name Middle Low German refers to the areal component related to this, as it refers to the 'Low German' areas in the German language area which did not take part in this sound change (Peters, 1973: 66).

Summarizing, the Middle Low German dialects are thus geographically bounded by the Slavic languages in the East, the Baltic ones in the North, the Dutch dialects in the West and the High German dialects in the Southeast.

1.2.1 Attestation

After the period in which Latin was the main writing language (i.e. during the Low German attestation gap), the situation gradually shifted from the first half of the 13th

century onwards. Peters (1998b) explains how written documents became far more important in the Middle Low German language area from the 13th century onwards. Administration, jurisdiction and trade required written texts and thus alphabetization. Merchants, craftsman and lower nobility, who did not necessarily have knowledge of Latin, started to produce texts in the vulgar tongue. The change progressed gradually by genre and first affected domains for which no High German writing tradition was available. Jellinghaus (1925: 4) describes how the very first texts to be produced in Middle Low German appeared in the East of the language area in the 13th century. They were chronicles and city rights: the *Gandersheimer Reimchronik* (1216), the *Sachsenspiegel* (1237) and the *Sächsische Weltchronik* (ca. 1225). Charters, laws and other prose texts followed in the 14th century, not much later also followed by letters, religious texts and more chronicles (Peters, 1973). Many of these texts have been preserved. A complete overview of the known Middle Low German texts and where they are archived is given in the *Atlas spätmittelalterlicher Schreibsprachen des niederdeutschen Altlandes und angrenzender Gebiete* (ASnA), a historic atlas of scribal languages which recently appeared and which gathers information about language variation in the scribal languages of the *Altland* and neighbouring areas such as Lübeck (Peters, 2017).

1.2.2 Variation in Middle Low German

There are many types of language variation. Language varies, among other reasons, depending on the place where it is spoken and on the situations in which it is used. Furthermore, language evolves and changes over time.

For Middle Low German, this means in the first place that there is geographical variation. The language has traditionally been divided up into four main scribal languages: Westphalian, Eastphalian, North Low Saxon and Brandenburgish-Anhaltinian (Peters, 1973). Important Westphalian centres of text production are, among others, Münster, Paderborn, Dortmund, Bielefeld, Osnabrück and Soest. Eastphalian was spoken in the region between the rivers Weser and Elbe and can be divided up into two parts. There is the *Altland* with cities like Hannover, Göttingen and Hildesheim and the later colonised *Neuland* with a.o. Magdeburg and Halle. The latter is also called South Brandenburgish-East Anhaltian and is often seen as a separate scribal language. This later colonised area was characterized by the many Middle Dutch speaking settlers from Brabant and Antwerp and the Middle Low German speaking (mainly) Eastphalian

settlers. The fourth main dialect, adjacent to the North Sea and the Baltic Sea, is called North Low German. It can also be divided up into the *Altland*, containing among others Bremen, Hamburg, Lüneburg and Oldenburg, and the newly colonized Eastelbian *Neuland*, with as its most important writing centre Lübeck. The latter is sometimes treated as a scribal language of its own. Figure 1.1 illustrates the Middle Low German dialect area. I refer the reader to the introduction of ASnA for a more fine-grained overview of all the important centres of text production in each area (Peters, 2017). This traditional division between the Middle Low German dialects is mainly based on



Figure 1.1: Overview of the Middle Low German dialects, from Sanders (1982).

the comparison of more modern Low German dialects compared to the Middle Low German texts, in which variation is not always so clear because of the interregional level on which the language had to function (Peters, 1973). Due to the fact that the syntax of Middle Low German is still under-researched, these traditional divisions are furthermore mainly based on phonological and morphological properties. Especially the *Neuland* areas are remarkably different from the other Low German areas according to new dialectometrical research based on the Wenker data (Lameli, 2016).

Variation can also be due to the situation in which the language is used. It is for instance very likely that spoken Middle Low German differed in many ways from written Middle Low German (Bischoff, 1981). This is mainly because the scribal languages were subject to more interregional leveling in order to facilitate interregional

correspondence, often following the rules of the most important chanceries in the region (see 1.2). Furthermore, when taking over regional elements from other chanceries, the language often became a mix, not only between spoken and written, but also between older and newer elements from different scribal languages, mixed with elements of the own language (Peters, 1998a). Both the spoken and the written language were used as an interregional trading language during the time of the Hanseatic league by people from the same social classes (Bischoff, 1981). The spoken language, though in all probability more influenced by local language phenomena, has quite certainly been influenced by the scribal language, for instance in the formation of the nominal plural in *-en* (Peters, 1973).

The fact that the plural ending of nouns is influenced by the language written during the time of the Hanseatic league already shows that languages also change through time, i.e. that there is diachronic variation. Though it is, due to the attestation gap, hard to look into the historical development of written Middle Low German and its predecessor Old Saxon, we know that both languages were spoken in the *Altland* area. Saxons and Irminones settled in the northern German area from the 6th century onwards, resulting in a Saxon tribal state and an associated Saxon language community in the 7th and 8th century (Sanders, 1973). The Saxons were part of the Ingvænic language group, which further includes Old Frisian, early Old English and coastal Old Dutch (thus excluding Low Franconian). An ongoing discussion is whether Old Saxon stayed purely Ingvænic or whether it was influenced by Old High German, as for instance the problems of localising the language of *Heliand* and other Old Saxon text(s) (fragments) make clear.

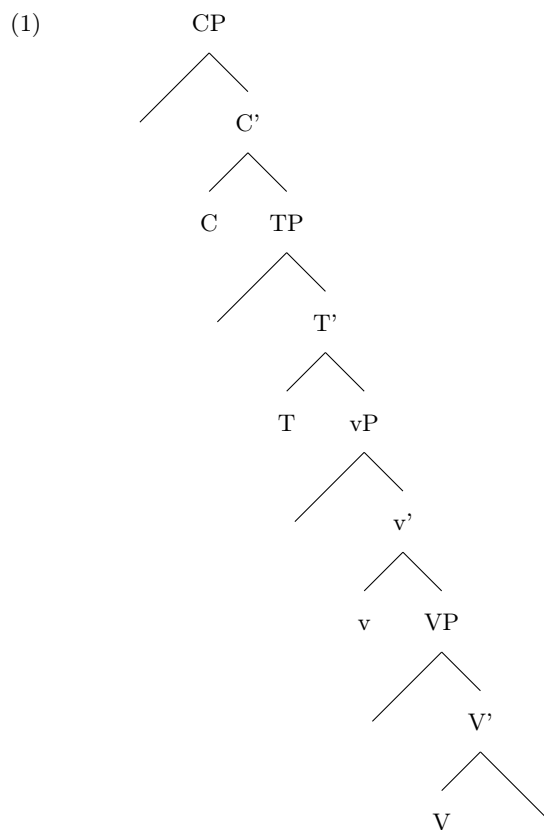
Besides geographic and diachronic variation, variation between text genres can be taken into account as well. One of the text types in which this is very noticeable in the syntax are the numerous charters that were produced from the 14th century onwards. These are, just as in other languages, highly formulaic (Boonen, 2005, 2010; Greule et al., 2012). They are, for instance, always introduced and closed with the same or a similar formula and they are almost always built up in the same way (Greule et al., 2012). Another type of text that offers insights into very different types of structures are religious texts, as they tend to make use of the first and second person more often, e.g. in prayers and lamentations (Farasyn et al., 2018). This can have an influence on a syntactic study.

1.3 Middle Low German syntax

In this section, I introduce the basic clause structure in Middle Low German starting from corpus data and earlier research in 1.3.2, followed by a look at the structure from a theoretical perspective. After that, I will introduce some concepts relating to agreement and features, as they will be important for the topics discussed in this dissertation in 1.3.3. I zoom in on features in verbs and pronouns in more detail in 1.3.4.

1.3.1 Theoretical preliminaries about the clause structure

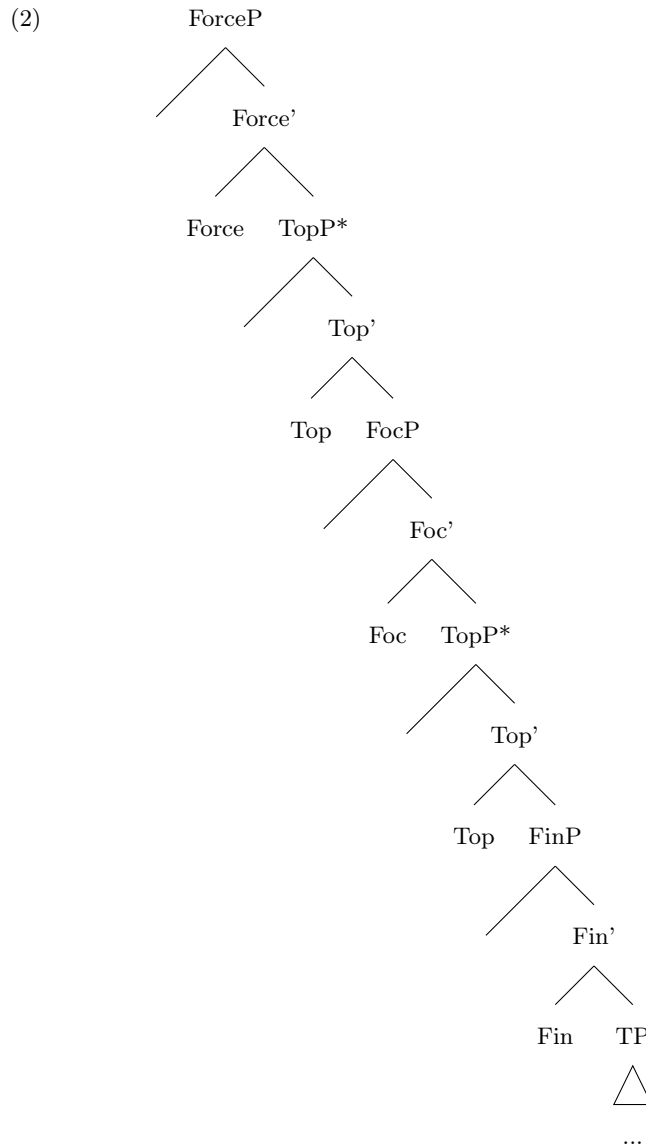
The syntactic framework in which this dissertation is embedded is generative grammar, mainly according to the Minimalist Program, outlined and elaborated in Chomsky (1993, 1995, 2000a,b, 2001, 2004, 2005, 2007, 2008, 2013, 2015). The basic structure of a clause in this theory looks as follows.



This structure consists of three main layers or domains, from bottom to top being the lexical domain, named the Verb Phrase (VP and vP) Layer, the inflectional domain, named the Tense Phrase (TP) Layer and the discourse domain named the Complementizer Phrase (CP) Layer (also often referred to as the left-periphery), all of which have different functions. Very briefly, the VP-Layer hosts information on arguments and event structure. The TP-Layer hosts information about tense, mood, aspect and in some languages on verbal agreement and grammatical case. The CP layer hosts information about mood, finiteness, topicalized and focalized constituents. It relates the clause to the discourse and is headed by the complementizer (C) (Van Gelderen, 2013: 65-68).

It is possible to take a cartographic approach, for instance to the left periphery following Rizzi (1997) (but see for instance also Frascarelli and Hinterhölzl, 2007 and Haegeman, 2012). Taking a cartographic approach is “an attempt to draw maps as precise and detailed as possible” (Cinque and Rizzi, 2008). Rizzi (1997) for instance assumes that the left periphery of the clause consists of a series of hierarchically ordered functional heads, such as a head for clause type (ForceP), informational categories (TopP*, FocP) and FinP which links the left periphery and TP. Topic phrases can undergo recursion if there are multiple topics (Rizzi, 1997: 297).⁵ Frascarelli and Hinterhölzl (2007), however, show with an analysis of topics in Italian and German that topics are not freely recursive. They argue that there are three types of topics which are distinguished phonologically and have different syntactic positions. There are for instance *aboutness topics*, for what the sentence is about (Givón, 1983), *contrastive topics*, for elements inducing alternatives which have no impact on the focus value (Büring, 1999), and *familiar topics*, which link a pronominal form to a given entity (Givón, 1983) (see Frascarelli, 2007). The basic hierarchy of the left periphery proposed by Rizzi (1997) is given in (2).

⁵This is the reason why TopP is marked with an asterisk.



I adopt the proposals of Giorgi and Pianesi (1997) concerning the projection of features such as person, number and gender (see 1.3.3 for more about linguistic features). They propose a *Feature Scattering Principle* which says that the maximum number of nodes in a selected array is given by the number of features in the array. Each feature can head its own projection. A bundle of features can be projected as a single, syncretic

node consisting of multiple features (for instance, a verbal ending), or scattered (Giorgi and Pianesi, 1997: 15). The difference with a cartographic approach is that syncretic bundles of features are possible. When scattered, the *Universal Ordering Constraint* must be respected. This constraint says that the structure of the inventory of features itself is not universal. It can either vary across languages or different structures can arise in one and the same language. However, there is a universal order of checking (Giorgi and Pianesi, 1997: 14). Both principles as formulated by Giorgi and Pianesi (1997) are given in (3).

- (3) a. **Feature Scattering Principle:**
Each feature can head a projection.
- b. **Universal Ordering Constraint:**
Features are ordered so that given $F_1 > F_2$, the checking of F_1 precedes the checking of F_2 .

Based on the proposal of Giorgi and Pianesi (1997), I will therefore assume in the following in a simplified manner that all features that can be assigned to the different heads in (2) can also be represented as feature bundles in C. This is only possible in the absence of evidence for several left-peripheral projections in the topics discussed in this dissertation. In cases of V2 violations, for instance, of which Petrova (2012a) has discussed cases which will be discussed in section 1.3.2, a feature scattering approach over more than one head in the left periphery would be needed.

1.3.2 The basic clause structure in Middle Low German

The basic word order in Middle Low German finite clauses mainly concerns the place of the verb (V), the subject (S) and the object (O). This basic structure differs in Middle Low German between subordinate clauses and main clauses. Petrova (2013) shows that in subordinate clauses, objects (4a) and nominal parts of the predicate (4b) usually precede the selecting main verb. If there are verb prefixes, these prefixes precede the lexical verb. This is for instance the case in (4c), in which the prefix is marked with PRT.

- (4) a. Do got der engele kore vullen wolde

Do got der engele kore vullen wolde
 when God the-Gen angels-Gen chorus complete wished

‘When God wished to complete the chorus of the angels’

(SW 67, 6, Petrova, 2013: 48, ex. 1a)

- b. *de och Asswerus geheten was*

de och Asswerus geheten was
 who-Rel also Asswerus called was

‘who was also named Asswerus’

(SW 77, 29, Petrova, 2013: 48, ex. 1b)

- c. *alse se it opgeleget hadden*

alse se it opgeleget hadden
 as they it PRT-placed had

‘the same way they had placed it before’

(SW 69, 10, Petrova, 2013: 48, ex. 1c)

In declarative main clauses, the verb typically occupies the position right after the first constituent. This means that Middle Low German has a so-called verb-second property (V2), which is typical for the modern Germanic languages excluding English. There are no restrictions on the type and function of the constituent that fills the first position. Petrova (2013) shows multiple examples, among others of a subject (5a), an object (5b) or a prepositional phrase (5c) taking the first position, all marked with square brackets.

- (5) a. [De vrowe] wann se vile lief

De vrowe wann se vile lief
 the-Nom woman won them-Acc.Pl very fond

‘The woman became very fond of them’

(SW 93, 35, Petrova, 2013: 91, ex. 1a)

- b. [Romeren] was dat unwert

Romeren was dat unwert
 Romans-Dat was that insignificant

‘The Romans did not care about that’

(SW 97, 25, Petrova, 2013: 91, ex. 1c)

- c. [To einer burch] quam si do

To einer burch quam si do

to a-Dat town came she then

‘Then, she arrived in a town’

(SW 94, 4, Petrova, 2013: 92, ex. 1e)

Different types of V2 violations are possible though (Petrova, 2012a, 2013). According to Petrova (2013: 118), matrix clauses with more than one constituent preceding the finite verb are for instance found throughout the whole period in which Middle Low German was written, though more frequently in early Middle Low German texts from the 13th and 14th century. Two such examples, in which the constituents preceding the finite verb are marked with square brackets, are given in (6).

- (6) a. [Silvester] [in dat hol] ginc

Silvester in dat hol ginc

silvester into this cavern went

‘Silvester went down into the cavern’

(SW 121, 34, Petrova, 2013: 117, ex. 1a)

- b. [Na sines omes dode] [he] [dat rike] hadde sesse unde viftich jar

Na sines omes dode he dat rike hadde sesse unde viftich

after his uncle-Gen death-Dat he the empire had six and forty

jar

years

‘After his uncle’s death he ruled the empire for 46 years’

(SW 121, 34, Petrova, 2013: 118, ex. 1c)

Petrova (2013: 118) notes that the examples given above are both ambiguous though. In (6a), the structures can be derived by leftward movement of the finite verb to a position lower than the second one, or it is possible that the verb is in situ, representing the basic word order. In (6b), the clause is possibly derived by extraposition of the constituent *sesse unde viftich jar*. Petrova (2013) further remarks in connection with these types of

examples that such structures are also attested in poetic as well as non-poetic Old Saxon texts. Based on the main assumptions from the literature on Middle Low German syntax listed above, I generally assume, following Petrova (2013), that Middle Low German was an asymmetric verb-second language (SVO), with an underlying OV base order visible in subordinate clauses.

The fact that the clause structure in main clauses linearly differs from the one in subordinate clauses combined with the fact that there are differences in where the verb and its complements appear, implies that the subject in Middle Low German can take different positions as well. This is illustrated in example (7). In these subordinate clauses which have an overt subject for instance, it is visible that the subject follows the complementizer (7a) or the relative pronoun (7b).

- (7) a. *des ne schal nicht sin he ne vor wissene dat he pape bliue*

des ne schal nicht sin he ne vor wissene dat he pape bliue

this NEG shall NEG be he NEG for knew that he pope would-stay

‘This will not be the case, unless he knew in advance that he would stay pope’

(Goslarer Kramerrecht)

- b. *Vnde alle de eere vnde werdicheit de sine moder gehath hadde wart ock deme sone ghegeuen*

Vnde alle de eere vnde werdicheit de sine moder gehath hadde wart

and all the honor and dignity REL his mother had had was

ock deme sone ghegeuen

also the.DAT son given

‘And all the honor and dignity which his mother used to have was also given

to the son’ (Veer koopliede)

The situation is different in the main clause, in which the subject can either precede or follow the finite verb. The former happens when the subject is topicalized, whereas the latter happens when another constituent fills the topic position (see (8a) in which the topic position is filled with an object), in questions with subject-verb inversion and without a *wh*-word (8a) or in asyndetic conditional clauses (8c).

- (8) a. *Dine regtigheit verbarch ic nicht in minen herten*

Dine regtigheit verbarch ic nicht in minen herten
 your justice hide I NEG in my heart

‘I do not hide your justice in my heart’ (Südwestfälische Psalmen)

- b. *Wylle gij na dessem leuende myt vrowden syn*

Wylle gij na dessem leuende myt vrowden syn
 want you.2PL after this life with joy be

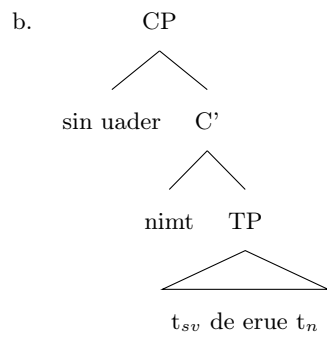
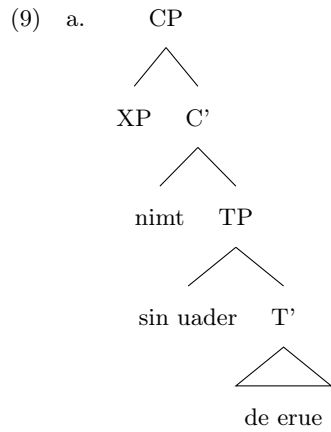
‘Do you want to be joyful after this life?’ (Bordesholmer Marienklage)

- c. *wolde hey nochtan dar na in der stat bliuen wonende so solde nochtan sin erue*
 [...] *deynst don*

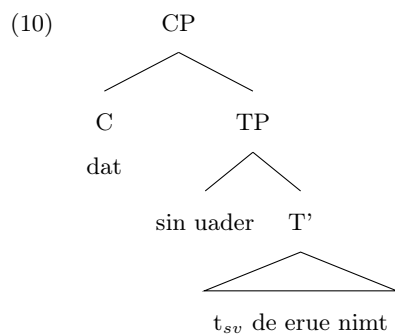
wolde hey nochtan dar na in der stat bliuen wonende so solde
 wanted he nevertheless there after in the city stay living so should
nochtan sin erue deynst don
 nevertheless his heir service do

‘If he would like to stay to live in the city nevertheless, then his heir [...] should serve nevertheless’ (Soester Schrae)

Given the theoretical preliminaries presented above, I make the following theoretical assumptions about the basic clause structure in Middle Low German specifically. I follow the well-established idea that finite clauses are CPs, and that the verb moves to C in V1 (9a) and V2 clauses (9b). The translation of these examples is similar, for (9a), *sin uader nimt de erue* it is for instance: ‘His father takes the inheritance’ (from Oldenburger Sachsenspiegel).



In syndetic subordinate clauses (10), the finite verb appears in a later, over time increasingly sentence-final position (Mähl, 2014). In these clauses, C is occupied by a complementizer, preventing verb movement (Den Besten and Rutten, 1989).



This basic system theoretically provides two linear positions which subjects in MLG can occupy: in the main clause the subject is located in SpecCP, whereas it can take a position following C both in main clauses and subordinate clauses, as it follows immediately after the complementizer or the verb. If the subject following C is a weak pronoun, this last position is traditionally also referred to as the *Wackernagel position* (WP) in Continental West Germanic (Weiß, 1998, 2015). This assumption is based on Wackernagel (1892: 343), who argues that the pronoun in Indo-Germanic languages has the tendency to appear in the second linear position in the clause, or as close to it as possible. The Wackernagel position is thus a descriptive position often used in traditional dialectology. There is however no consensus about whether the Wackernagel position should be seen as a separate projection, as a head adjunction to C or just as a phonological phenomenon. I will therefore only use “Wackernagel position” as a descriptive term for the position in which clitics appear.

Syntactically analyzing the position of subject, verb and other constituents in Middle Low German can however also be hard, as the picture is complicated when there is a verbal complex. Petrova (2012a) argues for instance that Middle Low German has a head-final VP, according to which the basic order in the verbal complex can be seen in (11), as the finite auxiliary follows the non-finite verb in the verbal complex.⁶

(11) Do got der engele kore vullen₂ wolde₁

Do got der engele kore vullen wolde

when God the-GEN angels-GEN chorus complete wished

‘When God wished to complete the chorus of the angels’

(SW 67, 6 Petrova, 2012a: 4, ex. 1)

However, as in multiple other West Germanic languages, verb raising (see Evers, 1975) as well as verb projection raising (see Haegeman and Van Riemsdijk, 1986) happen quite often. The example with verb raising in (12) shows a verbal complex in which the finite verb *hadden* is raised and adjoined to the left of the non-finite main verb *ghewest*.

⁶As it is not relevant for the topics in this thesis, I will not elaborate on possible arguments against a head-final VP in Middle Low German. I refer the reader to the work of Petrova (2012a, 2013) and Mähl (2012) for insightful data and comments in this respect.

- (12) also se tovorne vrolik hadden₁ ghewest₂

also se tovorne vrolik hadden ghewest
 as they before joyful had been

‘as they were joyful before’ (LS 105, 10a Petrova, 2012a: 6, ex. 11a)

Example (13) shows that non-verbal constituents such as the object *hundert efte twe hundert* ‘hundred or two hundred’ can intervene between the finite verb (here *hedden* ‘had’) and the main verb in the verbal complex (here *dotgeslagen* ‘slain dead’).

- (13) dat se in dem uplope nicht hedden₁ hundert efte twe hundert dotgeslagen₂

dat se in dem uplope nicht hedden hundert efte twe hundert
 that they in the-DAT turmoil-DAT not had hundred or two hundred
dotgeslagen
 dead.slain

‘that they had not killed one or two hundred people in this turmoil’

(HB 30 Petrova, 2012a: 6, ex. 11b)

Mähl (2014: 93) also presents examples of subordinate clauses in which the finite verb precedes the non-finite verb, in which other material intervenes between both (14).

- (14) wente dat ik di mit my mach in mynes vaders lant voren

wente dat ik di mit my mach in mynes vaders lant voren
 until that I you with me may in my-GEN father-GEN land lead

‘until I may lead you with me into my father’s land’

(Troye 87,36-88,1, Mähl, 2014: 93)

He calls these cases of *Distanzstellung* ‘distance position’, but they are in fact cases of verb projection raising as well, just like in the examples of Petrova (2012a).

Middle Low German also has cases of apparent verb projection raising (see Pintzuk, 2014, as illustrated in (15), in which a light element such as a pronoun or a monosyllabic adverb (here *wol*) intervenes between the finite auxiliary and the matrix verb (Petrova, 2012a: 13).

- (15) [Do he tome keisere quam], [he] wart wol untfangen

Do he tome keisere quam he wart wol untfangen
 when he to=the-DAT emperor came he became well received

‘When he arrived at this emperor’s place, he was warmly received’

(SW 118, 26 Petrova, 2012a: 14, ex. 30b)

Besides these types of variation in the verbal complex, the finite verb in Middle Low German can sometimes linearly surface in the second position after a subordination. Petrova (2013) analyses these cases as embedded V2 in complement clauses selected by certain bridge verbs such as *seggen* ‘to say’ (16a) or *wetan* ‘to know’ (16b). The extraposition of the constituents is thus pragmatically conditioned, similar to what happens in the modern Scandinavian languages.

- (16) a. Ick hebbe juw [...] ghesecht, dat unse leve here is eyn hovet aller cristenen menschen

Ick hebbe juw ghesecht, dat unse leve here is eyn hovet
 I have you-DAT-2PL told that our dear Lord is only head
aller cristenen menschen
 all-GEN Christian people

‘I told you that out dear Lord is the only head of all Christians’ (JV 9, 25)

- b. Gy scholet weten dat Rodjis is en alto schone land

Gy scholet weten dat Rodjis is en alto schone land
 you should know that Rhodos is a very nice island

‘You ought to know that Rhodos is a very nice island’ (LS 101, 24)

Furthermore, Mähl (2014) argues that Middle Low German has many other cases of extraposition in so-called *Kontaktstellung* ‘contact position’ (17a), in which there is total extraposition of all the constituents (apart from the subject) in the main clause (17a) or in the subordinate clause (17b).

- (17) a. Vnde ik hebbe gegeuen deme huse dines vaders alle dat offer der kindere van Ysrahel.

unde ik hebbe gegeuen deme huse dines vaders alle
 and I have given the-DAT house-DAT your-GEN father-GEN all
dat offer der kindere van Ysrahel
 the oblation the-GEN children-GEN of Israel

‘And I have given to the house of your father all the oblations of the children of Israel.’
 (Lüb.Hist. 3,22f, Mähl, 2014: 83)

- b. Do Paris mit vlite hadde gehort de wort Hectoris, do sprak he also [...]

do Paris mit vlite hadde gehort de wort Hectoris do
 when/where Paris with intention had heard the words of.Hector there
sprak he also
 spoke he so

‘When Paris had heard the words of Hector intentionally, he spoke [...].’
 (Troye 108,7, Mähl, 2014: 92)

These constituents thus linearly follow the verbal complex.

1.3.3 Agreement phenomena in Middle Low German

This dissertation consists of three chapters each dealing with another type of agreement phenomenon in Middle Low German. Agreement is a linguistic phenomenon in which one element is influenced by another element in the clause. The element influencing other elements is sometimes called the controller, whereas the influenced element is the target (Corbett, 2006). One controller can influence multiple targets. Consider the examples in (18). In (18a), *de hogheste richtere* ‘the highest judge’ is the controller, which has an influence on multiple targets, being the verb *is* ‘is’, the predicate *de gogreve* ‘the high count’ and the determiner of the predicate *de*. If the controller were plural, a difference with (18a) would be noticeable. In the made-up plural example (18b) for instance, the subject *de hogheste richtere* is now plural, though it has the same form as the singular. This implies that the verb now has a plural form *sint* ‘are’ and the determiner of the predicate can be present (definite) or absent (indefinite).

- (18) a. De hogheste richtere to Hervorde is de gogreve

de hogheste richtere to Hervorde is de gogreve
 the highest judge in Herford is the high-count

‘The highest judge in Herford is the high count’ (Goslarer Kramerrecht)

- b. *De hogheste richtere to hervorde sint (de) gogreve*

de hogheste richtere to hervorde sint de gogreve
 the highest judges in Herford are the high-counts

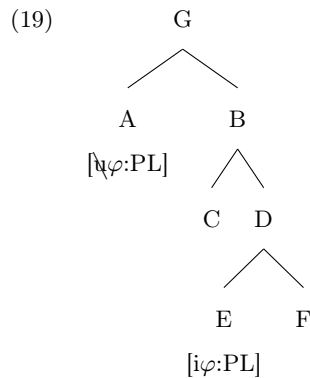
‘The highest judges in Herford are (the) high counts’

The targets thus agree with the controller in certain aspects as the sentence would otherwise be ungrammatical. The question is how these elements can agree with each other: How does the predicate for instance get another form when the subject has a plural meaning, even if the difference is not visible in the morphological form?

I will follow the assumption within Minimalism that each derivation is driven by features, which can be different in nature, i.e. for instance lexical or syntactic (Adger and Svenonius, 2011: 5). Lexical features have an effect on the semantic interpretation of the element bearing them. In chapter 4 for instance, we will see that the animacy feature can play a role for agreement with the relative pronoun, while speech-act participant features will play a role in chapter 5. The syntactic features that are important in this dissertation are mainly person features, number features and gender features. This group of syntactic features is typically referred to as φ -features. Together they form a bundle of features influencing agreement. The difference between the bundle of φ -features in the DP *De hogheste richtere* in example (18a) and the one in (18b) is that the former bears a singular feature, whereas the latter bears a plural feature. Both have in common that they are third person and masculine.

An important difference being made between features is the one between interpretable and uninterpretable features. As the term says itself, interpretable features can be mapped to spell-out (i.e. they can be overtly realized) without any problem. Uninterpretable features however need to be eliminated from the structure through valuation, which can be done via an agreement relation with a constituent bearing an interpretable feature (Chomsky, 2000a, 2001). In example (18b), the subject of the clause bears (at least) the interpretable φ -feature plural, whereas the verb bears an uninterpretable φ -feature. This last feature thus gets valued during the derivation. This is possible because

the uninterpretable feature probes for an interpretable feature, which is why these features are referred to as Probe and Goal respectively. Important in this respect is that the Probe c-commands the Goal, as valuation is not possible otherwise (Chomsky, 2000a, 2001). This means that the node in which the Probe bearing the uninterpretable feature is located, must command a sister node or a node dominated by its sister in which the Goal with the interpretable feature is located.⁷ Consider (19) in which A c-commands B, and the interpretable feature thus values the uninterpretable one via Agree.



The notion of c-command will mainly play a role in the chapter about referential null subjects in Middle Low German.

1.3.4 Morphology of verbs and pronouns in Middle Low German

In all of the chapters, verbs as well as pronouns will play an important role. Both verb and pronoun in MLG bear a set of φ -features, which will be important in this dissertation.

Considering the verb first, the Middle Low German scribal languages are distinguished by a particular property in the plural verbal paradigm, called the *Einheitsplural* ‘unitary inflection in the plural’. This means that all persons in the plural share the same agreement morphology on the verb (Lasch, 1914: 226). In the singular, all the persons have different agreement morphology. The paradigm is presented in

⁷The theory which I have briefly sketched here represents the view of Chomsky (2000a, 2001) on the concept of Agree. Although I adopt this well-established theory, there are other approaches to the phenomenon as well. Pesetsky and Torrego (2007), for instance, argue that Agree is in fact a form of feature sharing and that valuation and interpretability of features are two independent concepts.

tables 1.1 and 1.2, respectively for the strong and for the weak verbs, which are both taken over from Dietl (2002). The paradigm will be discussed in detail in chapter 5.

	Present, ind.	Present, subj.	Past, ind.	Past, subj.
1 SG	rid-e	rid-e	reet	red-e
2 SG	rid-e-st	rid-e-st	red-e-st	red-e-st
3 SG	rid-e-t	rid-e	reet	red-e
1-3 PL	rid-e-n/t	rid-e-n	red-e-n	red-e-n

Table 1.1: Conjugation of *riden* ('drive', strong verb)

	Present, ind.	Present, subj.	Past, ind.	Past, subj.
1 SG	salv-e	salv-e	salv-e-d-e	salv-e-d-e
2 SG	salv-e-st	salv-e-st	salv-e-d-est	salv-e-d-est
3 SG	salv-e-t	salv-e	salv-e-d-e	salv-e-d-e
1-3 PL	salv-e-n/t	salv-e-n	salv-e-d-en	salv-e-d-en

Table 1.2: Conjugation of *salven* ('anoint', weak verb)

Considering the pronouns, a difference between personal (table 1.3) and demonstrative pronouns (table 1.4) can be made.

Nominative		
NOM-SG	1	ik, ek
	2	dû
	3 m	hee, hie
	3 f	see, si(e), süe
	3 n	(h)it, (h)et, (h)öt
NOM-PL	1	wee, wie
	2	gie, je, ie
	3	see, si(e)

Table 1.3: The personal pronoun in Middle Low German, based on Dietl (2002: 22)

Nominative		
NOM-SG	m	dee, di(e)
	f	düe, dee, di(e)
	n	dat, dit, düt
NOM-PL		dee, di(e)

Table 1.4: The demonstrative pronoun in Middle Low German, based on Dietl (2002: 22)

Déchainé and Wiltschko (2002) argue that it is necessary to recognize different types of pronouns, which differ in their internal as well as in their external syntax. They propose

an internal structure for at least three different types of personal pronouns as in example (20). As can be seen in (20), the different types stand in a morphological relation to each other (i.e. Pro-NPs are included in Pro- φ Ps, which are included in Pro-DPs).

- (20) a. [DP D [φ P φ [NP N]]]
 b. [φ P φ [NP N]]
 c. [NP N]

Furthermore, Déchaine and Wiltschko (2002) present properties of each of these pronominal categories in a *nominal proform typology* in certain languages. For the first category, Pro-DPs, they show this on the basis of independent pronouns in Halkomelem, a Central Coast Salish language in which independent pronouns show the same properties as full DPs. In example (21) for instance, the pronoun is made up of a determiner, *thú*, and *tl'ó*, the pro- φ P which specifies number and person features.

- (21) Tl'ó-cha-l-su swemcíwe-t [thú-tl'ó q'ami]_{ARG}
Tl'ó-cha-l-su swemcíwe-t thú-tl'ó q'ami
 then-FUT-1-SG-so hug-TRANS DET.f-3SG girl

'Then I'm going to hug that girl'

(Déchaine and Wiltschko, 2002: 412, ex. 5, from Galloway, 1993: 174)

Based on examples of Shuswap, a Northern Interior Salish language, Déchaine and Wiltschko (2002: 415) further show that there are pronouns belonging to a second category of pronouns called pro- φ Ps. Following them, φ P is "a cover term for any intermediate functional projection that intervenes between N and D and that encodes φ -features (where φ -features include number and gender, and in some cases person)" (Déchaine and Wiltschko, 2002: 410). The Shuswap pro- φ Ps differ from this first category by, among other things, the fact that they have no D-syntax of their own, but they can be preceded by the same determiner as full DPs, for instance *re* in (22). Furthermore, they are blocked from certain nominal positions.

- (22) [Wí.w.k-t- \emptyset -en]_{PRED} [re n-tséts-we7]_{ARG}.
Wí.w.k-t- \emptyset -en re n-tséts-we7.
 see (REDUP)-TRANS-3SG.OBJ-1SG-SUBJ DET

‘I saw him’

(Déchaine and Wiltschko, 2002: 415, ex. 15a, from Lai and Sandra, 1998: 28, ex. 10)

Déchaine and Wiltschko (2002) further present examples from Japanese pro-NPs, which have the same syntax of Japanese nouns. The pro-NP *kare* for instance can be preceded by an adjective, as possessive or a demonstrative pronoun. The latter is shown in example (23).

(23) *watasi-no kare*

watasi-no kare

I-GEN he

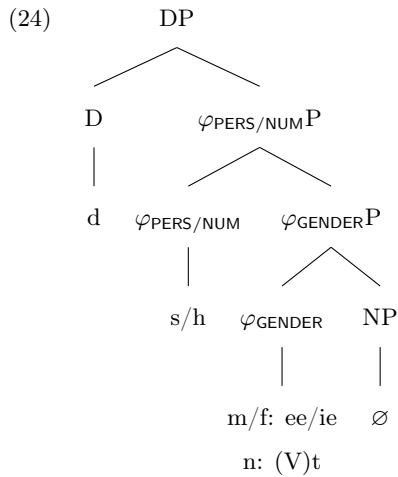
‘my boyfriend’

(Déchaine and Wiltschko, 2002: 417, ex. 21b)

Overt pronouns in Middle Low German can have three different sizes. As observed for other languages by Cardinaletti and Starke (1999), depending on their size/strength, they display different positional preferences. The strong forms of the third person coincide with the form of the definite article, as was shown in table 1.4. The weak form is the full form of the personal pronoun, as was illustrated in table 1.3. Furthermore, there are clitic pronouns in the second person singular and the neutral form of the third person singular.

Combining the division made by Cardinaletti and Starke (1999) with the idea of Déchaine and Wiltschko (2002) and the *Feature Scattering Principle* of Giorgi and Pianesi (1997) makes it possible to argue for splitting up the φ P-layer in Middle Low German (third person) subject pronouns in different layers of φ P between D and N. Each feature heads its own projection, though there may be more layers of φ P between D and N, as the pronouns in the third person can either have a gender feature and a number feature or only a gender feature, following (Déchaine and Wiltschko, 2002). This results in the figure below as the proposed internal structure of Middle Low German subject pronouns, as can be seen in example (24).⁸

⁸(V) in (24) stands for vowel. The vowel of the pronoun can change depending on the size of the pronoun (*dat/het/-et*).



In Middle Low German, either D or $\varphi_{\text{PERS/NUM}}$ is spelled out. These different internal structures of the pronoun lead to different properties, as predicted by Déchaine and Wiltschko (2002). The strong forms of pronouns are pro-DPs, which are the same as the determiners and definite articles. They can only be used in positions where strong pronouns are found in, for instance in SpecCP, which means that they have the same properties as full DPs.

(25) *de ne schal ire gherade nicht nemen*

de ne schal ire gherade nicht nemen

he NEG shall her goods NEG take

‘He shall not take her goods’

(Goslarer Kramerrecht)

Furthermore, the pronouns *sê*, *hê* and *(h)it* are $\varphi_{\text{PERS/NUM}}$ Ps in Middle Low German, as are the second person pronouns *dû* and *gie*. In contrast to the previous category of d-pronouns, they are not restricted to SpecCP, but they can also be found in the position where weak pronouns would appear, i.e. in the Wackernagel position. (26) illustrates this with the $\varphi_{\text{PERS/NUM}}$ Ps *sê* ‘she’.

(26) ... *dat se iren vormunden to rechter tid vorebringhe*

dat se iren vormunden to rechter tid vorebringhe

that she her bailiff to right time forward-brings

‘... that she brings her bailiff to justice at the right moment’

(Goslarer Kramerrecht)

The remaining pronouns *-ee*, *-ie* and *-it* are $\varphi_{\text{GENDER}}\text{Ps}$. They have the property that they can only appear in the Wackernagel position in Middle Low German. These pronouns will be further discussed in section 3.5.4.2.

(27) ... dat=tu bist konyneck des hemels vn(de) der eerden

dattu bist konyneck des hemels vn(de) der eerden
that=you are king of.the heaven and of.the earth

‘... that you are king of heaven and earth’

(Myrren bundeken)

The reason why this analysis of pronouns is necessary will become clear in chapter 3, in which I will need to focus more on the properties of (null) pronouns.

1.4 Research questions

The goal of this dissertation is to provide an insight into three major topics in Middle Low German syntax which are all related to agreement between the subject (pronoun) and the verb. This will be done by close examination of a Middle Low German text corpus. Each of the topics will be discussed in one main chapter, each of which can be read separately from the other. However, many assumptions about Middle Low German syntax will come back in each of these chapters.

The first topic relates to clauses such as the one given in (28), in which the subject pronoun seems to be missing, i.e. the clause contains a gap. The subject gap in this and similar examples is referred to as a referential null subject. Though referential null subjects have been the topic of many recent and less recent studies in the Germanic languages and beyond, they had until recently never been studied in Middle Low German.

(28) forder szo schole gy weten dath [] yuwen breff entfangen hebbe

forder szo schole gy weten dath yuwen breff entfangen hebbe
furthermore so should you know that your letter received have-1SG

‘Furthermore, you should know that I have received your letter’

(Agneta Willeken)

The chapter dedicated to this phenomenon therefore deals with the following questions:

1. What are the properties of referential null subjects in Middle Low German, for instance in terms of relative frequency, syntactic distribution and their relation to verbal agreement?
2. How are referential null subjects in Middle Low German licensed? What is for instance the role of *c*-command and of (un)interpretable features?

The second topic concerns a special type of relative clauses such as the one given in (29), in which the ending of the finite verb in the relative clause, such as *hefst* ‘have’, with a morphological ending on the verb marking second person singular, agrees with the antecedent of the relative clause *du* ‘you’ in person and number.

(29) **Du** bist selue min coninc ande min got de du kundes dat heil iacob

Du bist selue min coninc ande min got de du kundes dat heil
 you are REFL my king and my god REL you announce the salvation
iacob
 jacob

‘You yourself, who announce the salvation of Jacob, are my king and my god’
 (Southwestphalian psalms)

I will call these clauses such as (29) ‘non-restrictive relative clauses with a first or second person head’. These raise some very similar, but also some different questions:

1. What are the properties of non-restrictive relative clauses in Middle Low German, for instance in terms of relative frequency and syntactic distribution?
2. What is the role of the element introducing the relative clause (such as *de*)?
3. How exactly do the different elements bearing φ -features interact in the derivation of a grammatical Middle Low German non-restrictive relative clause with a first or second person head?

The third topic which will be handled in this dissertation is the alternation in the endings of the finite verb in the first and the second person plural, as illustrated in (30), depending on the relative position of the finite verb and the subject. When the subject pronoun precedes the verb, as in (30a), the verb gets the ending of the unitary inflection in the plural (here *mogen*), whereas the final consonant of the ending is not present when the subject pronoun follows the verb, as can be seen in *wille* in example (30b). I will therefore refer to this phenomenon as position-dependent agreement.

(30) a. wij mogen nu nicht lenger stan

wij mogen nu nicht lenger stan
we may-1PL now not longer stand

‘We may not longer stand now’

(Bordesholmer Marienklage)

b. late wy ene

late wy ene
let-1PL we him

‘Let us leave him alone’

(Buxtehuder Evangeliar)

The central questions related to position-dependent agreement in Middle Low German are the following:

1. Are the differences in the ending of the verb purely dependent on the relative position of verb and subject, or can we deliver a more fine-grained picture of the environment in which the alternative endings appear?
2. How does the deletion of (a part of) the ending of the verb relate to the presence or absence of certain features?
3. Is the change phonological, morphological or syntactic in nature, or is it an interface phenomenon?

Furthermore, there are some questions which will return in each of the topics discussed. In the first place, the three major topics in this discussion are all topics in the field of diachronic syntax. It will thus be important in each of them to see whether and how/why the construction(s) changed over time or stayed stable. The attestation gap between the period in which Old Saxon was written and the one in which Middle Low German was

written makes it hard to formulate a conclusive answer on such questions. A second question which will be answered in each chapter is how each phenomenon in Middle Low German compares to the cognate constructions in closely related languages. Returning to the introduction of this dissertation, it is only in this way that it is possible to see whether Middle Low German really behaves exactly like for instance (Early New) High German and (Middle) Dutch, as suggested in most of the earlier literature referring to Middle Low German syntax, or whether it has its own syntactic properties in this respect. A last question arising in each of the chapters is the following. As described above, Middle Low German featured various types of variation. One of the major questions will be whether there were factors influencing variation in the data or strengthening or weakening the possibility of change happening.

1.5 Overview of the dissertation

The goal of chapter 1 was to familiarise the reader with Middle Low German and the basic theoretical assumptions on which this dissertation builds. In chapter 2, I introduce the data which I used to answer the research questions which were introduced in the last section. In chapter 3, I present data on the presence, the licensing and the diachronic development of different types of referential null subjects in Middle Low German. Chapter 4 focuses on the possible agreement patterns in Middle Low German non-restrictive relative clauses with a first or second person head and on the way in which agreement in these clauses can be established. Chapter 5 presents a remarkable phenomenon in Middle Low German, in which the plural verbal ending in the first or second person plural has a different ending when the verb is preceding the pronoun, from when the pronoun is preceding the verb. As it is not always possible to look into the history of Middle Low German, there is a strong focus on comparative data from closely related languages throughout all chapters. The analysis of position-dependent agreement in Middle Low German will largely be based on such a comparative approach. Furthermore, each chapter is followed by a short intermediate conclusion. A general conclusion, focusing on what this dissertation taught the reader about specific aspects of Middle Low German grammar is given in chapter 6. The bibliography at the end of the dissertation is combined with an index of names. The numbers following the page numbers indicate the page(s) on which the author in question is mentioned.

2.1 Data collection

Syntactically annotated corpora are of great importance to enable and facilitate large-scale diachronic and diatopic research. One of the reasons why the syntax of Middle Low German still holds many secrets is that the creation of such corpora with morphological and syntactic markup only started quite recently. The corpus on which my research is based contains texts from two corpus projects which aim to address this lack of means: the Referenzkorpus Mittelniederdeutsch / Niederrheinisch¹ and the Corpus of Historical Low German².

ReN is a corpus project conducted at the universities of Hamburg and Münster (Peters and Nagel, 2014; Schröder, 2014). The project team aims to publish 180 texts (i.e. about 3.6 million words), 160 of which are written in Middle Low German.³ The other texts are written in Low Rhenish. The Middle Low German part of the corpus consists of texts from different writing centres, written throughout the whole period in which Middle Low German scribal languages were used. The corpus is based on texts from three other corpus projects, namely the already mentioned ASnA, the project ‘Niederdeutsch in Westfalen (Historisches Digitales Textarchiv)’ and the project ‘Mittelniederdeutsch in Lübeck’. All of the texts have been or will be enriched with part of speech tags, which

¹<https://vs1.corpora.uni-hamburg.de/ren/>

²<http://www.chlg.ac.uk/>

³I sincerely thank the project team of ReN for allowing me to use their digitally transcribed Middle Low German texts for my research, even before they were published online.

indicate the word category and grammatical function of the word. Furthermore, ReN has the option of indicating boundaries between finite clauses. The texts and their mark-up have been released successively since 2017, i.e. each time a text and its mark-up are complete, they appear online for consultation in Annis, a web browser-based search and visualization tool for corpora consisting of multiple layers of information (Krause and Zeldes, 2014).⁴

The project team of the CHLG aims to build a syntactically annotated corpus of historical Low German, consisting of a subcorpus of Middle Low German and a subcorpus of Old Saxon. HeliPaD, the Old Saxon part of the corpus, was released in 2016 (Walkden, 2016a). The Middle Low German part will be released in 2020. The goal of the corpus project is to make a large number of texts available online to facilitate large-scale, reproducible syntactic research into Middle Low German. The texts are being enriched with linguistic mark-up of different types, i.e. they will be tokenized, tagged for part of speech and morphology and syntactically parsed. ReN makes its texts available for CHLG. Both corpora are collaborating for the part of speech tagging and the indication of finite clauses. The difference with ReN is that CHLG is adding an extra syntactic annotation layer, whereas ReN will not add this. The syntactic layer is added with the browser-based software Annotald.⁵ A screenshot of how the Middle Low German example (31) was parsed in Annotald, is given below.

(31) Dat heuet ghedan de gude biscop philippus de do bischop was to colne

Dat heuet ghedan de gude biscop philippus de do bischop was to
 that has done the good bishop philippus REL RELPART bishop was in
colne
 cologne

‘The good bishop Philippus, who was bishop in Cologne, has done that’
 (Statutarrecht Rüthen)

The benefit of a parsed corpus is that it makes it possible to search for syntactic structures, as parsing makes the hierarchical structures in sentences visible. The

⁴http://annis.corpora.uni-hamburg.de/gui/#_c=UmVOXzIwMTctMDYtMTU

⁵<https://annotald.github.io/>

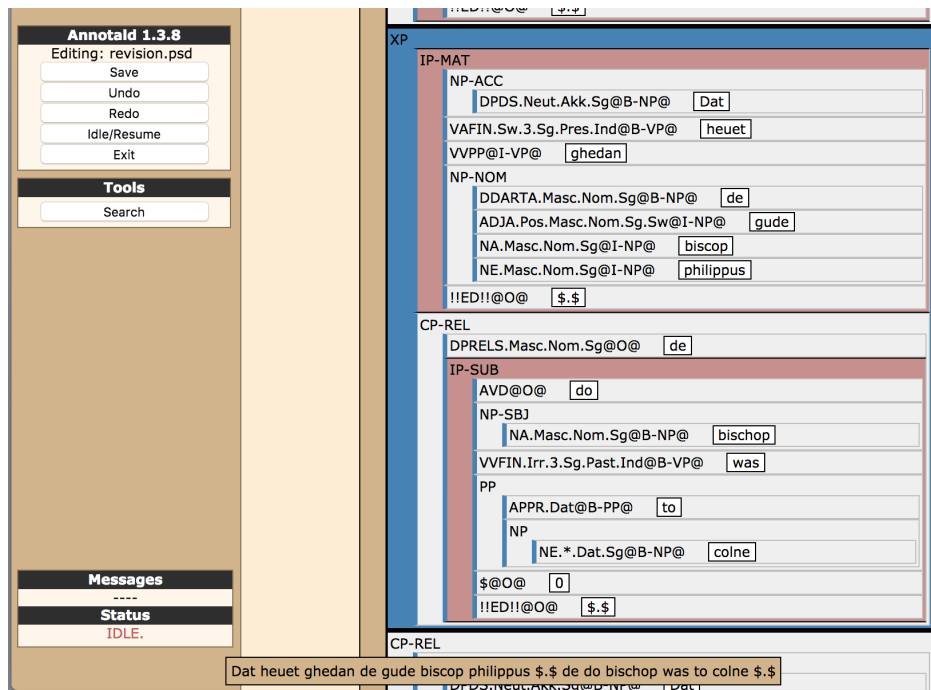


Figure 2.1: Adding a syntactic layer in the CHLG with Annotald

project team of the CHLG parses the corpus using the Penn-parsing format. This makes the results easily comparable to the results of the many historical corpora using these standards already, such as the Penn Parsed Corpora of Historical English (Taylor et al., 2003). Relevant structures in corpora using these standards can be retrieved with CorpusSearch,⁶ which is a search query program that makes it possible to find and count (complex) syntactic structures in parsed corpora with the Penn-Treebank format (Randall et al., 2005).

Unfortunately, most of the linguistic mark-up of the texts of ReN and CHLG was not available yet during the first years of my research, in which I needed to gather the necessary data. Therefore, I composed my own corpus based on already available transcriptions from both projects. The corpus that I use in this study tries to give a representative picture of Middle Low German by selecting a wide range

⁶<http://corpussearch.sourceforge.net/>

of different texts selected from ReN and CHLG. In order to reach a good level of representativeness, I decided in the first place to include texts from the three main scribal languages of the *Altland*: Westphalian, Eastphalian and North Low Saxon. They are complemented with one comprehensive set of charters from the *Neuland* (i.e. from Lübeck). The texts all come from areas belonging to modern-day Germany, which means that Middle Low German spoken and written in the contemporary Baltic language area, the Slavic language area and the Netherlands is not included in the corpus. Furthermore, I included texts from the whole period in which Middle Low German was written (1251-1600). Although a more specific dating is possible for most of the texts, they were classified into writing periods each stretching over 50 years, starting from 1251. I further opted for texts of different genres as a result of my preliminary work on null subjects that showed very soon that charters and laws in Middle Low German are very formulaic, as is the case in other Germanic languages as well (Boonen, 2005, 2010; Greule et al., 2012). The corpus used for this study therefore consists of different genres such as literature, letters, law, chronicles, and religious texts. Two of the texts (i.e. both psalm compilations), are very close translations from Latin, though they also have additions and comments that are originally Middle Low German. There are some other texts which are adaptations of originals in other languages as well. *Griseldis* for instance is based on a High German edition of the *Griselda* tale of Giovanni Boccaccio, which was a story often translated and edited in Western European literature (Langhanke, 2005: 28). Such adaptations are however not as close to the original as the psalm translations.

The texts included in the corpus are given in table 2.1, which lists the short versions of the titles of the texts according to scribal language, period (of writing) and genre. The full references can be found in the list of primary sources in appendix A at the end of this dissertation.

Period	Scribal language	Genre	Text
1251-1300	Eastphalian	Law	Goslarer Kramerrecht
1301-1350	North Low Saxon	Law	Sachsenspiegel
1301-1500	Lübeck	Charters	Lübecker Urkunden
1301-1500	North Low Saxon	Charters	Oldenburger Urkunden
1351-1400	Westphalian	Law	Herforder Rechtsbuch
1351-1400	Westphalian	Law	Soester Schrae
1401-1450	Westphalian	Religious	Spiegel der leyen
1401-1450	Westphalian	Religious	Südwestfälische Psalmen
1451-1500	Eastphalian	Chronicle	Cronecken der sassien
1451-1500	Eastphalian	Literature	Gandersheimer Reimchronik
1451-1500	Eastphalian	Letter	Göttinger Liebesbriefe
1451-1500	North Low Saxon	Literature	Bordesholmer Marienklage
1451-1500	North Low Saxon	Religious	Qvatuor Evangeliorum
1451-1500	Westphalian	Religious	Prayer 1
1451-1500	Westphalian	Religious	Prayer 2
1451-1500	Westphalian	Religious	Myrren bundeken
1501-1550	Eastphalian	Religious	Ostfälische Psalmen
1501-1550	North Low Saxon	Literature	Veer Koepluden
1501-1550	North Low Saxon	Letter	Agneta Willeken
1501-1550	North Low Saxon	Literature	Griseldis
1551-1600	North Low Saxon	Literature	Kortwilige Historien

Table 2.1: Texts in the corpus according to period (of writing), writing language and genre

Each of the texts of both ReN and CHLG has been digitalized by the ReN-project. The big advantage of these digitalizations, which are in fact digital transcriptions with extra-linguistic markup in XML, is that they almost always compared the transcriptions from former projects to the real manuscript itself. The transcriptions are thus almost never based on editions of texts. The transcription is diplomatic and therefore very close to the original. Information about scribal abbreviations, columns, pages, page ends and punctuation is encoded in the transcription as well. In both corpora, finite sentences are separated. This is mostly necessary for the CHLG, as the automatic classifier built for the part of speech annotations relies

on this information for finding clause boundaries or larger chunks of information (Koleva et al., 2017). Unlike modern standard languages, it is hard to identify larger chunks of information in Middle Low German texts, as the punctuation system was not yet clause-based (Tophinke and Wallmeier, 2011). This means that the division into finite clauses needs to be done manually. Both ReN and CHLG, as they share this layer of annotation, indicate this with `$. $`, as can be seen in 2.1 as well. After doing this, the texts can be tokenized (i.e. split up into individual words) and uploaded in CorA (Bollmann et al., 2014), a web-based annotation tool which is used by both corpora to add a part of speech tag and a morphological tag to each token.

2.2 Data analysis

The content of the CHLG and the ReN is gradually becoming publically available. However, I have not been able to use the morphological and syntactic mark-up in the corpora to their full extent for this study. This is on the one hand because only a small number of texts with part of speech and morphological markup of the ReN have recently become available. On the other hand, the CHLG only recently started to add the parsing layer to its texts, which means that I could not make use of this layer of information yet. I could however make use of some other documents from the corpus projects that helped to partly automatize the work that I had to do, especially concerning the use of encoded information about the start and the end of finite clauses.

The first step in the annotation process for the data analysis was to download the texts that I had selected from CorA. With the help of a Python script, I re-arranged the tokens into finite sentences, based on the manually added borders between finite clauses, and automatically put them in a comma separated file, each clause having its own row. In this way, the database consists of about 14,000 finite clauses, which roughly corresponds to about 135,000 words.

After splitting up the texts into finite clauses, I manually analysed each finite clause and added meta-information for different extra-linguistic and intralinguistic parameters. First, extra-linguistic information was added to each finite sentence, more specifically the genre, the dialect, the name of the text and the period in which the text was written. The included genres are charters, chronicles, legal texts, letters, literature

and religious texts. The dialects are, as said in section 2.1, Westphalian, Eastphalian, North Low Saxon in the *Altland* and the language of Lübeck in the *Neuland*. The category period always comprises 50 years, starting from 1201 and running until 1600.

After the enrichment with extra-linguistic information, intralinguistic information was added to each clause. I encoded the type of subject (noun phrase or pronoun), person (singular or plural) and number (1/2/3). Additionally, the clause type (main clause/subordinate clause) was added. I also encoded whether the clause started with a conjunction or not. Each pronominal subject was further classified according to the type of subject: this could be an overt pronominal or a covert one, and in the case of a covert one more specifically a referential null subject, a gap in a non-restrictive relative clause, the unexpressed subject of an imperative, the gap in a second conjunct with conjunction reduction or an expletive. These categories are presented with examples and more details in section 2.3. After doing this, each finite clause along with its information was captured in a comma separated string of information, which could be used as an input file for further statistical analysis. An extract of how the clauses were encoded in the database belonging to the corpus is given in table 2.2.

Clause	Period	Genre	Dialect	Text	Noun/ pronoun	Pers	Num	Clause type	Conj	Type
Dit boc seal men oc alle iar twen ratnammen beuelen to bewarende dat half enes mannes si	1251-1300	legal	EPH	KR Goslar	p	3	SG	main	0	0
	1251-1300	legal	EPH	KR Goslar	p	3	SG	sub	0	*rel*
do vorden de Ratmanne mit den wisesten vser stat to rade	1301-1350	charters	NLS	Oldenburg	n	3	PL	main	0	0
vnde sprecht al dus	1251-1300	charters	LB	UBLB	p	3	SG	sub	1	*con*
Were ok	1301-1350	charters	LB	UBLB	p	3	SG	sub	0	*exp*
O, myne leve(n) borghere: Weset eyndrechtich "	1351-1400	legal	WPH	Herford	p	2	PL	main	0	*imp*
Vnde wil van synem geschlechte [] nu mer schriven	1451-1500	chronicle	EP	CDS	p	1	SG	main	1	*pro*

Table 2.2: Extract from the database of encoded clauses from the corpus

The reason that I did not only analyze those specific clauses in which the structures that I am investigating turned up, but all the clauses in specifically chosen texts, is that it makes it possible to measure the frequency of the structures investigated. In this way, the data can be used by statistical software as for instance the R Project for Statistical Computing (Gentleman et al., 2009) or tools like Rbrul, which are based on R (Johnson, 2009).

As every chapter focuses on a different phenomenon concerning agreement in Middle Low German, the methodology to further describe and analyze corpus data depends largely on the specific phenomenon which is researched. A small methods section elaborating on the basic analysis described here, will therefore be added to each chapter in which a new linguistic phenomenon is introduced to clarify the further phenomenon-specific methodology.

To support my claims I will often give relevant examples from the Middle Low German corpus along the following conventions throughout the dissertation. The preamble of each example shows the Middle Low German text fragment with the original interpunction as found in the transcription of the manuscript (with solved scribal abbreviations). This preamble also follows the capitalization as found in the original. If necessary, I will add additional mark-up to clarify my statements, such as italics, bold markings or sequences of square brackets indicating gaps, syntactic positions or indexes. After that, the example is repeated without punctuation and additional mark-up, connected to word-by-word glosses. I have added this first unglossed line to improve readability, because it is often hard to read longer examples when the glosses immediately follow. The last line of the example shows an English translation.

2.3 Encoded subject gaps

In this section, I give a short overview of the types of subject gaps that can be found in the Middle Low German corpus used for this study and that are encoded in the database resulting from the corpus study. While referential null subjects and gaps in non-restrictive relative clauses with a first or second person head each form the main topic of a separate chapter in the dissertation, I will repeatedly refer to these other categories of gaps as well. The next sections give an overview of the encoded categories

apart from referential null subjects and gaps in non-restrictive relative clauses, as these two types of gaps will be discussed extensively in chapter 3 and 4 respectively.

2.3.1 Subject gaps in imperatives

A common category of gaps are gaps in imperatives, as there are 810 examples in the corpus. Imperatives in the singular are the most common, with 666 cases (32). In the singular, the verb form is identical to the form of the first person singular indicative present in the weak verbs (32a), whereas it has the stem vowel of the second person singular indicative present and no ending in the strong verbs (32b).

(32) a. lose my vth desser not

lose my vth desser not
save me from this need

‘Save me from this misery!’

(Bordesholmer Marienklage)

b. Brich herte myn

Brich herte myn
break heart mine

Break, my heart!

(Bordesholmer Marienklage)

In the plural cases, of which there are 144 in the corpus, the verb takes the ending of the second person plural indicative present (i.e. the ending of the unitary inflection in the plural, viz. *-t* or *-n*) (Dietl, 2002). This is illustrated in (33), in which the ending of the finite verb in the second person plural can be seen in (33a) and the ending of the verb in the imperative in (33b).

(33) a. als ghi to bedde gaen willen

als ghi to bedde gaen willen
if you-2PL to bed go want

‘if you want to go to bed’

(Spiegelhel der leyen)

b. Louet got mit mi

Louet got mit mi
 praise-IMP god with me

‘Praise god with me!’

(Südwestfälische Psalmen)

2.3.2 Subject gaps in relative clauses

There are 1100 null arguments in the corpus that are gaps in relative clauses. An example in the third person singular is given in (34a). However, there are also agreement mismatches in relative clauses with a first or second person head. These special cases will be discussed extensively in chapter 4.

- (34) a. He buwede Jn t erste In deme lande dat [] nu westualen het eyne borch vppe
 eynen hogen barch

He buwede Jn t erste In deme lande dat nu westualen het eyne
 he built in the first in a land REL now Westphalia names a
borch vppe eynen hogen barch
 castle on a high mountain

‘He built a castle on a high mountain in a land that is called Westphalia
 nowadays’ (Cronecken der sassien)

- b. VOrtmer dey vronen dey [] buten der stat wonet de mughen alle markedaghe
 eyne iuweliken manne vor none to gherichte beyden

VOrtmer dey vronen dey buten der stat wonet de mughen alle
 furthermore the bailiffs REL outside the city live they may all
markedaghe eyne iuweliken manne vor none to gherichte beyden
 market-days a any man before noon to court summon

‘Furthermore, the bailiffs who live outside the city may summon any man to
 court on all market days’ (Soester Schrae)

2.3.3 *Alse*-clauses

Another type of subject gap ($N = 51$) is found in adverbial clauses introduced by *als(e) < al so* ‘as’. The structures in which these gaps appear are highly formulaic.

They appear almost exclusively in charters, which are in general often formulaic (Greule et al., 2012). Some examples are given in (35).

- (35) a. *alse [] to Sust ghenge vnde gheue is*
alse to Sust ghenge vnde gheue is
 as in Soest current and given is
 ‘as [it] is common practice in Soest’ (Soester Schrae)
- b. *alse [] hir bouen geschreuen stat*
alse hir bouen geschreuen stat
 as here above written stands
 ‘as [it] is written above’ (Cronecken der sassen)

These clauses are similar to relative clauses modifying the preceding situation as a whole. In example (36), *alze* and the unexpressed subject in the *alse*-clause refer to the whole situation in the main clause: ‘they wanted to claim him as a serf and testify’.

- (36) *Un(de) se wolden ene vorbosmen un(de) vortughen, alze [] des ammetes recht is.*
un(de) se wolden ene vorbosmen un(de) vortughen alze des
 and they wanted him claim.as.serf and testify as the-GEN
ammetes recht is
 authority’s right is
 ‘and they wanted to claim him as a serf and testify, as [it] is the authority’s right’
 (Herforder Rechtsbuch)

Instances in which *alse* appears indeed to be used as a relative particle in relative clauses modifying a noun phrase (not a whole situation) deliver support for treating these clauses as some sort of relative clauses. In such cases, the subject however always remains overt. Two such cases, example (37a) and (37b), are present in the charters of the city of Lübeck.

- (37) a. *[van wegen eynes huszes] alse de obg(ena)nte Jacob van luebeke dem*
vorb(enomed)en Bernd papke(n) vorkofft hadde vp passchen lest vorleden
tobetale(n)de

van wegen eynes huszes also de obg(ena)nte Jacob van luebeke
 because of a house as the abovementioned Jacob of Lübeck
dem vorb(enomed)en Bernd papke(n) vorkofft hadde vp passchen lest
 the.DAT aforementioned Bernd Papken sold had on Easter last
vorleden tobetale(n)de
 past to-be-paid

‘[because of a house], which the abovementioned Jacob of Lübeck had sold to the aforementioned Bernd Papken, to be paid this past Easter’

(Oldenburger Urkunden)

- b. [van wegen(e) eynes perdes] also karste(n) Egghardes deme erg(ena)nt(en)
 Jacobe na synem(e) schriftlike beger(e) vnde beuele karste(n) erben(omed)
 gedan vnde gegeue(n), gekofft vnde Jacobe to Brunswijck gesant hadde

van wegen(e) eynes perdes also karste(n) Egghardes deme
 because of a horse as Karsten Egghards the.DAT
erg(ena)nt(en) Jacobe na synem(e) schriftlike beger(e) vnde beuele
 aforementioned Jacob after his written request and order
karste(n) erben(omed) gedan vnde gegeue(n) gekofft vnde Jacobe
 Karsten aforementioned done and issued bought and Jacob.DAT
to Brunswijck gesant hadde
 to Braunschweig sent had

‘[because of a horse], which Karsten Egghards had bought and sent to Jacob in Braunschweig after the written request and order that the aforementioned Jacob had issued and given to the aforementioned Karsten’

(Oldenburger Urkunden)

Unlike in relative clauses introduced by a relative pronoun, *also* is of course not a (relative) pronoun. It can therefore not serve as a subject agreeing with the finite verb as in a regular relative clause. It is furthermore unclear whether it is located in SpecCP at all (as a relative pronoun would be), or rather in a head position. The covert subjects in these clauses cannot be null expletives or correlates, nor do they qualify for an analysis in terms of topic drop (see section 3.2.3), these being subordinate clauses. For all of these reasons, I treat the subject gap in *also*-clauses as referential *pro*. Because of the

very formulaic structure of these utterances however, they were not included in all the further calculations concerning referential null subjects.

2.3.4 Null expletives

Null expletive subjects are another type of null subject in Middle Low German. They are slightly more common than *alse*-clauses. They are uninterpretable elements which are not assigned a theta-role (38a) (Vikner, 1995). Together with null correlates/quasi-arguments of subordinate clauses (38b) they will not be discussed any further. As is the case in *alse*-clauses, they are very formulaic. Null expletives are used very often in conditional constructions such as *were dat sake* ‘if it were the case’, in which *dat* as well as *dat sake* often are covert (38a).

- (38) a. Were [] ok , dat ienech man den anderen sculdeghen wolde

were ok dat ienech man den anderen sculdeghen wolde
 were also that a man the other accuse wanted

‘If it were [the case] that a man wanted to accuse another man’

(Urkundenbuch Lübeck)

- b. Jtem sy [] witlik dat ik myt anneken myner husfrouwe(n) to brudschatte hebbe entfange(n) ijC m(a)r(k) an redem(e) gelde vn(de) l m(a)r(k) an suluer smyde

Jtem sy witlik dat ik myt anneken myner husfrouwe(n) to
 likewise be-SUBJ known that I with Anneken my wife as
brudschatte hebbe entfange(n) ijC m(a)r(k) an redem(e) gelde vn(de) l
 dowry have received 200 Marks of cash money and 50
m(a)r(k) an suluer smyde
 Marks in silver ware

‘Likewise, [it] be known that I have received as dowry from my wife Ann 200 Marks of cash money and 50 Marks of silverware’ (Urkundenbuch Lübeck)

The corpus comprises 57 expletives in main clauses and 56 in subordinate clauses.

2.3.5 Conjunction reduction

One of the properties of Middle Low German syntax is conjunction reduction. If the supposed subject in the second conjunct is identical with the one in the first conjunct, the subject in the second (or third or fourth) conjunct stays covert.

- (39) Jck kome to dy o vader der barmherticheit vnde god alles trostes vnde [] bidde
oitmodeliken

Jck kome to dy o vader der barmherticheit vnde god alles trostes

I come to you ITJ father of mercy and god of-all consolation

vnde bidde oitmodeliken

and pray modestly

‘I come to you, o father of mercy and god of all consolation, and [I] pray modestly’

(Prayer 2)

Conjunction reduction is one of the most frequent kinds of subject gaps in the Middle Low German corpus, as it contains 873 gaps in conjoined clauses, of which 724 gaps are main and 149 are subordinate clauses.

Clear cases of asymmetric coordination or cases of symmetric coordination where there is an agreement mismatch (person and/or number) between the gap and the potential antecedent do not count as conjunction reduction in this study, but as referential null subjects. These cases are discussed separately in section 3.5.3.2.

2.4 Some remarks on the use of written data

Historical language research of periods before it was possible to make recorded data is of course only based on written resources, which has different consequences.

As I have mentioned in chapter 1, it must in the first place be clear that the language studied in this dissertation is not the same as the language that was spoken. Elements from present and past, own and different regions and spoken and written language are usually mixed-up in the documents studied here (Bischoff, 1981; Peters, 1998a). Furthermore, the written language studied in this dissertation is not representative of the written language as a whole. This is among other considerations because a historical document is always the utterance of (a) certain scribe(s), and not of the whole

language community. It is furthermore the language written at a certain point in time in a certain type of book in a certain region. By using a balanced corpus with a range of texts that cover different regions, multiple genres and different periods in time, the researcher can at least try to build a corpus which represents the written language as well as possible. Though a balanced corpus of 135,000 words is also not enough to represent the whole of the Middle Low German language written for 400 years, the dissertation can be seen as a pilot study sketching first tendencies in agreement topics in Middle Low German. The reason why I have to limit myself to about 14,000 finite clauses is that it is very time-consuming to analyse a large-scale corpus completely manually. After the publication of the CHLG, the findings from this study can be tested on a large scale in the whole parsed corpus. The advantage of having this in-depth study of the data already is that more detailed and targetted searches will be possible once the parsed corpus can be used. Furthermore, the results of this study were used to inform the CHLG about certain tags that needed to be added, for instance for different positions for gaps in the case of null subjects, which will make it much easier to find the relevant structures.

A common assumption about the use of corpora, finding its origin in Chomsky (1957: 15), but living on to today, is that a corpus does not provide negative evidence and that native speaker judgements are therefore indispensable. The fact that corpora do not show certain structures can follow from different considerations: the corpus can be too small or it can be unbalanced. We will for instance see in chapter 4 and 5 that the low frequency of the discussed phenomena is strongly related to the genre of certain texts. Ungrammaticality is only one of the possible reasons for the non-occurrence of a structure in a corpus. According to Stefanowitsch (2006), the absence or the low frequency of words or constructions can serve as a relevant fact for the analysis as well, as by comparing datasets, one can measure how significant the absence of an item is. Therefore, Stefanowitsch (2006: 62) argues that corpora can ‘provide’ negative evidence when using the right methods:

When approached with the right methodological tools, corpora do provide negative evidence, i. e., evidence that allows us, in principle, to distinguish between constructions that did not occur but could have (these could be referred to as ‘accidentally absent’, and constructions that did not occur and could not have (these can be referred to as ‘significantly absent’ structures).

This means that bare frequencies do not give significant evidence for the grammaticality of a structure, but the significance has to be measured in relation to something else, for instance by performing Fisher's Exact Test (Johnson, 1972; Stefanowitsch, 2006). I will apply this and related statistical tests repeatedly in this dissertation.

3.1 Introduction

One of the questions about the syntax of Middle Low German that has remained unanswered until recently is the question whether Middle Low German allowed null arguments, in particular referential null subjects. The question is particularly interesting as recent research has shown that close relatives of Middle Low German did have null subjects in a form that is no longer available in most Modern Germanic languages (Rosenkvist, 2009). In this first chapter I will show that Middle Low German did indeed have null arguments and moreover null referential subjects. To set the scene, a few examples are given in (40). In (40a), there is a gap in the second conjunct because of conjunction reduction and a referential null subject precedes *erschrak* ‘was shocked’. What immediately catches the eye, is that the referent of this referential null subject located in the third clause is *de iukfrowe* ‘the virgin’, which is not the same as the referent of the subject in the first and the second clause, which is *se* ‘they’, referring to the people. Example (40b) illustrates that referential null subjects in Middle Low German are not only found in the topic position in Middle Low German. The covert subject pronoun is in this case located right after the finite verb *schere* ‘wandered’.

- (40) a. Se gingen henin myt groten wunder des volkes vnde [] vunden de iukfrowe schaffen in deme huseken Vnde [] erschrak sere van deme seltzen gaste

Se gingen henin myt groten wunder des volkes vnde vunden de
 they went in with great wonder of-the people and found the

iukfrowe schaffen in deme huseken Vnde erschrak sere van deme
 virgin working in the house and was-shocked much of the
seltzen gaste
 peculiar guest

‘They went in under great amazement of the people and [they] found the virgin working in the little house and [she] was frightened by the strange guest.’ (Griseldis)

- b. Dar na schere [] nach vmme negen daghen

Dar na schere nach vmme negen daghen
 that after wandered after about nine days

‘After that, he wandered for about nine days’

(Gandersheimer Reimchronik)

In this chapter I look at these and other properties of referential null subjects in Middle Low German in more detail and compare them with the properties of referential null subjects in other Northwest Germanic languages. I argue that they can be classified in two categories, depending on their syntactic position.

The chapter provides a formal analysis of how referential null subjects in Middle Low German are licensed. The analysis will be supported by quantitative analyses to reveal the language-internal and language-external factors influencing the occurrence of referential null subjects and thus causing variation in the data. I argue that Middle Low German is in the transition from a partial null-subject language to a topic drop language of the modern V2-Germanic type, though it preserves the null-subject property from Old Northwest Germanic to a high degree as well.¹

I start with general background on null arguments and on the general assumptions about referential null subjects and how they can be analysed in the (generative) literature in section 3.2. In section 3.3, I present the different types of null-subject lan-

¹Most findings from this chapter have been published in Farasyn and Breitbarth (2016), though this chapter is based on a much more extended corpus. The findings also deviate from this earlier research on some points. In comparison to the article, this chapter focuses far more on factors influencing variation in the data such as style, place and period of writing. It also places the findings about Middle Low German in a broader context, as it starts with an elaborate background on the typology of null-subject languages.

guages that have been discovered cross-linguistically. A closer look at null subjects in Northwest Germanic languages which are closely related to Middle Low German follows in section 3.4. In section 3.5, I present the Middle Low German data on null subjects found in the corpus. I relate the occurrence of referential null subjects to extra-linguistic as well as language internal factors in section 3.5.2. After that, I argue in the analysis how referential null subjects in Middle Low German fit in typologically, based on the findings from the preceding sections. I end this chapter with the diachronic development of referential null subjects from Old Saxon onwards in section 3.5.4.3, followed by a short conclusion.

3.2 Background

The aim of this section is to give an introduction to what empty categories in generative grammar are. More specifically, I focus on what referential null subjects are. After that, I present the two main ideas which have been proposed to explain how referential null subjects can be analysed syntactically in the generative tradition.

3.2.1 Empty categories

Arguments which can be covert in finite clauses are called null arguments. They can be subjects as well as direct or indirect objects. An example of a null object is illustrated in (41), from Imbabura Quechua.

(41) Juzi [] rikurka.

Juzi rikurka

Jose saw

‘Jose saw him/her/it.’

(Cole, 1987: 597, ex. 1)

In this chapter, I will mainly concentrate on null subjects, though null objects will be considered as well. This is because they are important to classify languages in certain types of null-subject languages typologically (see section 3.3). This study thus mainly deals with null subjects, and more specifically with referential null subjects. Non-referential null subjects, such as expletive pronouns (see section 2.3.4), will however be used as a tool to determine the position of the referential null subject or the typological category

to which Middle Low German belongs as a null-subject language.

Originally, referential null subjects were embedded in a typology of empty categories in generative grammar, which was presented by Chomsky (1981: 55-91, 231-284) in his government and binding theory. In this typology, he made a distinction between non-pronominal empty-categories (i.e. *wh*-traces and NP-traces) and the pronominal empty categories PRO and *pro*. I will not talk about the typology of traces in this dissertation, but I refer the reader to Chomsky (1973) for an introduction. The idea of a typology of empty categories has also been abandoned, as traces are nowadays assumed to follow from a deletion process (Kinn, 2015; Roberts, 2010: 58), for instance following Nunes (1995).

As concerns pronominal empty categories, it has been described that non-finite clauses require null subjects in certain languages, for instance in French and English. As can be seen in the similar examples (42a) and (42b) respectively. Such covert pronominal subjects in non-finite clauses are referred to as (big) PRO in generative grammar, for instance by Chomsky (1973, 1981) in accordance with Postal (1969) (Wratil and Gallmann, 2011).

- (42) a. John a essayé [de _ partir].
 b. John has tried [_ to leave] (Roberts and Holmberg, 2010: 4, ex. 4c).

PRO is also possible in non-null-subject languages, which are languages in which all referential subjects must be overtly expressed. (Big) PRO will not be discussed in this chapter any further.

Chomsky (1981) also discusses examples with other properties than big PRO. Among the many differences between languages, one of them is that certain languages require the subject pronoun in a finite clause to be expressed, while this requirement does not necessarily hold in other languages. He refers to this phenomenon as the *pro-drop* parameter, referring to languages in which referential null subjects or (little) *pro* can be found. Theoretical approaches to referential null subjects in generative grammar arose almost half a century ago. In these earliest studies, Perlmutter (1971) as well as Taraldsen (1980) observed that there are languages in which an overt definite referential subject pronoun is not always required to construct a grammatical clause (Roberts and Holmberg, 2010; Wratil and Gallmann, 2011). In Spanish for instance, the subject pronoun is usually covert (43a). In Standard Dutch however, the presence of the subject

as well as the object pronoun is absolutely required to construct a grammatical clause (43b).

- (43) a. Toco el piano.
toco el piano
play the piano
'I play the piano'
- b. Ik speel piano.
ik speel piano
I play piano
'I play the piano'

The fact that subject pronouns can be covert in many languages was already observed in classical grammars long before, for instance by Jespersen (1928) and Gildersleeve (1895) (Roberts and Holmberg, 2010: 2-3). The reason why subjects can be omitted was in these grammars (and in later studies as well) often linked to the richness of the verbal morphology in these languages. In languages such as Spanish, for instance, the implied subject of the clause can easily be deduced from the ending of the finite verb, as there is not much syncretism in the paradigm. In (43a), for instance, the ending of the finite verb, *-o*, can only belong to a first person subject, as if the pronoun is expressed in the verb somehow. Consequently, there is no need anymore to express a separate pronoun. Though this explanation holds for many null-subject languages, I will show in section 3.3 that this theory does not suffice to explain the possibility of null-subjects cross-linguistically. This is the reason why more recent research has shown that the original pro-drop parameter formulated by Chomsky (1981: 240) does not suffice to explain the presence of null subjects across languages. The parameter proposed in Chomsky (1981) was based on the clustering of multiple features, but a more fine-grained distribution in types of null-subject languages is needed. I will present such a more fine-grained distribution in section 3.3.

The analysis and frequency of null subjects in a language does of course also largely depend on how the data are labelled: In this chapter, I will only look at “real” referential null subjects. Other types of subject gaps occurring in Middle Low German

are for instance subject gaps in imperatives, subject gaps in relative clauses, gaps in second conjuncts (conjunction reduction) and null expletives, which I have mentioned already. These other types of subjects/gaps have been described more extensively in section 2.3.

3.2.2 Analysing null subjects

In clauses in which the referential subject pronoun is covert, there is still an understood subject. A question arising from this fact is how the gap must be analysed then, i.e. whether there is a relation between the understood interpretation and the syntactic form. In the literature on the analysis of referential null subjects, there are two main approaches to deal with this question.

A first approach builds on the early observations that the occurrence of subject gaps must be related to verbal agreement. Within this so-called I-subject approach, which was proposed by Borer (1986), it is assumed that the null subject is expressed by verbal agreement inflection and that there is no subject position as such. This agreement inflection on the verb is located in T (or I, hence the term I-subject approach) and functions like a pronoun, which means that the morphological inflection morpheme bears a thematic role and a grammatical function, exactly like an overt referential subject pronoun would do. In cases in which the subject pronoun is expressed, the subject must be seen as a left-dislocated element, which is consequently an extra-clausal peripheral element not associated with a theta-role, whereas the agreement marker of the finite verb functions as a clitic pronoun bearing the theta-role. If this were true, it means that the Extended Projection Principle (EPP) proposed by Chomsky (1982), which says that every clause must contain an NP or a DP in the subject position, is not compatible with this theory (Roberts and Holmberg, 2010: 13).

A second approach is the idea that referential null subjects are functional elements which are available in the syntactic structure, but which have no phonological expression. This implies that there is an empty pronoun present in the structure, which is usually referred to as *pro*. Therefore, this assumption does not constitute a problem for the requirements of the EPP. The most influential approach in this respect is Rizzi (1986) (Roberts and Holmberg, 2010: 13). Rizzi (1982, 1986) argues that *pro* is licensed by a special pronominal feature, the D-feature, which is associated with the head which

bears the φ -features which are realised on the verb.

The two views have in common that the inflectional head (T/I) is something pronoun-like in null-subject languages (Roberts and Holmberg, 2010). Building on this common feature, Roberts and Holmberg (2010) state the null subject parameter must be the following:

(44) *The Null Subject Parameter*

Does T bear a D-feature? (Roberts and Holmberg, 2010: 14, ex. 17)

They further argue that this implies that T/I in non-null-subject languages does not bear a D-feature, while it does in consistent null-subject languages. In partial null-subject languages and expletive null-subject languages, there is no D-feature on T either. I will describe the different types of null-subject languages more extensively in section 3.3.

3.2.3 Topic drop

In the following sections, I will show that all of the languages that I will discuss had some kind of referential null subjects. A hypothesis that has been brought up in this respect is that these null subjects could be cases of topic drop, also referred to as pronoun zap, as for instance discussed by Ross (1982) and Fries (1988) for German, by Huang (1984) and Sigurðsson (1989, 2011) more generally and by Walkden (2014) for the early Germanic languages.

In some languages such as German, Swedish and Icelandic, some arguments can be covert. This accounts for subjects, such as in example (45a) from Austrian German, as well as for objects (45b), provided they are topicalised and located in SpecCP.

(45) a. [] *verstehe*.

verstehe

understand

‘I understand’

b. [] *trage ich schon*.

trage ich schon

wear I already

‘I am wearing them/it already.’

(Huang, 1984: 547, ex. 48c)

Haegeman (1990) reports on subject omission in non-null-subject-languages like French and English, but only in diary style messages such as diary entries, postcards and informal letters. The phenomenon is illustrated in (46).

- (46) A very sensible day yesterday. Saw no one. Took the bus to Southwark Bridge...
Saw a flight of steps down to the river. I climbed down.

(Haegeman, 1990: 167, from *The diary of Virginia Woolf*)

This specific kind of topic drop is often referred to as diary drop. The omission of elements in such contexts is in most dialects restricted to root contexts (i.e. these are cases of topic drop).² Topic drop is not contingent on agreement with the verb (Sigurðsson, 2011: 271). Two proposed analyses are on the one hand that the covert argument is a null operator in SpecCP binding the null argument (47a) or on the other hand that a DP moved into SpecCP and was deleted from there (47b), (Sigurðsson, 2011; Walkden, 2014).

- (47) a. $[_{CP} Op_i \dots [_{TP} e_i \dots$
b. $[_{CP} \overline{DP}_i \dots [_{TP} t_i \dots$ (Sigurðsson, 2011: 271, ex. 10)

Huang (1984) remarks that an analysis of referential null subjects in Northwest Germanic as Germanic topic drop predicts that only one element in a clause can be null “given the usual assumption that there is only one topic position in German, the verb being always in second position” (Huang, 1984: 548). This does not contradict the possibility of recursive topic positions in the cartographic approach of the left periphery proposed by Rizzi (1997) completely when assuming the idea of Frascarelli and Hinterhölzl (2007) which says that there are three types of topic positions, one of which is one for familiar topics (see 1.3.1). As this is the kind of topic position referential null subjects take, only one referential null subject in a topic position is expected. Furthermore, an analysis as topic drop would also predict that a referential null subject cannot appear in subordinate clauses (Walkden, 2014: 203). Walkden (2014) argues however that all early Germanic languages permit referential null subjects in subordinate clauses based on examples from

²In a minority dialect of British fictional diaries, Haegeman and Ihsane (2001) find that diary drop is possible in embedded clauses as well. They do not analyse these as null topics, but as cases of pronoun ellipsis. I refer the reader to Haegeman and Ihsane (2001) for further discussion of such specific examples.

earlier studies of null subjects in early Germanic. This shows that the null topic analysis cannot entirely account for all the referential null subjects found in these languages.

3.3 Typology of null-subject languages

Apart from non-null-subject language such as English and French, which do not allow any type of referential null subject, Roberts and Holmberg (2010) distinguish four different types of null-subject systems that have been identified cross-linguistically. This section gives an overview of the different types they identify. Many different classifications of null-subject languages have been proposed over time, for instance by Rizzi (1982) or Huang (2000). I will however not go into details about the differences in classifications. I will argue in section 3.5.4.2 that Middle Low German is a partial null argument language, based on the syntactic properties of referential null subjects discussed in the following sections. I will therefore only sketch a picture of the most important differences between the three other types of null-subject languages identified by Roberts and Holmberg (2010) and mainly focus on the properties of partial null argument languages.

3.3.1 Consistent null-subject languages

In consistent null-subject languages, clauses contain covert pronouns in all persons and tenses. It is a typical property of the verbal paradigms in these languages that they display ‘rich agreement’: the inflectional morphology on the verb is different in most combinations of person and number, almost always in any tense. Languages belonging to this category are, among others, Modern Greek, Turkish, Spanish and Italian. An example of the verbal paradigm (combined with the covert pronoun) in Spanish is illustrated in (48a), a similar paradigm in Greek is given in (48b), for which I adopted the notation of Wrátil and Gallmann (2011).

(48) a. Spanish

pro *bail-o* (1SG) ‘I dance’
 pro *bail-as* (2SG) ‘you dance’
 pro *bail-a* (3SG) ‘he/she/it dances’
 pro *bail-amos* (1PL) ‘we dance’
 pro *bail-ais* (2PL) ‘you dance’
 pro *bail-an* (3PL) ‘they dance’

(Wrátil and Gallmann, 2011: 4, ex. 3)

b. Greek

pro *pin-o* (1sg) ‘I drink’
 pro *pin-is* (2SG) ‘you drink’
 pro *pin-i* (3SG) ‘he/she/it drinks’
 pro *pin-ume* (1PL) ‘we drink’
 pro *pin-ete* (2PL) ‘you drink’
 pro *pin-un* (3PL) ‘they drink’

(adaptation from Roberts and Holmberg, 2010: 6, ex. 5b)

A second property of consistent null-subject languages is that they use overt subject pronouns as well, but only in order to emphasize the subject or to indicate a change of referent, i.e. as an obviation strategy (Roberts and Holmberg, 2010; Taraldsen, 1980). This can be seen in example (49).

(49) a. Spanish

El habla español.

‘HE speaks Spanish’

(Roberts and Holmberg, 2010: 7, ex. 6b)

b. Greek

Aftos mila ellinika.

‘HE speaks Greek.’

(Roberts and Holmberg, 2010: 7, ex. 6c)

For the early Germanic languages, Van Gelderen (2000) and Axel (2007) assume that there is a connection between rich inflection in the verbal paradigm and null subjects as well. Van Gelderen (2000) argues that this is the case in the first and the second person

plural in Old English, whereas Axel (2007) indicates that there might be a similar effect in the first person plural in Old High German (Walkden, 2014). Walkden (2014: 201) argues that it is unlikely that rich agreement played a role in the possibility of having null subjects in the early Germanic languages (probably apart from Gothic), because the inflection is not rich enough. As these languages also (rarely) allow null objects, which is not recoverable by verbal agreement in Germanic, rich agreement is unlikely to be the licenser of referential null subjects in early Germanic. Furthermore, null-subject languages such as Italian do not share the distribution of covert and overt pronominal subjects with the early Germanic languages.

3.3.2 Expletive null-subject languages

In expletive null-subject languages, expletive null subjects are allowed, while referential null subjects are not (Roberts and Holmberg, 2010). Biberauer (2010) mentions among others some varieties of Dutch, in which covert expletives alternate with overt ones, an example of which is given in (50a). The option to have a covert null expletive depends on the variety of the language that is spoken.

(50) a. ... dat (er) in dit bordeel een jongen werkt

dat (er) in dit bordeel een jongen werkt
that there in this brothel a boy works

‘... that a (non-specific) boy works in this brothel’

(Biberauer, 2010: 13, ex. 19a, from Rosengren, 2002)

In weather expletives, among others in German and Dutch, the expletive pronoun must be overtly expressed (Bennis, 2010; Biberauer, 2010; Cardinaletti, 1990). This is illustrated for German in (51).

(51) a. Es regnet.

es regnet
it rains

‘It rains.’

b. Gestern regnete *(es).

gestern regnete es
yesterday rained it

‘Gestern hat es geregnet.’

These weather expletives are usually considered quasi-argumental, as they are, indeed, non-referential, but they do bear a θ -role (see Biberauer, 2010: 6 and the references there). The expletive pronoun *es* is usually not expressed in German though, as can be seen in example (52a). The same pronoun *es* can however also be referential, as in (52b).

(52) a. Gestern wurde (*es) getanzt

*gestern wurde (*es) getanzt*
Yesterday was (*it) danced

‘Yesterday there was dancing.’

(Roberts and Holmberg, 2010: 8, ex. 9a, from Cardinaletti, 1990)

b. Gestern war *(es) geschlossen.

*gestern war *(es) geschlossen*
yesterday was *(it) closed

‘Yesterday it was closed.’

(Roberts and Holmberg, 2010: 8, ex. 9b, from Cardinaletti, 1990)

If the latter is the case, *es* cannot stay covert.

3.3.3 Radical null-subject languages

Radical null-subject languages (or ‘discourse null-subject languages’) allow null subjects (and null objects) in many environments without any kind of agreement marking, including Japanese, Korean, Thai and Vietnamese. A classic example is Mandarin Chinese, which was originally discussed by Huang (1984: 533, ex. 7) and cited by Roberts and Holmberg (2010: 9). Both subject (53a) and object pronouns (53b) can be dropped under certain discourse conditions.

(53) a. _ kanjian ta le

kanjian ta le

see he ASP

‘He saw him’

(Roberts and Holmberg, 2010: 9, ex. 10b, from Huang, 1984)

b. Ta kanjian _ le.

ta kanjian le

He see ASP

‘He saw him’

(Roberts and Holmberg, 2010: 9, ex. 10a, from Huang, 1984)

Roberts and Holmberg (2010: 9) present several hypotheses focusing on the relation between the absence of agreement markers and the liberal availability of null subjects in radical pro-drop languages. Tomioka (2003) for instance argues within his ‘Discourse Pro-drop Generalization’ that all radical pro-drop languages allow (robust) bare NP arguments, i.e. arguments without obligatory determiners. In Japanese, such bare NPs can be in an argument position and their interpretation depends on the context (Tomioka, 2003: 328). Such bare NPs can be deleted because of their lack of obligatory determiners, as in languages with a determiner, there would be determiner stranding (Tomioka, 2003: 336). An example of a clause containing a bare object is illustrated in example (54). The Discourse Pro-drop Generalization is disputed for several reasons (Walkden, 2014: 205).

(54) Ken-wa ronbun-o yon-da

Ken-wa ronbun-o yon-da

Ken-TOP paper-ACC read-PAST

‘Ken read a paper / papers / the paper / the papers.’

(Tomioka, 2003: 328, ex. 19)

Another generalization is proposed by Neeleman and Szendrői (2007, 2008: 673), who state that radical pro-drop languages require agglutinating morphology on pronouns. According to this so-called ‘Radical-Pro-Drop Generalization’, it depends on the characteristics of the pronominal paradigm whether covert subject pronouns are allowed or not. Neeleman and Szendrői (2007) present an example for Japanese in which the

pronominal stem *kare* ‘he’ bears the agglutinated case morphemes *-ga* or *-o*, illustrated here in (55a). They also provide a Chinese example which shows the pronominal stem *ta* ‘he’ with the agglutinated ending *-men* which marks plural, illustrated here in (55b).

(55) a. *Kare-ga kare-o settokusuru.*

Kare-ga kare-o settokusuru.
he-NOM he-ACC persuades

‘He persuades him.’ (Neeleman and Szendrői, 2007: 679, ex. 15a)

b. *Ta-men kanjian ta le.*

Ta-men kanjian ta le.
he-PL see he LE

‘They saw him.’ (Neeleman and Szendrői, 2007: 679, ex. 15b)

Saito (2007) formulates a third hypothesis about radical subject-drop languages (Roberts and Holmberg, 2010). He states, based on Japanese, that many East Asian languages share three properties: argument ellipsis, radical pro-drop and absence of overt agreement. He argues that there is a relation between the presence/absence of argument ellipsis and the optionality/obligatoriness of agreement, though this is not the case in all languages (Saito, 2007: 225). Furthermore, he suggests that there might be a single grammatical mechanism, LF copying, which is responsible for ellipsis as well as for radical pro-drop, as he suggests that radical pro-drop is some kind of argument ellipsis. This mechanism allows copying of linguistic objects provided by the discourse, such as *pro* Saito (2007: 219).

3.3.4 Partial null argument languages

A last type of pro-drop language identified by Roberts and Holmberg (2010) is formed by a less coherent group of languages and is therefore sometimes seen as a waste-basket category. This is because the conditions on pro-drop in these languages can differ quite a lot between different languages within this type. They are languages that allow referential null subjects under more restricted conditions than in radical pro-drop languages: referential subject pronouns can only stay covert in particular persons, tenses or clause types. These restrictions vary from language to language. Roberts and Holmberg (2010) men-

tion Finnish, Hebrew, Russian, Icelandic, Marathi, (probably) several Indic languages and Brazilian Portuguese as partial pro-drop languages. In written Finnish for instance, first and second person pronominal subjects may be null in finite contexts, while third person ones can only if they are bound by a higher argument (see Holmberg, 2005, 2010 and Vainikka and Levy, 1999), while one of the restrictions on referential null subjects in Hebrew is the tense of the verb.

Based on the approach of Holmberg (2010), Walkden (2014: 209) presents an analysis under which the early Germanic languages (i.e. at least Old Icelandic, Old English, Old High German and Old Saxon) “were in a sense the mirror image of languages such as modern formal Finnish”. The idea of Walkden (2013, 2014) is that partial null-subject languages differ in which categories in the left periphery have the ability to probe and to enter in an Agree relation with SpecTP or T^0 and that this ability itself is therefore parameterized. The possible probing categories he distinguishes are (i) Λ AP and APP operators (linking to the logophoric agent/patient, see Sigurðsson, 2004a), (ii) null aboutness topics (iii) both of the preceding options and (iv) none of these probing categories. In this way, he establishes a typology of partial null-subject languages in which he classifies variant partial null-subject languages into different groups. I refer the reader to Walkden (2014) for this classification.

In his typology of partial null-subject languages, Walkden (2014) analyses referential null subjects in the early Germanic languages such as Old Saxon (but excluding Gothic) as DPs with a full set of φ -features, but with an uninterpretable D-feature [uD] (see Roberts and Holmberg, 2010). They agree for φ -features with T^0 , and have their D-feature valued (and hence, receive their referential index) by an Aboutness topic operator in ShiftP, which probes for the nearest (following) anaphoric element by means of a [$uAnaphor$] feature. This anaphoric element can also be an object.³ Because the topics in ShiftP are aboutness topics, null subjects in early West Germanic are usually

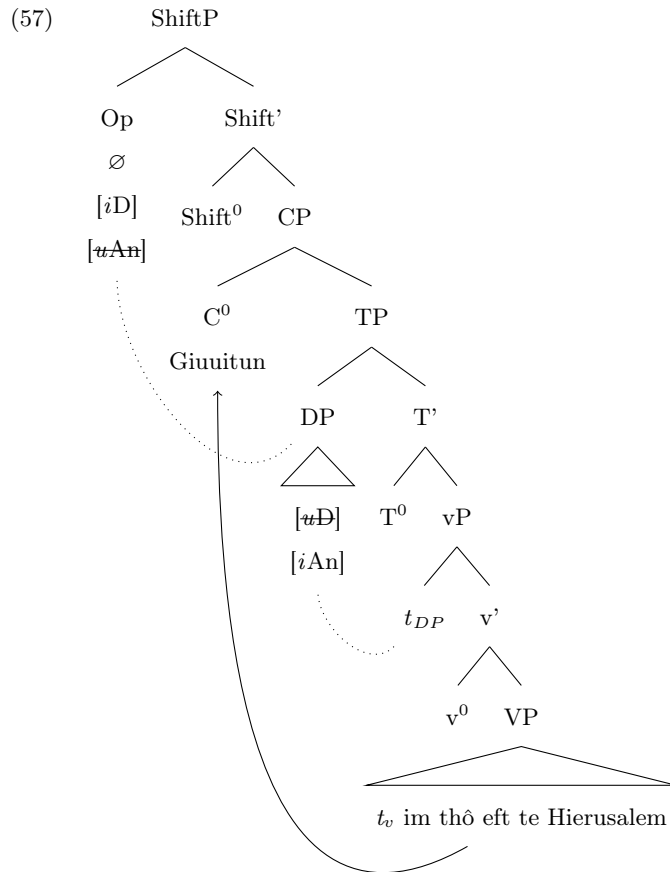
³ For this analysis, Walkden (2014) adopts the cartographic approach of a split CP, originally initiated by Rizzi (1997). In this approach, ShiftP is the head in which (aboutness) topics are hosted and in which it is indicated what the clause is about. As I have indicated in section 1.3, I will assume here as well that all features that can be assigned to these different heads can also be represented as feature bundles in C, following Giorgi and Pianesi (1997). Operators such as the ones discussed by Walkden (2014) could be seen as bundles of corresponding uninterpretable features in C as well, as suggested by Kinn et al. (2016: 175-177) in contrast with for instance Sigurðsson (2011), who proposes that operators introduce their own projections. These latter bundles will however not be assumed, in order to facilitate a better comparison with Walkden (2014) and Sigurðsson (2011). For this analysis, both options are compatible though.

unexpected in the first and the second person. According to Sigurðsson (1993: 254, footnote 6), this is because first and second person aboutness topics are possible, but only in narration and not in direct speech. The referential null subjects in the first and second person found in the early Germanic languages are however almost exclusively found in direct speech. Therefore, Walkden (2014) does not believe that the operator is located in Λ AP or Λ PP in early West Germanic, as he assumes, based on the fact that referential null subjects are so rare in early Northwest Germanic, that these languages lacked such probing operators (Walkden, 2014: 211-212). He illustrates his analysis with the tree in (57) below based on example (56) from Old Saxon.

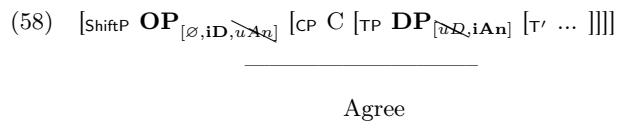
(56) *Giuuitun im thô eft te Hierusalem*

Giuuitun im thô eft te Hierusalem
 went.3PL REFL.dat then after to Jerusalem

‘Then they went to Jerusalem’ (Heliand 806-807, Walkden, 2014: 212, ex. 50)



The analysis can thus be captured as follows:



By contrast, Walkden (2014) analyses V2-Germanic topic drop, for instance in German, as licensed by a topic operator either in ShiftP or $\Lambda_{AP}/\Lambda_{PP}$, in which the probing feature is a [$u\varphi$] feature. This means that not only pronominal elements, but all elements bearing φ -features are visible to the operator. While the [u Anaphor] feature of the topic operator in early Northwest Germanic can probe for all pronominal material, only [$i\varphi$]

DPs in SpecFinP can be null in V2-Germanic topic drop languages as the finite verb in Fin acts as a defective intervener for a $[u\varphi]$ operator in ShiftP/ Λ_{AP} / Λ_{PP} (see for an introduction on defective intervention Chomsky, 2000a and for a recent overview Moreno and Petersen, 2016). This means that the referential null subject needs to be located in a position which c-commands the position of the finite verb in a V2 sentence. For, if SpecFinP were filled with other material in such a language (an adverbial phrase for instance), and a null subject were in SpecTP, the finite verb could serve as a defective intervener due to the fact that it bears φ -features. This would prohibit the licensing of the null subject by the $[u\varphi]$ topic operator. The operator can, depending on its position in the left periphery, make a connection with a logophoric agent (Λ_{AP}) or patient (Λ_{PP}) (Sigurðsson, 2004a,b). This explains why null topics in modern topic drop languages can be first or second person as well as third person. The analysis of modern V2 languages according to Walkden (2014) is illustrated in (59).

- (59) [$\Lambda_{AP}/\Lambda_{PP}/\text{ShiftP}$ OP_[$\emptyset, iD, \bar{u}\bar{Q}$] [FinP DP_[$\bar{u}\bar{Q}, i\phi$] [Fin' Fin-V_{fin $[\phi]$} [TP ...]]]]
 (Walkden, 2014: 215)

In short, the analysis given by Walkden (2014) for early Northwest Germanic referential null subjects predicts that they are aboutness topics in ShiftP. The fact that they are aboutness topics makes referential null subject in the first and second person very unlikely and has as a result that they are mainly third person. A consequence is that languages using this system rarely have referential null subjects in subordinate clauses, as the finite complementizer introducing the subordinate clause is in complementary distribution with the finite verb in Fin.⁴

The way in which referential null subjects in Middle Low German fit into the analyses sketched for earlier and later (Northwest) Germanic languages will be discussed in section 3.5.4.2, as all of their properties have to be presented first.

⁴ As indicated in Farasyn and Breitbarth (2016: 546), not all early Northwest Germanic languages share the properties on which the analysis of Walkden (2014) is based. Axel (2007) for instance notices that various Old High German texts, such as the *Monseer Fragmente* and *Tatian* have up to 30% of referential null subjects in the first person and even 40% in the second person. Furthermore, referential null subjects are much more common in the third person (singular as well as plural) too. These texts probably show an older system of consistent pro-drop in the transition to a partial null-subject language system. Walkden (2014) does for instance also analyse Gothic as a language having radical instead of partial pro-drop, which might be similar to the situation in early Old High German.

3.4 Referential null subjects in Northwest Germanic

Referential null subjects are not very common in the modern Germanic languages (Rosenkvist, 2009). Some exceptions are found in various Frisian dialects (Hoekstra, 1997), Zürich German (Hoekstra, 1997), Yiddish (Prince, 1999; Rosenkvist, 2009), Bavarian (Axel and Weiß, 2011; Grewendorf and Weiß, 2014) and Övdalian (Rosenkvist, 2009, 2010).

In the older Germanic languages, referential null subjects seem to be much more common though. They have among others been studied by Rusten (2013, 2015); Van Gelderen (2000); Walkden (2013) and Walkden (2016b) in Old English, by Axel (2007) in Old High German, by Sigurðsson (1993) and Kinn et al. (2016) in Old Icelandic, by de Smet (1970) in Old Dutch, by Kinn (2014, 2015) in Old Norwegian and by Walkden (2014) in Old Saxon. Extensive comparative overviews of pro-drop in the (early) Germanic languages can be found in Axel and Weiß (2011); Rosenkvist (2009) and Walkden (2014).

Null subjects have also been studied in more recent historical language stages of the Germanic languages. As might be expected, they often show interesting properties because of the fact that they are in the transition from older stages where null subjects were possible to the current systems, which typically exhibit quite different properties as far as their referential null subjects are concerned. Interesting findings in this respect have among others been reported by Kinn (2015) for Middle Norwegian, by Walkden and Rusten (2017) for Middle English, by Abraham (1991) for Middle High German, by Ackema and Neeleman (2007) for Early Modern Dutch, and by Volodina (2009, 2011) and Volodina and Weiß (2016) for Early New High German. Except for Farasyn and Breitbarth (2016), which was a pilot study on a smaller sub-corpus of the corpus used in this study, there are to the best of my knowledge no previous studies on referential null subjects in Middle Low German.

In this section, I focus on the main properties of referential null subjects in Northwest Germanic. Each of the subsections deals with referential null subjects in the presumable predecessor of Middle Low German, Old Saxon, and in the cognate languages contemporary to Middle Low German, Early New High German and Middle Norwegian.

3.4.1 Old Saxon

Walkden (2014) argues in his overview of pro-drop in the early Germanic languages that Old Saxon typologically qualifies as a partial null-subject language. Some of the examples of clauses containing referential null subjects are given in (60). He identifies the (understood) subject of the clause repeated here in (60a) as ‘Joseph and Mary’, although Joseph was not mentioned in the preceding clause. He also presents cases such as (60b), in which the verb has moved to the left periphery and a topic, i.e. the genitive object, is fronted. Such cases rule out an analysis of referential null subjects in Old Saxon as topic drop.

- (60) a. *Giuuitun im thō eft te Hierusalem iro sunu sōkean*

Giuuitun im thō eft te Hierusalem iro sunu sōkean
 went-3PL REFL-DAT then after to Jerusalem their son seek-INF

‘They then went to Jerusalem to seek their son’

(Heliand 806-7; Walkden, 2014: 192)

- b. *libes uueldi ina bilōsien, of he mahti gilēstien sō*

libes uueldi ina bilōsien, of he mahti gilēstien sō
 life-GEN would him take if he could achieve so

‘he_i would take his_j life if he_i could’ (Heliand 1442; Walkden, 2014: 192)

Furthermore, he finds eight examples of null objects in Old Saxon as well, one of which can be seen in (61).

- (61) *huuand it rotat hîr an roste, ende regintheobos farstelad, uurmi auuardiad...*

huuand it rotat hîr an roste, ende regintheobos farstelad, uurmi auuardiad...
 because it rusts here to rust and thieves steal worms spoil

‘because it rusts away, thieves steal [it], worms spoil [it]...’

(Heliand 1644-5, Walkden, 2014: 195)

Walkden (2014) presents the overall results on the frequency of referential null subjects in Old Saxon in table 3.1, which is based on the data extracted from the HeliPaD. Cases which could be analysed as gaps in second conjuncts (i.e. conjunction reduction) are

Person	N	Overt	Null	Total
1	SG	262 (100.0%)	0 (0.0%)	262
	PL	61 (100.0%)	0 (0.0%)	61
2	SG	247 (99.2%)	2 (0.8%)	249
	PL	230 (99.1%)	2 (0.9%)	232
3	SG	1089 (94.5%)	63 (5.5%)	1152
	PL	454 (91.5%)	42 (8.5%)	496
Total		2343	109	2452

Table 3.1: Referential pronominal subjects in the *Heliand*, by person and number, (Walkden, 2014: 193)

excluded from the data in the table. An important observation based on these data is that third person referential null subjects are significantly more common than non-third person ones ($p < 0.0001$ in Fisher's Exact Test) (Walkden, 2014: 193). A division of the same data according to clause type further show that referential null subjects in Old Saxon have a preference to occur in the main clause, as can be seen in table 3.2.

	Overt	Null	Total
Main clauses	969 (93.4%)	68 (6.6%)	1037
Subordinate	1277 (99.4%)	8 (0.6%)	1285
Second conjunct	97 (74.6%)	33 (25.4%)	130
Total	2343 (95.55%)	109 (4.45%)	2452

Table 3.2: Referential pronominal subjects in the *Heliand*, by clause type (Walkden, 2014: 193)

This difference between clause types is also significant ($p < 0.0001$).

3.4.2 Early New High German

In Early New High German (1350-1650), which is partially contemporary with Middle Low German, referential null subjects are possible as well. Volodina (2009, 2011) and Volodina and Weiß (2016) show that referential null subjects are particularly common in main clauses. The possibility of referential null subjects is not linked to a particular text/author. The overall results, based on a corpus of 1736 clauses (two texts), are given in table 3.3. As can be seen, referential null subjects occur in about 5.5% of all the clauses containing a pronominal subject. The table is based on the data from Volodina (2009: 58), though the data are represented differently, as only pronominal (null) subjects are given here. In this way, the data can easily be compared to the Old

Saxon data and the data for Middle Low German which will be given in section 3.5.2 (table 3.11).

Person		Overt	Null	Total
1	SG	246 (94.25%)	15 (5.75%)	261
	PL	84 (97.67%)	2 (2.33%)	86
2	SG	2 (66.67%)	1 (33.33%)	3
	PL	0	0	0
3	SG	131 (93.57%)	9 (6.43%)	140
	PL	152 (95.00%)	8 (5.00%)	160
Total		615 (94.62%)	35 (5.38%)	650

Table 3.3: Referential pronominal subjects in an Early New High German corpus, based on Volodina (2009: 58, figure 1)

As can be seen in table 3.3, the relative number of referential null subjects in the second person is quite high, though Volodina (2009: 59) calls the second person results marginal (in all probability due to the low overall number of occurrences). Besides these second person examples, referential null subjects have a preference to be in the third person in Early New High German (leaving number out of consideration).

Volodina and Weiß (2016) argue that referential null subjects are especially common in clauses in which verb movement to C^0 has taken place. Some examples of such clauses are given in (62): (62a) is a main clause. (62b) is a rarer example of a dependent V2 clause. The two clauses in this example have different syntactic functions: the second clause has the function of an argument of the preceding matrix clause, hence the subject has another referent. The covert subject is therefore analysed as pro-drop and not as topic drop (Volodina, 2009). In a few cases, pronominal gaps are found in syndetic as well as in asyndetic verb-final clauses, though it is not certain whether these are really cases of referential null subjects or gaps due to structural breaks because of strong nesting of the clauses (Volodina, 2009). A last type of clause in which referential null subjects in Early New High German can appear are clauses with an asymmetric second conjunct (i.e. when there is inversion in the first conjunct but not in the second conjunct, see example (62d)).

(62) a. als ich Nacher triefß kam erqwickete [] mich widerumb

als ich Nacher triefß kam erqwickete mich widerumb
 when I later there.out came refreshed myself again

‘When I came out of it later, [I] refreshed myself again’

(Güntzer, Volodina, 2009: 61)

- b. ... begerdten an mich [] solte mit Machen/

begerdten an mich solte mit Machen
asked of me should with make

‘They asked of me that I should participate’ (Güntzer, Volodina, 2009: 61)

- c. Sie_i risen die Heuser und andere Beuw umb den Kirchoff alle umh, uff dass []
] nicht, wan sie_j die Bayerischen_j in die Stadt kämen und sie_i sich uff dem
Kirchoff wehreten, nicht solten uff die Bäuw komen und Feuer unter sie_i geben.

Sie_i risen die Heuser und andere Beuw umb den Kirchoff alle
they tore the houses and other buildings around the churchyard all
umh, uff dass nicht, wan sie_j die Bayerischen_j in die Stadt kämen
down up that NEG when they the Bavarians into the town came
und sie_i sich uff dem Kirchoff wehreten, nicht solten uff die
and they REFL on the churchyard defended NEG should onto the
Bäuw komen und Feuer unter sie_i geben.
buildings come and fire among them give

‘They tore down the houses and other buildings around the churchyard such that the Bavarians when they came to town and they would have to defend themselves on the churchyard, they (the Bavarians) would not be able to get onto the buildings and set fire to them.’ (Güntzer, Volodina, 2009: 61)

- d. datzu hab ich allzeyt die weysse gehabt Und [] fortan haben will

datzu hab ich allzeyt die weysse gehabt Und fortan haben
to this have I always the disposition had and henceforth
will
have

‘I have always had the disposition for this and [I] will have [it] henceforth’

(Luther, Ebert et al., 2013: 346)

Though Volodina (2009) mentions that gaps in coordinated structures are common, she

does not count them as real referential null subjects. The same holds for sentence initial, context-linked subjects such as diary drop.

3.4.3 Middle Norwegian

Middle Norwegian (1350-1550) is, like Early New High German, partially overlapping in time with Middle Low German. Furthermore, there was intensive language contact in many localities because of the Hanseatic trading network (Bandle et al., 2005; Braunmüller, 1996, 2004; Braunmüller and Diercks, 1993; Jahr, 1999). Kinn (2015) focuses on referential null subjects in Middle Norwegian and shows that the language has a type of referential null subject which is no longer possible in the modern language. The covert pronouns are found in subordinate clauses (63a) as well as main clauses (63b). Just as in Old Saxon and Early New High German, many cases, such as (63c) are unlikely to be cases of topic drop, as they can occur in V2 clauses with a different constituent fronted.

- (63) a. ... *adh* [] *worom laglighe till kraffde och ooth sporde aff welbwrðig swen Karl Knwdson adh sigie ssaningen...*

adh worom laglighe till kraffde och ooth sporde aff welbwrðig swen
that were lawfully to demanded and out asked of well-born man
Karll Knwdson adh sigie ssaningen
Karl Knutsson to say truth.the

‘... that we were lawfully summoned and interrogated by the well-born man Karl Knutsson to tell the truth...’

(DN XI 650, 1538; Kinn, 2015: ch. 9.2, ex. 9.6c)

- b. *helde* [] *handom sammen...*

helde handom sammen
held hands together

‘They shook hands...’ (DN XI 650, 1538; Kinn, 2015: ch. 9.2, ex. 9.6d)

- c. *til sannynnda her vm settom* [] *okkor insigli firir þetta bref*

til sannynnda her vm settom okkor insigli firir þbref
to testimony here about put our seal for this

‘To testify this [we] put our seal on this letter...’

(DN XI 650, 1538; Kinn, 2015: ch. 9.2, ex. 9.6b)

The results of Kinn’s corpus study are given in table 3.4. The frequent formulaic structures with the verbs *sjá* ‘to see’, *heyra* ‘to hear’ and *sverja* ‘to swear’ are excluded from these data.

Person	Overt subject pronoun	Null subject	Total
1	426 (96.4%)	16 (3.6%)	442 (100%)
2	36 (94.7%)	2 (5.3%)	38 (100%)
3	633 (95.2%)	32 (4.8%)	665 (100%)
Total	1095 (95,6%)	50 (4.4%)	1145 (100%)

Table 3.4: Null and overt subjects in Middle Norwegian, by person, from Kinn (2015)

Important for comparison to the data of other languages is that Kinn (2015) takes referential null subjects in second conjuncts into account in these numbers (Kinn, 2015: 115). Kinn (2014) expands on gaps in coordinations, in which the conjoined clauses can either share the same subject or have different subjects. For comparison, the first kind of subject within these described types is not counted as a referential null subject in the Middle Low German data in this study, whereas the second type is (= asymmetric second conjuncts). An example of the latter in Middle Norwegian is given in (64).

(64) hann var bleikr a har_i ok []_i fell með lokkum

hann var bleikr a har ok [] fell með lokkum

he was fair on hair and fell with curls

‘He had fair hair that fell in curls.’ (Flat. I 550, 6, Nygaard, 1966: 11)

In Old Norwegian, referential null subjects were almost exclusively possible in the third person. Kinn (2015) finds that this person constraint is much more relaxed in Middle Norwegian, as referential null subjects are possible in the first as well as in the second person singular. The difference between first and third person referential null subjects is not statistically significant in her corpus data ($p = 0.4219$). She argues that this relaxation of the person restriction in Old Norwegian indicates that the language is in transition towards a language with discourse ellipsis, and that there is no person restriction on topic or discourse drop, resulting in the first and second person examples. However, there are still cases of genuine pro-drop which are restricted to third person.

3.5 Referential null subjects in Middle Low German

3.5.1 Methodology

For the calculations in this chapter, I used the data and metadata discussed in chapter 2. The corpus proposed in chapter 2.1 was however divided into two parts for the research about null subjects. To rule out the influence of Latin, which is a language with consistent pro-drop and, according to the typology of null subjects, a different type of null-subject language, I excluded the texts directly translated from Latin, two psalter(s) (fragments). The data are discussed separately in section 3.5.2, which deals especially with the variation between translated and non-translated texts. The psalters form a good base of comparison, as they make up about 21% of the whole corpus (i.e. about 3000 finite clauses). They were analysed and encoded in the database in exactly the same way as the untranslated Middle Low German texts.

I will argue in this chapter that Middle Low German had two different types of null subjects, which can be found in different positions in the clause. Therefore, I expanded the database for this chapter with extra mark-up concerning the position of the referential null subject. This information was only added to clauses containing a referential null subject. I added the same type of mark-up for the position to all clauses containing null expletives, as this is useful for the further argumentation in this chapter.

Advanced statistical analyses in this chapter were performed with Rbrul (Johnson, 2009). Basic statistical values such as the p -value in Fisher's exact test of independence or chi-squared test were performed with R.

3.5.2 Variation

The results from the corpus study show that Middle Low German has referential null subjects, though they make up only a small part of all the pronominal subjects in the corpus: only 2.23% of all the referential subjects in the corpus are null subjects. Several intra- and extra-linguistic factors influence their presence or absence. The results of the corpus study will therefore be presented in the light of these factors in the following section. The percentages and numbers of tokens always refer to pronominal subjects. Clauses in which the subject is a noun, are thus excluded from these numbers, as are the subject gaps in relative clauses and imperatives, null expletives, gaps in symmetric conjunctions and gaps in *alse*-clauses, which were all introduced in section 2.3.

3.5.2.1 Language internal factors

In the older Northwest Germanic languages, referential null subjects preferably appeared in main clauses and in the third person. In this section these factors are compared to the situation in Middle Low German.

3.5.2.1.1 Clause type

A very important factor influencing the occurrence of referential null subjects is the clause type. Referential null subjects are more than three times more common in main clauses (65a) than in subordinate clauses (65b), i.e. 3.53% vs. 0.71% respectively.

(65) a. *vnd [] begunden dar to buwen borghe*

vnd begunden dar to buwen borghe
and started there to build castle

‘and they started to build a castle there’ (Cronecken der Sassen)

b. *forder szo schole gy weten dath [] yuwen breff entfangen hebbe*

forder szo schole gy weten dath yuwen breff entfangen hebbe
furthermore so should you know that your letter received have-1SG

‘Furthermore, you should know that I have received your letter’

(Agneta Willeken)

The difference between those values is highly significant in Fisher’s Exact Test of Independence ($p = 8.084 \cdot 10^{-15}$). The results in table 3.5 show that the preference of the clause type in which the referential null subject appears presumably has not changed diachronically. The main clause is the preferred environment, as it was the case in Old Saxon as well (Walkden, 2014).

Clause type	Overt	Null	Total
Main	3172 (96.47%)	116 (3.53%)	3288
Subordinate	2782 (99.29%)	20 (0.71%)	2802
Total	5954 (97.77%)	136 (2.23%)	6090

Table 3.5: Referential pronominal subjects in the corpus, by clause type

The influence of the factor clause type can be measured more precisely with a distribution

analysis, performed with the statistical analysis software Rbrul (Johnson, 2009). The 'log odds' value in table 3.6 and similar tables shows the strength of the relationship between the factor (in this case clause type, with the difference between main or subordinate clause) and the occurrence of referential null subjects. A negative value shows a negative correlation, whereas a positive value shows a positive correlation. The correlation is stronger if the value is higher. Consequently, there is no correlation if the value is 0. The centred factor weight shows the same, but centred within a range between 0 and 1, which means that a correlation close to 0.50 is almost neutral, i.e. that the factor has no significant influence on the expression of the dependent variable.

Clause type	Log odds	Tokens	Centred factor weight	%referential null subjects
main	0.78	5868	0.69	3.53%
subordinate	-0.78	4748	0.31	0.71%

Table 3.6: Influence of the factor clause type on the expression of a referential pronominal subject as null

The values in table 3.6 show again that the correlation between referential null subjects and main clauses is strong, and that they thus preferably appear in the main clause.

3.5.2.1.2 Person and number

As I have described in section 3.4, the preferred person to have referential null subjects to appear in was the third person in Old Saxon as well as in the other older Northwest Germanic languages. In Middle Low German, these covert subjects still appear in this person very often, though the preference is much less striking than was the case in Old Saxon or Old High German (Walkden, 2014). As can be seen in table 3.7 referential null subjects are even slightly more common in the second person (2.43%) (singular and plural taken together) than in the third person (2.32%).

Person	Overall	Null	Total
1	1180 (98.17%)	22 (1.83%)	1202
2	643 (97.57%)	16 (2.43%)	659
3	4131 (97.68%)	98 (2.32%)	4229
Total	5954 (97.77%)	136 (2.23%)	6090

Table 3.7: Referential null subjects in the corpus, by person

The logistic regression analysis in Rbrul confirms this result again. The highest (centred) factor weight is found in the second person, in which it is slightly higher than in

the third person. Referential null subjects are slightly disfavoured in the first person. The results are however all close to 0.5, which means that person is certainly not the most relevant factor for explaining the presence or absence of referential null subjects. The values close to 0.5 confirm, however, that the strong preference for referential null subjects to appear in the third person has weakened enormously.

Person	Log odds	Tokens	Centred factor weight	%referential null subjects
1	-0.177	1202	0.456	1.83%
2	0.112	659	0.528	2.43%
3	0.064	4229	0.516	2.32%

Table 3.8: Influence of the factor person on the expression of a referential pronominal subject as null

Middle Low German distinguishes all persons of the singular in its verbal inflection, while it has a unitary inflection in the plural. As I have said in section 3.3, rich agreement is often suggested as a condition for referential null subjects in consistent null-subject languages, though it is suggested by Axel (2007) and Van Gelderen (2000) that agreement morphology on the verb played a role in some Germanic non-consistent null-subject languages as well. If such effects were to play a role in Middle Low German, one would expect to see a significant difference between the occurrence of referential null subjects in the singular and the plural: because of the unitary inflection in the plural, the relative frequency in the plural would be lower. This is however not the case. In the corpus used for this study, there is only a minimal difference between the relative frequency in both numbers, in which the relative frequency in the plural (2.25%) is even slightly higher than the one in the singular (2.23%). This can be seen in table 3.9.

Number	Overall	Null	Total
SG	4737 (97.77%)	108 (2.23%)	4845
PL	1217 (97.75%)	28 (2.25%)	1245
Total	5954 (97.77%)	136 (2.23%)	6090

Table 3.9: Referential null subjects in the corpus

The fact that there is no significant difference between the relative frequency of referential null subjects in the singular and in the plural is confirmed by the analysis in Rbrul in table 3.10, as the centred factor weight are both extremely close to 0.5.

Number	Log odds	Tokens	Centred factor weight	%referential null subjects
SG	-0.005	4845	0.499	2.23%
PL	0.005	1245	0.501	2.25%

Table 3.10: Influence of the factor number on the expression of a referential pronominal subject as null

Taking the parameters together delivers the results in table 3.11, which shows that referential null subjects are most common in the third person plural, while they are least favoured in the first and second person plural.

Person		Overt	Null	Total
1	SG	890 (97.80%)	20 (2.20%)	910
	PL	290 (99.32%)	2 (0.68%)	292
2	SG	440 (97.13%)	13 (2.87%)	453
	PL	203 (98.54%)	3 (1.46%)	206
3	SG	3407 (97.85%)	75 (2.15%)	3482
	PL	724 (96.92%)	23 (3.08%)	747
Total		5954 (97.77%)	136 (2.23%)	6090

Table 3.11: Referential pronominal subjects in the corpus, by person and number

An example for each one of the combinations of person and number is given in (66). The contexts in which the examples appeared is not given, as the distribution of referential null subjects within their context will be discussed in more detail in section 3.5.3.

(66) a. Seyt o here myn herte ys vor dy [] wolde gerne dyne(n) wille(n) vullenbrenge

Seyt o here myn herte ys vor dy wolde gerne dyne(n) wille(n)
 see o lord my heart is for you wanted-1SG gladly your will
vullenbrenge
 fulfill

‘See o lord, my heart is for you. [I] gladly wanted to fulfill your will’

(Prayer 2)

b. Men als my myne gaue hetest myt my nemen

Men als my myne gaue hetest myt my nemen
 but if me my gift commands-2SG with me take

‘But if [you] command me to take my gift with me’

(Griseldis)

- c. Dar waendt de rese het Sigenot vnd [] ys des Grymen mage

Dar waendt de rese het Sigenot vnd ys des Grymen mage
there lives the giant called Sigenot and is of.the Grim relative

‘There lives the giant named Sigenot and [he] is a relative of Grim’

(Kortwilige Historien)

- d. vnde [] schollen vns nach dar na holden

vnde schollen vns nach dar na holden
and shall-PL us to there to hold

‘and [we] must adhere to that’

(Cronecken der sassen)

- e. dat gy godt danckeden dar [] wol thofreden weren

dat gy godt danckeden dar wol thofreden weren
that you god thanked as well satisfied were

‘that you thanked god, as [you] were satisfied’

(Agneta Willeken)

- f. un(de) [] anclagheden mit eren vorspraken densulven Johanne

un(de) anclagheden mit eren vorspraken densulven Johanne
and sued-PL with their spokesmen the-same Johannes

‘and [they] sued the same Johannes with their spokesman’

(Herforder Rechtsbuch)

3.5.2.2 Extra-linguistic factors

The corpus study performed for this research shows that the occurrence of referential null subjects in Middle Low German varies depending on several factors such as clause type or period of writing. It also plays a role whether the text is a close translation from Latin or not.

3.5.2.2.1 Period of writing

Most of the variation in the data can be explained by looking at extra-linguistic factors influencing the occurrence of referential null subjects. Figure 3.1 gives a good overview of the relative frequency of these covert subjects over time. With the exception of a

small relapse in the first half of the 15th century, referential null subjects become more common over time from 1300 until about 1550, in which they occur most often in the second half of the 15th century. They are significantly less likely to occur in the earliest period (1251-1300). The number slightly decreases again in the last period for which there are sources (i.e. 1551-1600). More concrete (relative) frequencies are given in table 3.12.

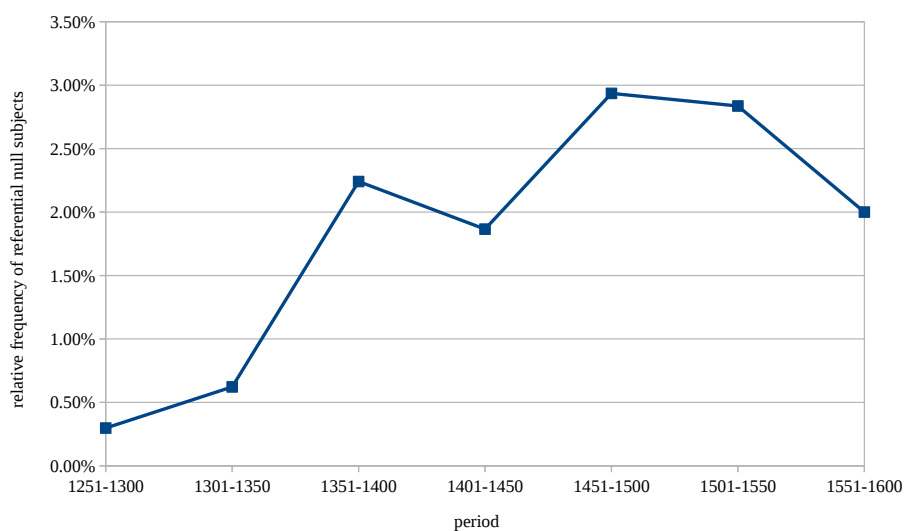


Figure 3.1: Relation between estimated period of writing and the occurrence of referential null subjects

The exact (relative) frequencies of the numbers per period are given in table 3.12. The highest frequency of null subjects can be found in the texts written in the period ranging from 1451 to 1500 (2.48%).

Period (range)	Overt		Null		Tokens
1251-1300	670	99.70%	2	0.30%	672
1301-1350	639	99.38%	4	0.62%	643
1351-1400	698	97.76%	16	2.24%	714
1401-1450	263	98.13%	5	1.87%	268
1451-1500	2612	97.06%	79	2.94%	2691
1501-1550	925	97.16%	27	2.84%	952
1551-1600	147	98.00%	3	2.00%	150
	5954	97.77%	136	2.23%	6090

Table 3.12: Referential null subjects in the corpus, by period of writing

The logistic regression analysis in Rbrul shows more clearly that there is a strong correlation between the periods from 1351 until 1600 and the occurrence of referential null subjects. The value of the strongest correlation indicates again that referential null subjects favoured the period between 1451 and 1500 (centred factor weight = 0.673).

Period (range)	Log odds	Tokens	Centred factor weight	%referential null subjects
1251-1300	-1.593	672	0.169	0.23%
1301-1350	-0.852	643	0.299	0.42%
1351-1400	0.446	714	0.61	1.51%
1401-1450	0.259	268	0.564	1.11%
1451-1500	0.723	2691	0.673	2.11%
1501-1550	0.688	952	0.665	2.12%
1551-1600	0.330	150	0.582	1.47%

Table 3.13: Influence of the factor period on the null expression of a referential pronominal subject

3.5.2.2.2 Genre

Genre is a factor with a strong influence on the occurrence of referential null subjects in Middle Low German (Farasyn et al., 2018). The centred factor weights in table 3.14 show on the one hand that the strongest correlation lies between the text type chronicle and the presence of the covert subject. The correlation is quite high in letters as well. On the other hand, referential null subjects are quite unlikely to occur in legal texts and charters. It must however be noted that these are the numbers excluding the genre-specific *alse*-clauses which were discussed in section 2.3, which were especially frequent in charters and legal texts. In religious texts and literature, there is almost no correlation, as the centred factor weights are close to 0.5.

Genre	Log odds	Tokens	Centred factor weight	%referential null subjects
chronicle	1.337	426	0.792	7.75%
letter	0.384	510	0.595	3.14%
religious	0.039	1249	0.51	2.24%
literature	-0.092	1876	0.477	1.97%
legal	-0.513	1304	0.375	1.30%
charters	-1.156	725	0.239	0.69%

Table 3.14: Influence of the factor genre on the null expression of a referential pronominal subject

For completeness, the exact numbers and the frequencies of referential null subjects for each genre are given in table 3.15.

Genre	Overt		Null		
	Count	%	Count	%	Total
chronicle	393	92.25%	33	7.75%	426
letter	494	96.86%	16	3.14%	510
religious	1221	97.76%	28	2.24%	1249
literature	1839	98.03%	37	1.97%	1876
legal	1287	98.70%	17	1.30%	1304
charters	720	99.31%	5	0.69%	725
	5954	97.77%	136	2.23%	6090

Table 3.15: Referential null subjects in the corpus, by genre

Referential null subjects are most frequent in chronicles, in which they reach a value of 7.75%, compared to charters which only reach an average of 0.65%.

3.5.2.2.3 Scribal language

The factor with the strongest influence on referential null subjects in Middle Low German is the scribal language. The analysis in Rbrul in table 3.16 shows that there is a very strong positive correlation between Eastphalian, Westphalian and North Low Saxon, whereas there is a negative correlation between the scribal language of Lübeck and the occurrence of these subjects.

Scribal language	Log odds	Tokens	Centred factor weight	%referential null subjects
EPH	3.610	1958	0.974	2.66%
WPH	3.441	1644	0.969	2.25%
NLS	3.304	2388	0.965	1.97%
LB	-10.354	100	< 0.001	0.00%

Table 3.16: Influence of the factor scribal language on the expression of a referential pronominal subject as null

The exact and relative values and numbers in the data are given in table 3.17.

	Overt		Null		
EPH	1906	97.34%	52	2.66%	1958
WPH	1607	97.75%	37	2.25%	1644
NLS	2341	98.03%	47	1.97%	2388
LB	100	100.00%	0	0.00%	100
	5954	97.77%	136	2.23%	6090

Table 3.17: Referential null subjects in the corpus, by scribal language

This division in the data comes down to the division between the languages of the *Attländ* and the languages of the *Neuländ*. In the former, referential null subjects are strongly favoured, whereas they are barely possible in the newly emerging urban scribal language of Lübeck. The dialect of Lübeck has been characterised as more progressive concerning ongoing linguistic changes and generally shows properties of dialect mixing and leveling (Breitbarth, 2014a,b; Peters, 2017).

3.5.2.2.4 Translation

For this section, I compared two texts which were close translations from the Latin original with the rest of the Middle Low German corpus: the Southwestphalian and the Eastphalian psalters. As I have mentioned in chapter 2, this does not mean that the rest of the corpus does not contain any translations. Many of these adaptations do however not follow the original word for word, contrary to how it is more or less the case in the psalters.

The two psalters in my corpus date from different periods: the *Southwestphalian psalms* date from the beginning of the 14th century and the Eastphalian ones from the 15th century. The psalter from the 14th century is based on a Middle Franconian and on a Latin original and follows the *Nova Vulgata* Latin translation of the Bible. Each Middle Low German verse is introduced by the first one to three Latin words of the Latin original of the text. This can be seen in example (67), in which the preceding Latin text is marked in bold.

- (67) **Et ascendit** Do steig he uppe cherubin an(de) vlog he ulog ou(er) de vederen der winde

Do steig he uppe cherubin an(de) vlog he ulog ou(er) de vederen
 There mounted he on cherub and flew he flew over the feathers
der winde
 of.the wind

‘There he mounted on cherub and flew, he flew on the feathers of the wind’
 (Südwestfälische Psalmen, ps. 17)

The Eastphalian psalter is different, as it is only ever based on a Latin equivalent. Each Middle Low German verse is preceded by the full equivalent Latin verse. This psalter differs from the original, however, in the sense that it often adds comments and elaborations such as relative clauses and complement clauses to the psalms. Example (68) shows a Middle Low German verse from the Eastphalian psalter, preceded by the Latin equivalent marked in bold. The second conjunct *vn(de) nicht inder .e. des vlesches* ‘and not the law of the flesh’, which has no Latin equivalent, has been added at the end of the verse. This addition is marked in bold as well in the example.⁵

- (68) **Beati in maculati in via qui ambulant in lege dnj** Salich sint alle de vn-
 beveleckeden in deme wege der warheit i xpo . dede wandren inder .e. des heren.
vn(de) nicht inder .e. des vlesches.

Salich sint alle de unbeveleckeden in deme wege der warheit i xpo.
 blessed are all the immaculate in the way of.the truth in christ
dede wandren inder .e. des heren. vn(de) nicht in=der .e.
 REL=RELPART walk in.the law of.the lord and not in=the law
des vlesches.
 of.the flesh

‘Blessed are the immaculate in the way, who walk in the law of the lord

⁵Most data and the findings about the influence of translations close to the Latin original on the presence of referential null subjects in this subsection will appear in Farasyn et al. (2018). The findings in the article are mainly based on the longest psalm, psalm 119, and they are based on a slightly smaller Middle Low German corpus. The study is representative for this larger study, as all main findings turn out to apply for the rest of the psalms in the psalters and for this corpus as well.

Blessed are all the immaculate in the way of truth in Christ, who follow the law of the lord **and not the law of the flesh.**' (Ostfälische Psalmen, ps. 119)

As can be seen in table 3.18, a big difference can be noticed between the Latin psalters and the other Middle Low German texts, which have respectively 0.97% and 2.23% of null subjects. The difference between the two values is statistically significant at the 1-percent level in Fisher's Exact Test ($p = 0.0006126$).

Corpus	Overt		Null		
base corpus	5954	97.77%	136	2.23%	6090
psalms	1633	99.03%	16	0.97%	1649
Total	7587	98.04%	152	1.96%	7739

Table 3.18: Referential null subjects in the corpus, by type of text (close translation from Latin or not)

Table 3.19, which is based on the distribution analysis in Rbrul, again underlines the fact that there is a negative correlation between the close psalm translations and the presence of referential null subjects, whereas there is a positive correlation between the more balanced Middle Low German corpus and the presence of referential null subjects.

Translation	Log odds	Tokens	Centred factor weight	%referential null subjects
no	0.423	6090	0.604	2.23%
psalm	-0.423	1649	0.396	0.97%

Table 3.19: Influence of the factor translation on the null expression of a referential pronominal subject

Latin is a consistent pro-drop language, in which the referential subject is usually phonetically empty (69a), though subject pronouns are sometimes used for disambiguation, focusing or intonation (69b) (Lücht, 2011).

(69) a. Cogitavi vias meas & qverti pedes meos in testimonia tua

Cogitavi vias meas & qverti pedes meos in testimonia tua
 considered my ways and converted feet mine in testimonies your

'[I] have considered my ways and [I] turned my feet toward your testimonies'
 (Ostfälische Psalmen, ps. 119)

b. Tu mandasti mandata tua. custodiri nimis

Tu mandasti mandata tua custodiri nimis
 you commanded commandments yours to.be.kept

‘You have commanded your commandments to be kept diligently’

(Ostfälische Psalmen, ps. 119)

This makes the results very surprising, as an influence of Latin pro-drop might have been expected to lead to a higher number of referential null subjects in the psalters. Furthermore, the referential null subjects in the psalms act the same as typical Middle Low German referential null subjects would do in non-translated texts as well concerning their syntactic position, the environment in which they appear, the relation to their antecedent and their behaviour in coordinations, properties which will all be discussed in section 3.5.3.

I assume that referential null subjects form an inherent feature of (Middle) Low German grammar. There are two reasons for this. In the first place, they are quite uncommon in the psalters. Furthermore, they behave exactly like ‘real’ Middle Low German null subjects in non-translated texts. The translators of the texts, who knew the grammar of Latin, clearly knew that overt pronominal subjects are not necessary in Latin, whereas they were usually present in Middle Low German in the same environments. Therefore, they probably added the overt subjects more often in Middle Low German texts in those environments in which they could have left the pronoun covert in an original Middle Low German text. The examples of null subjects in the Middle Low German text are therefore also more common in the comments for which there is no Latin example (70).

(70) *hir vme so steit hir vore dusse bokstaf phe dar spreket [] ik hebbe erret*

hir vme so steit hir vore dusse bokstaf phe dar spreket ik hebbe erret
 here for so stands here for this letter b there speaks I have erred

Therefore, the letter b stands here. There [he] speaks: ‘I was wrong’.

(Ostfälische Psalmen, ps. 119)

This example is not preceded by a Latin counterpart in the original psalter as it appears in the comments on the psalm. A common type of example, in which there is no subject pronoun in the Latin psalm, whereas there is a subject pronoun in Middle Low German, was given in (67).

3.5.3 Syntactic distribution

In this section I look at the referential null subjects in more detail. In subsection 3.5.3.1, two possible positions in which the referential null subject can appear, are discussed. Both positions are looked at in respect to the factors influencing variation which were discussed in section 3.5.2. Subsection 3.5.3.2 offers some insights on the relation of the referential null subject to its antecedent.

3.5.3.1 Position of referential null subjects

As was introduced in 1.3, there are two possible positions which the subject can occupy in Middle Low German, viz. SpecCP or a position following C. As the basic structure of Middle Low German is known, it is possible to reconstruct where the referential null subject would be located if it were an overt pronoun. This can for instance be done by looking at the position of the finite verb, based on the function of the clause (for instance a conditional) or by looking if there is a topic or not. Consequently, it must be assumed that there are two possible positions for referential null subjects as well. The results from the corpus show that 63.97% of all the referential null subjects are located in SpecCP, while 36.03% are located in the position after C. The two positions can host four possible types of referential null subjects. In the first type, the subject-initial V2 clause, the gap is located in SpecCP and thus preceding the finite verb. This is the only type with the referential null subject in SpecCP. The null subject is often preceded by *vnde* ‘and’. Two example of this type are given in (71).

(71) a. *vnde* [] *wanderde so in dat elende*

vnde wanderde so in dat elende
and went like.this in that misfortune

‘and [she] ran into misfortune’ (Veer koepliede)

b. *vn(de)* [] *heuest al der ghenre oghen de in dy seggen doen verwundere(n)*

vn(de) heuest al der ghenre oghen de in dy seggen doen
and have-2SG al the ones eyes REL in you saw do
verwundere(n)
amaze

‘And you amazed the eyes of everyone who looked at you’

(Myrren bundeken)

In the three other types of structures, the referential null subject is following C. This is the case in clauses in which there is no topic or in which the topic is filled by a constituent other than the subject. Example (72) is an example of an asyndetic conditional V1-clause in which the gap is following C.

(72) heuet [] ene ane burghe ghelaten so mach hey dat selue doyn

heuet ene ane burghe ghelaten so mach hey dat selue doyn
has him without bailman left so may he that himself do

‘If [he/one] left him without a bailman, he may do that himself’

(Soester Schrae)

There are also cases with the referential null subject in the position after C, in which the topic position is filled by a constituent other than the subject. In example (73a), this constituent is an adverbially used infinitive, whereas it is a pronominal adverb in example (73b).

(73) a. v(m)me in dy to gheloue(n) heuest [] ghenodet openbarlike doende to beke(n)nen myt openen ghetuechnissen vn(de) blenckenden tekenen

v(m)me in dy to gheloue(n) heuest ghenodet openbarlike doende to
for in you to believe have needed public doing to
beke(n)nen myt openen ghetuechnissen vn(de) blenckenden tekenen
confess with open testimonies and shining signs

‘In order (for us) to believe, [you] needed to confess publicly with open testimonies and shining signs’

(Myrren bundeken)

b. Dar na schere [] nach vmme negen daghen

Dar na schere nach vmme negen daghen
that after wandered after about nine days

‘After that, he wandered for about nine days’

(Gandersheimer Reimchronik)

The last type of clauses in which the referential null subject follows C are syndetic verb-late subordinate clauses. Such an example is given in (74), in which the referential null subject is not in SpecCP, but following C.

- (74) Doch bidde yk di eynes dinges, effte yd scheen mach, dat [] de tzarten ledemate des edelen kyndes wult bewaren vor de wilden deerte vnde vogele

*Doch bidde yk di eynes dinges, effte yd scheen mach, dat de
yet ask I you one-GEN thing-GEN if it happen may that the
tzarten ledemate des edelen kyndes wult bewaren vor de wilden
tender limbs the-GEN precious child-GEN will keep from the wild
deerte vnde vogele
animals and birds*

‘Yet I ask one thing from you, if it may happen, that [you] shall protect the tender limbs of the precious child from the wild animals and birds.’ (Griseldis)

An overview of the four different types of clauses in which referential null subjects are found, is given in table 3.20. Though the favoured environment for referential null subjects is the V2 clause (63.97% or 87 cases), an analysis in terms of topic drop from SpecCP does not suffice to capture the many examples in which the referential null subject is located in the position following C (i.e. in V1 clauses, non-subject-initial V2 clauses and in syndetic subordinate clauses).

V2	SpecCP	(vnde) [] Vfin ...	87
V1	> C	(vnde) Vfin [] ...	5
V2	> C	(vnde) topic Vfin [] ...	30
VL	> C	(vnde) Comp [] ...	14
Total			136

Table 3.20: Possible positions of the referential null subject

It becomes clear from table 3.20 and from the fact that the main clause is the preferred environment that the presence of referential null subjects correlates with verb movement. This is because 89.71% ($N = 122$) of all the referential null subjects ($N = 136$) occur in

environments with V-to-C movement (i.e. in the first three types of clauses in the table).⁶

3.5.3.1.1 Person and number according to syntactic position

The distribution of referential null subjects is rather asymmetrical. Person and number of the subject seem to correlate to some extent with the position in which the subject can appear. An overview of the possible combinations of person and number according to the position of the null subject is given in table 3.21. The centred factor weight of each combination, resulting from the multiple regression analysis in Rbrul, is given in the last column.

Number	Person	SpecCP		After C		Total	Centred factor weight
SG	1	12	60%	8	40%	20	> 0.999
	2	4	30.77%	9	69.23%	13	< 0.001
	3	50	66.67%	25	33.33%	75	0.555
PL	1	2	100%	0	0%	2	< 0.001
	2	0	0%	3	100%	3	> 0.999
	3	19	82.61%	4	17.39%	23	0.445
Total		87	63.97%	49	36.03%	136	

Table 3.21: Frequency of each combination of person and number according to type of null subject

Figure 3.2, which is based on the frequencies in table 3.21 shows for instance very clearly that there are no cases of referential null subjects in the position after C in the first person plural, while there are no cases of second person plural pronouns in SpecCP. It should of course be kept in mind that the examples in these person-number combinations are very sparse, which heavily influences the figures.

⁶Two of the gaps are located in asyndetic conditional subclauses with verb movement like in main clauses. This can for instance be seen in example (72). In all of the other subclauses, with or without a(n overt) complementizer, there is no verb movement to C.

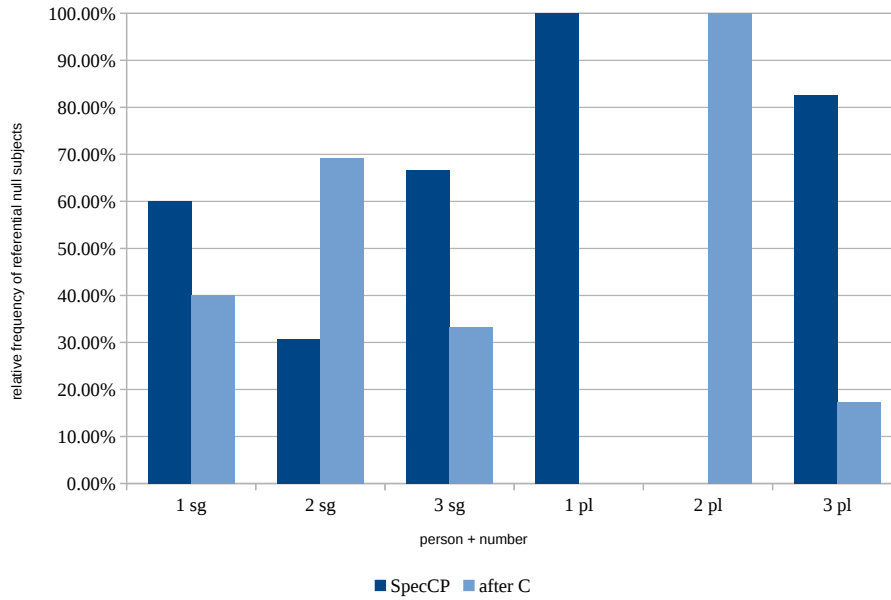


Figure 3.2: Type distribution of referential null subjects according to person and number

The chart in figure 3.3 shows that referential null subjects are relatively more common in SpecCP than in the position after C both in the singular as well as in the plural.

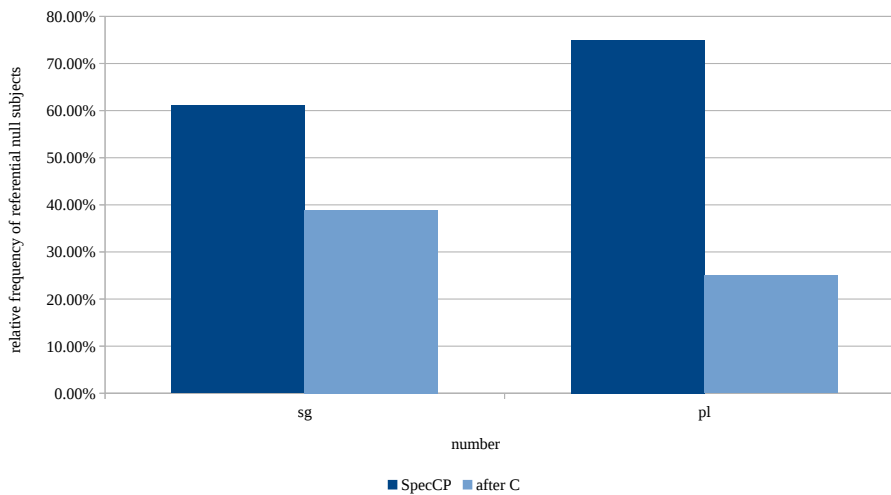


Figure 3.3: Type distribution of referential null subjects according to number

To conclude the section about the correlation between person/number and the syntactic position of the null subject, figure 3.4 shows that the second person is the most common person in the position following C, whereas it is the least favoured person in SpecCP.

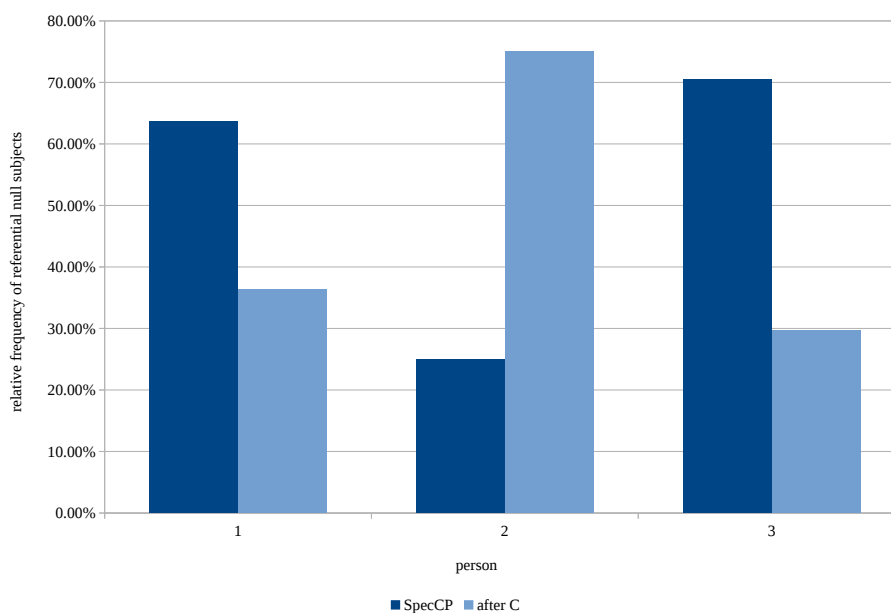


Figure 3.4: Type distribution of referential null subjects according to person

Third person null subjects, of which there are numerous examples, clearly favour being in SpecCP.

3.5.3.1.2 Syntactic position according to period

I have shown that there was a strong correlation between the periods from 1351 until 1600 and the occurrence of referential null subjects. In the earliest periods, the numbers of referential null subjects are very low, which might mean that the earliest results in figure 3.5 are not representative. The other data points in this graph are however useful to show us that the rise in the relative frequency of referential null subjects from 1350 onwards is mainly due to a gradual increase in referential null subjects of the first type, i.e. in SpecCP from 1351 until about 1550. The highest number of this type is achieved between 1501 and 1550. Meanwhile, there is, except for a short plunge in the frequency between 1401 and 1450, a gradual increase of referential null subjects in the

position after *C* as well. The frequency of this type peaks between 1451 and 1501.

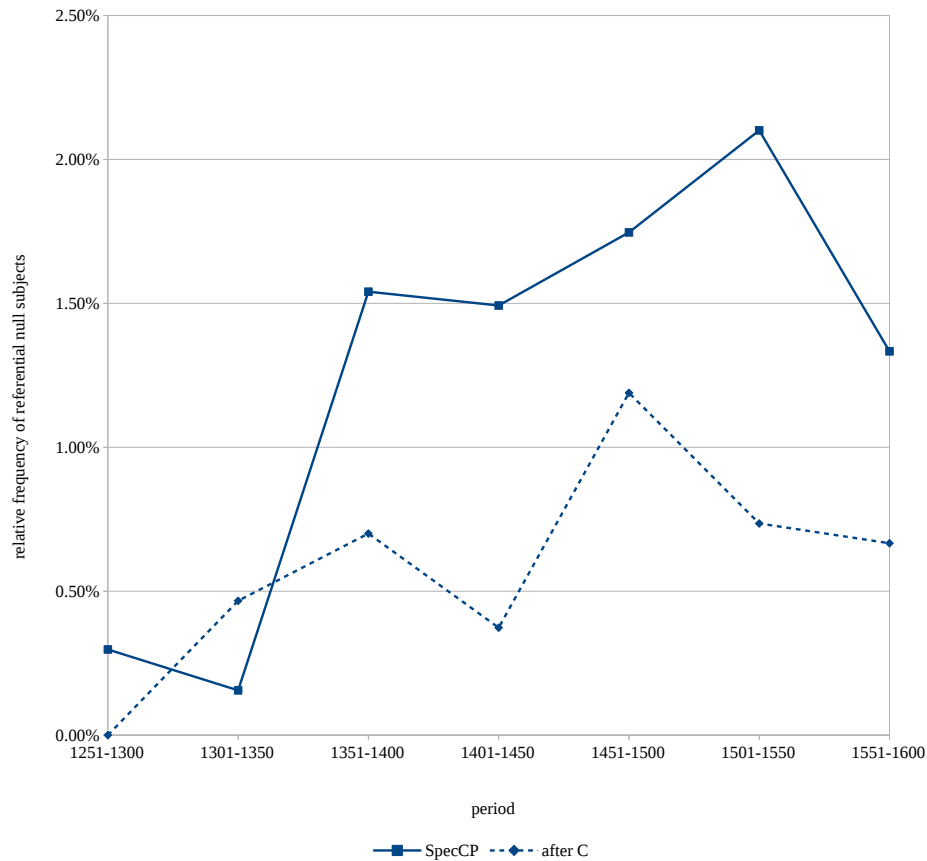


Figure 3.5: Positional distribution of referential null subjects according to period

3.5.3.1.3 Syntactic position according to genre

Figure 3.6 connects the genre of the text to the relative frequency of referential null subjects of each type. The most striking results are found in the chronicles, in which over 90% of all referential null subjects occur in SpecCP. I showed that the strongest correlation between text type/genre and referential null subjects was found between chronicles and referential null subjects. It can be specified on the basis of 3.6 that this correlation is mainly a correlation between pro-drop in SpecCP and the narrative genre. A more moderate example of this claim can be seen in the literary genre. The figure

also shows that this type of referential null subject is least common in charters, letters and religious texts.

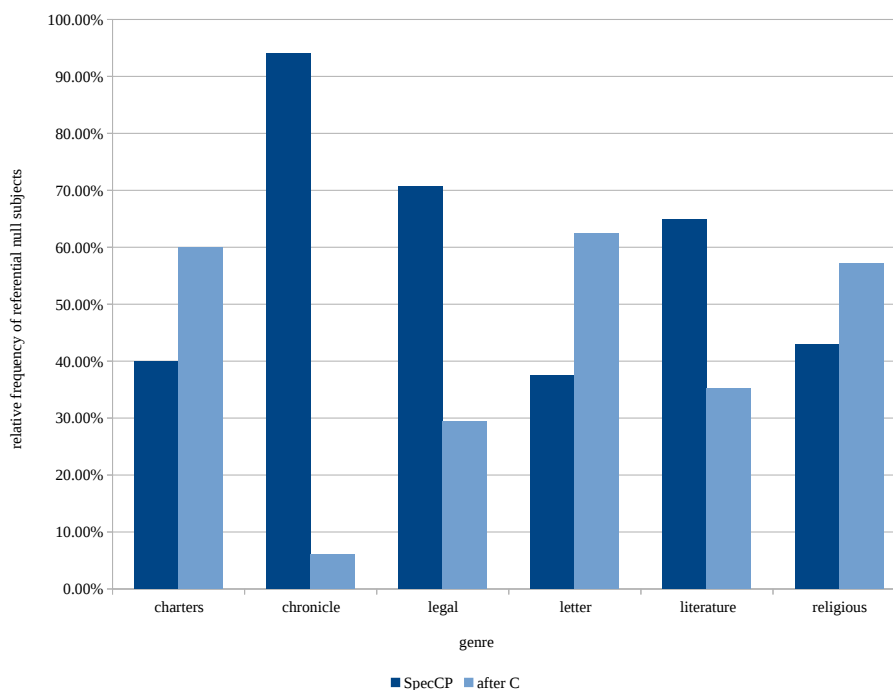


Figure 3.6: Type distribution of referential null subjects according to genre

3.5.3.1.4 Two types of referential null subjects

In the last section I showed that the referential null subject can occur in SpecCP or in the position following C, as the overt subject pronoun can take these positions as well. Furthermore, I showed in the preceding subsections that the position of the referential null subject can be linked to some of its syntactic properties: overt second person pronouns favour the position following C, whereas overt third and first person pronouns preferably occur in SpecCP. These observations indicate that there are two different kinds of null subjects in Middle Low German, one in SpecCP and one in the position following C, i.e. the position descriptively called the Wackernagel position. This means that the first type occurs in a position which is typical for topics, which could explain why this type of referential null subject correlates strongly with narrative texts. Two additional observations can be made to support the claim that there is a second type of referential

null subject in the position following C. In the first place, Middle Low German does not only have null subjects, but it also has null expletives. The position of these null expletives is almost exclusively the position in which the second type of referential null subject appears (i.e. in 98% of all cases). The fact that null expletives can be found in Middle Low German is a typical property of partial null-subject languages. A common example of a null expletive in the Wackernagel position is given in (75a), whereas (75b) shows a very rare example of a null expletive in SpecCP. When I turn to the analysis in section 3.5.4, I will make use of the observation that the post-C position seems to attract referential and expletive null subjects. The position therefore shows properties of a partial null-subject language, while SpecCP as a topic position does not attach the same kind of null elements.

- (75) a. Vortmer were [] dat the Stath eder der borghere Jenig, vnse manne
besculteghede

Vortmer were dat the Stath eder der borghere Jenig, vnse manne
Furthermore were that the city or the citizen Jenig our man
besculteghede
accused

‘Furthermore, should [it] be (the case) that the city or citizen Jenig accused
our man’ (Urkundenbuch Oldenburg, Bl.1345a)

- b. vn(de) [] beteke(n)t dat vns got bewijsen wolde syne pure menscheit vn(de)
gotheit

vn(de) beteke(n)t dat vns got bewijsen wolde syne pure menscheit
and means that us God prove wanted his pure humanity
vn(de) gotheit
and divinity

‘and [it] means that God wanted to prove to us his pure humanity and divinity’
(Spiegel der leyen)

A second observation is that there are non-restrictive relative clauses with a first or second person head. These types of clauses have been introduced in section 3.2 and will

be discussed more extensively in chapter 4, where I claim that they contain either an overt resumptive or a null resumptive in the Wackernagel position.

3.5.3.2 Referential null subjects and their antecedents

In this section, I will look at the relation between the referential null subject and its antecedent. I will among other things discuss second conjuncts which are not parallel to the first conjunct, the lack of c-command for licensing the gap in certain cases and referential null subjects which are introduced implicitly in the discourse.

3.5.3.2.1 Structurally non-parallel antecedent in a second conjunct introduced by *vnde*

Many of the referential null subjects in the corpus in this study occur in clauses which are introduced by *vnde/unde/ande* ‘and’ ($N = 88$). As I have said in the introduction to this chapter, conjunction reduction is very common in Middle Low German. The cases under consideration here, however, are special cases in which the parallelism requirement for conjunction reduction as is found in the modern languages does not hold, even though they are second conjuncts. They were therefore labelled as referential null subjects, and not treated as regular conjunction reduction. These coordinated clauses can be divided into different types.

In the first type of example, the referential null subject is licensed by an antecedent which is not the subject in the preceding clause, but a direct or indirect object. In example (76a), the referential null subject in the second conjunct is not coreferent with *sin vader* ‘his father’, which is the subject of the first conjunct. Rather, its referent in the first conjunct is the direct object, *den man* ‘the man’. A second example of this type is given in (76b). The main clause is followed by a straightforward conjoined clause, in which there is conjunction reduction of *se* ‘they’. In the last conjoined clause however, the covert subject is *sie*, which is coreferent with *de iukfrowe*, the direct object of the second conjoined clause.

- (76) a. Den ma(n)_i hedde em_k sin vader_j gheervet un(de) [_i] were sin_k wulschuldighe eghene man

Den ma(n) hedde em sin vader gheervet un(de) were sin
 the-ACC man had him his father bequeathed and were his
wulschuldighe eghene man
 fully.indebted own man

‘[Reportedly,] his father had bequeathed the man to him, and [he] were his fully indebted own man (=bondslave)’ (Herforder Rechtsbuch)

- b. Se gingen henin myt groten wonder des volkes vnde [] vunden de iukfrowe schaffen in deme huseken Vnde [] erschrak sere van deme seltzen gaste

Se gingen henin myt groten wonder des volkes vnde vunden de
 they went in with great wonder of.the people and found the
iu kfrowe schaffen in deme huseken Vnde erschrak sere van deme
 virgin working in the house and was.shocked much of the
seltzen gaste
 peculiar guest

‘They went in under great amazement of the people and [they] found the virgin working in the little house and [she] was frightened by the strange guest.’ (Griseldis)

In another type of example, as for instance in (77a) and (77b), the question is with which conjunct the conjoined clause in which the referential null subject is located is really coordinated. In example (77a), the first conjunct of the example is a main clause. The referential null subject is located in the sub clause which is introduced by *vnde*: *vn(de) [] is daer v(m)me ghehete(n) een spieghel d(er) leyen* and is followed by the finite verb. As the verb appears in this position only in main clauses, one would expect the implied subject to be the subject of the main clause, *de vorrede* ‘the prologue’. However it is clear from the context that the relative pronoun introducing the relative clause *dat seer nutte is...* ‘that is very useful...’, which modifies *desse(n) boeke* in the PP-complement to *de vorrede*, is the real antecedent of the gap in the conjoined clause.

A very similar example is given in (77b). The referential null subject is again located in a clause introduced by *vnde* and it is followed by the finite verb, which

makes it seem like it is coordinated with the first main clause. However, the referential null subject is coreferent with *des mannes*, which is also the subject of the conjoined adverbial clause of result (with a verb final structure). The second conjunct therefore seems to be conjoined with the adverbial clause rather than with the main clause, even when the verb position in both clauses is non-parallel.

- (77) a. *Hijr beghi(n)t de vorrede vp desse(n) boeke . dat seer nutte is de(n) leye(n). vn(de) [] is daer v(m)me ghehete(n) een spiegel d(er) leyen.*

Hijr beghi(n)t de vorrede vp desse(n) boeke dat seer nutte is de(n)
 here begins the prologue on this book that very useful is to.the
leye(n) vn(de) is daer v(m)me ghehete(n) een spiegel d(er) leyen
 layman and is there for called a mirror of.the layman

‘Here begins the prologue to this book that is very useful for the layman and [it] is therefore also called Mirror of the Layman.’ (Spiegel der leyen)

- b. *Do quemen so vele barnende tranen in de ogen des mannes dat he sick nicht mer mochte entholden vnde [] kerde van er syn antlath*

Do quemen so vele barnende tranen in de ogen des mannes dat he
 there came so many burning tears in the eyes of.the man that he
sick nicht mer mochte entholden vnde kerde van er syn antlath
 himself not anymore might withhold and turned of her his face

‘There came so many burning tears in the eyes of the man that he could no longer withhold himself and [he] turned his face away from her’ (Griseldis)

These examples are very similar to the asymmetric coordinations with subject gaps which can be found in modern High German as well (Büring and Hartmann, 1998; Höhle, 1983; Reich, 2009). In example (78) for instance, the position of the finite verb in the first conjunct differs from its position in the second conjunct as well (i.e. verb final vs. V2 respectively).

- (78) [Wenn du nach Hause kommst] und [[] siehst_i den Gerichtsvollzieher vor der Tür
 t_i]

*Wenn du nach Hause kommst und siehst den Gerichtsvollzieher vor
 when you-2SG to house come and see the bailiff before
 der Tür
 the door*

‘When you come home and [you] see the bailiff in front of the door’

(example from Reich (2009: 206), own English translation)

A third type of case indicates that the role of *vnde* ‘and’ is not only coordinating. In many cases, it rather seems to be a discourse marker which indicates a new chunk of information, similar to the discourse marker *vortmer* ‘furthermore’ which is often used in legal texts (79a). Example (79b) shows this discourse marker *vnde* followed by a referential null subject, which does not refer to a reference in the preceding utterance. The implied subject in the new chunk of information is clearly the first person plural pronoun *wi* ‘we’, as can be deduced from the use of the plural verb form and the possessive in *vnsen Jnghezeghele* ‘our seal’.

- (79) a. *VOrtmer dey Prouest van Suyst efte sin Official dey sal twyge in deme iare
 sinen sent binnen der stat sitten*

*VOrtmer dey Prouest van Suyst efte sin Official dey sal twyge
 furthermore the mayor of Soest or his representative he shall twice
 in deme iare sinen sent binnen der stat sitten
 in the year his court inside the city sit*

‘Furthermore, the mayor of Soest or his representative will hold court in the city twice a year’
 (Soester Schrae)

- b. *alzo dat dat vrenomde gud scal alzo vry wesen vnde nene plicht mer doen
 dan also anderer riddere vnde knechte gud Jn vnser herschoph doeth vnde
 plichtich is. Vnde [] betughet dat mid vnsen Jnghezeghele ghehanghen to
 desen breve*

*alzo dat dat vrenomde gud scal alzo vry wesen vnde nene
 so that the aforsaid good should so free be and no
 plicht mer doen dan also anderer riddere vnde knechte gud Jn
 duty anymore do than like other knights and servants good in*

unser herschoph doeth vnde plichtich is Vnde betughet dat mid vnsen
 our reign do and obliged is and testify that with our
Jnghezeghele ghehanghen to desen breve
 seal appended to this letter

‘So that the aforesaid good should be free in this way and no additional duty should do, as other knights and servants in our reign does or is obliged to do. And we testify that with our seal, appended to this letter’

(Oldenburger Urkunden)

3.5.3.2.2 Antecedent in the preceding adjunct clause

In another type of clause, the referential null subject is located in the main clause, while the antecedent is in a preceding adjunct clause depending on the main clause.

In example (81a), there are two desiderative clauses conjoined with *vnde*. The subject of the first conjunct is *god*, whereas the subject of the second conjunct is the pronoun *iu* ‘you’. However, *iu* is an object which consequently bears the accusative case. The referent, *ghi* ‘you’, appears preceding the gap in the nominative case as well, but it does not c-command the subject gap as it is located in an adverbial clause.

In example (81b) there are two conjoined main clauses. The referential null subject is located in the second conjunct. This can be seen because the finite verb, *hebben* ‘have’ in this clause is in the plural, while the subject and the verb in the first conjunct are singular (*is* ‘is’ and *de memorie* ‘the memory’). Furthermore, the context indicates that *de memorie* cannot be the subject of the second conjunct, as it is unlikely that the memory would forget something. A much more logical antecedent of the gap is *manich sympel leye* ‘many a simple layman’, which is again located in the preceding (concessive) adverbial clause. Again, the antecedent is thus not c-commanding the covert referential pronoun. Though *manich sympel leye* is in fact singular in form (and agrees with a singular verb), it is here probably semantically interpreted as a plural (*constructio ad sensum*).⁷

⁷Volodina and Weiß (2016) find similar examples in their analysis of Early New High German. In example (80), for instance, the antecedent *volck* ‘people’ is grammatically singular, whereas there is agreement between the subject gap and the finite verb in the plural in the second conjunct.

(80) do gieng [...] ein michel volck_{i-SC} mit von frau vnd von manen, dem edelen kung entgegen
 vnd [e_{i-PL}] enphiengen In

- (81) a. God gheue iv_i also to soeken vn(de) to lesen [dat ghii $_i$ daer by verbetert weerden.] Vnde willen [] $_i$ dit boeck to godes eeren beghinne(n).

*God gheue ivi also to soeken vn(de) to lesen [dat
God give-SBJN you-ACC.PL therefore to search and to read that
ghii daer by verbetert weerden Vnde willen dit boeck to godes
you-NOM.PL there at improved be and will this book to God's
eeren beghinne(n).*

honour begin

‘May God inspire you to search and to read, in order for you to be improved by it. And may [you] begin (to read) this book to honour God’.

(Spiegel der leyen)

- b. Want al hoert manich sympel leye some tijt yn der kerken wat gudes seggen vn(de) de hillighe scrift exponeeren of duden so is leider de memorie v(er)gheetende als een mester in der nature(n) bescrijft vn(de) [] hebben=t kort vergheeten.

*Want al hoert manich sympel leye some tijt yn der kerken
for even.though hears many.a simple layman some time in the church
wat gudes seggen vn(de) de hillighe scrift exponeeren of
something good being.said and the Holy Scripture being.exposed or
duden so is leider de memorie v(er)gheetende als een
being.interpreted so is unfortunately the memory forgetting as a
mester in der nature(n) bescrijft vn(de) hebben=t kort vergheeten.*

master in the nature writes and have-PL=it shortly forgotten

‘For even though many a simple layman occasionally hears in church some-

*do gieng ein michel volck mit von frau vnd von manen dem edelen kung
there went a large crowd with of woman and of men the noble king
entgegen vnd enphiengen In
toward and received him*

‘There a large group of men and women went to meet the noble king, and they received him.’
(Kottanerin 34, 39, Volodina and Weiß, 2016: 194, ex. 8d)

thing good being said and the Holy Scripture being explained or interpreted, the memory is unfortunately forgetful, as a master of the sciences writes, and [they] forget it immediately'. (Spiegel der leyen)

These examples with the antecedent inside the adverbial clause and the subject gap in following main clause are very similar to donkey anaphora (Heim, 1990). This is because in these cases, the pronoun in the matrix clause seems to be bound by an antecedent inside an adjunct clause or a relative clause as well, as can be seen in example (82).

- (82) a. Every farmer who owns **a donkey** beats **it**.
 b. If John buys **a donkey** he vaccinates **it**.

Though cases of (apparent) conjunction reduction are common, clauses introduced by *vnde* are not the only environments in which referential null subjects are present. There are 64 other clauses ($N = 136$) with referential null subjects that are not introduced by *vnde*, suggesting that this factor can only partially account for the occurrence of referential null subjects in Middle Low German.

3.5.3.2.3 More general discourse antecedent

In many cases, the referential null subject is not directly licensed by an overt antecedent in the (preceding) main clause. Often it is introduced more implicitly in the discourse. In example (83a) for instance, the referential null subject in the second and the third conjunct, which should be *ick* 'I', is introduced in the discourse by the possessive *myn* 'my' in *myn wiff* 'my wife'. It is moreover interesting to notice that Middle Low German also had null objects. The referent of the null object (marked with []_j) is introduced implicitly in the discourse by *myn wiff* as well.

In the text fragment in example (83b), there are several conjoined clauses with conjunction reduction (marked with [∅]). The last two gaps are however not structurally parallel and can therefore not be seen as examples of conjunction reduction, nor are they anaphors licensed by a c-commanding referent. The first referential null subject is co-referent with *Adam*, whereas the second one is coreferent with *got* introduced at the very beginning of the discourse.

- (83) a. Unde he sprack myt groter begerte tho er du byst alleine myn_i wiff vude []_i
 hebbe nye [nene ander]_j gehad noch []_i []_j hyr na hebben wil

Unde he sprack myt groter begerte tho er du byst alleine myn wiff
 and he spoke with great desire to her you are alone my wife
vude hebbe nye nene ander gehad noch hyr na hebben wil
 and have never no other had nor here after have will

‘and he spoke to her with great desire, you alone are my_i wife, and [I]_i have never had [another one]_j, nor will [I]_i ever have [another one]_j’ (Griseldis)

- b. Vnd in der ersten stunde des dages mackede got_i Adame_j van der erde na synem likenisse vnd [∅]_i gaff ome gewalt over fee ouer voggel ouer fische vnd [∅]_i sande one_j in dat Paradis dar mackede he_i Eua van Adames ribbe Jn der dridden stunde des dages die wile dat he_j sleyp vnd gaff [∅]_i eua adame_j to wiue vnd [pro]_j scholde ewich leuen vnde [pro]_i vorbot one frucht an eynem bome to eten

Vnd in der ersten stunde des dages mackede got Adame van der
 and in the first hour of-the day made god Adam from the
erde na synem likenisse vnd gaff ome gewalt over fee ouer voggel
 earth to his image and gave him power over mammals over birds
ouer fische vnd sande one in dat Paradis dar mackede he Eua van
 over fishes and sent him in the paradise there made he Eve from
Adames ribbe Jn der dridden stunde des dages die wile dat he sleyp
 Adams rib in the third hour of-the day the while that he slept
vnd gaff eua adame to wiue vnd scholde ewich leuen vnde vorbot one
 and gave Eve Adam to wife and should forever live and forbade him
frucht an eynem bome to eten
 fruit from one tree to eat

‘And in the first hour of the day, God_i created Adam_j from earth in his image, [∅]_i gave him power over mammals, birds and fishes and [∅]_i sent him_j to paradise. There, he_i made Eve from Adam’s rib in the third hour of the day, while he_j was asleep, and he_i gave her to Adam as his wife. [He]_j was

meant to live forever and [he]_i forbade him to eat fruit from a certain tree.’
(Cronecken der Sassen)

Such cases are very similar to consistent pro-drop in languages such as Italian or Spanish, in which third person referential null subjects are in fact null aboutness topics accessible in the discourse. The distance between the topic introduced in the discourse and the actual referential null subject can be very long. In the following text fragment for instance (ex. 84), the covert subject in the very last conjunct refers to *Dusse keyser Julius* ‘this emperor Julius’ introduced much earlier. As can be seen, the null element alternates with the overt subject pronoun *he* ‘he’.

- (84) *Dusse keyser Julius de bedtwangk hir dusse lant vnde brachte se to deme Romeschen louen an de affgodde vnde buwede Seuen borchge Jn de ere der Seuen planeten He buwede Jn t erste In deme lande dat nu westualen het Eyne borch vppe eynen hogen barch de heyt marszbarghe vnde satte dar vp den got mars vnde buwede In Sassen dat hus veneris dat is megdeborch Jn de ere syner affgoddynne venus vnde na syner tungen wart se geheten partenia Vnde so wart de borch genant partenopolis de sassen de heten se de megedeborch na deme dat de affgoddyne na megedengestalt weren so gy hir na vinden vnde [] buwede de Saterborch*

Dusse keyser Julius de bedtwangk hir dusse lant vnde brachte se to
this emperor Julius he controlled here this land and brought them to
deme Romeschen louen an de affgodde vnde buwede Seuen borchge Jn de
the Roman praising to the idol and built seven castles in the
ere der Seuen planeten He buwede Jn t erste In deme lande dat
honour of.the seven planets He built in the first in the land REL
nu westualen het Eyne borch vppe eynen hogen barch de heyt
now Westphalia names a castle on a high mountain REL names
marszbarghe vnde satte dar vp den got mars vnde buwede In Sassen dat
Marsberg and put there on the god mars and built in sassen the
hus veneris dat is megdeborch Jn de ere syner affgoddynne venus
house of.venus that is Magdeburg In the honour of.his idol venus

vnde na syner tungen wart se geheten partenia Vnde so wart de borch
 and to his tongue was she called partenia and so was the castle
genant partenopolis de sassen de heten se de megedeborch na deme
 named partenopolis the sassen they name it the Magdeburg after this
dat de affgodyne na megedengestalt weren so gy hir na vinden vnde
 that the idol to virgin.figure were so you here after find and
buwede de Saterborch
 built the Saterburg

‘This emperor Julius ruled over this land and let them praise idols like the Romans and [he] built seven castles in honour of the seven planets. First, he built a castle on a high mountain named Marsberg, in the land nowadays called Westphalia and [he] put the god Mars on it. And in Saxony, [he] built the house of Venus, which is Magdeburg (lit. ‘virgin castle’) in honour of his idol Venus, and in his language she was called Partenia. Therefore, the castle was named Partenopolis and the Sassen named it Magdeburg after the idol, as the idols were portrayed as figures of virgins, as you can find after this. And [he] built the Saterburg castle [...]’ (Cronecken der Sassen)

The use of the pronoun is in some cases also similar to the use in consistent pro-drop languages in the fact that overt and covert pronouns can be used for disambiguation (see for instance Frascarelli, 2007). This can be seen in the three clauses in example (85).

- (85) *VOrtmer Welick man_i mit willen sin ghut vtborghet dey_i ne magh vmme dat ghut nummande_j vredeloy_s leghen hey_j ene hebbe eme ghesyckert in truwen heuet []_i ene ane burghe ghelaten so mach hey_j dat selue doyn*

VOrtmer Welick man mit willen sin ghut vtborghet dey ne
 furthermore which(ever) man with will his property owns he NEG
magh vmme dat ghut nummande vredeloy_s leghen hey ene hebbe eme
 may about that property no one lawless lay he NEG have him
ghesyckert in truwen heuet ene ane burghe ghelaten so mach hey dat
 assured in truth has him without bailman left so may he that
selue doyn
 self do

‘Furthermore, whosoever owns his property on his own initiative may not declare anyone on that property lawless, unless he_j has assured [it] to him in truth. If [he] has left him without bailman, he is allowed to do it himself’. (Soester Schrae)

The subject *hey* ‘he’ is once overt, then covert and then again overt. The first *hey* is coreferent with *nummande* and is overt as it shows that the referent changes. The referential null subject on the other hand has *Welick man* as its referent and thus stays covert. The *hey* in the last clause is coreferent with *nummande* again and expresses the change of the referent again.

3.5.3.3 Intermediate conclusion

In this chapter, the following main properties of referential null arguments in Middle Low German have been observed so far:

1. Middle Low German referential null subjects preferably occur in main clauses. Their position is not restricted to the topic position in V2 clauses (i.e. SpecCP), as they can also occur after the finite verb, in V2 clauses with the topic position filled by another element, and in V1 clauses. Besides these types of null subjects, referential null subjects can also occur in the position following C, for instance in syndetic subordinate clauses.
2. The distribution of referential null subjects is rather asymmetrical, though person and number seem to correlate with the syntactic position of the referential null subject to some extent: it is very normal to find first, second and third person singular referential null subjects in SpecCP as well as following C. Second person singular is even located in this position more often than in the other position. All other pronouns prefer to be located in SpecCP, except for second person plural, for which the three referential null subjects found in the corpus take the position after C. For the first person plural, there are only two occurrences of referential null subjects as well, which are however all located in SpecCP.
3. Clauses containing referential null subjects are often coordinated and hence introduced by *vnde* ‘and’. These are however not cases of conjunction reduction, as the gap is not structurally parallel to its antecedent. In some cases, the referent of the referential null subjects is introduced by an antecedent with a different grammatical function from the gap, for instance an object or a possessive pronoun. In

other cases, the referential null subject is not accessible in the structure, as the antecedent does not c-command the gap, for instance when the antecedent occurs inside a subordinate clause preceding the gap.

4. Next to referential null subjects, referential null objects are attested in the corpus as well. They are not necessarily cases of conjunction reduction.

These conclusions raise two important questions concerning referential null subjects in Middle Low German, the first one being which type of null-subject language Middle Low German belongs to? Furthermore, it is not clear how the licensing conditions have to be analysed and if they are different for the two different types of referential null subjects found in the corpus. These questions will be answered in the next section.

3.5.4 Analysis

Based on the properties of referential null subjects in Middle Low German described in the last sections, I will now argue that Middle Low German is a partial null-subject language. I will also show how referential null subjects in Middle Low German can be licensed, providing an adaptation of the analysis of Walkden (2014) for partial null-subject languages in other early Germanic languages.

3.5.4.1 Middle Low German in the typology of null-subject languages

Based on the data, some observations regarding the typology of referential null subjects in Middle Low German can be made, following Farasyn and Breitbarth (2016). First of all, Middle Low German referential null subjects are attested throughout the whole corpus, albeit rather infrequently (2.23% in average). This means in the first place that an analysis as an expletive null-subject language can already be excluded. The rather low frequency is the main reason why Middle Low German cannot be a consistent or a radical null-subject language. Besides, Middle Low German verbal agreement is not rich enough for it to be a consistent null-subject language. There is for instance unitary inflection in all three persons of the plural, as well as syncretism of many of the verbal forms in the indicative and in the optative (see chapter 5 in which the morphology of the verbal ending will be discussed in detail). Furthermore, there are no agglutinative pronouns in Middle Low German, which prohibits the analysis as a radical null-subject language in the sense of Neeleman and Szendrői (2007, 2008) as well.

Another element that prohibits an analysis as pro-drop based on agreement is the fact that a few null objects are found in the data, and that these are completely independent of agreement with the verb. In consistent null-subject languages, coreference between an overt pronoun in a dependent clause with an overt subject in the main clause is prohibited (obviation requirement), whereas null pronouns implicate coreference. Middle Low German however retains the old asymmetry between main and subordinate clauses, with referential null subjects being much more likely to occur in main clauses. The obviation requirement typical of consistent pro-drop languages does not hold either, that is, overt pronouns in subordinate clauses in Middle Low German can be co-referent with overt subjects in the matrix clause; they do not (and often are not) need to be covert for that. Again, this shows that Middle Low German is neither a consistent nor a radical pro-drop language.

As was shown in table 3.20, 63.97% of all referential null subjects occur in SpecCP. However, the licensing conditions in Middle Low German are evidently not identical to those holding in the modern V2-Germanic topic drop languages (see for instance Ross, 1982; Sigurðsson, 1989: 150-160 and section 3.2.3). This is because antecedents of referential null subjects are often not syntactically accessible, as they do not c-command the position of the referential null subjects. Besides, referential null subjects in Middle Low German may occur following C in the Wackernagel position in case SpecCP is otherwise filled, or in subordinate clauses. These observations speak against a general analysis of Middle Low German referential null subjects in terms of topic drop.

All of these arguments indicate that Middle Low German is a partial null-subject language. As presented in section 3.3, partial pro-drop languages have their own restrictions on the presence or absence of referential null subjects. As presented in section 3.3.4, Walkden (2014) analyses the early Northwest Germanic languages, including Old Saxon, as referential null-subject languages. The closely related languages Early New High German and Middle Norwegian were analysed as partial null-subject languages as well. In all of these languages, topic drop could not account for all referential null subjects found in the data, exactly as it cannot account for all the data found in the Middle Low German corpus. Middle Low German therefore seems to show a remarkable diachronic stability concerning the presence of referential null subjects. One property contradicting the properties usually assigned to partial null-subject languages

is that Middle Low German preferably expresses overt generic null subjects, whereas one would expect to have generic null subjects given the discussion in Holmberg (2010). An example of this preferred overt type of generic subject is given in example (86).

- (86) Hirumme scolde men eme gheven ere gherade un(de) erve van des ammetes rechtes weghene.

hirumme scolde men eme gheven ere gherade un(de) erve van des
 herefore shall one him give their device and inheritance from the
ammetes rechtes weghene
 official rights way

‘Therefore, one should give him by right their device and the inheritance’.

(Herforder Rechtsbuch)

However, generic null subjects can also occur in Middle Low German (87), but rather rarely.

- (87) Anders ne darf [] nicht wroghen

Anders ne darf nicht wroghen
 otherwise NEG may not charge

‘Otherwise, [one/the person in question] may not bring in charges’

(Oldenburger Sachsenspiegel)

Furthermore, the availability of null generic subjects has apparently never been a strict or even a preferred property in the early West Germanic languages, as discussed by Walkden (2014: 214) and the literature he refers to. The favouring of overt generic subjects thus does not stand in the way of an analysis of Middle Low German as a partial null-subject language.

3.5.4.2 Partial pro-drop in Middle Low German

When comparing the properties of referential null subjects in Middle Low German to the findings of Walkden (2014), his predictions for the properties of referential null subjects in early Northwest Germanic languages seem to be largely borne out in the data from the Middle Low German corpus as well. Middle Low German referential null subjects do

for instance prefer to occur in main clauses. Furthermore, third person referential null subjects clearly prefer to be in the topic position in SpecCP, as was illustrated in figure 3.2. In this section, I will therefore investigate whether Walkden’s analysis of partial null-subject languages can account for the Middle Low German data.

One challenging aspect might be the following. Like some other Northwest Germanic languages, Middle Low German allows null objects, besides null subjects, see (81a) and (83b). Under the analysis of Walkden (2014), this is accommodated by assuming that the [*uAn*]-feature of the operator in ShiftP probes for the nearest anaphoric element, which may be an object. However, his analysis predicts that only one empty argument can be licensed per clause. While this prediction largely seems to be correct, I have shown a case in which there appears to be both a null subject and a null object in the same clause, viz. (83a). Furthermore, as I have shown in section 3.5.3, Middle Low German referential null subjects are asymmetrically distributed in my corpus, with different person/number combinations strongly preferring or even exclusively occurring in different syntactic positions, the topic position and the Wackernagel position. Most strikingly, second person turned out to be the strongest predictor of referential null subjects in my data (see table 3.8, in which the centred factor weight of the second person is 0.528). For these reasons, this section provides a fresh look at the distribution of null arguments in Middle Low German and proposes an alternative analysis.

If one were to apply the analysis of Walkden (2014) of early Northwest Germanic partial pro-drop languages such as Old Saxon unchanged to the Middle Low German referential null subjects, one would have to assume that Middle Low German referential null subjects are licensed by the null Aboutness topic operator both in SpecCP (88a) as well as in the position following C, perhaps SpecTP or the Wackernagel position (88b).

- (88) a. (*vnde*) [_{ShiftP} OP_[∅, iD, ~~uAn~~] [_{Shift'} Shift⁰ [_{CP} C⁰ [_{TP} DP_[~~uAn~~, iAn] [_{T'} ...]]]]]]
 b. [_{ShiftP} OP_[∅, iD, ~~uAn~~] [_{Shift'} Shift⁰ [_{CP} DP_[~~uAn~~, iAn] [_{C'} C⁰ [_{TP} t_i [_{W'}]]]]]]

That means that null subjects would be assumed to undergo syntactic movement in the majority of their occurrences.

However, as the discussion in section 3.5.3.1 has indicated, the two positions that can be taken by the referential null subject in Middle Low German correlate with different person restrictions. The most frequent combination of person and number

(in relative terms), the second person singular, strongly tends to occur in the position following C (compared to the second person plural for which the examples are very sparse). This is similar to historical High German data (i.e. Middle High German and Early New High German), for which a similar distinction between (at least) two positions for referential null subjects has been proposed by Volodina and Weiß (2016). In these languages, especially the null subjects in Wackernagel position show properties typical for partial null-subject languages. However, they have not been given a formal analysis. Following Farasyn and Breitbarth (2016), I propose such an analysis for my Middle Low German data in what follows. Volodina and Weiß (2016) distinguish, among other things, context-linked null subjects in sentence initial position (SpecCP) and null subjects in embedded *dass*-clauses, *ob*-clauses and asyndetic verb-final-clauses.

I propose to analyse the two distinct types of referential null subjects in Middle Low German as being distinguished by their internal structure, following Farasyn and Breitbarth (2016) who propose this based on a smaller Middle Low German corpus. The first kind, which alternates with overt pronominal subjects in SpecCP/SpecFinP, is a full DP with an uninterpretable D-feature [uD], as under Walkden's 2014 proposal. The null subject is licensed by a null topic operator. This will in most cases be an Aboutness topic operator in SpecShiftP, as proposed by Walkden (2014). This captures the observation that third person referential null subjects are significantly more likely to occur in SpecCP than in the Wackernagel position looking at the absolute frequencies of referential null subjects (see table 3.21). Less frequently (again looking at the absolute frequency), it will be a topic operator in Λ_{AP} / or Λ_{PP} , identifying the referent of the null subject as the logophoric agent, following Sigurðsson (2004a,b). This accounts for data such as (83a), repeated here.

(83a) Unde he sprack myt groter begerte tho er du byst alleine myn_i wiff vude []_i
 hebbe nye [nene ander]_j gehad noch []_i []_j hyr na hebben wil

Unde he sprack myt groter begerte tho er du byst alleine myn wiff vude
 and he spoke with great desire to her you are alone my wife and
hebbe nye nene ander gehad noch hyr na hebben wil
 have never no other had nor here after have will

'and he spoke to her with great desire, you alone are my_i wife, and [I]_i have never
 had [another one]_j, nor will [I]_i ever have [another one]_j' (Griseldis)

The fact that the relative frequency of referential null subjects in the first and especially in the second person in SpecCP (especially in the singular) is even higher than in the third person suggests that the topic operator identifying null subjects in Middle Low German in general might often have been in Λ_{AP} or Λ_{PP} . The main difference with the early Germanic languages is thus that there are operators in Λ_{AP} or Λ_{PP} in Middle Low German which can probe.

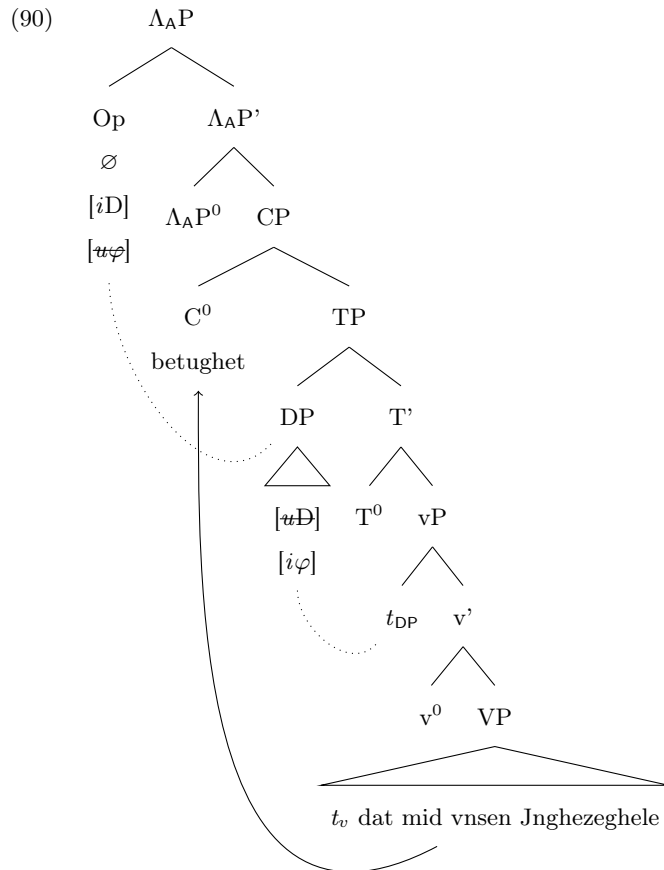
The probing feature may be [uAn], as proposed by Walkden (2014) for partial null-subject languages such as Old Saxon, or [$u\varphi$], as he proposes for the modern V2-Germanic topic drop languages (Walkden, 2014: 115f). As proposed by Sigurðsson (1993), the difference may lie in the mechanism for identifying the referent in the clause-external context, not in the clause-internal linking mechanism. Because of the increasing frequency of referential null subjects in the SpecCP-type, a [$u\varphi$]-feature is the most probable option. The analysis of referential null subjects in SpecCP is illustrated in (90), based on example (89).

(89) (Vnde) [] betughet dat mid vnsen Jnghezeghele [...]

Vnde betughet dat mid vnsen Jnghezeghele
and testify that with our seal

‘(And) we testify that with our seal [...]’

(Oldenburger Urkunden)



The second kind of referential null subject, on the other hand, requires a different analysis. As pointed out in chapter 1, the weak and clitic pronouns in V2-Germanic languages, and also in Middle Low German, occur in the Wackernagel position, directly following the complementiser or the finite verb in clauses with verb movement (Weiß, 1998). Example (91a) and (91b) from the corpus illustrate this for the overt clitic *-tu* (second person singular), (91c) and (91d) shows this for *-et* (neutral third person singular).

- (91) a. ... ofte he dencket datt=*et* eme ghener hande noet en do.

ofte he dencket datt=et eme ghenere hande noet en do
 or he thinks that=it him no hand need NEG do-SUBJ

‘... or he thinks that it is not necessary for him in any way.’

(Spiegel der leyen)

- b. Were=t och dat der stede heren [] mit vns twidrachtich worden...

were=t och dat der stede heren mit vns twidrachtich worden
 were=it also that the-GEN city lords with us discording become

‘Should it furthermore be that the city’s lords came to disagree with us...’

(Spiegel der leyen)

- c. ... dat=tu den menschen wunderlike heuest gheschepen.

... dat=tu den menschen wunderlike heuest gheschepen
 that=you the man wondrously have-2SG created

‘... that you have wondrously created man’

(Myrren bundeken)

- d. van nymande en werdes=tu weerdlike ghelouet dan van dy solue(n)

van nymande en werdes=tu weerdlike ghelouet dan van dy solue(n)
 by no one NEG are=you worthily praised than by you

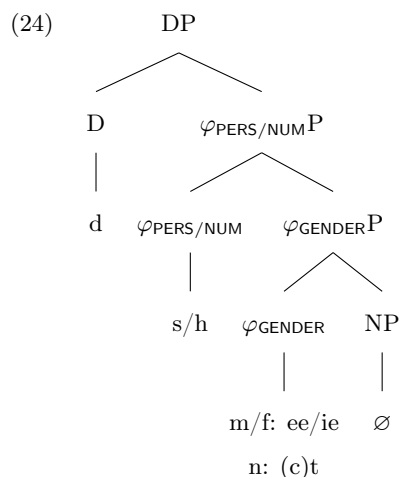
‘By no one are you praised as worthily than by yourself’

(Myrren bundeken)

The distribution of the second type of referential null subject is analogous to that of overt weak and clitic pronouns in the sense of Cardinaletti and Starke (1999) (see section 1.3.4). Therefore, I follow Farasyn and Breitbarth (2016) again and take referential null subjects in the position following C to be deficient pronouns. This follows from Cardinaletti and Starke (1999: 27), who propose that ‘genuine’ *pro* is a deficient pronoun and not a full argument. More specifically, referential null subjects following C are phonetically null clitics. This is because second and third person singular pronouns have overt clitic forms in Middle Low German. A null version of them would likely be a clitic, too. This claim is supported by the fact that especially second and third person singular pronouns are null in this position.

According to the pronominal system following Farasyn and Breitbarth (2016), which I presented in section 1.3.4, the weak pronouns (*sê*, *hê*, *(h)it*) are $\varphi_{\text{PERS/NUMPs}}$ in

Middle Low German, as are the second person pronouns (*dû, gie*), whereas Wackernagel subject clitics are φ_{GENDERP} s (*-ee, -ie, -it*). Example (24), which illustrated this, is repeated here.



Given the observations concerning the distribution of referential null subjects, Farasyn and Breitbarth (2016) propose that clitic *pro* is φ_{GENDERP} , too. The fact that referential null subjects in Wackernagel position are most likely to be φ_{GENDERP} might seem unconventional, given that in traditional grammars, first and second person pronouns are considered genderless (*‘ungeschlechtlich’*, e.g. Braune, 2004: 241) due to their invariant form. However, this is incompatible with a feature-based account. There are empirical arguments in favour of first and second person pronouns bearing gender features, if, possibly, initially underspecified or unvalued ones. In German for instance, relative pronouns in non-restrictive relative clauses like (92) agree for gender with the head of the relative clause, which depends on the referent in the particular context.

(92) *ich/du, die/der immer aufräumen muss/musst*

ich(F/M)/du(F/M), die(F)/der(M) immer aufräumen muss(1SG)/musst(2SG)

I/you REL always tidy-up have-to

‘I/you who always have to tidy up’

Following Cardinaletti and Starke (1999), the null φ_{GENDERP} , clitic pronouns encliticise to their licensing head to recover the layers of internal structure they lack compared to a

full DP. Applied to the proposed analysis of null pronouns in Middle Low German, this means that the null φ_{GENDERP} encliticises to C to recover the D- and person/number-layers, which are the layers of internal structure it lacks compared to a full DP. That is, its $\varphi_{\text{PERS/NUM}}$ -layer is recovered by the finiteness features in C, similar to what happens in consistent null-subject languages. As has been shown with many examples of referential null subjects, the referent of the gap is always somehow retrieved from the context (i.e., there is no ‘out-of-the-blue’ pro-drop in Middle Low German). I therefore propose, in line with Farasyn and Breitbarth (2016), that the referential information of the null φ_{GENDERP} , which is normally encoded in the D-layer, is provided by “free coindexing with an NP antecedent” which in Middle Low German can have any grammatical function or structural position in the preceding discourse context (see Sigurðsson (1993) for Old Icelandic). The referential information is recovered using the context-linking mechanism proposed by Sigurðsson (2011, 2014). That is, the referent is established via a C/Edge-Linker CLn (‘speaker’/ ‘hearer’/ ‘X-topic’) in the left periphery ($\Lambda_{\text{AP}}/$, $\Lambda_{\text{P}}/$, different TopPs) by scanning the discourse context for any preceding nominal referent, (93).

(93) a. C/Edge-Linking Generalization

Any definite argument, overt or silent, positively matches at least one [C/Edge-Linker] CLn in its local C-domain $\text{CLn} \in \Lambda_{\text{A}}, \Lambda_{\text{P}}, \text{Top}, \dots$
(Sigurðsson, 2011: 282)

- b. (context) [$\Lambda_{\text{A/P/TopP}} \{\text{CLn}_i\} \dots [\text{CP} (\text{X}) \dots \text{C}^0\text{-}\varphi_{\text{PERS/NUM}} = \emptyset_i [\text{TP} \dots]]$]
- | | | |
|------------------|--|----------------|
| | | |
| Context scanning | | C/Edge-Linking |

This mechanism is particularly appealing given the observation that c-command does not seem to play a role in identifying the referent of the null pronoun (see section 3.5.3.2). The difference between the referential null subjects in the Wackernagel position and the null topics in SpecCP is that in case of the latter, the φ -features cannot be identified through the linking topic operator. C/Edge-Linking of the null clitic in the Wackernagel position is possible across a potentially filled SpecCP because of the clitic nature of the referential null subjects, which I take to be similar to pronominal Agr/T in consistent pro-drop languages such as Spanish or Italian.

The claim for Middle Low German is then that Middle Low German referential null pronouns of the more frequent type in SpecCP are pronouns with a full

DP-structure, while the less frequent referential null pronouns in the Wackernagel position are deficient pronouns, i.e. $\varphi_{\text{GENDER}}\text{Ps}$, as they very often appear in those persons and numbers in which one can also find overt clitic pronouns. Such overt Wackernagel clitics are overwhelmingly second and third person singular expletives and resumptives. It is striking that 34 of the 49 (69%) referential null subjects in the Wackernagel position occur in the same person-number combinations for which we see overt clitic forms. This can be taken to corroborate the analysis.

The fact that there are two different types of referential null pronouns in Middle Low German with different licensing conditions restricting them to different syntactic positions predicts that, unlike in Walkden’s analysis, two null arguments should be possible in one clause, as I have indeed found attested in the corpus (83a).

3.5.4.3 Comparative aspects and diachronic development

The preceding section showed that Middle Low German distinguished two types of referential null subjects, i.e. (i) null DPs in SpecCP (licensed by a $[u\text{An}, i\text{D}]$ or $[u\varphi, i\text{D}]$ operator in ShiftP, $\Lambda_{\text{A}}\text{P}$ or $\Lambda_{\text{P}}\text{P}$ and (ii) null φPs encliticising to C (licensed by a $[u\text{An}]$ operator). This raises the question how such a system might have arisen diachronically.

Essentially, this analysis involves that $[uD]$ DPs become restricted to SpecCP, while originally $[uD]$ DPs in SpecTP (Walkden, 2014) lose the D-layer (and $[uD]$ -feature) entirely, and become clitics on C. It therefore appears that there are two innovations in Middle Low German, both involving changes in syntactic features: A change from $[u\text{An}]$ to $[u\varphi]$ as the probing feature on the operator in Shift, facilitating a connection with a logophoric agent in $\Lambda_{\text{A}}\text{P}/\Lambda_{\text{P}}\text{P}$ in case of $[uD]$ null DPs in SpecCP, and the loss of the D-layer and $[uD]$ -feature in the rise of null Wackernagel clitics. The analysis also raises the question of how this development compares to the other older Germanic languages.

Compared to Old Saxon, there is a certain relaxation of the person constraint on referential null subjects, as besides third person, also first and second person can be null. I have argued that this is mainly a consequence of the referential null subjects in the Wackernagel position becoming null clitics on C: they align their distribution to overt clitic pronouns in the same position. The most common type of null subject in this position is the second person singular. Second and first person referential null subjects are also possible in SpecCP, and most common in the first person, see figure 3.4. The main difference between this system and the system proposed by Walkden (2014) for

early Northwest Germanic, and in our case more specifically for Old Saxon, in which first and second person null subjects in this position are barely possible, is that there are operators in $\Lambda_{AP}/$ or $\Lambda_{P}P$ in Middle Low German which can probe. Kinn (2015) shows a similar relaxation of the old person restriction compared to Old Norwegian, and concludes that Middle Norwegian is in transition to a discourse-drop language. She argues that genuine pro-drop, where it persisted in Middle Norwegian, continued to be restricted to third person. However, this situation cannot directly be compared to the situation in Middle Low German based on the corpus data in this study. The fact that almost two thirds (63.97%, see section 3.5.3.1) of referential null subjects are found in SpecCP, points to Middle Low German being in transition to a discourse-drop language of the modern V2-Germanic type as well.

The fact that Middle Low German has two different types of null subjects also resembles the analysis of null subjects in Old Icelandic by Sigurðsson (1993), who also distinguishes two different types of referential null subjects. One type are variables bound by a null-topic in SpecCP, the other ones are ‘genuine’ *pro*, i.e. “null subjects in subordinate clauses and root clauses with a lexicalised CP specifier” (Sigurðsson, 1993: 264). Sigurðsson (1993) argues that both types of Old Icelandic null subjects are located in SpecIP(/SpecTP). This does not hold in Middle Low German, as I have shown that the parallels with overt subjects indicate that the two types of Middle Low German null subjects are located in different syntactic positions. The fact that Middle Low German has this type of null subject in SpecCP already much more often than the clitic type, unlike in Old Icelandic, in which it is the other way around (Sigurðsson, 1993), is further evidence of the degree to which Middle Low German is already in transition to a topic drop language, even though the distribution of the referential null subjects in SpecCP is still not the same as in the modern V2-Germanic languages.

The clitic referential null subjects on *C*, however, can be seen as a continuation of ‘genuine’ *pro* (see Kinn, 2015; Sigurðsson, 2011). They continue an older stage of the language, but are not restricted to third person in Middle Low German. In this respect, Middle Low German has more similarities with Early New High German, where according to Volodina (2009), referential null subjects are most frequent in the second and in the third person. These similarities can however only be seen as tendencies and not as straight facts, as Volodina (2009: 58) calls the second person results marginal due to the small number in the corpus (see section 3.2.3). It is surely similar to mod-

ern German dialects still exhibiting partial pro-drop/which have developed new types of pro-drop under certain circumstances (see chapter 5). In Bavarian or Alemannic dialects for instance, referential null subjects are restricted to the Wackernagel position and prefer second person singular. According to Axel and Weiß (2010) and Volodina and Weiß (2016), pro-drop in the second person singular in these Bavarian and Alemannic dialects is a consequence of their being dependent on pronominal agreement morphology on verbs in C (see also Axel, 2005; Axel and Weiß, 2010; Volodina, 2009, 2011; Weiß, 2005 and Volodina and Weiß, 2016), which arose through a reanalysis of a clitic pronoun in Wackernagel position (see Fuß, 2005 and the literature cited there, as well as chapter 5). This cannot be the whole story for Middle Low German, though, as third person referential null subjects are still relatively frequent as well, also in the Wackernagel position. These null subjects cannot be attributed to a reanalysis as is the case for the ones in the second person. One possibility might be that the ‘inherited’ third person referential null subjects have assimilated their distribution to the new null Wackernagel clitics, and that at the same time, null discourse topics in SpecCP emerged.

Due to the fact that there is a relaxation in the person constraint and the rise of topic drop of the V2-Germanic type with null subjects/topics bearing [$u\varphi$]-features, there is a moderate increase of referential null subjects in each position during most of the Middle Low German period I have taken into account in this study, as has been illustrated clearly in figure 3.5.

3.6 Summary

In this chapter I have presented new results on the distribution of referential null arguments in a corpus of Middle Low German. A detailed overview of this distribution in combination with a detailed statistical analysis on the influence of parameters (possibly) causing variation in the data such as person, number, syntactic position and translation, shed light on the properties of referential null subjects in Middle Low German. The analysis builds to a large extent on the findings of Farasyn and Breitbarth (2016), who analysed a smaller corpus Middle Low German corpus (incorporated in the corpus used for the present study).

Concerning the diachronic development of referential null subjects, I showed that on the one hand, Middle Low German displays a certain continuity with Old Saxon

in that referential null subjects are significantly more frequent in main clauses than in subordinate clauses and in third person. On the other hand, the language shows a number of innovative developments. First, referential null subjects are particularly frequent in V2 second conjuncts (*vnde [] Vfin ...*) where an analysis in terms of conjunction reduction is not available for various reasons. In some cases, the gap is not structurally parallel to its antecedent, whereas the antecedent is in other cases structurally not accessible, as it does not c-command the gap. A general discourse-topicality seems to be sufficient to establish the reference of the referential null subjects.

A closer look at the distribution of null arguments in the corpus has further revealed that Middle Low German referential null subjects are distributed in a peculiar fashion: almost two thirds are found in SpecCP, a position in which they pattern with strong overt pronouns. The null subjects found here were analysed as full DPs, which are phonetically null due to a [*uD*]-feature which they bear. This feature is licensed by a null Topic operator in SpecShiftP (Walkden, 2014) (in the third person) or $\Lambda_{\text{D}}\text{P}$ or $\Lambda_{\text{P}}\text{P}$ (in the first or second person respectively). I showed that there is likely to be an ongoing change in the features of these referential null subjects from [*uAn*] to [*u φ*] in Middle Low German, given the increasing frequency of this SpecCP-type of referential null subjects.

About one third of referential null subjects, especially subjects in the second person singular, is found in the position following C, which is the so-called Wackernagel position (Fuß, 2005; Grewendorf and Weiß, 2014). These referential null subjects often come to align with overt clitic pronouns in Middle Low German, also concerning their person and number restrictions, as they are particularly likely to be second person singular, though third person ones (singular as well as plural) are frequent, too. This second kind of referential null subject has been analysed as involving a deficient pronouns, i.e. a null clitic $\varphi_{\text{GENDER}}\text{P}$, arising through a loss of the D-layer. This created the need to encliticise to C to recover their missing functional layers (see Cardinaletti and Starke, 1999).

The combination of the fact that there is this observable split into two types of null pronouns in Middle Low German and the fact that there is an increasing prominence of the SpecCP-type null arguments indicates that Middle Low German is in transition to a topic drop language of the modern V2-Germanic type.

4.1 Introduction

In this chapter I focus on non-restrictive relative clauses with a first or second person head in Middle Low German, such as the ones shown in example (94).

- (94) a. [...] van wes hillig(er) melck **du** bist geuodet vn(de) gespiset. **de een voeder vn(de) een heerde bist van allen me(n)schen. vn(de) spise vn(de) brod der engele**

van wes hillig(er) melck du bist geuodet vn(de) gespiset. de een
of whose holy milk you are fed and nurtured REL a
voeder vn(de) een heerde bist van allen me(n)schen vn(de) spise
nurture and a hearth are-2SG for all people and food
vn(de) brod der engele
and bread of-the angels

‘[...] from whose milk **you** were fed and nurtured, (you), **who are the nurture and the hearth of all people and the food and the bread of the angels**’
(Myrrren bundeken)

- b. **Got de du mi wrekes ande under dus mi** de lude min erlosere van den tornige(n) lude(n)

got de du mi wrekes ande under dus mi de lude min erlosere van
 got REL you me avenge and under do me the people my saviour of
den tornige(n) lude(n)
 the wrathful people

‘God, who avenges me and subdues the people under me, my saviour
 of the wrathful people’ (Südwestfälische Psalmen)

In example (94a), the head *du* ‘you’ and the non-restrictive relative clause modifying the head are marked in bold. In example (94b), the head of the non-restrictive relative clause, again marked in bold, is the vocative *God* ‘God’. In clauses such as these, there is variation in how elements in the left periphery of the relative clause and the finite verb in the relative clause interact with the head in the matrix clause. I refer to the interaction between these elements, i.e. the head, the pronouns/particles introducing the relative clause (here: *de* ‘who’ in the first and *de du* ‘who’ in the second example) and the finite verb, as “the agreement pattern”.

Not only in Middle Low German, but also in the older stages of the other continental West Germanic languages, the way in which an agreement pattern is formed in clauses modifying first and second person heads differs from the way in which it is formed in non-restrictive relative clauses modifying a third person head. Furthermore, the ways in which agreement can be established in the clauses with a first or second person head vary, also in the modern languages. In some languages, the finite verb in the relative clause agrees in person and number with the head, while in other ones, the verb agrees with the relative pronoun and the verb displays default third person agreement, or there are several options. This chapter sheds light on what the agreement patterns in non-restrictive relative clause with a first or second person head in Middle Low German are and how they are formed. It also places them in a broader historical and comparative perspective.

The chapter is structured as follows. I will start with a brief introduction to relative clauses and more specifically to non-restrictive relative clauses in section 4.2 to set the chapter in context. After that, I will expand on the general methodology of chapter 4.3 to explain how I found these rare clauses in the Middle Low German corpus. In that section, I will also expand on how the clauses were encoded. In section 4.4 I elaborate on the syntactic distribution, the features and peculiarities of

the data in the corpus. Section 4.5 gives an overview of the factors causing variation in the data gathered in the corpus study. Section 4.6 highlights the different aspects which are necessary to come to an analysis in more detail. The subsections focus among other things on the element(s) introducing the relative clause in Middle Low German and on the elements in the agreement pattern that are necessary to establish agreement. Section 4.6 also offers analyses of the basic types of non-restrictive relative clause as well as the more peculiar examples. In section 4.7 I reflect on the historical development of the structure, for which I will particularly focus on the (relative) pronouns and/or particles introducing relative clauses in the older West Germanic languages, which will help to explain how the probable development from Old Saxon to Middle Low German compares to other related languages. Section 4.8 provides an overview of the most important points in this chapter.¹

4.2 Background

In this first section, I will introduce some basic concepts about relative clauses in general. In that way I will formulate a general answer to what relative clauses are and which elements they consist of. After that, I will elaborate on the difference between restrictive and non-restrictive relative clauses and their syntactic representation. Finally, I will focus specifically on the structures that will be discussed in this chapter.

4.2.1 Relative clauses

The most fundamental property of relative clauses is that they identify something or someone, i.e. that they have the ability to make a concept more specific through the formation of a clause (Lehmann, 1995: 1200). This first general claim is illustrated with Middle Low German example (95), in which the relative clause *den du mit dy brochtes* ‘which you brought with you’ further specifies *dynen brudschat* ‘your dowry’.

¹The content of this chapter has partly appeared in Farasyn (2017), which focused in particular on how to find relevant non-restrictive relative clauses in a historical text corpus. This chapter adds detail on the historical development of the structure and compares the situation in Old Saxon and Middle Low German to other West Germanic languages. It also focuses more on the elements introducing the relative clause and is based on an extended corpus (40,000 in the old vs. 135,000 words in the newer corpus study).

- (95) *Vnde nym myt di in dyn olde hus dynen brudschat den du mit dy brochtes*

Vnde nym myt di in dyn olde hus dynen brudschat den du mit dy
 and take with you in your old house your dowry REL you with you
brochtes
 brought

‘And take your dowry, which you brought with you, (back) with you in your old house’.
 (Griseldis)

There are three defining properties of relative constructions according to de Vries (2006: 14), the first one being that a relative clause is always subordinated. Furthermore, he argues that relative clauses are connected to surrounding material by a ‘pivot constituent’, i.e. a constituent which is shared by the matrix clause and the relative clause. This means that there is always a link between an element in the relative clause and an element in the matrix clause. I will refer to this element as the ‘head’ of the relative clause. As was explained in chapter 1, the head consists of several features which can be syntactic, semantic or phonological in nature. In example (95), the head of the clause is the entity which is nearly specified by the relative clause, viz. *dynen brudschat* ‘your dowry’, is modified by the relative clause *den du mit dy brochtes* ‘which you brought with you’. The third property of relative constructions according to de Vries (2006) is that the “semantic θ -role and the syntactic role that the pivot constituent plays in the relative clause, are in principle independent of its roles outside the relative” (de Vries, 2004: 14). In example (96) for instance, the head (or pivot constituent) *syne erste brud* ‘his first bride’ is the direct object of the matrix clause, whereas it is the subject of the subordinate clause.

- (96) [...] *dat he van syck mochte dryuen syne erste brud de eme nicht edel ghenoch en*
 was

dat he van syck mochte dryuen syne erste brud de eme nicht edel
 that he from REFL might drive his first bride REL him NEG noble
ghenoch en was
 enough NEG was

[...] that he might drive his first bride, who was not noble enough, from him'.
(Griseldis)

In many languages, the relative clause is introduced by a complementizer located at the clause border (Lehmann, 1995: 1201). According to de Vries (2004: 62), the relative clause is often introduced by a relative element, which can be a relative pronoun, a relative particle, a resumptive pronoun or a combination of these. A last option is zero relativization, i.e. when nothing overtly introduces the relative clause. In English, all of these introducing elements can be found with the exception of resumptive pronouns. Consider for instance (97), in which the relative clause can be introduced by nothing, by the relative pronoun *which* and by the relative particle *that*.

(97) I love the cat \emptyset /**which/that** I adopted.

In German, resumptive pronouns (such as *wir* 'we') can be found in combination with relative pronouns (such as *die*) in certain types of clauses (98). This is exactly the type of clause that I will discuss later in this chapter for Middle Low German.

(98) Wir, **die wir** Kinder sind, ...

Wir, die wir Kinder sind, ...

we REL we children are, ...

'We, who are children, ...'

Just like in other Germanic languages, the element introducing the relative clause in Middle Low German depends on the type of the relative clause. In (99a) for instance, the relative clause is connected to the matrix clause by the pronominal adverb *dar ... ynne* 'in which'. It is also possible to have combinations of different relative elements, as illustrated by example (99b) introduced by *de de* 'who'.

(99) a. [...] dath dat lyff **dar** dine kyndere hebben **ynne** ghelegen schal naket vnde
bloet van deme volke geseen werden

dath dat lyff dar dine kyndere hebben ynne ghelegen schal naket vnde

that the body where your children have in laid will naked and

bloet van deme volke geseen werden

bare of the people seen become

‘[...] that the body in which your children have been carried will be seen by the people naked and bare (Griseldis)

- b. In desser / wis dat ek schal vn(de) wille van deme seluen gude bekeosteghen enen prester **de de** holde ene missen alle daghe also men wente her to / ghedan heft to deme seluen altare

in desser wis dat ek schal vn(de) wille van deme seluen gude
 in this way that I shall and will of the same property
bekeosteghen enen prester de de holde ene missen alle
 sustain a priest who RELPART hold.SUBJ a mass all
daghe also men wente her to ghedan heft to deme seluen altare
 days as one until here to done has at the same altar

‘In this way, I shall sustain a priest with the same property, who is to hold a mass every day, as one has done up until now at the same altar’

(Braunschweig Urk. 1365-04-19)

We will take a closer look at more (combinations of) relative elements in Middle Low German relative clauses in section 4.6.1 in this chapter.

The examples above have already introduced the fact that there are multiple types of relative clauses. An important difference is the one between restrictive relative clauses and non-restrictive or appositive relative clauses, which I will focus on in the next subsection. Furthermore, there are some special types of relative clause such as free relatives, in which the relative clause itself serves as an argument of the matrix clause. In (100) for instance, *wat mi erbreke* ‘what I miss’ is the object of the matrix clause.

- (100) dat ic wite **wat** mi erbreke

dat ic wite wat mi erbreke
 that I know what I.DAT lack

‘So that I know what I miss’

(Südwestfälische Psalmen)

In the next section I will only focus on the difference between restrictive and non-restrictive relative clauses. For an in-depth overview of other types of relative clauses

and their properties, I refer the reader to publications such as de Vries (2006) and Lehmann (1984).

4.2.2 Restrictive and non-restrictive relative clauses

The main difference between restrictive (101) and non-restrictive relative clauses (102) semantically lies in the necessity of the semantic information in the clause. The non-restrictive relative clause is not needed for the identification of the referent, but adds extra information about the referent. This information is omissible. In a restrictive relative clause however, the combination of the head and the relative clause are necessary to identify the referent (Lehmann, 1995). The multilingual example (101) for instance comments, in English, Dutch and German respectively, on an unspecified number of cats, one of which is hungry and is thus trying to catch a mouse.

- (101) a. A cat which is hungry is trying to catch a mouse.
b. Een kat die honger heeft, probeert een muis te vangen.
c. Eine Katze, die hungrig ist, versucht, eine Maus zu fangen.

The examples in (102) focus on one particular cat trying to catch a mouse, as he happens to be hungry.² In some modern languages, like Standard English or Standard Dutch, the difference is clearly noticeable in the spelling, as only non-restrictive relative clauses (102) are separated from the head by commas, but also in the prosody, as the speaker uses comma intonation. In others, like High German, the comma separating the head from the clause is mandatory in both types.

- (102) a. The cat, which is hungry, is trying to catch a mouse.
b. De kat, die honger heeft, probeert een muis te vangen.
c. Die Katze, die hungrig ist, versucht, eine Maus zu fangen.

In Middle Low German however, it is hard to see a difference between restrictive and non-restrictive relative clauses. This is because prosody is (obviously) not available and

²In both examples, both a definite or an indefinite determiner can be used to modify the noun, though I decided to use an indefinite in (101) and a definite in (102) to make the difference in meaning between the examples more clear.

the punctuation system in historical languages is not as extensive as it is in standardized languages today (Tophinke and Wallmeier, 2011). Therefore, relative clauses in Middle Low German such as (103) can have two different readings, i.e. a restrictive and a non-restrictive one.

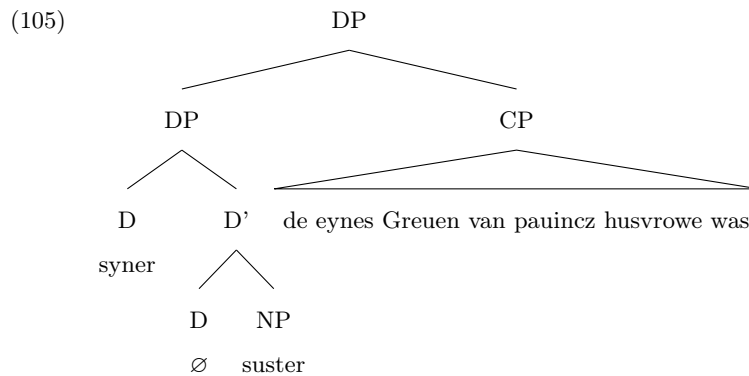
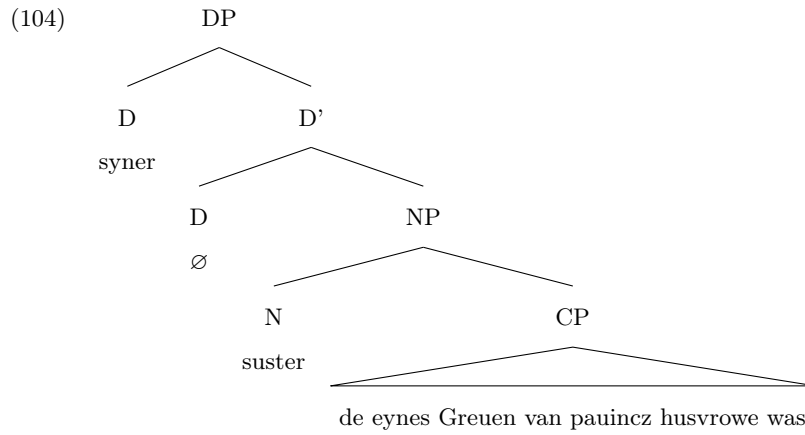
- (103) vnde [he] het den knecht dath kynth myt doken wol bewynden yn einen korff vp eineme tamen Ezel myt vlite bewaren Unde to Benonyen voren to syner suster de eynes Greuen van pauincz husvrowe was

vnde het den knecht dath kynth myt doken wol bewynden yn einen korff
and let the servant the child with cloths well wrapped in a basket
vp eineme tamen ezel myt vlite bewaren Unde to Benonyen voren
on a tame donkey with diligence preserve and to Benonyen carry
to syner suster de eynes Greuen van pauincz husvrowe was
to his sister REL of a count of Pavincz wife was

‘And [he] let the servant preserve the child, wrapped in cloths, on a donkey and carry it to Benonyen to his sister(,) who was the wife of the count of Pavincz’.

(Griseldis)

In (103), the first reading of *syner suster de eynes Greuen van pauincz husvrowe was* would be ‘his sister who was the wife of the count of Pavincz’, in which the referent is that one sister who is married to the count of Pavincz (if it were a restrictive relative clause). A non-restrictive reading would be ‘his sister, who was the wife of the count of Pavincz’, i.e. the baby was sent to his (one and only) sister, who is (by the way) married to the count of Pavincz. The difference between the restrictive reading and the non-restrictive reading could syntactically be represented as in (104) and (105) respectively.



Relative clauses with a first or second person singular head are somewhat different from clauses modifying a third person head, as they cannot have a restrictive reading. Consider for instance example (106).

- (106) a. *I who am hungry will cook something special today.
 b. I, who am hungry, will cook something special today.

It is obvious that there is only one me and that I can therefore never be hungry and not hungry at the same time. This consequently rules out the restrictive reading in (106a).

These special kinds of clauses are the ones that I will further focus on in this chapter.³

Some languages make a distinction between inclusive and exclusive readings in the first and even in the second person plural. In the first person plural, an exclusive *we* refers exclusively to the speaker and people distinct from the addressee(s), while an inclusive *we* refers to speaker, addressee (and possibly other people as well). In the second person plural, the exclusive form refers to the addressees only, while the inclusive refers to addressee(s) and non-participant(s) (Filimonova, 2005: 427). Simon (2005) however concludes on the basis of cross-linguistic evidence that such distinctions are impossible in all the languages he investigated, though Bavarian could form an exception in which respect or politeness plays an exclusive role. As no further or more elaborate clusivity distinctions have been described for any Germanic language, I do not consider this distinction for Middle Low German in this dissertation.

4.2.3 Non-restrictive relative clauses with a first or second person head

There has been growing generative interest in agreement in relative clauses with a first or second person head since Ross (1970) and Ito and Mester (2000) described the phenomenon briefly for High German. More recently, Kratzer (2009) and Trutkowski and Weiß (2016) devoted more elaborate studies to the establishment of agreement and to the use of alternating structures respectively. Trutkowski and Weiß (2016) showed by carrying out a magnitude estimation experiment that agreement patterns can vary within one and the same language.⁴

Furthermore, agreement patterns vary between the different West Germanic languages. The agreement patterns which can be formed have for instance been described by Kratzer (2009) and Heck and Cuartero (2012) for English and by de Vries (2004) and Van der Horst (2008) for Dutch. It is important to notice these cross-linguistic (differ-

³Non-restrictive relative clauses with a first or second person pronominal head do appear in English, but for some speakers these examples obtain an anomalous reading. They prefer Latin-like constructions with a participle ('I, being hungry, will cook something special today') or constructions in which the relative is completely avoided ('I will cook something special today, as I am hungry').

⁴In a magnitude estimation experiment, test subjects evaluate the grammaticality of a linguistic structure (i.e. the stimulus). This magnitude is evaluated by giving the structure a number or value, compared to a standard stimulus which is given a certain number by the researcher conducting the experiment (Stevens, 1956).

ences in) patterns if one wants to place Middle Low German in a broader perspective. In this section, I will look at its neighbouring languages, languages overlapping in period or older language stages. As contemporary High German however covers all the possible patterns described in other West Germanic languages, these patterns form a good basis to start from in the first subsection.

4.2.3.1 Three agreement patterns

The magnitude estimation experiment of Trutkowski and Weiß (2016) is based on the fact that there are three possible ways to create agreement chains in non-restrictive relative clauses with a first or second person head in High German. In examples of the type in (107), the verb in the relative clause displays morphology corresponding to the person and the number of the head. An extra resumptive pronoun, repeating person and number specified in the features of the head, is added.

(107) Ich, die/der ich Katzen liebe, habe letztens eine adoptiert.

Ich die/der ich Katzen liebe habe letztens eine adoptiert
 I-1SG REL-f/m.3SG I cats love-1SG have-1SG lately one adopted
 ‘I, who love cats, adopted one lately’.

In (108), the verb shows default/third person agreement and therefore agrees (or seems to agree) with the relative pronoun.

(108) Ich, die/der Katzen liebt, habe letztens eine adoptiert.

Ich die/der Katzen liebt habe letztens eine adoptiert
 I-1SG REL-f/m.3SG cats love-3SG have-1SG lately one adopted
 ‘I, who love cats, adopted one lately’.

The verb in the last High German pattern, exemplified in (109), agrees with the head in person and number again, but does not add a resumptive pronoun.

(109) Ich, die/der Katzen liebe, habe letztens eine adoptiert.

Ich die/der Katzen liebe habe letztens eine adoptiert
 I-1SG REL-f/m.3SG cats love-1SG have-1SG lately one adopted

‘I, who love cats, adopted one lately’.

The three types of agreement patterns presented above will henceforth respectively be referred to as resumptive pronoun agreement (ResPA, (107)), relative pronoun agreement (RPA, (108)) and head agreement (HA, (109)).

The results of the experiment of Trutkowski and Weiß (2016) contrast with the claim of Ito and Mester (2000) that first and second person heads in German require the relative clause to contain a resumptive pronoun repeating the number and person of the head, combined with morphology on the verb which corresponds with the head. Both agreement with the resumptive and agreement with the relative pronoun in the relative clause (default/third person agreement) are possible according to Ito and Mester (2000) in cases in which the first and third person singular verb form are syncretic. In the first person plural, both types are possible as well due to syncretism, whereas in the second person plural, only agreement with the relative pronoun is possible. Trutkowski and Weiß (2016) argue, however, that all types of patterns appear in the modern High German dialects, though they vary in terms of acceptability. Their study also shows that the pattern in which a resumptive is available and which is seen as the traditionally favored pattern, is in fact not always better rated than default agreement with the relative pronoun. In clauses with a head in the first person plural for instance, head agreement is preferred (Trutkowski and Weiß, 2016: 143, ex. 19).

Possible agreement patterns differ across languages. English, for instance, has only one possible pattern, as it allows HA exclusively (110) (Heck and Cuartero, 2012).⁵

- (110) a. I who am tall, ... (Heck and Cuartero, 2012: 1)
 b. *I who is tall..
 c. *I who I am tall..

The Standard Dutch pattern is the same as the English one, as only HA is allowed (111).⁶

⁵See footnote³

⁶This pattern is not described in the literature, but it is a topic on the language advice section of the Genootschap Onze Taal (<https://onzetaal.nl/taaladvies/ik-die-is-ik-die-ben/>) and on the language advice website of the Flemish Government (<https://www.taaltelefoon.be/ik-die-...-ben>), the Taaltelefoon.

- (111) a. *Ik, die groot ben, ...*
 I-1SG who-3SG tall am-1SG
- b. * *Ik, die groot is, ...*
 I-1SG who-3SG tall is-3SG
- c. * *Ik, die ik groot ben, ...*
 I-1SG who-3SG I-1SG tall am-3SG

4.2.3.2 Agreement mismatches

The first aim of this chapter is to describe non-restrictive relative clauses with a first or second person head in Middle Low German. In addition, one of the things I also want to look at is how exactly agreement is established in all these described patterns, as it is only when agreement is established that a grammatical sentence can be formed. The patterns I am looking at are also called agreement chains (see for instance Kratzer 2009) and as I have already introduced, they consists of the head of the relative clause, the (combination of) element(s) introducing the relative clause and the finite verb in the relative clause. Some examples of such clauses were given in the introduction and are repeated here.

- (94) a. [...] van wes hillig(er) melck **du** bist geuodet vn(de) gespiset. **de** een voeder vn(de) een heerde **bist** van allen me(n)schen. vn(de) spise vn(de) brod der engele

van wes hillig(er) melck du bist geuodet vn(de) gespiset. de een
 of whose holy milk you are fed and nurtured REL a
voeder vn(de) een heerde bist van allen me(n)schen vn(de) spise
 nurture and a hearth are-2SG for all people and food
vn(de) brod der engele
 and bread of.the angels

‘[...] from whose milk **you** were fed and nurtured, (you), **who are** the nurture and the hearth of all people and the food and the bread of the angels’

(Myrren bundeken)

- b. **Got de du mi wrekes** ande **under dus** mi de lude min erlosere van den tornige(n) lude(n)

got de du mi wrekes ande under dus mi de lude min erlosere van
 got REL you me avenge and under do me the people my saviour of
den tornige(n) lude(n)
 the wrathful people

‘**God, who avenges** me and **subdues** the people under me, my saviour of the wrathful people’ (Südwestfälische Psalmen)

In (94a), agreement must be established between the head, *du* ‘you’, the relative element, *de* ‘who’ and the finite verb in the relative clause *bist* ‘are’. In (94b), the same accounts for the head *Got* ‘God’, the elements introducing the clause *de du* ‘who’ and the verb in the finite verbs in the first and the second conjunct in the relative clause, *wrekes* ‘avenges’ and *under dus* ‘subdues’.

Looking back at the three patterns present in High German, it is interesting that, although agreement is established, it is also known that all of the patterns show different kinds of mismatches. The ResPA cases (see 107) show a mismatch between relative pronoun (*der/die*, i.e., 3SG) and the finite verb in the relative clause (*liebe*, i.e. 1SG). When there is a RPA pattern or a HA pattern, in which there is no resumptive pronoun, there seems to be a gap in the place where the subject of the relative clause would be interpreted. In the HA cases the mismatch arises between the relative pronoun, which bears a third/default person feature, and the verb, which bears the morphological features of the first or second person head. If the verb does not agree with the head, i.e. in the RPA cases, it agrees with the relative pronoun, resulting in a third person agreement marker on the verb. Though the finite verb in the non-restrictive relative clause and the relative pronoun in that case agree, there is still a mismatch between the first or second person head and the relative pronoun (and the verb). The analysis that I will give in section 4.6 will answer how agreement is possible in each of these patterns nevertheless.

4.2.3.3 What is special about clauses with a first or second person head?

Apart from the fact that third person relative clauses headed by a non-first or second person DP distinguish themselves from the ones headed by a first or second person DP

by their ability to distinguish between a restrictive and a non-restrictive reading, there are two additional reasons why non-restrictive relative clauses with a first or second person head are special.

The first reason has to do with historical evidence. First and second person non-restrictive relative clauses seem to act differently from clauses modifying a third person head in older stages of the West Germanic languages. This will be shown more elaborately in section 4.7 for Old Saxon, Old High German, Old Dutch and (non-West Germanic) Gothic.

The second reason is that, depending on the language, it can be harder to detect the type of agreement pattern. In High German for instance, mismatches in the singular are only visible in the first and second person, as the relative pronoun triggers agreement with the third person/default agreement (see RPA). It is thus impossible to see a mismatch in clauses like (112).

- (112) *Sie, die Katzen liebt, ...*
 she-3SG, REL-f.3SG cats loves-3SG
 ‘She, who loves cats, ...’

Consequently, the pattern can also not be studied in clauses containing a verb form that is syncretic with one of the third person forms in the paradigm, for instance for the verbs *wissen* ‘know’ (*ich weiß* ‘I know’ vs. *er/sie/es weiß* ‘he/she/it knows’) or *können* ‘can’ (*ich kann* ‘I can’ vs. *er/sie/es kann* ‘he/she/it can’). The same accounts for clauses modifying a head in the first person plural in High German, as they are syncretic with the verb forms of the third person plural that agree with the relative pronoun. If a resumptive were present, at least the resumptive pronoun agreement pattern could be detected. Such clauses have been detected in High German internet sources by Trutkowski and Weiß (2016: 136), for instance in example (113) in which the resumptive pronoun *er* ‘he’ is used in the non-restrictive relative clause.

- (113) *Aber was macht er, der er immerhin Volljurist ist*
 But what does he, who-MASC-SG he after-all fully-qualified-lawyer is
und seit Jahrzehnten in der Politik aktiv ist?
 and since decades in the political-world active is?

‘But what does he do, after all being a fully qualified lawyer and for decades

being active in the political world?’

(Trutkowski and Weiß (2016:136), my own free translation)

This is the only type of case in which there is no mismatch between the different elements in the agreement chain.

4.3 Methodology

Non-restrictive relative-clauses with a first or second person head are rare, which makes them hard to find in a historical corpus. Furthermore, they are also hard to detect. The reason for this has been described at the end of section 4.1: It is not always possible to determine whether there is agreement of the verb with the head or with the relative pronoun, which is mainly due to syncretic verb forms. This is also the case in Middle Low German. As Middle Low German plural has a unitary inflection, syncretism is a very important factor concealing relevant structures. This leads to the fact that these patterns can only be studied in-depth in the singular in Middle Low German, although ResPA might be visible in the plural as well. Sentences with a third person singular finite verb are not able to provide all the relevant information which is needed about Middle Low German agreement patterns either. Just like in Present-day (High) German, it is possible that the Middle Low German relative clause-initiating *de* triggers third person agreement with the finite verb in the relative clause (114). However, it is also possible that the verb just agrees with the third person head and not with the element introducing the relative clause. Both possibilities are indistinguishable.

(114) Dar mede vmmevenck he se de van vroliken worden erschrack

Dar mede vmmevenck he se de van vroliken worden

That with embrace-3SG.PAST he her-ACC who of cheerful words

erschrack

was-3SG.amazed

‘Because of that he embraced her, and she was very amazed by the cheerful words’
(Griseldis)

Farasyn (2017) offers a more elaborate description of the constraints for Middle Low German non-restrictive relative clauses in general. Furthermore, a diachronic perspective

seems to point in the direction of a separate system for modifying first or second person heads. I will elaborate on this system in section (4.7).

As concerns the annotation of clauses in the corpus, I want to elaborate on how the encoding of relevant examples of relative clauses was done. As I described in section 2.2, every clause was analysed for its type of subject (noun, overt pronoun or covert pronoun). All covert pronominal subjects were further divided up into five categories of covert pronominal subjects, of which one was the gap in a non-restrictive relative clause. I showed in chapter 1, in which the verbal paradigm of Middle Low German was introduced, that the singular verb forms set themselves apart from the plural ones by the fact that the endings of the verb in the singular are morphologically distinct for each different person. In chapter 3, this made it possible to determine the number of covert pronominal subjects by looking at the form of the finite verb. For this chapter however, determining the gap by the form of the finite verb in the singular was not possible, as the corpus study still had to reveal whether the verb agrees with the relative pronoun or with the first or second head (i.e., if the verb shows first, second or third person morphology).

Further, as Middle Low German has syncretism in the plural, it was sometimes necessary to determine the person of the covert subject in another way in the plural as well. The analysis of person and number in the relative clause does therefore not solely rely on the verb form, but much more on factors like the relativized head and the further context. For instance, I had to rely on additional factors because the antecedent is not always that clear due to possible long distance agreement and implicitly introduced antecedents such as possessives. I will expand on this long distance agreement in section 4.4.2.2 and on implicitly introduced antecedents in section 4.4.1.4. The decision I made was to always label non-restrictive relative clauses with a first or second person head with first or second person, independent of the verb form. These specific non-restrictive relative clauses with first or second person heads were then coded further for type of head, labelled according to the five categories that I will describe in section 4.4.1, and for type of agreement pattern, according to the three agreement patterns described in section 4.2.

4.4 Syntactic distribution

Examples of non-restrictive relative clauses with a first or second person head are very scarce in historical corpora. I found only 53 examples of relevant clauses in the whole corpus. In this section I will first introduce the different types of heads which can be modified in the Middle Low German corpus, to see whether this head influences the type of agreement pattern in the relative clause. After that, I will focus on two peculiarities of these clauses in Middle Low German.

4.4.1 Types of heads and agreement patterns

Based on the corpus study, five types of non-restrictive relative clauses with a first or second person head can be detected in Middle Low German depending on the syntactic function in the matrix clause. The types of antecedents that can be modified are nominatives/vocatives, objects, complements of a preposition, possessives and imperative subjects. Two different patterns were found: Middle Low German has non-restrictive relative clauses with head agreement and with resumptive pronoun agreement. Table 4.1 shows the absolute number of each combination of type of antecedent and type of non-restrictive relative clause in the corpus. When it is impossible to distinguish between head agreement and relative pronoun agreement due to the form of the verb (i.e. in the plural), the agreement pattern is marked as “/”.

Head	Number	Person	Agreement pattern	N cases
I. nominative/vocative	SG	1	HA	1
		2	HA	28
	PL	2	ResPA	4
			/	2
		ResPA	1	
II. object	SG	1	HA	2
	PL	2	HA	3
		2	ResPA	1
III. complement of a preposition	SG	2	HA	1
			ResPA	2
	PL	2	/	1
IV. possessive	SG	2	HA	3
V. imperative subject	PL	2	/	2
			ResPA	2
Total				53

Table 4.1: Agreement patterns in Middle Low German non-restrictive relative clauses in each number and person, by head and agreement pattern

The different types of clauses will be elaborated on in the next subsections. In the examples, the head is always marked in bold when it is overt.

4.4.1.1 Non-restrictive relative clauses modifying a nominative/vocative

Non-restrictive relative clauses modifying a nominative/vocative are the most common type of clauses, making up 66.67% of the total number of non-restrictive relative clauses with a first or second person head (38 attestations). The head/antecedent of the clause always appears in the nominative case. The verb agrees with the head or the resumptive pronoun in person and number. A resumptive is thus possible (115), but less common than the head agreement structures without a resumptive pronoun (116). Example (115a) and (115b) both show a vocative head in the second person singular, which is modified by a clause in which the verb agrees with the second person. The verb in the first example has the ending *-st*, while the one in the second example has the older second person singular ending *-s* without the contracted *-t*. The contracted *-t* derives from the personal pronoun (see chapter 5). Example (115c) shows a non-restrictive relative clause with a head in the second person plural. The example thus shows that a resumptive can also be added in the plural, but it is impossible to decide based on the verb form if it agrees with the head or the relative pronoun, as both forms are syncretic.

- (115) a. O **here** de du my geschapen hefst

O here de du my geschapen hefst

O lord REL you me created have-2SG

‘O lord who has created me’

(Prayer 2)

- b. **Du** bist selue min coninc ande min got de du kundes dat heil iacob

Du bist selue min coninc ande min got de du kundes dat

you are REFL my king and my god REL you announce the

heil iacob

salvation jacob

‘You yourself, who announce the salvation of Jacob, are my king and my god’

(Southwestphalian psalms)

- c. **alle gij** leuen vrunde de gij hijr nu vmme staen

alle gij leuen vrunde de gij hijr nu vmme staen

alle you-2PL dear friends REL you-2PL here now around stand-PL

‘you all, dear friends, who stand around here now’

(Bordesholmer Marienklage)

Example (116a) is a straightforward example of a clause with head agreement, in which no resumptive pronoun can be seen. Example (116b) is more complex, as the head is modified by four non-restrictive relative clauses succeeding each other, which all have head agreement.

- (116) a. **dattu** mijn vader woldest wesen de mijn schepper bist

dat=tu mijn vader woldest wesen de mijn schepper bist

that=you my father would be REL my creator are-2SG

‘that thou wouldst be my father, who art my creator’ (Myrren bundeken)

- b. O armode bouen armode **dattu** nouwe en heddest snode doke v(m)me to done vn(de) in gewunden to werden de al de wereld regeerst de den eersten mensche(n) enen rock van velle makedest de den hemel myt sternen. de eerden myt blome(n) vn(de) crude(n). De beste myt velle vn(de) hare. de

voghele myt plume(n) vn(de) vedere(n) bedeckest vn(de) becledest vn(de)
myt wonderliker varwe(n) vertzijrst.

O armode bouen armode dattu nouwe en heddest snode doke
o poverty above poverty that=you only NEG had worthless cloth
v(m)me to done vn(de) in gewunden to werden de al de wereld
on to put and in wrap to become REL all the world
regeerst de den eersten mensche(n) enen rock van velle makedest
rules.2.SG REL the first men a skirt of skin made-2SG
de den hemel myt sternen. de eerden myt blome(n) vn(de) crude(n).
REL the heaven with stars the earth with flowers and herbs
De beeste myt velle vn(de) hare. de voghele myt plume(n) vn(de)
the beasts with skin and hair the birds with plumes and
vedere(n) bedeckest vn(de) becledest vn(de) myt wonderliker varwe(n)
feathers cover-2SG and clothe-2SG and with wonderous colours
vertzijrst.
decorate-2SG

‘O poverty upon poverty. That you barely had worthless cloth to put on and to be wrapped in, you, who rule all the world, who made the first men a skirt made of skin, who made the heaven with the stars, the earth with flowers and herbs, the beasts with skin and hears. You, who cover and clothe the birds with plumes and feathers and decorate them with wonderous colours.’
(Myrren bundeken)

4.4.1.2 Non-restrictive relative clauses modifying an object

A sizeable proportion of relative clauses can modify a direct (117a) or an indirect object (117b) (11.3%). The resumptive/gap in the relative clause thus takes another case (nominative) than the head (accusative/dative). Both relative clauses contain a verb with second person singular agreement with the head.

- (117) a. vp dat ick **dy** de dat ouerste gud bist v(m)me myne eghene traecheit vn(de)
vnuulherdicheit nicht en mote verlesen

vp dat ick dy de dat ouerste gud bist v(m)me myne eghene
 so that I you REL the highest good are-2SG for my own
traecheit vn(de) vnuulherdicheit nicht en mote verlesen
 slowness and lack of persistence NEG NEG must-2SG lose

‘So that I mustn’t lose you, who are my highest good, because of my own
 slowness and lack of persistence’ (Myrren bundeken)

- b. *Jck anbede vn(de) glorificeer dy de in den name(n) dynes vaders bist*
ghekome(n) v(m)me vns to verlosen van der hand des viandes vn(de) myt
dyne(n) dure(n) blode god den vader to versonen.

Jck anbede vn(de) glorificeer dy de in den name(n) dynes vaders
 I worship and glorify you REL in the name your father
bist ghekome(n) v(m)me vns to verlosen van der hand des viandes
 have come for us to redeem of the hand of-the enemy
vn(de) myt dyne(n) dure(n) blode god den vader to versonen.
 and with your valuable blood god the father to reconcile

‘I worship and glorify you, who came in the name of the father to redeem us
 of the hand of the enemy and to reconcile god the father with your valuable
 blood.’ (Myrren bundeken)

The corpus provides only one example of resumptive pronoun agreement, (118), modifying an indirect object. It is again an example of a clause modifying a second person plural head, in which agreement of the verb in the relative clause is syncretic and thus dubious.

- (118) *ic secke in alle de i got enfortet vat he dide miner sele*

ic secke in alle de i got enfortet vat he dide miner sele
 i say you-2PL.DAT all REL you god fear what he did to.my soul

‘I tell all of you, who fear god, what he did to my soul’ (Westphalian psalms)

4.4.1.3 Non-restrictive relative clauses modifying a complement of a preposition

Some relative clauses modify the complement of a preposition. The corpus study reveals only one case in which there is clearly head agreement (119).

(119) alle wi oetmodighe(n) sundere vley n to **dy** de vns to voren heuest ghesocht

alle wi oetmodighe(n) sundere vley n to dy de vns to voren heuest
 all we devout sinners flee to you REL us to before have-2SG
ghesocht
 sought

‘all we devout sinners flee to you, who has sought us before’

(Myrren bundeken)

Another complement (120) is modified by two relative clauses which both contain a resumptive pronoun and a finite verb with agreement with the second person singular. The case and the function of the head and the gap/resumptive are different again, as the head takes the case depending on the preposition (here in both cases accusative), while the gap/resumptive is the subject of the non-restrictive relative clause (nominative).

(120) meer warhen sal ick van **dy** vlein de du allerwegen Jegenwordich byst welkers ogen alle dy nge bloeth sy(n)t vnde openbaer de du vndersokest de herten vnde niren

meer warhen sal ick van dy vlein de du allerwegen
 but where.to FUT-2SG I from you flee REL you everywhere
Jegenwordich byst welkers ogen alle dy nge bloeth sy(n)t vnde
 present are-2SG who-GEN eyes all things naked are-3PL and
openbaer de du vndersokest de herten vnde niren
 public who you examine the hearts and kidneys

‘But where will I flee from you, who are present everywhere, for whose eyes all things are bare and public, (you,) who examine hearts and kidneys’ (Prayer 1)

4.4.1.4 Non-restrictive relative clauses modifying a possessive

The corpus study yields a few remarkable examples of relative clauses in which the antecedent is introduced implicitly by the possessive (see example 121a and 121c). In these cases, the finite verb agrees with the implicitly introduced antecedent in person and number and there is no overt resumptive, i.e. there is always head agreement. Example (121b) is dubious, as the head could either be the possessive *myne* or the indirect object *my*.

- (121) a. *v(er)beide(n)de de behoerlike tijd dyner gheboerten de na dyner godheit ghine tijd en heuest noch iare*

v(er)beide(n)de de behoerlike tijd dyner gheboerten de na
 bidding the appropriate time your-GEN birth REL after
dyner godheit ghine tijd en heuest noch iare
 your divinity no time NEG have-2SG nor years

‘biding the time appropriate for your birth, who has no time nor years due to your divinity’ (Myrren bundeken)

- b. *wu orberlick wer my behoerlick ghenoech doen vor myne mysdaet de myt so ma(n)nychuoldighe(n) smytten der sunde beulecket byn*

wu orberlick wer my behoerlick ghenoech doen vor myne mysdaet
 how useful were to.me properly enough do for my crime
de myt so ma(n)nychuoldighe(n) smytten der sunde beulecket
 REL with so multiple blemishes of sin stained
byn.

am-1SG

‘How useful would it be to me, who am stained with so many blemishes of sin, to pay properly for my crime’ (Myrren bundeken)

- c. *Vp dat ick doch ichteswat arbeides dyner caritaten weder moge gheuen. de vor my in der nacht gheboren. vn(de) in der nacht ouergheleuert vn(de) gheuangen vn(de) myt zeelen ghebunde(n) bist.*

Vp dat ick doch ichteswat arbeides dyner caritaten weder moge
 on that I still somewhat effort of-your charity back may

gheuen. de vor my in der nacht gheboren. vn(de) in der nacht
 give REL for me in the night born and in the night
ouergheleuert vn(de) gheuangen vn(de) myt zeelen ghebunde(n) bist.
 surrendered and captured and with cords tied.up are-2SG
 ‘So that I may still give back some effort of your charity, (you,) who are born
 for me in the night and in the night surrendered and captured and tied up
 with cords.’ (Myrren bundeken)

4.4.1.5 Non-restrictive relative clauses modifying an imperative subject

Non-restrictive relative clauses can also modify an even more implicit antecedent as for instance an imperative subject (also referred to as ‘vocative imperative’). As all the examples have plural imperatives and due to the unitary plural in Middle Low German, it is again not possible to distinguish whether there is head agreement or relative pronoun agreement in (122).

(122) *Samenet sine hiligen de satet sin orcunde ouer dat off(er)*

Samenet eme sine hiligen de satet sin orcunde ouer dat off(er)
 Gather-PL him his holy.ones who put-PL his message above the sacrifice
 ‘Gather His holy ones to Him, you who put His message above the sacrifice’
 (Southwestphalian psalms)

Resumptive pronoun agreement (123) is definitely possible. Both relative clauses in (123) contain the resumptive pronoun *i* ‘you.2PL’.

(123) a. *Vernimet disse dinc de i godes vergeten*

Vernimet disse dinc de i godes vergeten
 Understand these things REL you-2PL god forget-PL
 ‘Understand these things, you who forget God’
 (Southwestphalian psalms)

b. *vernim(et) mit den oren de i de werlt buwet*

vernim(et) mit den oren de i de werlt buwet
 understand with the ears REL you-2PL the world build

‘Understand with the ears, you who build the world’

(Southwestphalian psalms)

4.4.2 Special cases

So far, I have discussed head agreement and resumptive pronoun agreement, two patterns that were introduced by looking at the situation in High German. There are two more agreement peculiarities that should be discussed for Middle Low German as well, namely agreement in clauses modifying a matrix clause with a copula and long distance agreement.

4.4.2.1 Postcopular relative clauses

A peculiar type of clause is the relative clause modifying an element in a matrix clause which contains a subject in the first or second person, a copula and a predicate. Although these structures are rarely found (only two in the whole corpus), they are worth mentioning because of their remarkable agreement patterns.

Example (124) shows a relative clause headed by the predicative DP *de ghene* ‘the one’, which should actually introduce a restrictive relative clause. The finite verb in the relative clause is *hebbe* ‘have’, of which the verb form shows that the verb agrees in person and number with the subject of the matrix clause *Jck* ‘I’ and not with the predicate to the subject. In what follows, I will refer to this type of postcopular relative clause as ‘copula head agreement’.

(124) *Jck byn leder de ghene de de su(n)de ghedaen hebbe*

Jck byn leder de ghene de de su(n)de ghedaen hebbe

I am unfortunately the one who the sin done have-1SG

‘I am unfortunately the one who has done the sin’ (Myrren bundeken)

This type of sentence resembles the examples of postcopular kind-defining relative clauses in Old Italian given by Benincà and Cinque (2014: 20):

Old Italian (early Florentine) post-copular kind-defining relatives had instead a further property that has been lost, namely, the fact that the relative clause verb agrees with the subject of the copular sentence rather than with

the relative clause Head (Noordhof, 1937). This can only be observed - for independent reasons - if the copula is in the 1st or 2nd person [...] The same is found in other Italian vernaculars and in modern French [...]. In modern Italian, this characteristic is not totally unknown, but is strictly banned in formal style both written or spoken.

Benincà and Cinque (2014) give among others the examples below for Old Italian (125a) and modern French (125b) and mention that the behaviour mentioned in the citation above might be related to a lack of referential features in the syntactic head of the relative clause, but they do not elaborate on this any further.

- (125) a. *Io son colei che sí importuna e fera chiamata son da voi...*
 I am she that so tiresome and fierce called I.am by you
 ‘I am the one that you call so annoying and fierce’
 (Petrarca, Trionfi, T. Moris, from Benincà and Cinque (2014: 20, ex. 38b))
- b. *C’ est moi qui suis/*?est venu te chercher ce matin*
 it is me who am/is come you search.INF this morning
 ‘It’s me who came to look for you this morning’
 (Benincà and Cinque, 2014: 20, ex. 39b)

Another type of postcopular non-restrictive relative clause is given in example (126), which looks like a genuine cleft sentence.

- (126) *Ik bin et de mit di sprikt*
Ik bin et de mit di sprikt
 I am it REL with you speak-3SG
 ‘It is I who speak to you’ (Qvatuor Evangeliorum)

The structure is similar to example (124), although, in this case, the verb in the relative clause establishes agreement with the relative pronoun, as it has third/default person features. Trutkowski and Weiß (2016: footnote 1) notice that clefts in High German distinguish themselves from non-restrictive relative clauses in the fact that they cannot have resumptive pronoun agreement, as resumptive pronouns are not possible in these

types of clauses. They therefore assume that these are syntactically different structures than relative clauses, which are not modifying the first or second person. There is however disagreement about what exactly is the head which is modified in this kind of clause (i.e. *et* or the clefted XP). The idea that *it* is the head is a wide-spread analysis of clefts called the specificational approach to clefts, though there are also other approaches to the topic. Reeve (2012: 25) for instance proposes for English that *John* rather than *it* is the modified head in a sentence like *It is John that Mary saw*, and that the relative clause is in such cases a restrictive relative clause modifying the clefted XP instead of the predicate as its antecedent.

If the relative clause in the example above would modify the predicate DP and not the subject of the clause one would expect third person features on the verb in the relative clause, as is the case here. It should however be noted that the relative pronoun introducing the relative clause is *de*, though the expected clause-introducing element in the relative clause modifying an inanimate neuter head in Middle Low German would be *dat*. This suggests that the relative element agrees with *ik* in gender (i.e. -gender). It is among other considerations because of this reason that I will argue in section 4.6.1 that this relative element is a relative pronoun. The clause thus somehow agrees with the head as well as with the clefted DP. I will further refer to this type of postcopular clause as “copula relative pronoun agreement”.

4.4.2.2 Long distance agreement/no binding

Some relative clauses in Middle Low German are located quite far away from their head in the text, i.e. there is no adjacency between the matrix clause that contains the head and the non-restrictive relative clause that modifies it. In clauses with a first or second person head, both head agreement and resumptive pronoun agreement are possible. A first example is (127), in which the matrix clause contains the prepositional phrase *v(m)me dyne veruolghinge vnd tribulacie* ‘for your prosecution and tribulation’. This matrix clause is modified by a restrictive relative clause introduced by the relative pronoun *de*, which correctly takes a finite verb in the third person singular. This first (restrictive) relative clause is followed by another clause starting with *Vn(de)* ‘and’, which creates the impression that this clause is a second restrictive relative clause with an ellipsis of the relative pronoun, modifying the same prepositional phrase in the matrix clause. However, the ending of the finite verb in this clause has second person singular

morphology. Therefore, it seems to be the case, also as concerns the context, that the clause takes the object (and not the prepositional phrase) of the first matrix clause *dy* ‘you’ as its referent. The elided relative pronoun must be due to a mismatch: the relative pronoun in a real second conjunct could have been left out if the referent was identical, which is however not the case for these two relative clauses, as the first relative clause has *dyne veruolghinge vnd tribulacie* ‘your prosecution and tribulation’ as its head and is a restrictive relative clause, while the second relative clause takes the pronoun *dy* ‘you.ACC’ as its referent and is a non-restrictive relative clause.

- (127) Ick benedie vn(de) dancke dy here ih(es)u (christ)e alre hogheste konyneck der konynghe v(m)me dyne veruolghinge vnd tribulacie de dy an ghedaen waert in dyne(n) kyndeschen daghen Vn(de) alz een ellendich vn(de) vromet pelgry(m) van dyne(n) eghenen lande wordest ghedwu(n)gen to trecken int land van egipten al hemelike.

ick benedie vn(de) dancke dy here ih(es)u (christ)e alre hogheste konyneck
 I praise and thank you lord Jesus Christ all highest king
der konynghe v(m)me dyne veruolghinge vnd tribulacie de dy
 the.GEN kings for your prosecution and tribulation REL you
an ghedaen waert in dyne(n) kyndeschen daghen Vn(de) alz een ellendich
 done was in your juvenile days and like a miserable
vn(de) vromet pelgry(m) van dyne(n) eghenen lande wordest ghedwu(n)gen
 and pious pilgrim from your own land are.AUX forced
to trecken int land van egipten al hemelike
 to settle in=the land of Egypt all heavenly

‘I praise and thank you, lord Jesus Christ, highest king of kings, for your prosecution and tribulation, that was done to you in your juvenile days. And who like a miserable and pious pilgrim were forced to settle in the all heavenly land of Egypt’
 (Myrren bundeken)

Another example is given in (128), in which it is even harder to identify the antecedent to which the non-restrictive relative clause (*Vn(de) de alle dynghe sunder arbeit heuest gheschapen*) attaches. This is due to the fact that the head can be introduced either explicitly, by the direct object *dy* in the first matrix clause, by the clitic *-u* in the

second main clause introduced by *Mer* or by the clitic *-u* in the subclause introduced by *dat(tu)*, or implicitly by the possessives in *dyner gheboerten* and *dyner godheit* in the first subclause. The *Vn(de)* introducing the relative clause suggests that the clause is a second conjunct, while no first conjunct can be found. This points in the direction of the relative clause being an additional piece of information, introduced by the discourse structuring *vnde* (see chapter 3). This suggests that this relative clause has a more important, text structuring role, which might point to it belonging to the first main clause introducing this whole chunk of information.

- (128) Jck loue vn(de) verhoghe dy v(m)me de lange(n) inwonynge dat du neghen maende by(n)nen den beslote(n) meghentliken lichame marien een clene kyndeken heuest gheshuelt v(er)beide(n)de de behoerlike tijd dyner gheboerten de na dyner godheit ghine tijd en heuest noch iare. Mer alle dynck heestu in tiden vn(de) in behoerliker ordynancien ghesat. O my(n)entlike vn(de) alto ser verwunderende weerdicheit dattu god der vnbegrijpliker glorien nicht en heuest versmaet een snode worm to werden. Vn(de) de alle dynghe sunder arbeit heuest gheschapen

Jck loue vn(de) verhoghe dy v(m)me de lange(n) inwonynge dat du
 I praise and glorify you for the long inhabitancy that you
neghen maende by(n)nen den beslote(n) meghentliken lichame marien
 nine months inside the closed maidenly body Mary.GEN
een clene kyndeken heuest gheshuelt v(er)beide(n)de de behoerlike
 a little child have.AUX.2SG hidden indwelling the appropriate
tijd dyner gheboerten de na dyner godheit ghine tijd en
 time your-GEN birth REL after your divinity no time NEG
heuest noch iare. Mer alle dynck heestu in tiden vn(de) in behoerliker
 have nor years But all things have=you in time and in decent
ordynancien ghesat. O my(n)entlike vn(de) alto ser verwunderende
 rules set. O lovely and too much wondering
weerdicheit dattu god der vnbegrijpliker glorien nicht en
 dignity that=you god the-GEN incomprehensible glory NEG NEG

heuest versmaet een snode worm to werden. Vn(de) de alle
 have-AUX.2SG disdained a worthless worm to become. And REL all
dynghe sunder arbeit heuest gheschapen
 things without pain/labour have-AUX.2SG created

‘I praise and glorify you for the long inhabitancy, that you have hidden for nine months inside the closed, maidenly body as a little child, indwelling the time appropriate for your birth, who has no time nor years due to your divinity. But you have set everything in time and decent rules. O lovely and too much wondering dignity, that you, god of incomprehensible glory, haven’t recoiled from becoming a worthless worm. And who has created all things without trouble’.

(Myrren bundeken)

To learn more about the frequency of non-restrictive relative clauses which are non-adjacent to the first or second person head compared to long distance examples in the third person, I performed a test on 1000 clauses of *Dat myrren bundeken*, a text which contains many first, second and third person subject relative clauses. An example of this last type of relative clauses, which shows that long-distance examples are not exclusively present in first and second person clauses, is given in (129). It must however be noted that these data are only indirect indications of the situation, as the data in the rest of this subsection are based on both restrictive and non-restrictive relative clauses.

- (129) Een wonderlick dynck vn(de) wonderlike weerdicheit dat god als een cleyne kyndecken schreyet in der weghe. welken de engele loue(n) in de(n) hemel. Vn(de) he sughet de borsten sijnre moder alz een sterflick kynd. de dat wesen des leuens ghift allen creature(n) als almechtich.

Een wonderlick dynck vn(de) wonderlike weerdicheit dat god als een cleyne
 a wonderful thing and wonderful honour that god as a little
kyndecken schreyet in der weghe. welken de engele loue(n) in de(n) hemel.
 child crying in the cradle REL the angels praise in the heaven
Vn(de) he sughet de borsten sijnre moder alz een sterflick kynd. de
 and he sucks the breasts his-GEN mother as a mortal child REL
dat wesen des leuens ghift allen creature(n) als almechtich.
 the existence of life gives all creatures as almighty

‘[It is] a wonderful thing and a wonderful honour, that god, who the angels praise in heaven, cries in the cradle as a little child. And he, who gives the existence of life to all creatures, being almighty, sucks the breasts of his mother like a mortal child.’ (Myrren bundeken)

The distribution of non-adjacent subject relative clauses is given in table 4.2.

Person	Adjacent	Long distance	
1	1	0	0.00%
2	15	18	54.55%
3	55	9	14.06%
Total	71	27	27.55%

Table 4.2: (Relative) frequency of non-adjacent subject relative clauses

As can be seen in table 4.2, non-adjacent relative clauses are quite frequent in the text (27.55% of the clauses investigated). The difference between occurrences in the first or second person clauses on the one hand and in the third person clauses on the other hand is remarkable and statistically significant at the 1 percent level in Fisher’s Exact Test ($p = 8.955 \cdot 10^{-05}$).

4.5 Variation

As I have only found 53 examples of relevant clauses in the corpus containing approximately 14,000 clauses, it must again be stressed that this phenomenon is very marginal. Certainly for sparse clauses like these, a large-scale corpus study with a parsed corpus will in the future be necessary to give a better indication of the frequency of the structure. The statistical analysis on this small number of examples can therefore only indicate tendencies in the data. As regards a first tendency, the corpus study shows that Middle Low German offers two alternating options for agreement patterns. The first type has a resumptive pronoun, whereas the second type has a gap in the relative clause. Both display first or second person agreement on the verb in the relative clause. Head agreement is the most common agreement pattern found in 71.7% of all cases, whereas only 18.9% of the cases have resumptive pronoun agreement. The remaining 9.4% are clauses with a plural head and without a resumptive and in which it is consequently impossible to see what the verb agrees with.

4.5.1 Scribal language and period

Examples of non-restrictive relative clauses with a first and second person head are found throughout the texts from the Altland. Both the resumptive pronoun agreement pattern and the head agreement pattern are found in Westphalian, Eastphalian and Old Low Saxon. The logistic regression analysis in Rbrul, which is (just like the other analyses in this section) based on the relative frequency of non-restrictive relative clauses with a first or second person head compared to all the other subordinate clauses found in the corpus, shows that region - and, specifically, Westphalian provenance - is the most determining factor for the possibility of having non-restrictive relative clauses with a first or second person head (see table 4.3). There are no examples of non-restrictive relative clauses in the dialects of the Neuland, which makes the factor weight of this scribal language 0.

Scribal language	Log odds	Tokens	Centred factor weight	%NRRCs
WPH	5.157	1942	0.994	2.6%
NLS	2.521	1587	0.926	0.2%
EPH	2.097	1616	0.891	0.1%
LB	-9.776	135	< 0.001	0%

Table 4.3: Non-restrictive relative clauses with a first or second person head in the corpus, by scribal language

This is in all probability due to the fact that the corpus does not include religious texts from the Neuland, as the genre of the text plays an important role in the occurrence of non-restrictive relative clauses with first or second person clauses (see section 4.5.2). A similar explanation can be given for the results of the logistic regression analysis in which the relation between the occurrence of non-restrictive relative clauses with a first or second person head and the period is measured (see table 4.4).

Period (range)	Log odds	Tokens	Centred factor weight	%NRRCs
1251-1300	-5.005	682	0.007	0%
1301-1350	12.052	1103	> 0.999	1.1%
1351-1400	-5.005	747	0.007	0%
1401-1450	-5.005	367	0.007	0%
1451-1500	12.971	1602	> 0.999	2.7%
1501-1550	-5.005	723	0.007	0%
1551-1600	-5.005	56	0.007	0%

Table 4.4: Non-restrictive relative clauses with a first or second person head in the corpus, by period

As not all of the periods included in the corpus contain religious texts, the relevant clauses do simply not show up in all of the periods in the analysis.

4.5.2 Genre

49 relevant clauses in the corpus were found in religious texts (prayers and lamentations), three in literary texts (with a religious topic) and one in a letter. Table 4.5 shows the influence of genre through a multiple logistic regression analysis in Rbrul, confirming that religious texts are the most likely texts in which such clauses can be found, though they can also be found in letters and literary texts.

Genre	Log odds	Tokens	Centred factor weight	%NRRCs
religious	9.840	1567	> 0.999	3.3%
letter	7.798	230	> 0.999	0.4%
literature	7.365	1062	0.999	0.003%
charters	-8.334	850	< 0.001	0%
chronicle	-8.334	271	< 0.001	0%
legal	-8.334	1300	< 0.001	0%

Table 4.5: Non-restrictive relative clauses with a first or second person head in the corpus, by genre

The reason for this only becomes clear when having a closer look at the texts in which the clauses turn up. In most cases the narrator invokes a higher authority, usually God, Christ or the Virgin Mary. The relative clause then often specifies this higher authority by expanding on the greatness of the invoked authority in the form of appositive relative clauses.

(130) Here do gutlike in dinen gude(n) willen syon [...] de geweldich bist in der regtigheit

here do gutlike in dinen gude(n) willen syon de geweldich bist in der
 lord do good in your good will Syon REL mighty are-2SG in the
regtigheit
 justice

‘Lord, do Syon good with your goodwill, (you), who are mighty in justice’.

(Südwestfälische Psalmen)

This is corroborated by the data from table 4.1 as well, which shows that 38 of the 53 relevant relative clauses modify a nominative or vocative. Non-restrictive relative clauses with a plural head on the other hand often appear when the narrator needs to convince a group of people to take action or to reflect. This can for instance be seen in the two examined psalm translations in the corpus, illustrated with example (131).

(131) Duot manlike so wert gesterket iuwe herte alle de gode ge-truwet

duot manlike so wert gesterket iuwe herte alle de gode getruwet
do manly so become strenghtened your heart all REL god trust

‘Be brave, so your heart will be strenghtened, all of you, who trust in God’.

(Südwestfälische Psalmen)

In this fragment, the narrator addresses the listening or reading audience.

A question raising concerning the long-distance agreement examples presented in section 4.4.2.2 is whether they are genre-related. In that case, they could really be more a feature of the text type than something which needs to be described in the syntax. Unfortunately, as I just shown that non-restrictive relative clauses with first and second person heads as a type almost exclusively show up in religious texts, it is impossible to compare the frequencies of first and second person non-restrictive relative clauses between genres. What can be compared between different text genres are the frequencies of third person (non-)restrictive relative clauses with and without distance between head and relative clause. I therefore looked at the third person examples from the religious text *Dat myrren bundeken* from section 4.4.2.2 again and compared them to the number of non-adjacent subject relative clauses in a sample of 1000 clauses in the *Chronik der Sassen*, a chronicle. The results are given in table 4.6. The number of the (third person) non-adjacent clauses in the chronicle lies very close to the number in the religious text, which makes the difference not significant in Fisher’s Exact Test ($p = 0.7979$).

	Adjacent	Long distance	%long distance
Myrren bundeken	55	9	14.06%
Chronik der Sassen	59	8	11.94%
Total	114	17	12.98%

Table 4.6: Adjacent and non-adjacent subject relative clauses in a multi-genre sample

The total number of subject relative clauses which are not adjacent to their third person head in both texts still differs significantly from the number of first and second person ones which were given in table 4.2 in section 4.4.2.2 ($p = 2.895 \cdot 10^{-06}$ in Fisher's Exact Test), which can be seen in table 4.7.

Person	Adjacent	Long distance	%long distance
1-2	16	18	52.94%
3	114	17	12.98%

Table 4.7: Adjacent and non-adjacent subject relative clauses in a multi-genre sample: totals

These results show in the first place that the genre does not have an influence on the presence of long-distance agreement examples, at least in the third person. Though that means that this could also account for first and second person clauses, it is impossible to know this for sure based on the current dataset. It also does not exclude the possibility that the first and second person non-adjacent relative clauses do act differently in religious texts, possibly in a more formulaic/formal way.

4.5.3 Translation

A point that could play a role in what the attested agreement patterns look like, is the fact that some texts are translated from Latin. This does however not seem to be the case to a large extent for the texts that I have used in my Middle Low German corpus.

A comparison of original Middle Low German texts with the Southwestphalian psalm translation from the 14th and with the Eastphalian psalm translation of the 15th century, which both had a Latin original (see section 3.5.2.2), showed that the sentences in the psalms all showed original Middle Low German syntax and properties as concerns non-restrictive relative clauses with a first and second person head. This in the first place because of their syntactic distribution, which coincides with that in non-translated texts (i.e. the same types of heads can be modified). The patterning of relative clauses in the Middle Low German texts that had been translated from Latin is exactly the same as in non-translated texts: both resumptive pronoun agreement and head agreement exist.

In non-restrictive relative clauses in Latin in which the relative clause does not really function as an identifier of the referent, but rather as a secondary predication, the Latin verb is usually used in the subjunctive mood and semantically interpreted as an adverbial (Pompei, 2011: 439). See for instance the example of Pompei (2011), repeated

in (132), in which the finite verb in the relative clause *attigissem* ‘began’ appears in the subjunctive. As in Middle Low German, the verb has first person morphology though. In the psalm translations, it is however not possible to see whether the verb agrees with the head or with the relative pronoun, as there are only cases of non-restrictive relative clauses with a first or second person plural head.

(132) *namque egomet, qui sero ac leuiter Graecas litteras attigissem, tamen cum pro consule in Ciliciam proficiscens uenisse Athenas, compluris tum ibi dies sum propter nauigandi difficultatem commoratus*

‘for I myself, who began very late in life to study Greek, and then attained only a smattering of it, yet, after I had come to Athens as a proconsul, in my road to Cilicia, was stopped there a good many days, because the seas were then dangerous’ (Cic. de orat. 1,82, Pompei, 2011: 440, ex. 21)

In Middle Low German, this use of the subjunctive is not known. A direct transfer of this Latin property is thus unlikely. When looking at equivalent verses, which I have done in the *Vulgata* (though the original manuscript of the *Südwestfälische Psalmen* does not show the full equivalent Latin verse), it is remarkable that, just like in Middle Low German, the Latin verses equivalent to the ones found in the corpus have a relative element which introduces the relative clause (i.e. *qui/quae/quod*, see Pompei, 2011: 429). Even more striking is that the verb in these plural examples shows agreement with the head of the clause. Compare for instance the Latin verse in (133) (from Rosary Bay⁷) and its Middle Low German equivalent (118).

(133) *(Venite, audite,) et narrabo, omnes qui timetis Deum, quanta fecit animae meae.*

(Draw near and listen), all you who fear God, and I will describe to you how much he has done for my soul. (Psalm 65, 65:6)

The Latin relative clause is introduced by the relative pronoun *qui* and the verb *timetis* ‘fear’ has second person plural morphology. The Middle Low German example (118), repeated here, in which, as I have mentioned, the type of agreement cannot be deduced

⁷<https://www.rosarybay.com/psalm-65>

from the verbal ending, is introduced by a relative element *de*. I will argue in section 4.6.1 that this element is a relative pronoun as well.

(118) *ic secke in alle de i got enfortet vat he dide miner sele*

ic secke in alle de i got enfortet vat he dide miner sele
i say you-2PL.DAT all REL you god fear what he did to.my soul

‘I tell all of you, who fear god, what he did to my soul’ (Westphalian psalms)

A striking difference with the Latin examples is however that the Middle Low German clauses can have a resumptive pronoun. A certain influence of Latin can thus not be excluded, though the resumptive and the fact that the exact same patterns are found in non-translated texts as well, suggest that a direct transfer from Latin is unlikely here, as these latter elements point in the direction of the clauses being inherently Middle Low German.

4.6 Analysis

In this section I will expand more on the alternation in the patterns. The section offers analyses of the basic types of non-restrictive relative clauses as well as of the more peculiar examples. Before that, it is necessary to clarify the properties of the element *de* introducing the non-restrictive relative clause.

4.6.1 Elements introducing (non-restrictive) relative clauses in Middle Low German

One property concerning non-restrictive relative clauses with a first or second person head in Middle Low German that immediately catches the eye is that they are always introduced by *de* at the left periphery of the relative clause. Another point that became very clear in section 4.4.1, is that the finite verb in the relative clause never agrees with the relative pronoun. This raises the question whether this clause-initiating *de* is a relative pronoun at all. If so, *de* would be located in SpecCP (134a). The alternative option, *de* being a relative particle, would mean that it were located in C⁰, which would mean that there is an empty operator in SpecCP (134b). Both relative pronouns as well as relative particles and combinations of these are common in Middle Low German.

- (134) a. [_{CP} de [_{C'} C=∅ [...]]]
 b. [_{CP} OP=∅ [_{C'} de [...]]]

To be able to analyse how agreement in non-restrictive relative clauses with a first or second person head is established in Middle Low German, it is of major importance to know what the exact status of *de* is. One fact that can shed light on this is the fact that *de* is not the only element located in the left periphery of the relative clause, as it sometimes combines with other clause-introducing elements. The elements which *de* can combine with vary between the Middle Low German scribal languages, although the variation is quite limited. Combinations of the clause-introducing *de* with particles, next to the examples in which it combines with the resumptive pronoun, occur in all the scribal dialects of the *Attland*. This section gives a short overview of the elements introducing relative clauses in Middle Low German. The first part covers direct evidence from non-restrictive relative clauses, while the second part focuses on (combinations of) particles in other types of relative clauses. The (combinations of) (relative) pronouns and relative particles are marked in bold in the examples.

A first example from Eastphalian is given in (135), which consists of three successive non-restricted relative clauses modifying one and the same imperative subject. Here, *de* combines either with an extra (clitic) *de* or with *dar*. *Dar* is a very common particle in Middle Low German, which was originally a locative/temporal particle (Lasch et al., 1956). In this environment it has lost its locative/temporal meaning. A similar evolution of the locative/temporal particle can among others be noticed in Gothic, Old High German, Old Saxon and Old Dutch (see 4.7).⁸

- (135) Vrowet iu in deme heren alle **de de** enes guden leuendes mit ruwen be gynnet
 vn(de) bewiset vtwendich de vroude iuwes herten alle **de dar** vort treden in enem
 guden leuende vn(de) beromet iu der ewighen ere alle gy **dede** rechtes herten
 sint ane straffinghe iuwer samwitticheit

Vrowet iu in deme heren alle de de enes guden leuendes
 rejoice you.PL in the lord all REL RELPART a good life

⁸In the first clause, the second *de* could also be a demonstrative pronoun (see also Lasch et al., 1956: 220). This would result in a translation such as ‘all the ones, who...’. In the second and the third clause, such a reading is not possible. Because of the paralllism in the conjuncts, I thus preferred the other option for the analysis.

mit ruwen be gynnet vn(de) bewiset vtwendich de vroude iuwes
 with remorse begin and prove outwardly the joy of=your
herten alle de dar vort treden in enem guden leuende vn(de)
 heart alle REL RELPART forward go in a good life and
beromet iu der ewighen ere alle gy dede rechtes herten
 glory you of=the eternal glory all you REL=RELPART of=right heart
sint ane straffinghe iuwer samwitticheit
 are without punishment of=your conscience

‘Rejoice in the lord, all who begin a good life with remorse, and outwardly show the joy of your heart, all who progress in a good life, and glory in eternal glory, all of you, who are of the right heart without a guilty conscience’

(Eastphalian psalms)

Non-restrictive relative clauses in Westphalian third person non-restrictive relative clauses can combine two types of *de* to introduce the clause. Like in Eastphalian, *dar* can occur as a particle as well, but only in restrictive relative clauses.

(136) *Vn(de) yn desse(n) wille(n) vn(de) yn dessen vpsate volghede he na gode. de de wil dat alle mensschen beholden blyue(n) vn(de) komen to bekantheyt der warheit*

Vn(de) yn desse(n) wille(n) vn(de) yn dessen vpsate volghede he na gode.
 and in this will and in this intention followed he to god
de de wil dat alle mensschen beholden blyue(n) vn(de) komen
 REL RELPART wants that all people saved stay and come
to bekantheyt der warheit
 to knowledge of the

‘And in this will and in this intention he followed god, who wants all people be saved and come to knowledge of the truth’ (Legende des heiligen Ludgers)

Combinations of *de* with particles in non-restrictive relative clauses do not turn up often in the North Low Saxon part of the corpus: Only one example can be found, which is also quite unclear. It is certain that the left periphery of example (137) contains *dar*. The (probable) particles *a* and *de* preceding *dar* have been added interlinearly. I have added

these insertions in the example between square brackets. The status of *a* is unclear, as it does not turn up in the rest of the corpus as a clause-introducing element. *Dar* is probably identical to the *dar* in Westphalian and Eastphalian.

(137) wo esches du drinken van mi [a de] dar bin en wif samaritana

wo esches du drinken van mi [a de] dar bin en wif
 why ask you drink of me ? REL RELPART am a woman
samaritana
 Samaritan

‘why do you ask a drink of me, who am a Samaritan woman’

(Qvatuor Evangeliorum)

In other types of relative clauses in Middle Low German, (combinations of) relative particles and relative pronouns are quite common as well. In relative clauses modifying a third person animate subject, clauses are often introduced by the relative pronoun *de* followed by *do*. In some examples, like in (138a), it is unclear from the structure whether this particle is a locative adverb (‘there’, referring to the house of Johannes), a temporal adverb (‘then’, hence cognate to *dar* and referring to the year 1360) or a relative particle (roughly, ‘that’). In this particular case, the context points in the direction of it being a relative particle, though a locative translation with ‘there’ could be correct as well. Thanks to the context, other examples like (138b) show much more clearly that *do/dar* must be a relative particle. This is because there is no element in the matrix clause which the locative/temporal adverb could refer to. Consequently, a translation as *there/then* makes no sense.

(138) a. Do uses heren jare weren MCCCL^o, do wart en richte gheheghet to Johannes
 hus Kyneken un(de) dat Johan Nobeke besat, **de do** richter was

Do uses heren jare weren MCCCL^o, do wart en richte gheheghet
 when our Lord’s years were 1360 there was a tribunal held
to Johannes hus Kyneken un(de) dat Johan Nobeke besat, de
 at Johannes’ house Kyneken and which Johan Nobeke owned who
do richter was
 there judge was

‘In 1360 AD there was a tribunal at the house of Johannes Kyneken, which was owned by Johan Nobeke who was the judge (there/then)’

(Herforder Rechtsbuch)

- b. *dat wi vnse werch brengen ovp eynen ghuden ende . also dat et si dessen dren vor ghenomeden . de dar sin dryualdich in den p(er)sonen*

dat wi vnse werch brengen ovp eynen ghuden ende . also dat et si
 that we our works bring to a good end such that it be
dessen dren vor ghenomeden . de dar sin dryualdich
 these-GEN three aforementioned who PRT are threefold
in den p(er)sonen
 in the persons

‘... that we bring our works to a good end such that it be for the three aforementioned, who are threefold in persons’ (Soester Schrae)

Some clauses such as (139) suggest even more that *dar* must be a relative particle, as the element cooccurs with another locative element in the clause, here for instance *vor deme vinstere* ‘in front of the window’.

- (139) *Des nam he towe vnde halteren [...] vnde bant den enen ende des towes tho enen struke de dar vor deme vinstere gewassen was.*

Des nam he towe vnde halteren vnde bant den enen ende des towes
 therefore took he rope and holsters and tied the one end of-the rope
tho enen struke de dar vor deme vinstere gewassen was.
 to a bush REL RELPART before the window grown was

‘Therefore, he took rope and holsters and tied the one end of the rope to a bush which grew in front of the window’. (Griseldis)

In third person restrictive relative clauses modifying an animate head, the clause can be introduced with a combination of *de*, a second *de* and *dar*. In example (140) the head *dem berghe* is modified by a clause introduced by *de de dar*. The *dar* could however have a locative reading (‘the mountain which is called Ararach there’) as well.

- (140) *de arcke de bestod Jn armenia an dem barghe **de de dar** het ararach*

de arcke de bestod Jn armenia an dem barghe de de
 the ark DEM existed in Armenia at the mountain REL RELPART
dar het ararach
 RELPART is.named Ararach

‘The ark was located in Armenia at the mountain called Ararach’

(Cronecken der sassen)

In the Eastphalian dialects, restrictive relative clauses with an animate head can sometimes show a combination of *de* and another *de*, one being a relative pronoun and the other one a relative particle. Such a combination shows even more clearly that the *de* is used both as a pronoun and as a particle in Middle Low German. Such an example is given in (141).

- (141) *Jn desser / wis dat ek schal vn(de) wille van deme seluen gude bekeosteghen enen prester de de holde ene missen alle daghe also men wente her to / ghedan heft to deme seluen altare*

Jn desser / wis dat ek schal vn(de) wille van deme seluen gude
 in this way that I shall and will of the same property
*bekeosteghen enen prester **de de** holde ene missen alle daghe*
 sustain a priest who RELPART hold-SUBJ a mass all days
also men wente her to / ghedan heft to deme seluen altare
 as one until here to done has at the same altar

‘In this way, I shall sustain a priest with the same property, who is to hold a mass every day, as one has done up until now at the same altar’

(Braunschweig Urk. 1365-04-19)

Besides, *de* can appear as a clitic on a relative pronoun in Eastphalian in free relative clauses (142), pointing to an analysis of this *de* as a (clitic) relative particle in C.

- (142) **we=de** sick hyr in ertrick vorheuet de schal dort vornyddert werden

we=de sick hyr in ertrick vorheuet de schal dort
 who=RELPART REFL here on earth is.pretentious he will there
vornyddert werden
 humiliated be

‘Who(soever) is pretentious on earth, will be humiliated there’

(Cronecken der sassen)

A last type of relative clause introduced by a particle, is the type discussed in chapter 2, in which the comparative particle *alse* ‘as’ acts more like a relative particle, as the *alse*-clause modifies the whole preceding situation, for instance in (36), repeated here. As is the case in genuine subject relative clauses, the particle is followed by a gap.

(36) Un(de) se wolden ene vorbosmen un(de) vortughen, alze [] des ammetes recht is.

un(de) se wolden ene vorbosmen un(de) vortughen alze des
 and they wanted him claim.as.serf and testify as the-GEN
ammetes recht is
 authority’s right is

‘and they wanted to claim him as a serf and testify, as [it] is the authority’s right’

(Herforder Rechtsbuch)

The list below gives an overview of direct as well as indirect evidence for the fact that relative clauses (in the first, second and third person) in Middle Low German are often introduced by (combinations of) relative pronouns and particles, and of the fact that *de* can be a relative pronoun as well as a relative particle in Middle Low German. It also includes the head agreement and resumptive pronoun agreement cases listed in the last section.

- **direct evidence** from first and second person non-restrictive relative clauses
 - Westphalian: *de, de* + resumptive
 - Eastphalian: *de, de* + resumptive, *de + de*; *de + dar*; *de + de* (connected)
 - North Low Saxon: *de, de* + resumptive, *(a) + de + dar*
- **indirect evidence** from other types of relative clauses:

- 3rd person non-restrictive relative clauses: *de + do, de + dar*
- 3rd person restrictive relative clauses: *de + de + dar*
- Eastphalian restrictive relative clauses: *de + de*
- free relative clauses: *we + de*

The examples and the schematic overview given above make clear that at least three overt positions in the left periphery and/or at the start of the middle field of the (non-restrictive) relative clause in Middle Low German must be assumed. The examples also clearly point in the direction of *de* in the left periphery of the non-restrictive relative clause with a first or second person head being a relative pronoun and not a particle, as *de* is an invariable clause-introducing element, while the other elements, the particles, often remain optional. The clearest example is Eastphalian example (135), in which *de* in the succeeding non-restrictive relative clauses always remains in the most leftward position, while the other elements vary between *de*, *dar* and clitic *-de*. There are other Middle Low German clauses which point in the direction of *de* in non-restrictive relative clauses with a first or second person head being a pronoun and not a particle. The reason for this was introduced in the section about copula relative pronoun agreement above. I showed that in such cases, the clause is introduced by one relative element which took over a feature of the subject and not of the third person predicate, as the expected pronoun would have been *dat*. This is because *dat* is usually the clause-introducing element in a relative clause modifying a neuter antecedent in Middle Low German, in restrictive as well as in non-restrictive relative clauses (as it is hard to tell the difference, see 4.2.2). Some examples of clauses with a neuter head and *dat* introducing the relative clause modifying this head are given below.

- (143) a. Bekant men emme wes vor gherichte / **scult oder ander ding dat** den eruen vnwitlik were / [...] so [...]

bekant men emme wes vor gherichte scult oder ander ding
 confess one him something before court debt or other thing
dat den eruen vnwitlik were so
 that the heir unknown was then

‘If one confesses something to him in court, debt or a thing which was unknown to the heir, [...] then [...] (Kramerrecht Goslar)

- b. Vortmer inder Ryddere wonynghe vnde in der knapen scalmen nynen Man besetten noch hinderen behaluen vmme Dotslag eder vmme wunnynghe Dat bynnen der stath gheschen sy

vortmer inder ryddere wonynghe vnde in der knapen scalmen
 furthermore in=the knight's house or in the knightboy's shall=one
nynen man besetten noch hinderen behaluen vmme dotslag eder
 no man occupy nor impede except because.of manslaughter or
vmme wunnynghe dat bynnen der stath gheschen sy
 because.of spoils which inside of.the city happened is

'Furthermore, in the house of the knight or the knightboy, one shall not obstruct or impede any man, except because of manslaughter or because of theft which happened inside of the city' (Oldenburger Urkunden)

There are however some exceptions to this rule, which suggests that the relative pronoun sometimes agrees in animacy/gender through semantic instead of syntactic agreement. In (144), the head of the relative clause is *sin wif* 'his wife', which is grammatically neuter, but semantically feminine.

- (144) Storue ok emme manne sin wif_i de_i kindere hinder sek lete [...]

storue ok emme manne sin wif de kindere hinder sek lete
 would.die also a-DAT man-DAT his wife REL children behind REFL left

If the wife_i of a man died, who_i left children behind [...] (Kramerrecht Goslar)

These examples show that the relative element introducing the relative clause can have a different set of features in different clauses. This is only possible if the right features are introduced by the relative pronoun in SpecCP or by an empty operator with the right features in SpecCP, as a particle itself cannot bear features. However, an empty operator would not leave room for all the elements that can introduce the relative clause in Middle Low German. The data and argumentation presented in this section lead the way to a structure in which all of the examples given in the last section can be captured in one structural overview. The schematic overview of the system of relative pronoun(s), particle(s) and resumptive(s) in Middle Low German restrictive and non-restrictive relative clauses is given in (145).

(145) $DP_i [_{CP} de_1 [_{C'} (de_2) [_{TP} (ResP)_i / (dar) \dots V_i]]]$

I propose that the clause-introducing relative pronoun de_1 is always located in SpecCP. C^0 is the slot in which the second de_2 , the relative particle, can appear, but this de is not obligatory.⁹ The resumptive pronoun is located in the position following C, i.e. in SpecTP (or in the Wackernagel position, see section 1.3.2). Concerning *dar/do*, Light (2010) argues that *dar* in Early New High German must be located in SpecTP. She analyses *da* as some sort of expletive subject. I therefore propose that the optional *dar* in Middle Low German is also located in SpecTP. This is supported by the fact that resumptives and *dar* never co-occur in the corpus.

4.6.2 Two agreement patterns

In section 4.4.1 I presented the different agreement patterns which can be found in Middle Low German. I showed that there are two basic agreement patterns, namely head agreement and resumptive pronoun agreement, which can modify five types of heads (see table 4.1). A question which arises in connection with these two patterns is whether they behave differently. I have tested this by measuring the correlation between the type of agreement pattern and (i) long distance between head and modifying clause (ii) the type of head and (iii) the person of the head (1 or 2). When measuring the strength of the relation between the agreement pattern and locality, it can be seen that both of the centred factor weights have a positive correlation with long distance. Both values are quite similar, which means that long distance is always quite frequent, independent of the type of the agreement pattern.

⁹The possibility of filling SpecCP and C^0 at the same time is not uncommon in other Germanic languages as well. Brandner and Bräuning (2013) for instance argue that headed relative clauses in Southern German dialects such as Alemannic, Bavarian and Hessian are introduced by a(n optional) demonstrative pronoun in SpecCP and a relative particle *wo* in C^0 (146).

(146) *dea Mo (dea) wo seine Schu verlor hot*

dea Mo (dea) wo seine Schu verlor hot
 the man REL RELPART his shoe lost has

‘the man who lost his shoe’

(Brandner and Bräuning (2013: 132), my own English translation)

Long distance	Log odds	Tokens	Centred factor weight	%LD clauses
no	0.133	24	0.833	53.3%
yes	-0.133	29	0.793	46.7%

Table 4.8: Type of agreement pattern according to locality

In the analysis of the relation between the head and the type of agreement pattern, there is a preference for the head agreement pattern when the head is a possessive (IV, see table 4.1). However, it is again important to be careful in interpreting the values from the analysis as the number of examples is very small. This small number of incidences of clauses modifying possessives could distort the picture provided here. In the only category in which there is a larger number of examples for instance, the clauses which modify vocatives (I), the correlation between the pattern and the head is negative (i.e. a centred factor weight close to 0).

Type of head	Log odds	Tokens	Centred factor weight	%HA
I	-2.375	36	0.085	86.1%
II	-2.591	6	0.07	83.3%
III	-4.200	4	0.015	50%
IV	13.366	3	> 0.999	100%
V	-4.200	4	0.015	50%

Table 4.9: Type of agreement pattern (HA) according to type of head

The multiple logistic regression analysis in Rbrul measuring the relation between person and type of agreement pattern (in this case head agreement) returned the results in table 4.10. There is a strong correlation between first person heads and head agreement clauses, but this could again be due to the limited number of examples. In the bigger group of second person heads, it can be seen that the correlation between the head and the agreement pattern is almost non-existent (< 0.001).

Person	Log odds	Tokens	Centred factor weight	%HA
1	8.09	3	> 0.999	100%
2	-8.09	50	< 0.001	80%

Table 4.10: Type of agreement pattern according to person

I conclude from these data that there is not much (reliable) correlation in the dataset concerning these variables looking at the bigger groups of examples. Furthermore, there is no noticeable difference in meaning between both patterns. Consequently, I claim that

both the resumptive pronoun agreement pattern and the head agreement pattern could in fact be two sides of the same coin. I thus claim that the resumptive pronoun in the non-restrictive relative clauses with a first or second person head always contains a resumptive pronoun, which in some cases can be null, following Trutkowski and Weiß (2016: 162) who argue that the resumptive is covert in High German cases of head agreement as well. This means in other words that every Middle Low German non-restrictive relative clause with a first or second person head contains a resumptive pronoun, either overt or covert.

The main element for assuming that the gap in the relative clauses with a head agreement pattern is a null resumptive derives from chapter 3. As the chapter has shown that Middle Low German has referential null subjects in SpecCP and null clitics in the Wackernagel position, it is more than likely that resumptives in this position can stay covert as well. The fact that the West Germanic languages had a much larger number of referential null elements anyway also supports this idea (Volodina and Weiß, 2016). This will become even more clear in the section about the diachronic development (see 4.7), where I show that the modifying pattern with an overt resumptive seems to be a newer phenomenon than the pattern with the covert resumptive (see 4.7).

4.6.3 Establishment of the agreement chain

Section 4.6.2 showed how two main agreement patterns are found in non-restrictive relative clauses with a first or second person head in Middle Low German. I elaborated on how those patterns are in fact two sides of the same coin, as head agreement is resumptive pronoun agreement with a null resumptive. The choice between both strategies is not dependent on the type of head which is modified by the relative clause (see table 4.1). Further, it became clear that this type of relative clause is always introduced by an invariable *de* at the left periphery of the clause, which was argued to be a relative pronoun in section 4.6.1. These elements form the basis of the analysis that I present in this section. Copula head agreement and copula relative pronoun agreement will also be discussed. The two basic and the two postcopular agreement patterns are given in table 4.11 for the sentence ‘I who speak to you’ or ‘It is I who speak to you’ in Middle Low German. Non-obligatory categories are marked with square brackets.

	Pronominal head	[...]	[Predicate]	REL	[ResP]	[...]	VFIN
HA	ik		/	de	/	mit di	spreke
ResPA	ik		/	de	ik	mit di	spreke
CHA	ik	bin	de ghene	de	/	mit di	spreke
CRPA	ik / et	bin	ik / et	de	/	mit di	sprikt

Table 4.11: Schematic overview of the four agreement patterns in Middle Low German

This overview raises the question why and how these exact agreement patterns are formed, as there has to be a way in which the relative clause is able to modify the head. According to Kratzer (2009), this can only happen by establishing some kind of agreement between every part of the agreement chain, i.e. between every element bearing φ -features. In these cases this would be at least between the head, the relative pronoun, the (null) resumptive pronoun and the finite verb in the relative clause. I argue that the relative pronoun *de* introducing each non-restrictive relative clause is underspecified for person, number and gender (i.e. for φ -features). The main reason to assume the relative pronoun to be underspecified is that *de* remains invariable when modifying a masculine or feminine head, while the pronoun in High German for instance does inflect for gender. There is a difference between the introducing element in animate (*de*) versus inanimate (*dat*), but this feature plays no role in agreement with the verb. Furthermore, *de* remains immutable when the clause modifies either another person or another number.

When adding the specified and underspecified φ -features to the table given above, this provides the picture in table 4.12.

	Head	[Predicate]	REL	[ResP]	VFIN
HA	ik [p:1, g:-, n: sg.]		de [p:-, g:-, n:-]	NULL [p:1, g:-, n: sg.]	spreke [p:1, n: sg.]
ResPA	ik [p:1, g:-, n: sg.]		de [p:-, g:-, n:-]	ik [p:1, g:-, n: sg.]	spreke [p:1, n: sg.]
CHA	ik [p:1, g:-, n: sg.]	diegene [p:3, g:-, n:-]	de [p:-, g:-, n:-]		spreke [p:1, n: sg.]
CRPA	ik [p:1, g:-, n: sg.]	et [p:3, g:-, n:sg.]	de [p:-, g:-, n:-]		sprikt [p:3, n: sg.]

Table 4.12: Schematic overview of the valued and unvalued features in the four agreement patterns in Middle Low German

As concerns the further derivation, Georgi and Salzmann (2017: 8) explain that there are two ways of achieving Agree between a probe and a goal, which do not require

movement: Checking and Matching. Both are possible in a bottom-up as well as in a top-down approach, though the bottom-up approach causes different problems in resumption theories, for instance that checking across clause boundaries is not possible (Salzmann, 2017; Salzmann et al., 2006). Their proposed analysis is among others based on resumption effects in Swiss German, in which the presence or absence of a resumptive in relative clauses depends on the case of the head noun. In Swiss German, the case information in the head noun thus needs to be accessible before the choice between the presence or the absence of a resumptive needs to be made. Georgi and Salzmann therefore argue for a top-down approach in relative clauses, in which Agree is established over the Checking and Matching relations. In that way, an indirect dependency without any movement is established (Salzmann, 2017). It is relevant to consider such a distinction between Checking and Matching to explain how agreement is established in the feature chain in non-restrictive relative clauses. The idea can be adapted as follows:

- (147) a. *Checking* involves Agree between a DP with unchecked ϕ -features and a probe. It requires identity of features, i.e. it is only possible if the goal has the same features as the probe.
- b. *Matching* involves Agree between a DP with already checked ϕ -features and a probe. It does not require identity of features, viz. it is possible if the probe has a subset of the features of the goal.

For the data under consideration here, this would mean that the relative pronoun *de* that introduces non-restrictive relative clauses in Middle Low German matches anything in the chain, as it is maximally underspecified. I have chosen to adapt the top-down approach described in Georgi and Salzmann (2017) to my data, with that difference that not the case information but the person feature needs to be accessible. In this way, the chain with the maximally underspecified relative pronoun, the (null) resumptive and the Checking and Matching relations between the elements ensure that no locality constraints need to be violated. This makes it possible to deal with the non-local dependency between the often implicitly introduced first or second person (features of the) antecedent and the resumptive and the resumptive/gap in the relative clause, as these features would, as is the case for case information in Swiss German, not be syntactically present in a bottom-up approach.

4.6.4 A theoretical analysis of non-restrictive relative clauses in Middle Low German

In the following sections, I present the derivation of standard non-restrictive relative clauses with a first or second person head (i.e. head agreement/resumptive pronoun agreement), for clauses modifying matrix clauses with a copula, for clauses modifying a possessive (i.e. with an implicitly introduced head) and for cases of long distance agreement.

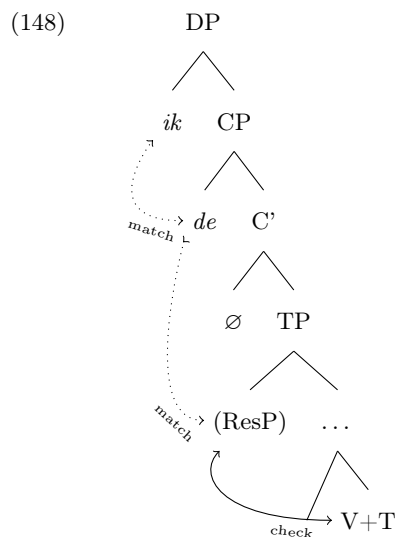
4.6.4.1 Non-cleft relative clauses

Turning the theory into practice in the basic two patterns in Middle Low German, repeated in table 4.13 below, the derivation runs as follows.

	Pronominal head	[...]	[Predicate]	REL	[ResP]	[...]	VFIN
HA	ik		/	de	/	mit di	spreke
ResPA	ik		/	de	ik	mit di	spreke

Table 4.13: Schematic overview of non-cleft relative clauses

First, there is Matching between the head and the probe, i.e. the relative pronoun, which is underspecified for φ -features and thus matches everything. Then, Matching between the relative pronoun and the (null) resumptive pronoun is established, followed by Checking between the (null) resumptive and T in the relative clause.



As I have already mentioned, the structure of head agreement and resumptive pronoun agreement is basically the same, though the resumptive can be covert or overt. Consequently, it is in fact not really possible to speak about ‘head agreement’ for Middle Low German, as Middle Low German only ever has resumptive pronoun agreement.

4.6.4.2 Clauses with copula

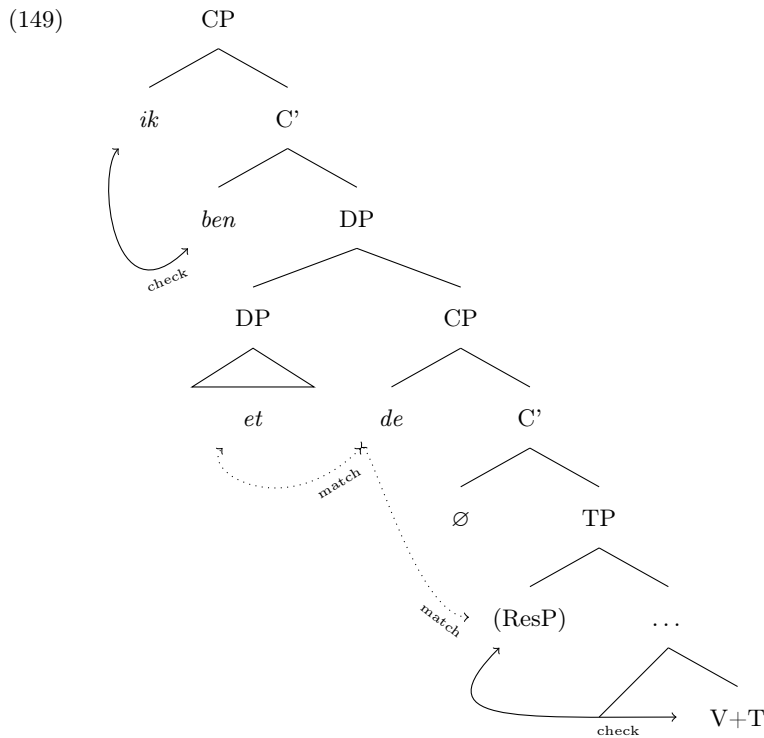
I have only found two cases of copula clauses with a clefted XP in the first or second person, which makes an analysis obviously only preliminary. The patterns are schematically repeated in table 4.14.

	Pronominal head	[...]	[Predicate]	REL	[ResP]	[...]	VFIN
CRPA	ik / et	bin	ik / et	de	/	mit di	sprikt
CHA	ik	bin	diegene	de	/	mit di	spreke

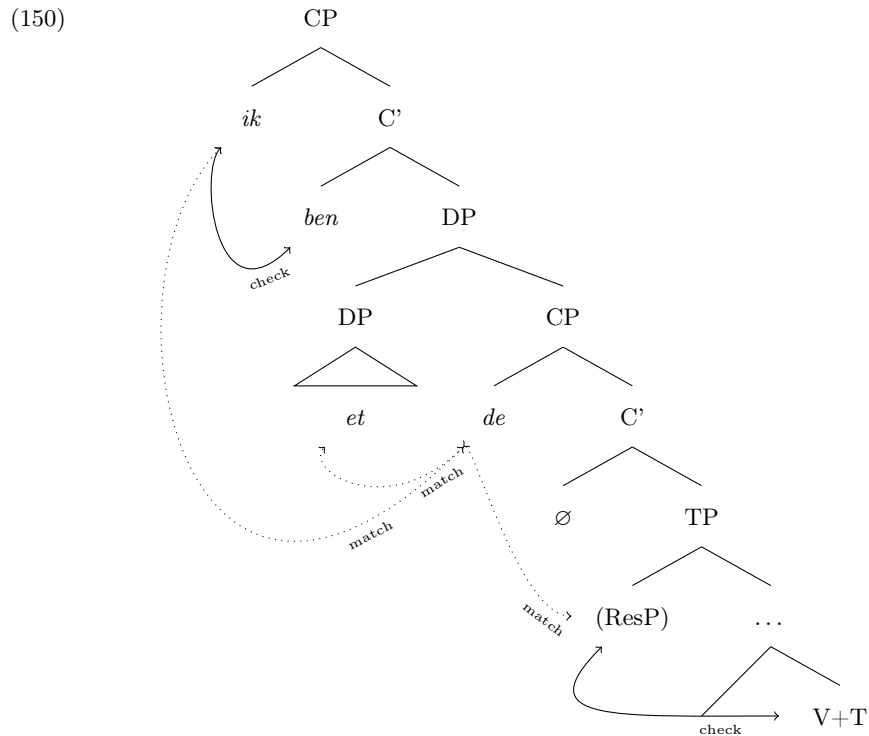
Table 4.14: Schematic overview of postcopular relative clauses

In the copula relative pronoun agreement clauses, there is first Checking between the subject and the verb in the matrix clause. An important point is that there is no Checking between the verb and the predicate. The predicate, *et* in example (126), does however match with the relative pronoun, as the relative pronoun is underspecified and thus matches everything. When finally Agree is established between predicate and relative pronoun, the third person feature of *et*, and not the one from the pronoun in

the first person singular is passed on. Consequently, the verb in the relative clause will express third person features.



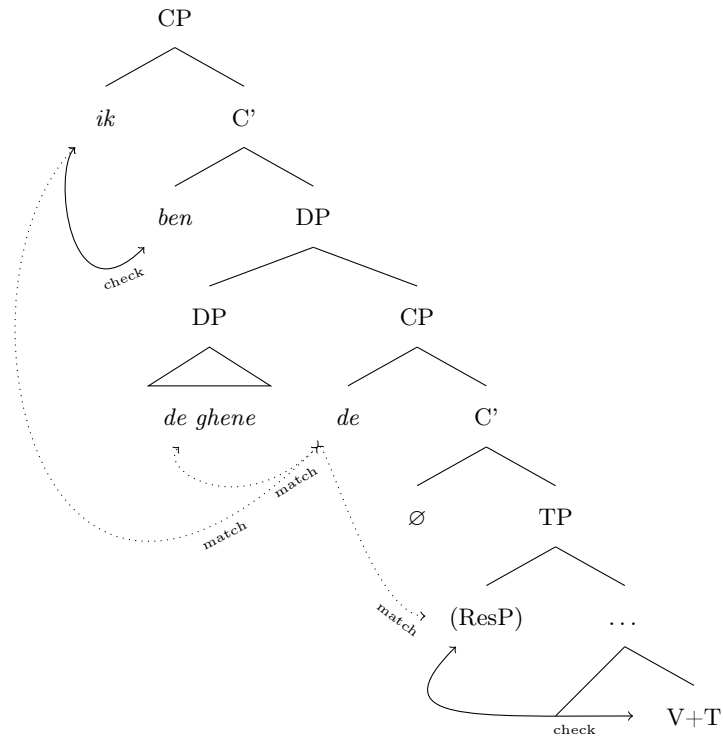
This does however not explain why there is the relative pronoun *de*, which modifies an animate head, and not *dat* here, which one would expect. A possible explanation might be that clefts modified by non-restrictive relative clauses with a first or second person head in fact have two antecedents, one being the clefted first or second person DP and the other one being *it*, which is the syntactic head of the clause. The non-restrictive relative clause can agree with (syntactic or semantic) features of the syntactic head, as well as with (syntactic or semantic) features of the clefted XP. In (150), the fact that *it* dominates the relative pronoun could provide the underspecified gender feature under c-command, while the Checking and Matching chain provides the syntactic features necessary for agreement in the clause, as can be seen in (150).



This would be an adaptation of the theory of licensing of restrictive relative clauses of Reeve (2012: 1981), who argues that restrictive relative clauses modifying clefts have, indeed, two antecedents, and that both syntactic and thematic licensing are possible.

The derivation I propose for the copula head agreement example, in which the verb agrees with the first person features of the head, is very similar to the former example. In the copula head agreement cases, there is first Checking between the subject in the matrix clause *ik* in this case and the verb *ben* in the matrix clause. Again, there is no Checking between the verb and the predicate. This head should in fact be modified by a restrictive relative clause, as I explained when discussing example (124). From there onwards, the agreement chain is identical to the one in the HA and ResPA agreement. *De ghene* first matches with the relative pronoun. Then the relative pronoun matches with the (null) resumptive in SpecTP, which bears first person features it received due to the c-commanding clefted XP. The last step in the process involves Checking between this resumptive and the verb in the relative clause.

(151)



4.6.4.3 Possessives

Some structures which I have not focused on in detail yet are the non-restrictive relative clauses modifying a possessive. These are special in the sense that the antecedent of the relative clause is introduced rather indirectly, though still head agreement is possible in all of the examples found in the corpus. I will assume in my analysis that they behave similar to pied-piping structures.

The term ‘pied-piping’, introduced by Ross (1967: 196), refers to the phenomenon when a constituent which is not expected to undergo *wh*-movement behaves in the same way as the operator which can undergo *wh*-movement would do on its own (Heck, 2008: 2). Heck (2008) gives for instance the following example for High German (152), in which the whole prepositional phrase *mit wem* ‘with whom’ moves instead of the *wh*-word *wem* ‘whom’ which contains the *wh*-feature only. In this example, the pied-piped constituent is the prepositional phrase, whereas the *wh*-word is called the pied-piper (Heck, 2008).

(152) Ich frage mich, [PP mit wem₂] du *t*₃ gesprochen hast.

Ich frage mich mit wem du gesprochen hast

I ask REFL with whom you talked have

‘I wonder who you talked to.’

(Heck, 2008: 3, ex. 2)

In such examples, the question arises how it is possible that the whole constituent, for instance the PP can be fronted, whereas it does in fact not contain a *wh*-feature, only the *wh*-word does. Chomsky (1973) introduced the idea that it is possible for the *wh*-phrase to transmit its relevant *wh*-feature to a node dominating it. The idea that *wh*-features can be transferred to a dominating node is referred to as ‘feature percolation’. Heck (2008: 5) argues with his ‘*wh*-feature percolation hypothesis’ that “there is a mechanism of *wh*-feature percolation that enables [WH] to spread across phrase boundaries”, though there are certain restrictions which prohibits percolation over an arbitrarily long distance. He argues that the pied-piped category, in the case of (152) the PP, behaves like a *wh*-word because it does in fact really bear a *wh*-feature. I refer the reader to Heck (2008) for more about this idea.

As concerns the possessives in Middle Low German, I assume that feature percolation has taken place in the DP containing the possessive as well. Consider for instance example (121), repeated here.

(121) *v(er)beide(n)de de behoerlike tijd dyner gheboerten de na dyner godheit ghine*
tijd en heuest noch iare

v(er)beide(n)de de behoerlike tijd dyner gheboerten de na dyner

biding the appropriate time your.GEN birth REL after your

godheit ghine tijd en heuest noch iare

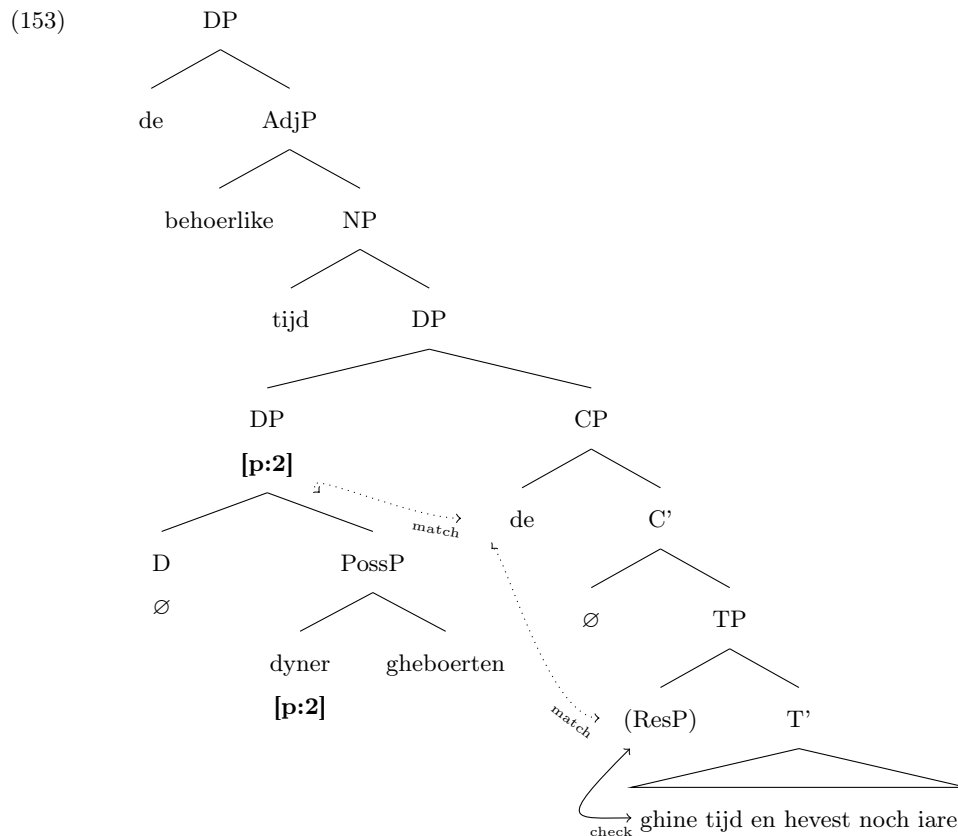
divinity no time NEG have-2SG nor years

‘biding the time appropriate for your birth, who has no time nor years due to your divinity’

(Myrren bundeken)

I would argue that the possessive pronoun in this example projected its φ -features to its dominating DP. The dominating DP now containing a second person feature then gets modified by the non-restrictive relative clause, which is construed in the same way as the standard relative clauses presented in 4.6.4.1. This results in the verb agreeing

with the second person DP head. This means that even though semantically only the possessive *dyner* ‘your’ thus is modified, syntactically, the whole phrase containing this possessive is modified, as the person feature percolates to the DP node. Based on this example, it is possible to generate the following (simplified) structure (153).



4.6.4.4 Long distance

A last type of example that needs to be discussed is the long distance agreement example given in section 4.4.2.2. For the analysis of this kind of examples, it is useful to introduce an extra element in the structure. I propose that these types of structures can be captured by a coordination-like structure proposed by Koster (1995, 2000), which he calls a ‘parallel construal’. In his theory, in which he discusses among others restrictive and non-restrictive relative clauses, the relative clause acts as a second conjunct which

offers a further specification of the antecedent of what he calls a colon phrase (:P). This means that his proposal aims to treat extraposition of relative clauses as a type of Pied Piping. Both parts of the parallel construal, in our case the antecedent and the relative clause, form a set union to derive the correct interpretation connected by a Boolean operator, the colon (:). The idea of the Boolean operator is derived from mathematical set theory in which \cup is usually used as the associated symbol for the Boolean operator meaning ‘and’ or ‘union’. In a set union, $A \cup B$ of A and B consists of all the points which are in A or B or in both (Kreyszig and Norminton, 1993: 1016). The parallel construal takes the colon (the Boolean operator :) as the head of a phrase, while the specifier is the antecedent of the relative clause (154a). The parallel construal captures both antecedent and relative clause in one and the same union (i.e. one and the same phrase), without any movement rule of extraposition (154b).

(154) a. Ik heb [_{NP}[_{NPEEN} vrouw] [_∴[:_{CP}die alles wist]]] gezien

Ik heb een vrouw die alles wist gezien

I have a woman who everything knew seen

‘I saw a woman who knew everything’ (Koster, 1995: 23, ex. 75a)

b. Ik heb [_P[_{VP}[_{NPEEN} vrouw]] gezien] [_∴[:_{CP}die alles wist]]

Ik heb een vrouw die alles wist gezien

I have a woman seen who everything knew

‘I saw a woman who knew everything’ (Koster, 1995: 23, ex. 75b)

In this way, the set union facilitates the identification between the head and the gap in the relative clause. Applied to Middle Low German, this results in the structure given in (155), in which the theory is reapplied to example (128) given above and repeated here (without glosses). As the discussion above has shown that one cannot be sure which of the possible antecedents is the real antecedent of the non-restrictive relative clause, I have chosen only one possibility here, i.e. *-tu* ‘you’ in *dattu* ‘that you’.

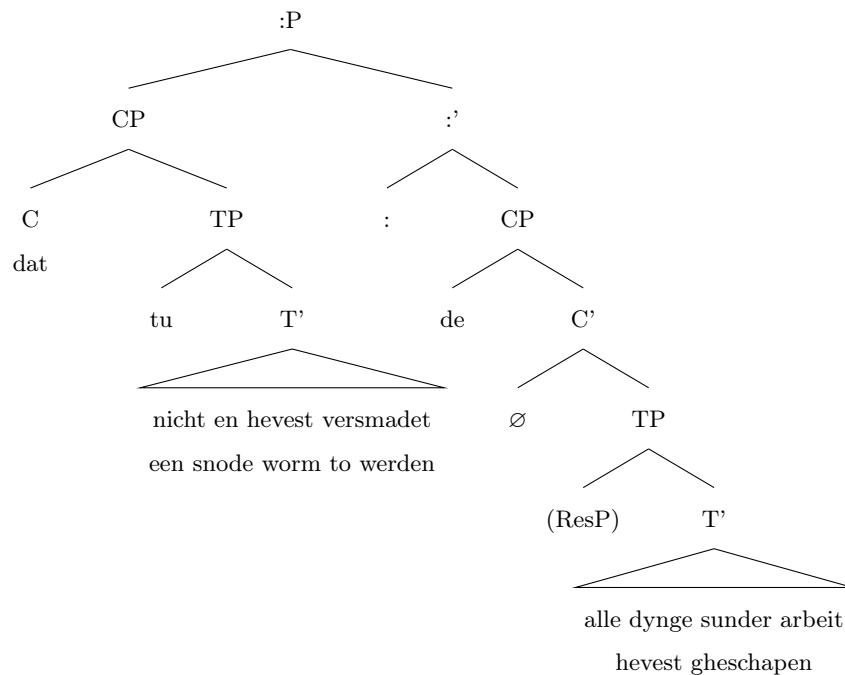
(128) *Jck loue vn(de) verhoghe dy v(m)me de lange(n) inwonynghe dat du neghen maende by(n)nen den beslote(n) meghentliken lichame marien een clene kyndecken heuest gheshuelt v(er)beide(n)de de behoerlike tijd dyner gheboerten*

*de na dyner godheit ghine tijd en heuest noch iare. Mer alle dynck
heestu in tiden vn(de) in behoerliker ordynancien ghesat. O my(n)nentlike
vn(de) alto ser verwunderende weerdicheit **dattu** god der vnbegrijpliker
glorien nicht en heuest versmaet een snode worm to werden. Vn(de)
de alle dynghe sunder arbeit heuest gheschapen*

‘I praise and glorify you for the inhabitancy in, that you have hidden for nine months inside the closed, maidenly body as a little child, indwelling the time appropriate for your birth, who has no time nor years due to your divinity. But you have set everything in time and decent rules. O lovely and too much wondering dignity, that you, god of incomprehensible glory, haven’t recoiled from becoming a worthless worm. And who has created all things without trouble’.

(Myrren bundeken)

(155)



4.7 Diachronic development

Cross-linguistic evidence from different Germanic languages points in the direction of Germanic having a separate system for relative clauses modifying first and second person heads, which is partly preserved in the modern languages. The earliest possible evidence is described by Braune and Heidermanns (2004: 136) for Gothic, who describe how Gothic non-restrictive relative clauses with a first or second person head are always initiated by a personal pronoun combined with a clitic relative/subordinating particle *-ei*, for instance *ikei* in (156a) or *þuei* in (156b). The verb agrees with the head of the clause in person. This contrasts with clauses modifying third person heads, in which the relative clause is introduced by the demonstrative pronoun and the clitic particle *-ei*. Harbert (2006: 415-417) analyses it as a complementizer which can also be used on its own to introduce subject or object clauses. Afros (2006) however analyses the elements as a relative particle as a whole. The meaning of *ei* on its own can be ‘in that case, under those circumstances, there, so’ (Lehmann, 1986). The original meaning of **ei* in Proto-Germanic was locative (‘there’) (Kotin, 2012: 344).

- (156) a. *ik auk im sa smalista apaustaule, ik=ei ni im wairþs ei haitaidau apaustaulus, duþe ei wrak aikklesjon gudis.*

ik auk im sa smalista apaustaule, ik=ei ni im wairþs
 I verily am the least apostles.GEN I=RELPART NEG am worthy
ei haitaidau apaustaulus, duþe ei wrak
 COMP am.called apostle for COMP persecute.1SG.PRET.
aikklesjon gudis.
 church God.GEN

‘For I am the least of the apostles, that am not meet to be called an apostle, because I persecuted the church of God.’

(Corinthians I 15:9, translation from the Wulfila project)

- b. *þu hvas is, þu=ei stojis framþjana skalk?*

þu hvas is, þu=ei stojis framþjana skalk?
 you who is you=RELPART judge-2SG foreign-ACC servant-ACC

‘Who art thou that judgest another man’s servant?’

(Romans 14:4, translation from Wulfila project)

First and second person non-restrictive relative clauses acted differently from third person non-restrictive relative clauses in older stages of the West Germanic languages as well, for instance in Old Saxon. As explained in section 1.2, it is difficult to study the history of Low German as a continuous development because of the attestation gap between the writing periods of Old Saxon and Middle Low German. Nevertheless, Old Saxon yields a few examples that can shed light on what the agreement chain looks like and how it might have evolved. There are, for instance, two possible interpretations for the clause *thu ni uuêst [the] maht godes* in (157) from *Heliand* (see HeliPaD, Walkden, 2016a).

(157) *Huat, thu thesaro thiodo canst menniscan sidu thu ni uuêst [the] maht godes*

Huat, thu thesaro thiodo canst menniscan sidu thu ni
 what you this crowd know-2SG people-GEN customs you NEG
uuêst [the] maht godes
 know-2SG the power God-GEN

‘Lo, you know the customs of these people, of men, you, who do(es) not know
 the power of God!’ (Heliand 3101-3102)

The first option is that it is an asyndetic non-restrictive relative clause. This would mean that there is only a personal pronoun introducing the clause, without a relative pronoun or a definite pronoun. Although one would expect the verb in verb-final position in a (non-restrictive) relative clause, the position of the verb-medial position of the verb seen in Old Saxon is also not unusual in Middle Low German subclauses, as pointed out by Petrova (2013: 81). A possibility is that *the maht godes* is extraposed, which is also a common phenomenon. Another option is that the example shows two asyndetic, paratactic clauses and that the second clause is thus a main clause with a personal pronoun in the topic position, as is among others suggested by the Dutch translation of the *Heliand* of Van Vredendaal (2007).¹⁰ A second Old Saxon example, given in (159),

¹⁰Van Vredendaal (2007) connects the two clauses, which are in this interpretation main clauses, with the conjunction *maar* ‘but’.

seems much closer to the cases with head agreement that are attested in Middle Low German as well.

(159) *Gabriel biun ik hetan, thie io for gode standu*

Gabriel biun ik hetan, thie io for gode standu

Gabriel am I called who ever before God stand-1SG

‘I am called Gabriel, who always stand(s) before God’ (Heliand 120)

The relative clause contains a relative pronoun and a finite verb that agrees with the head. This particular case thus points in the direction of continuity between Old Saxon and Middle Low German. Important to notice is that the finite verb in the relative clause - if it is a relative clause in (157) - in both cases agrees with the head.

Schrodt (2004) as well as Axel-Tober (2012) and Coniglio et al. (2017) give examples of cases of non-restrictive relative clauses in Old High German. They are introduced by a personal pronoun exclusively, without a relative particle and/or a relative pronoun. Such cases, as for instance (160), are thus very similar to example (157) from Old Saxon, but the verb in Old High German is located at the very end of the relative clause, whereas it is located in the second position in Old Saxon. What is similar is that the verb agrees with the head in person and number.

(160) *Heil thu quádun sie xp̄c thu théro liuto kúning bist*

Heil thu quádun sie xp̄c thu théro liuto kúning bist

hail you said they Christ you of.those people king are-2SG

‘Hail you, Christ, said they, you [who] are king of those people’

(O IV 22, 27 from Axel-Tober (2012:224), my own English translation)

The question Axel-Tober (2012) tries to answer is whether the personal pronoun is the subject, the topic or a relative pronoun somehow. She shows examples similar to (160) in which there is no pronoun but a relative particle in the same position. This points

(158) *Je kent de zede van het volk, de menselijke aard, maar niet de macht van God [...].*

‘You know the custom of the people, the human nature, but not the power of God [...]’
(Van Vredendaal, 2007, my own English translation).

to this personal pronoun occupying the specifier of CP as well, meaning that it is not a resumptive. Furthermore, she finds cases which are very common in Old High German and Middle High German, in which personal pronouns and relative particles appear together (161). Furthermore, she shows that there is never a prosodic break between the personal pronoun and the relative clause, meaning that the pronoun is part of the relative clause.

(161) *uue iu scriberin Inti pharisei lichezera, ir=de dezemot minzun Inti dilli...*

uue iu scriberin Inti pharisei lichezera, ir=de dezemot
 woe to.you scribes and pharisees hypocrites you=RELPART tithe-2PL
minzun Inti dilli...
 mint and dill

‘woe you, scribes and pharisees, you hypocrites, who tithe mint and dill...’

(Tatian 245, 10; from Axel-Tober (2012:225), my own English translation)

Some examples of non-restrictive relative clauses modifying a first or second person head can be found in Old Dutch. In (162) from the *Oudnederlands Woordenboek* (ONW) in the *Geïntegreerde taalbank* (Dykstra et al., 2010) the relative clause is introduced by a relative pronoun *ir* combined with the orthographically connected *ther*.

(162) *Inde nu kununga fornemot, gelierot uerthet ir=ther dremot ertha*

Inde nu kununga fornemot, gelierot uerthet ir=ther
 and now kings understand, taught you-2PL-are you=RELPART
dremot ertha
 judge-2PL earth

‘And now kings, understand: you are taught, you who judge earth’

(Wachtendonck Psalms 002, 10)

The status of the clause-initiating *ther* is not entirely clear. Van der Horst (2008: 178) surmises that it could either be a relative pronoun or a relative particle which derives from the relative adverb *tha* but does not have a locative meaning anymore. He also refers to Cowan (1957), who assumes that this structure is in fact High German. The fact that it looks like the expletive cases of *dar/do* in Early New High German, as discussed

by Light (2010) and in section 4.6.1, supports this idea. The structure in fact being High German is very plausible, as the first nine psalms from the Wachtendonck Psalms are written in the Old Moselle Franconian dialect (de Grauwe, 1979). The Old Dutch counterpart would then be the following, as found in psalm 65 of the *Wachtendonck Psalms*.

(163) Cumit gehorit in tellon sal ic alla thia forhtit gode, huo deda sela mina.

cumit gehorit in tellon sal ic alla thia forhtit gode huo deda sela mina
 come hear you tell will I all REL fear god how did soul mine

‘Come, listen, and I will tell all who fear God, how he has treated my soul’

(Wachtendonck Psalms 065, 16)

This verse is equivalent to Middle Low German example (118), repeated here (Van der Horst, 2008: 179).

(118) ic secke in alle de i got enfortet vat he dide miner sele

ic secke in alle de i got enfortet vat he dide miner sele
 i say you.2PL-DAT all REL you god fear what he did to-my soul

‘I tell all of you, who fear god, what he did to my soul’ (Westphalian psalms)

In example (163), the relative clause is, according to the editors of the *Oudnederlands Woordenboek* introduced by the relative pronoun or particle *thia* (same argumentation as for the first example), without the repetition of the second person pronoun of the first example. It is in any case indisputable that the finite verbs, both in the first as well as in the second example (*dremot* ‘judge’ and *forhtit* ‘fear’ respectively) in the relative clause agree with the second person head. Furthermore, I showed in (163) that there is no resumptive pronoun, unlike in the Midde Low German example where there is a resumptive pronoun *i* ‘you’.

All of the examples from different languages above have in common that the person and number features of the head are specified in elements in the left periphery of the relative clause. This leads to the fact that the finite verb in each non-restrictive relative clause agrees with the head in person and number. The place where the features reside differs among languages. As my research only focuses on non-restrictive relative clauses, I do not elaborate on the whole left periphery of subclauses in Germanic. I

refer the reader to Ferraresi (2005), who proposes that the C-domain in Gothic, and presumably also in Proto-Germanic, is complex. Based on this, Axel (2007) argues that the many particles, for which the majority of evidence is found in Gothic, must be located in specifier and head positions of different projections in the C-domain. This means for the Gothic non-restrictive relative clause, that its basic structure can be captured as in example (164). Following Ferraresi (2005), the personal pronoun in the first and second person clauses might be located in SpecCP, while the relative/subordinating clitic particle *-ei* is located in C⁰.

(164) $DP_i [_{CP} \text{pronoun}_i [_{C'} \text{ei} [_{TP} \dots V_i]]]$

In the first type of Old Saxon example for instance (157), the pronoun is the subject inside the relative clause and there is an empty operator. In the second type of example, in (159) for instance, one might assume the same structure as in Middle Low German: a null resumptive pronoun establishes agreement with the head. The Old Saxon non-restrictive relative clause type can therefore be analysed as follows:

(165) a. $DP_i [_{CP} OP_i [_{C'} C [_{TP} \text{pronoun}_i \dots V_i]]]$
 b. $DP_i [_{CP} RP [_{C'} C [_{TP} (\text{ResP}) \dots V_i]]]$

According to Axel-Tober (2012), Old High German has a personal pronoun in SpecCP, acting like a relative pronoun. This is sometimes combined with a relative particle in C⁰. This results in the structure in (166).

(166) $DP_i [_{CP} \text{pronoun}_i [_{C'} (\text{de}) [_{TP} \dots V_i]]]$

For Old Dutch I will only consider the ‘real’ Old Dutch example (163), in which the clause is introduced by a relative pronoun (167a) or a relative particle (167b), in which case an empty operator would be necessary to establish agreement in the relative clause. There is always agreement of the verb with the head.

(167) a. $DP_i [_{CP} RP_i [_{C'} [_{TP} \dots V_i]]]$
 b. $DP_i [_{CP} OP_i [_{C'} \text{thia} [_{TP} \dots V_i]]]$

In Middle Low German there is, as explained in section 4.6, a relative pronoun with maximally underspecified φ -features. This underspecified relative pronoun is combined

with a resumptive pronoun, either overt (resumptive pronoun agreement) or covert (head agreement) (168).

(168) a. $DP_i [_{CP} de [_{C'} \emptyset [_{TP} (ResP)_i \dots V_i]]]$

As concerns all the languages discussed above, it should be noted that they all have in common that the finite verb in the non-restrictive relative clause always agrees with the head in person and number. Furthermore, non-restrictive relative clauses in the older stages of the Germanic languages are always introduced by (combinations of) elements specified with syntactic φ -features (at least person). The person and number features are either specified in topicalized pronouns or relative pronouns in the left periphery or clause-internally by resumptive pronouns. They mediate between head and verb and ensure that agreement can be established. This is another reason to assume that it is correct to interpret the observed gap in head agreement clauses in Middle Low German as a covert element (i.e. the resumptive pronoun) which ensures that person features are present in the Middle Low German non-restrictive relative clause, as agreement with the underspecified relative pronoun is not possible. Furthermore, it indicates that the null resumptive pattern in Middle Low German (head agreement) is a retention of an old way of forming non-restrictive relative clauses. This might have developed from an older topicalization structure. The overt resumptive pronoun agreement strategy is probably a modern innovation, as it is not attested in any older West Germanic languages, including Old Saxon. It is however present in the earliest Middle Low German texts already. This innovation does not happen at all in English and Dutch. Relative pronoun agreement, as found in modern High German but not in Old or Middle High German, must be a newer way of constituting non-restrictive relative clauses with a first or second person head as well, as it does not occur in any older language stages.

4.8 Summary

This chapter shed light on non-restrictive relative clauses with a first or second person head in Middle Low German. In these clauses, agreement chains can be formed in two different ways, though this was argued to be in fact only an apparent variation. The verb always agrees with the head in person and number. This is possible because an agreement chain is formed by the head, a relative pronoun *de* introducing the relative

clause, a resumptive pronoun and the verb. I claim that Middle Low German has an underspecified relative pronoun in the left periphery of the relative clause and that every relative clause contains a resumptive, which can stay covert. This thus results in two ways in which the relative clauses can be spelled-out. The agreement chain is established through Agree relations, by the processes of Checking and Matching. The same analysis can account for curious clauses in which there is no adjacency between matrix clause and relative clause. For these, I propose that the phrases form some sort of set union mediated by a Boolean operator. In possessive clauses in which the head of the relative clause is more implicit, agreement is possible because of feature percolation. In clauses containing a predicative element suggest that the verb can agree with two antecedents through syntactic licensing and semantic licensing (via *c*-command).

A closer look at the historical development of the structure in the older stages of the Germanic languages shows that the type with a covert resumptive is a preserved pattern that is rather old. This is not surprising in the sense that the older West Germanic languages had more referential null subjects. In Old Saxon as well as in Old High German and Old Dutch, the verb in the non-restrictive relative clause modifying a first or second person head always agrees in person and number with the head. This is because these features are always encoded on one of the elements that can be in the left periphery of the relative clause, SpecCP or C^0 , and/or clause-internally in the Wackernagel position. Such elements containing features are the personal pronoun, the relative pronoun or the null resumptive pronoun. Relative pronoun agreement in High German and clauses with an overt resumptive, as in Middle Low German and High German, are more recent innovations.

5.1 Introduction

In this chapter I will describe the position-dependent variation between the ending of the finite verb preceding the subject pronoun and the ending of the finite verb following the subject pronoun in the Middle Low German scribal languages. Although Middle Low German has a unitary inflection in the plural, which always ends in a consonant, an alternative ending, marked by the absence of the final consonant, can be found in inversion contexts in the first and second person plural, for instance in *gi hebbet* ‘you have’ vs. *hebbe gi* ‘have you’. Because of the dependence on the position of the subject relative to the verb, I will call this position-dependent agreement. Based on an extensive corpus study, I will in the first place present the distribution of this effect throughout the Middle Low German dialects. I will argue that only the interplay between syntax, morphology and phonology can explain this alternation, as there are no Germanic sound laws which suffice to explain why there is another, shortened ending (see section 5.7.1). Taking a comparative view on the phenomenon, I will furthermore show how this loss of the final consonant in inversion contexts most probably had its origin in the second person plural pronouns and further analogically extended to the first person. Based on newer theories within the framework of Distributed Morphology, I will argue that the loss of the final consonant was re-interpreted as a speech-act participant marker, expressing the difference between markers for speakers and/or addressees on the one hand and default plural on the other hand, creating a Low German (and possibly Ingvæonic)

person cycle.

The general structure of the chapter is as follows. In section 5.2 I give some background on position-dependent agreement and the verbal paradigm (in the plural) in Middle Low German in general. In section 5.3, I elaborate on the methodology given in chapter 2 to explain how the relevant clauses and numerical data for this phenomenon were retrieved. I present the syntactic distribution of the data, with frequencies, three types of exceptions, special cases and variation in section 5.4. In section 5.5, an overview is given of how Middle Low German compares to its predecessor Old Saxon and to related languages or languages overlapping in time, such as Old English, Old Frisian, Old and Middle Dutch and Old and Middle High German. Section 5.4 as well as section 5.5 function as the basis of section 5.6 and section 5.7. In the former, I focus on the environment in which the shortening of the ending could have originated. In the latter, an analysis of the alternative endings in inversion will be presented. In this section, I explain why the last consonant of the plural ending of the verb can only be deleted in the first and the second person plural and why this is only ever possible in inversion. Section 5.8 briefly summarizes the findings of this chapter.

5.2 Background

As discussed in section 1.3.4, the Middle Low German scribal languages are distinguished from many other Germanic languages such as Middle High German because of their plural verbal paradigm, as they have unitary inflection. The affix marking the plural verbal paradigm is either *-en* or *-et*. The endings of strong and weak verbs are identical in the present tense (Lasch, 1914: 224).

The ending in *-t* in the plural of the present paradigm derives from the Old Saxon plural ending *-ađ/-ođ* (Krogh, 1996). It is usually believed that this system of marking the plural derives from an even older system in which the endings of each person in the plural differed from one another (Gallée, 1891; Krogh, 1996; Lasch, 1914). According to this traditional view, the original third person plural ending in the indicative present in Germanic, **-nþ*, lost its nasal *-n* before **þ*, a development the consequences of which can be seen in Old English, Old Frisian and Old Saxon (Krogh, 1996: 331-336). This development was part of a broader sound law concerning the loss of the nasals *m* and *n* with compensatory lengthening before Germanic **f*, **s* and **þ*, which (partly)

happened in English, Frisian, Dutch and Saxon (Krogh, 1996: 213-233). After the loss of the nasal in the third person plural, the third person plural ending weakened until it became identical to the 2nd person plural ending, which was originally possibly voiced: *-*ð* (Krogh, 1996). The old ending of the first person plural, *-m*, was lost when the new plural ending spread to other environments, which made it equalize with the plural forms, consolidating the unitary inflection in the plural (Gallée, 1891; Krogh, 1996: 246). The transition to a unitary inflection in Ingvaëonic is usually believed to have happened before the Anglo-Saxon settlement of Britain from the early 5th century onwards.¹ However, the old ending containing the nasal can still be found in Westphalian texts from the 13th and 14th century in Middle Low German, as well as in Old Saxon (see Lasch (1914: 227) and Gallée (1891: 246) respectively).²

The origin of the alternating option in *-n* as ending in the plural of the present tense is less clear. Options that have been mentioned in the literature are among other things that the ending is not derived from *-ent*, but that it arose through contact of Low German varieties with *-et* with varieties with a plural distinguishing all persons such as historical stages of Dutch or High German (see De Vogelaer and Devos, 2009 and the references there), that the ending from the past tense was transferred to the present tense (Jørgensen, 1954: 103), or that the *-n* is a property connected to the influential scribal language of Lübeck (Peters, 1987: 74).

The past indicative plural forms differ in the fact that the weak verbs have dentals and the strong verbs do not, though the (plural) endings of the verb are identical as well. The Middle Low German verbal paradigm which was given in chapter 1 is repeated here in table 5.1 for the strong verbs, exemplified with *riden* ‘drive’ and in table 5.2 for the weak verbs, exemplified with *salven* ‘anoint’. Preterite-presents conjugate like the strong verbs.

¹I refer the reader to Krogh (1996: 336) and the many sources cited there for more information about the dating of the unitary inflection in the plural.

²Although I will adopt the traditional, widespread theory about the unitary inflection in the plural being a product of analogical leveling, it should also be mentioned that there are alternative assumptions about the emergence of unitary inflection systems. De Vogelaer and Devos (2009: 5), for instance, consider a spontaneous emergence through analogical leveling or analogical pressure unlikely, as unitary inflection in the plural is typologically quite rare. They show for instance that the unitary inflection in *-e(n)* in most Dutch (Low Franconian) dialects is the result of a fairly recent development (end of the 19th/begin of the 20th century), which emerged through the diffusion of an already existing North Hollandic ending. They argue that the emergence of the new pronoun *jullie* ‘jullie-2PL’ changed stress patterns, which caused the use of this unitary inflection ending to avoid stress clashes with verb stems, initially especially in inverted word order after verbs with a polysyllabic infinitive.

	Present, ind.	Present, subj.	Past, ind.	Past, subj.
1 SG	rid-e	rid-e	reet	red-e
2 SG	rid-e-st	rid-e-st	red-e-st	red-e-st
3 SG	rid-e-t	rid-e	reet	red-e
1-3 PL	rid-e-n/t	rid-e-n	red-e-n	red-e-n

Table 5.1: Conjugation of *riden* ('drive', strong verb)

	Present, ind.	Present, subj.	Past, ind.	Past, subj.
1 SG	salv-e	salv-e	salv-e-d-e	salv-e-d-e
2 SG	salv-e-st	salv-e-st	salv-e-d-est	salv-e-d-est
3 SG	salv-e-t	salv-e	salv-e-d-e	salv-e-d-e
1-3 PL	salv-e-n/t	salv-e-n	salv-e-d-en	salv-e-d-en

Table 5.2: Conjugation of *salven* ('anoint', weak verb)

The subjunctive plural verbs in the past have the same ending as the past indicative, which makes them indistinguishable based on form. Subjunctive plural verbs in the present can only end in *-n*, whereas indicative present plural verbs can either end in *-t* or *-n*. The difference between the ending in *-t* and the one in *-n* was originally determined by the region, though both forms were in a constant struggle for domination (Lasch, 1914: 226). Endings in *-t* tend to be more common among the most common verbs, such as *wi/gi/si gevet* 'we/you/they give' or *wi/gi/si hebbet* 'we/you/they have'. The preterite-presents originally ended in *-en*, but from the 14th century onwards, they often end in *-et* as well (Lasch, 1914: 227). Texts containing both *-t* and *-n* as the last consonant of the plural ending of the indicative present are not exceptional, as can be seen in example (169), which shows two consecutive clauses in a coordinated structure with *wente* 'as, because'. In the first conjunct, the last consonant of the ending of the verb in the first person plural is *-t*, while *-n* is used in the second parallel conjunct. This type of variation is not the phenomenon to be described in this study. It is however important to keep this variability between *n* and *t* in mind to know if the ending has an influence on deletion in inversion or not.

(169) *Wente wi hebbet yd suluen hort Wente wi weten werliken*

Wente wi hebbet yd suluen hort Wente wi weten werliken
 because we have-PL it ourselves heard Because we know-1PL truly

'Because we have heard it ourselves, because we know truly'

(Buxtehuder Evangeliar)

The endings *-et* and *-en*, however, are not the only endings found in the Middle Low German plural verbal paradigm. Another ending, *-e*, is attested as well, which can only ever be present in the first and second person plural (Fedders, 1993; Lasch, 1914). The presence of the *e*-ending depends furthermore on the position of the verb with respect to the subject pronoun, as the ending is only found when the verb precedes the subject pronoun (i.e. in inversion contexts), and never when the subject pronoun precedes the verb. Examples (170) to (175) give an impression of what the verbal paradigm for the first and second person plural looks like. In the first person plural, verbs in contexts with a topic, a wh-phrase or a framesetter in the prefield (170) as well as verbs without a prefield (171) do not have the final consonant which is obligatory in non-inversion contexts (172), resulting in the ending *-e*.

(170) a. Nu bekenne wi [...]

Nu bekenne wi [...]

now confess-1PL we [...]

‘Now we confess [...]’

(Buxtehuder Evangeliar)

b. Dat betughe wi mit vnse stades Jnghesegehelle ghehanghen to desen breue

Dat betughe wi mit vnse stades Jnghesegehelle ghehanghen to

that confess-1PL we with our city-GEN seal hung to

desen breue

this letter

‘That we confess with our city seal hung to this letter’

(Oldenburger Urkunden)

c. so neighe wi vns altijd to den bosesten vn(de) to de(n) erchsten vn(de) veru-

ulen in den quade

so neighe wi vns altijd to den bosesten vn(de) to de(n) erchsten

so tend-1PL we us always to the evil and to the worst

vn(de) veruulen in den quade

and fall in the evil

‘In that way we always tend to the evil and to the worst and fall in the evil

(Myrren bundeken)

- (171) a. late wy ene

late wy ene
let-1PL we him

‘Let us leave him alone’ (Buxtehuder Evangeliar)

- b. Do wi des nicht so schole wi [...]

Do wi des nicht so schole wi [...]
do-1PL we this not so shall we [...]

‘If we don’t do this, then we have to [...]

(Urkundenbuch Lübeck)

- (172) a. wi hebben geunden ihesum uan nazareth josepes sone

wi hebben geunden ihesum uan nazareth josepes sone
we have-1PL found Jezus of Nazarath joseph’s son

‘we have found Jezus of Nazareth, Joseph’s son’ (Buxtehuder Evangeliar)

- b. wij mogen nu nicht lenger stan

wij mogen nu nicht lenger stan
we may-1PL now not longer stand

‘We may not longer stand now’ (Bordesholmer Marienklage)

- c. effte wi dar umme bidden mogen

effte wi dar umme bidden mogen
if we there for pray may-1PL

‘If we may pray for that’ (Griseldis)

The situation is the same for the second person plural. The ending *-e* is present in inversion contexts with V2 (173) as well as in inversion contexts with V1 (174). This compared to the ending in *-n* or *-t* in non-inversion contexts (175).

- (173) a. Nu schulle gy horen vnde merken rechte Von des suluen groten heren slechte

Nu schulle gy horen vnde merken rechte Von des suluen groten
 now shall-2PL you hear and notice truly about the same big
heren slechte
 lord evil

‘Now you will hear and learn truly about the same bad old lord’

(Buxtehuder Evangeliar)

- b. An dem hymmele schulle gy sammen iuwen schat

An dem hymmele schulle gy sammen iuwen schat
 at the heaven shall you-2PL gather your treasure

‘You will gather your treasure in heaven’ (Gandersheimer Reimchronik)

- c. Aldus moeghe ghi in dessen boeke soeke(n)

Aldus moeghe ghi in dessen boeke soeke(n)
 thus may you-2PL in this book search

‘Thus, you may search in this book’

(Spiegel der Leyen)

- (174) a. Wylle gij na dessem leuende myt vrowden syn

Wylle gij na dessem leuende myt vrowden syn
 want you-2PL after this life with joy be

‘Do you want to be joyful after this life?’ (Bordesholmer Marienklage)

- b. hebbe gy my leff

hebbe gy my leff
 have you-2PL me dear

‘Do you love me?’

(Griseldis)

- (175) a. gy willen ordelen dessen boszhafftigen man

gy willen ordelen dessen boszhafftigen man
 you-2PL want judge this evil man

‘You want to judge this evil man’ (Veer Koepluden)

- b. Gy schult heten de lude vt engellant wente gy syn lude gelick den engelen godes

Gy schult heten de lude vt engellant wente gy
 you-2PL shall be.named the people from england because you-2PL
syn lude gelick den engelen godes
 are people like the angels god-GEN

‘You will be called the people from England, because you are people like the God’s angels’ (Chroniken der Sassen)

- c. gi scholen sien den hemel open vnde de engele godes vpstigende Vnde nederstigende vppe den sone des mynschen

gi scholen sien den hemel open vnde de engele godes
 you-2PL shall see the heaven open and the angels god-GEN
vpstigende Vnde nederstigende vppe den sone des mynschen
 rising and falling on the son of men

‘You shall see the heaven open up and God’s angels rising and falling on the Son of Man’ (Buxtehuder Evangeliar)

Position-dependent agreement is furthermore present in formal addresses using the first or second person plural. In example (176a), for instance, each *wi* ‘we’ refers to only one person (in this case respectively once to Eric, duke of Saxony, Engheren and Westphalia, and once to Johan, count of Holstein and Stormarn). This is a formulaic form of the first person plural pronoun (often referred to as the ‘majestic plural’), which is typical for Middle Low German charters. This use of *wi* does not make any difference for the deletion of the last consonant in inversion as compared to elsewhere (176b).

- (176) a. Wi Eric van der gnade godes Hertoghe tuo sassen , Engheren vnde wesfalen Vnde wi Johan van der suluen gnade Greue tuo Holzsten vn(de) stormern betuoghet vnde bekennet in dessen openen breuen [...]

Wi Eric van der gnade godes Hertoghe tuo sassen , Engheren vnde
 we eric of the grace god-GEN duke to Saxony Engheren and

wesfalen Vnde wi Johan van der suluen gnade Greue tuo Holzsten
 Westphalia and we Johan of the same glory count to Holstein
vn(de) stormern betuoghet vnde bekennet in dessen openen breuen
 and Stormarn express-PL and confess-PL in this public letter
 [...]

‘We, Eric of God’s grace, duke of Saxony, Engheren and Westphalia, and we, Johan of the same glory, count of Holstein and Stormarn, express and confess in this public letter [...]’ (Urkundenbuch Lübeck)

- b. *so schole wi hertoghe Gherard mit hern detleue van der wensine to rendesborch eder to hadersleue vnd wi Greue Johan [...]*

so schole wi hertoghe Gherard mit hern detleue van der wensine to
 so shall-PL we duke gherhard with lord detlev of the wensin to
rendesborch eder to hadersleue vnd wi Greue Johan [...]
 rendesborch or to hadersleue and we count johan [...]

‘In this way, we, duke Gerhard, lord Detlev of the Wensin in Rendesborch or in Hadersleve and we, count Johan [...] shall [...]’ (Oldenburger Urkunden)

In late Middle Low German texts (mainly in letters), the second person plural verb form and pronoun can also be used as formal addresses of single persons in letters. Exactly as in the first person, this does not make any difference for the incidence of position-dependent agreement: in inversion contexts, the last consonant is absent (177a), whereas the last consonant, *-t* or *-n* is present in non-inversion contexts (see example (177b) (which immediately succeeds (177a) in the letter in which the example was found).

- (177) a. *vorder szo schreue gy my [...]*

vorder szo schreue gy my
 furthermore so write you-2PL me-DAT

‘furthermore, you wrote to me [...]’ (Agneta Willeken)

- b. [...] *dat gy godt danckeden*

dat gy godt danckeden
 that you god thanked-2PL

‘[...] that you thanked god’

(Agneta Willeken)

5.3 Methodology

The findings in this chapter are again based on the corpus study described in chapter 2. After the basic analysis of all clauses described there, I could easily filter the clauses for person and number. First, all clauses which contain a verb in the first or the second person plural were selected. In addition to this basic annotation, I marked these first and second person clauses depending on whether they have inversion or not and for whether they have an ending in *-e* or a unitary inflection consonant. Additionally, I added the type (weak/strong/preterite-present/irregular), the function (full verb/copula/auxiliary), the mood (indicative/subjunctive) and the infinitive of the verb to the database. The dataset consists of verbs in the indicative as well as in the subjunctive mood, in the past as well as in the present tense. This is because all of the verbal endings are identical in the plural (except for the variation *-t/-n*). One exception is the irregular verb *sin* ‘to be’, which has the verb form *weren* in the plural, though it has *were* as well, but only in all persons of the subjunctive in the singular in the past. As a last step, I marked specifically if the verb in inversion had the ending *-en*, *-et*, *-e* or \emptyset . In the rest of the chapter, I will mainly focus on the clauses which were marked as appearing in inversion contexts.

5.4 Syntactic distribution

The corpus study shows in general that Middle Low German had robust position-dependent agreement effects in inversion contexts in the first and second person plural. Only 201 of the circa 14,000 finite clauses in the corpus have a verb and a subject pronoun within a first or second person plural inversion context. 133 (66%) of these clauses contain a verb in the first person plural, 68 (34%) contain one in the second person plural. In this section, I will focus on the overall distribution of the deletion of the final consonant in inversion by focusing on aspects of the verb in question, considering

language internal as well as extra-linguistic factors. I will further give an overview of some exceptions and deviations from the majority of the examples in the dataset.

5.4.1 Overall

The overall picture arising from the corpus study shows that position-dependent agreement is very robust in Middle Low German. The reduced ending is present in 95.5% of all the verbs in inversion contexts ($N = 201$). A detailed overview of the examples according to number is given in table 5.3.

Person	Deletion	No deletion	Total
1	129 (97%)	4 (3%)	133
2	63 (92.6%)	5 (7.4%)	68
Total	192 (95.5%)	9 (4.5%)	201

Table 5.3: Overall (relative) frequency of verbs with and without the final unitary inflection consonant in Middle Low German

5.4.2 Exceptions

Though the absence of the final consonant in inversion is so widespread in Middle Low German, three types of exceptions and deviations from the general rule can be found in the data. First, there are real cases of exceptions to the data in which the final consonant of the unitary inflection ending is not absent in inversion. Second, there are cases in which only the stem of the verb is present in inversion, whereas there are a stem and an ending in a consonant in usual non-inversion contexts. Finally, there is one extra peculiarity which can be observed in the first or second person plural verbs in the second conjuncts of coordinated structures with *vnde* ('and').

5.4.2.1 Final consonant of the unitary plural present in inversion

In a few cases, viz. in 9 of the 201 clauses with inversion in the corpus (4.5%), the verb form in inversion contexts does not differ from the verb form in non-inversion contexts, as the final consonant stays present in these cases. Exactly 5 of these 9 cases are plural verb forms of the irregular verb *sin* ('to be'). The first or second person plural indicative present verb form of *sin* can in non-inversion contexts either be *sint* or *sin*, the optative present can be *sin* or *sit* (Lasch, 1914). These forms alternate even within one and the

same text. In inversion, both the indicative forms *sint* (178a) and *sin* (178b) are present as well, respectively in 3 and in 2 of the 5 cases. The final consonant (cluster) is absent in only a small minority of the first and second person plural forms of *sin* in inversion (178c).

- (178) a. Leuen heren Nu sint wy an desseme dage gantz vrolick gewest

Leuen heren Nu sint wy an desseme dage gantz vrolick gewest
 dear lord now are-PL we on this day very happy been

‘Dear Lord. We have been very happy upon this day.’ (Veer Koepluden)

- b. Mer bi vnser ghebreclicheit syn wi neder ghe uallen vn(de) ghebreken

Mer bi vnser ghebreclicheit syn wi neder ghe uallen vn(de)
 but with our helplessness are-PL we down fallen and
ghebreken
 broken

‘But because of our helplessness, we fell down and broke’

(Dat myrren bundeken)

- c. Nu sy wij myt groten sorgen hutten gar vorborgen vnde in der yamercheyt

Nu sy wij myt groten sorgen hutten gar vorborgen vnde in
 now are-PL we with great sorrow today completely hidden and in
der yamercheyt
 the heartache

‘Now we are with great sorrow at the moment completely hidden and with heartache’ (Bordesholmer Marienklage)

The verb *sin* tends to act differently in the past forms. The indicative has the verb form *weren* in non-inversion contexts in the first and second person plural, the subjunctive past is *were*. In inversion contexts, the final *-n* of *were(n)* is always absent. This can be seen in example (179a), which because of the context seems to be a subjunctive form, and (179b), which is in all probability an indicative past form.

- (179) a. Beter were wij vngeboren

Beter were wij vngeboren

better were-1PL we unborn

‘We would better be unborn’ (Bordesholmer Marienklage)

- b. Hir vore dar were we vormodet an anwardinghe der gotlike tokumst

Hir vore dar were we vormodet an anwardinghe der gotlike

here for there were we presumed of candidacy the-GEN divine

tokumst

future

‘Therefore, we are presumed candidates to have a divine future’

(Eastphalian Psalms)

That the final consonant (cluster) in *sin* is only sometimes absent could be due to the fact that *sin* is an irregular, suppletive short verb, as its paradigm consists of four different roots (Nübling, 2000: 296). It could therefore behave differently from other verbs consisting of one root and an ending.

There are four more verbs which keep the unitary inflection consonant in non-inversion contexts in some cases. These are *hebben* ‘to have’, *gan* ‘to go’, *schouwen* ‘to look’ and *werken* ‘to work’. The (absolute) frequencies of verb forms in the first and second person plural forms of these verbs in inversion are given in table 5.4.

Verb	Deletion	No deletion
hebben	21	1
gan	1	1
schouwen	0	2
werken	0	1

Table 5.4: Absolute frequency of deletion and non-deletion cases in *schouwen*, *werken*, *gan* and *hebben*

It is remarkable that all the clauses containing *schouwen* (180a) and *gan* (180b) that have no deletion also contain a pronoun which is in fact an expressed subject of an imperative, i.e. a vocative imperative expressed as head of an adjunct. The ending found here is the same one as the one in genuine imperative clauses, in which the subject is not expressed overtly (180c).

- (180) a. Nu schowet gij salygen lude

Nu schowet gij salygen lude
 now look you sainted people

‘Now have a look, you, sainted people’ (Bordesholmer Marienklage)

- b. gat gy vormaliedieden

gat gy vormaliedieden
 go you accursed_ones

‘Go, you accursed ones!’ (Eastphalian Psalms)

- c. O gij saligen lute Schowet dessen groten yamer

O gij saligen lute Schowet dessen groten yamer
 O you blessed people see-2PL this great sorrow

‘O you blessed people, see this great sorrow [...]’
 (Bordesholmer Marienklage)

Only the exceptions of the verbs *hebben* (online one out of 24) and *werken* (only one example) do not appear in the imperative.

- (181) a. So hebben wy to husz eyn yewelick eyne schone vrame vrouwe

So hebben wy to husz eyn yewelick eyne schone vrame vrouwe
 so have we at home an eternity a beautiful pious woman

‘In this way, we have an eternity, a beautiful pious woman’

(Veer Koepluden)

- b. In iuwen herten werket i vnregt an der erden iuwe hande dut vnregt

In iuwen herten werket i vnregt an der erden iuwe hande dut
 in your heart work you injustice on the earth your hands do
vnregt

injustice

‘In your heart, you do wrong, and on earth, your hands do injustice’

(Südwestfälische Psalmen)

As there are only two non-deletions that are not imperatives (except for the cases of *sin*) and based on the frequency distribution with *hebben*), it is possible that these are scribal errors.

5.4.2.2 Stem of the verb in inversion

Another exception to the most common ending in inversion contexts, *-e*, are verbs of which only the stem is retained in inversion contexts, whereas they end in *-en* or *-et* in non-inversion contexts. This type of deletion only affects two high-frequency verbs in the corpus, which are both preterite-presents: *schölen* ‘shall’ and *willen* ‘want’. The stem of the verb *schölen* appears in 5 of the 51 cases in which the verb form appears in an inversion context in the first or second person plural, resulting in the form *sul/schal/schul* (182a). In all the other cases, the form maintains the (also shortened) ending *-e*, resulting in *sculde/schole/scole/scholle/schulle/schulde* (182b).

- (182) a. Vn(de) van dusser materien sul ghi in den derden boke wal meer beschreuen vinden

Vn(de) van dusser materien sul ghi in den derden boke wal meer
and from this material shall you in the third book well more
beschreuen vinden
described find

‘You will find more descriptions of this material in the third book’

(Spiegel der Leyen)

- b. Ok scole wi vm helpen vryghen

ok scole wi vm helpen vryghen
also shall we for help ask

‘We shall also ask for help’

(Oldenburger Urkunden)

The verb *willen* behaves similarly: In 10 of the 28 first or second person plural forms of *willen* in an inversion contexts, only the verb stem *wil* is present (183a). This is instead of the expected (alternating) forms *wille*, *wylle* and *wolde* (183b).

- (183) a. Dat lydent sunte marien dat wyl wij hijr nu anheuen

Dat lydent sunte marien dat wyl wij hijr nu anheuen
 the suffering saint Mary-GEN that want-1PL we here now commence

‘We want to commence the suffering of saint Mary now’

(Bordesholmer Marienklage)

- b. *deme wylle wy de kele aff steken vnde mynen rock in sineme blode wolteren*
 / *vnde syne tungen nemen*

deme wylle wy de kele aff steken vnde mynen rock in sineme
 he-DAT want we the throat off cut and my frock in his

blode wolteren vnde syne tungen nemen

blood roll and his tongue take

‘We want to cut his throat and roll my frock in his blood and take his tongue’

(Veer Koepluden)

5.4.2.3 Second conjuncts containing a first or second person plural verb

As I have shown in chapter 3, Middle Low German has a high number of null pronominal arguments. One type of gap that is very common is a non-expressed subject in second conjuncts, i.e. conjunction reduction. Briefly summarizing the explanation given in section 3.2, it means that if the subject in the second conjunct is identical with the one in the first conjunct, the subject in the second (or third or fourth) conjunct is not expressed overtly. The presumed location of the gap in second conjuncts with a first conjunct in which the subject pronoun precedes the verb is quite straightforward. Since nothing is supposed to cause inversion in the second conjunct either, the structure in the second conjunct is parallel to the first one and the gap must be located preceding the verb in the second conjunct, exactly where the subject is located in the first conjunct. This can be seen in example (184).

- (184) **dey** sal deme Rayde wedden eyn half punt ande [] sal vte deme gherichte ewelike
 wesen vorwyset

dey sal deme Rayde wedden eyn half punt ande [] sal vte deme
 he shall the council pay a half pound and [] shall out the
gherichte ewelike wesen vorwyset
 court everlasting be outlawed

‘he will pay the council half a pound and [he] will forever be outlawed from the
 court’ (Soester Schrae)

The situation is different in coordinated clauses in which the first conjunct has inversion, as for instance in example (185). In those cases, there are two possible options to interpret the structure of the second conjunct, as there are two possible locations for the covert subject. A first possibility is a parallel construction in which the verb precedes the gap, i.e. the inversion-causing element *do* in example (185) works through in the second conjunct. A second option is that the gap precedes the verb instead. It is hard to argue in favour of one interpretation or another in the third person examples, such as in (185).

(185) Do nemen se orloff van synen gnaden vnde [?] voren [?] in groter vrolichheyt
 wedder to Genay

Do nemen se orloff van synen gnaden vnde [?] voren [?] in groter
 then take they leave of his mercy and [?] rode [?] in great
vrolichheyt wedder to Genay
 joy back to Genay

‘Then they took their leave of his mercy and rode back to Genay in great joy’
 (Veer Koepluden)

A remarkable phenomenon is evident in the corpus data in coordinated structures with the conjunction *vnde* (‘and’), in which each conjunct contains a verb in the first or second person plural. If the first conjunct contains a verb and a pronoun in inversion, in which the expected inversion-ending without the final unitary inflection consonant is found, the verb in the second conjunct does contain this consonant. This is illustrated with example (186a) for the first person and with example (186b) for the second person plural.

- (186) a. Vortmer , bidde wi vnde manen alle guode lude , Houeman , vnde husman
Dat se alle mit eneme schrichte volghen [...]

Vortmer , *bidde* *wi vnde manen alle guode lude* , *Houeman* ,
furthermore pray-1PL we and demand all good people noblemen
vnde husman Dat se alle mit eneme schrichte volghen
and peasants that they all with a complaint follow

Furthermore we pray and demand from every good man, noblemen and peasants, that they all sue with a complaint [...] (Urkundenbuch Lübeck)

- b. szo hedde gy my dar gerne vnde wolden my dar ock henne hebben

szo hedde gy my dar gerne vnde wolden my dar ock henne
so have you-2SG me there gladly and want-2SG me there also there
hebben
have

‘In this way, you would like to have me there and you would also want to have me away’ (Agneta Willeken)

In the first example, the first conjunct clearly has inversion caused by the element *Vortmer* ‘furthermore’. The verb *bidde* ‘pray’ does not end in *-t* or *-n* but in *-e*, whereas the verb in the second conjunct, *manen* ‘demand’, does end in *-n*. The same can be observed in (186b), because of the inversion context caused by *szo* ‘in this way’, with *hedde* ‘have’ in the first and *wolden* ‘want’ in the second conjunct.

Finding a consonant at the end of the verb in the second conjunct in first and second person plural examples can mean two things. The first option is that these structures could provide evidence of a pronominal gap which precedes the verb in the second conjunct of coordinated structures in Middle Low German. This is because the ending of the verb in the second conjunct is the normal ending which would also appear in a non-inversion context. If this assumption were correct, it would mean that these examples do not constitute an exception to the data at all. This interpretation is very likely from a comparative point of view, as similar conclusions about the structure of second conjuncts in High German have been described by Reich (2009). Meanwhile, a second option could be that the verb in the second conjunct precedes the pronominal gap. This would mean that the consonant stays present if there is no phonological

expression of the subject pronoun. Such a possibility is supported by examples from null subjects in the first and second person plural preceded by a first or second person verb.

- (81a) God gheue iv_i also to soeken $vn(de)$ to lesen [dat ghii $_i$ daer by verbetert weerden.]
Vnde willen [pro] $_i$ dit boeck to godes eeren beghinne(n).

God gheue ivi also to soeken vn(de) to lesen [dat
God give-SBJN you-ACC.PL therefore to search and to read that
ghii daer by verbetert weerden Vnde willen dit boeck to godes
you-NOM.PL there at improved be and will this book to God's
eeren beghinne(n).
honour begin

‘May God inspire you to search and to read, in order for you to be improved by it.
And may [you] begin (to read) this book to honour God’. (Spiegel der leyen)

It must be noted however, as described in (81a) in chapter 3, repeated here, that the position of the subject pronoun in this example is not entirely certain, as another (more unlikely) reading in which the referential null subject is not following the verb would be possible as well.

5.4.3 Language internal factors

As I have shown before, there are only 4.5% of real exceptions to the data in the corpus. Though this number is relatively small (9/201 occurrences), it is possible to see indications of which factors might play a role in having or preventing the possibility of deletion in inversion. In this section, I will therefore discuss these exceptions in relation to different language internal factors, such as the function of the verb in the clause (full verb, auxiliary or copula), person or type of the verb (weak, strong, weak/strong, irregular or preterite-present).

5.4.3.1 Properties of the verb

The following table shows the strength of the relationship between verbs in inversion in which deletion has taken place and the function of the verb (full verb, auxiliary or copula). The centred factor weight shows the strongest correlation between deletion

and copula, though one has to keep in mind that only three clauses with copula and inversion with a first or second person pronoun can be found in the corpus. The centred factor weight of auxiliaries and full verbs is much smaller; the values are 0.036 and 0.002 respectively. This means that both have a negative correlation. The function of the verb thus does not seem to be a defining factor as to whether or not deletion is present.

Function	Log odds	Tokens	Centred factor weight	%deletion
copula	9.419	3	> 0.999	100%
auxiliar	-3.287	130	0.036	99.2%
full	-6.132	68	0.002	88.2%

Table 5.5: Influence of the factor function of the verb on deletion

The ten most common verbs in inversion are listed in table 5.6. It shows that most of the verb forms found in the corpus belong to *schölen* ‘shall’, followed by *hebben* ‘have’ and *willen* ‘want’. The total gives the amount of times the verb appears in inversion, between brackets the number of cases in which only the stem appears in inversion (‘st.’) or exceptions without deletion (‘ex.’) is given.

Infinitive	Type	Total
schölen ‘to shall’	preterite-presents	51 (25.4%) [+ 5 st. (2.5%)]
hebben ‘to have’	weak	28 (13.9%) [+ 1 ex. (0.5%)]
willen ‘to want’	irregular	27 (13.4%) [+ 10 st. (5%)]
mögen ‘to may’	preterite-presents	12 (6%)
werden ‘to become’	strong	10 (5%)
sin ‘to be’	irregular	10 (5%) [+ 7 ex. (3.5%)]
betügen ‘to profess’	weak	6 (3%)
loven ‘to promise’	weak	4 (2%)
don ‘to do’	irregular	4 (2%)
können ‘to be able to’	preterite-presents	3 (1.5%)

Table 5.6: Verb type and number of occurrences of the ten most common verbs in inversion in the corpus

The frequency of these verbs in the corpus is mainly due to the fact that they can all be used as auxiliaries and thus take verbal complements. Though the table therefore shows that deletion is more common in auxiliaries in bare numbers, this does not mean that deletion is more common relatively, as was shown in table 5.5. What does, however, have an influence on the presence of deletion is the type of the verb. Though deletion is, according to table 5.6 robustly attested in strong verbs, weak verbs, irregular verbs and preterite-presents, the logistic regression analysis in Rbrul shows that preterite-presents

and strong verbs have the highest positive correlation with the presence of deletion, as their centred factor is close to 1, as the ending drops in all of the verbs of these type in the middle Low German corpus.

Function	Log odds	Tokens	Centred factor weight	%deletion
prpr	15.419	69	> 0.999	100%
st	15.419	29	> 0.999	100%
sw	-1.797	59	0.142	96.6%
irr	-3.328	43	0.035	86%
sw/st	-25.713	1	< 0.001	0%

Table 5.7: Influence of the factor class of the verb on deletion

Table 5.7 shows that there is a negative correlation between weak verbs and irregular verbs and deletion (though deletion also takes place in 96.6% and 86% (respectively) of all these verbs in inversion as well). The only exception within the group of the irregular verbs is again *sin* ‘to be’ and the one occurrence of *gan* ‘to go’.

The results of the logistic regression analysis measuring the strength of the relation between deletion and monosyllabic and polysyllabic verbs is given in table 5.8. The monosyllabic verbs in the dataset of inversion clauses in the corpus are *don* ‘to do’, *gan* ‘to go’, *sen* ‘to see’ and *sin* ‘to be’.

Monosyllabic/polysyllabic	Log odds	Tokens	Centred factor weight	%deletion
polysyllabic	1.701	183	0.846	98.4%
monosyllabic	-1.701	18	0.154	66.7%

Table 5.8: Influence of the factor monosyllabic on deletion

The difference is statistically significant on the 1 percent level ($p = 7.87 \cdot 10^{-06}$). The relation between polysyllabic verb forms and deletion is positive, whereas there is a negative correlation between monosyllabic verbs and deletion, which happens in the latter in only 66.7% of the cases (12/18 cases). Except for one form *gat* ‘go’ in the imperative, these exceptions are all forms of the verb *sin* ‘to be’. This indicates that the fact that there is no change is in fact rather linked to the verb *sin* itself than to monosyllabic verbs as a whole.

Another factor one could look at is whether deletion is more common in verbs which would end in one or another unitary inflection consonant in non-inversion contexts. In the plural verbal paradigm in Middle Low German, the only environment in which the unitary inflection ending can alternate is the indicative present, as in this environment

the final consonant of the ending can be *-n* or *-t*. As the unitary inflection consonant in the plural is *-en* in all the other categories (i.e. in indicative past, subjunctive present and subjunctive past), it is quite hard to detect any difference between those categories. Consequently, it is also hard to tell from the Middle Low German data which final consonant is deleted. Furthermore, variation in endings of the same verb even within one and the same texts makes it very hard to test this hypothesis. De Vogelaer (2005) mentions that the difference between the ending in *-e* and the ending in *-et* in the Dutch and Frisian dialects might have its origin in the Saxon plural ending *-et*. According to De Vogelaer (2005), the different phonetic environments in inversion and non-inversion contexts would have led to the reduced ending *-e* in inversion contexts. I will come back to the question whether one or another final consonant might have led the change of the ending in inversion contexts in Middle Low German in section 5.7.2.

5.4.3.2 Person

Table 5.3 showed that the number of different endings varies by person: The ending *-e* is slightly more common in the first person plural (97%) than in the second person plural (92.6%). This difference in person is however not statistically significant at the 1 percent level in Fisher's Exact Test ($p = 0.1695$), i.e. the final consonant does not tend to be absent more often in one person than another. The strength of the correlation between deletion and person is also given in table 5.9, which confirms this statement.

Person	Log odds	Tokens	Centred factor weight	%deletion
1	0.47	133	0.615	97%
2	-0.47	68	0.385	92.6%

Table 5.9: Influence of the factor person on deletion

There is a slightly positive correlation between the first person (plural) and deletion due to the slightly higher number of occurrences of deletion. However, the centred factor weights are not extreme (i.e. close to zero or to 1), which suggests that the correlation between person and deletion is not that strong.

5.4.4 Extra-linguistic factors

As the absence of the final unitary inflection consonant in inversion contexts is so robustly attested in Middle Low German, it is hard to see a lot of variation in the data.

5.4.4.1 Period

In the first place, there is no real evolution over time. The very first examples of the phenomenon date from texts in the period 1301-1350, which is the period with the earliest texts containing first or second person plural pronouns in our corpus. From then onwards, the ending in *-e* is present whenever a verb precedes the subject pronoun in an inversion context, in the first as well in the second person plural. The table resulting from the logistic regression analysis in Rbrul, shown in table 5.10, shows again a discrepancy between values very close to zero and values very close to 1, which is in all probability due to the smaller amount of data in certain periods.

Period (range)	Log odds	Tokens	Centred factor weight	%deletion
1201-1250	6.264	1	0.998	100 %
1251-1300	6.264	2	0.998	100 %
1301-1350	-9.776	70	< 0.001	97.1 %
1351-1400	6.264	12	0.998	100 %
1401-1450	6.264	14	0.998	100 %
1451-1500	-10.611	63	< 0.001	93.7 %
1501-1550	-10.935	35	< 0.001	91.4 %
1551-1600	6.264	4	0.998	100 %

Table 5.10: Influence of the factor period on deletion

There is a positive correlation in period, except in the periods ranging from 1301 to 1350, from 1451 to 1500 and from 1501 to 1550, which happen to be the periods in which the amount of data is much higher, and which exhibit the exceptions in the corpus. The factor period is consequently not a strong predictor of deletion ($p = 0.652$, i.e. insignificant on the 1 percent level). This means however that there does not seem to be a diachronic change going on in Middle Low German, the phenomenon was quite stable from the earliest period onwards and stays like that throughout time.

5.4.4.2 Scribal language

There are no significant differences across scribal languages ($p = 0.53$, not significant on the 1 percent level), though deletion tends to be a bit more common in the scribal language of Lübeck, as can be seen in table 5.11. As I have indicated in section 3.5.2.2 already, this newly emerging, influential dialect tended to be quite progressive concerning linguistic changes, often showing properties of dialect mixing and leveling (Breitbarth, 2014a,b; Peters, 2017). Of course, the number of tokens in the subcorpus of Lübeck is

smaller than in the other subcorpora, which means that the lack of exceptions could be due to chance.

Scribal language	Log odds	Tokens	Centred factor weight	%deletion
LB	11.659	17	> 0.999	100%
EPH	-3.523	61	0.029	96.7%
WPH	-3.989	39	0.018	94.9%
NLS	-4.147	84	0.016	94%

Table 5.11: Influence of the factor scribal language on deletion

The shortened ending in *-e* is in any case still robustly attested in every scribal language in the corpus, which means that position-dependent agreement cannot be purely linked to orthographic variation because of the practices or influence of one particular chancery.

5.4.4.3 Genre

The ending without the final consonant is attested in all the text types in the corpus. The correlation between text type and deletion is not significant at the 1 percent level ($p = 0.275$). The text type itself does however have an influence on the occurrence of first or second person plurals, both in inversion and in non-inversion contexts, as has also been noted in section 4.5. Second person plural pronouns and verbs turn up much more often in religious texts, whereas first person plural verbs and pronouns are most common in charters. Table 5.12 shows the result of the logistic regression analysis measuring the strength of the relation between genre and deletion.

Scribal language	Log odds	Tokens	Centred factor weight	%deletion
chronicle	9.598	1	> 0.999	100%
legal	9.598	7	> 0.999	100%
charters	-3.825	64	0.021	98.4%
letter	-4.207	44	0.015	97.7%
religious	-5.175	52	0.006	94.2%
literature	-5.987	33	0.003	87.9%

Table 5.12: Influence of the factor genre on deletion

In chronicles and legal texts, there are barely cases of first and second person plural pronouns (1 and 7 cases respectively), which explains the negative correlation with deletion, since other factors were influenced by the smaller numbers as well. In genres with a substantial amount of first and second person plural verbs and pronouns, the correlation is negative.

5.5 Position-dependent agreement in West Germanic

The omnipresence of position-dependent agreement in Middle Low German makes it hard to retrieve information on the exact nature and the origin of the loss of the final consonant of the verb form in inversion contexts in the first and second person plural. Therefore, it might be interesting to have a look at the same syntactic environment in related West Germanic languages. In this section, I will look at (possible) position-dependent agreement effects of the same type in Old Saxon, the modern Low German and Eastern Dutch dialects, the other Ingvæonic languages (i.e. Old Frisian and Old English) and other West Germanic languages (i.e. Old Dutch and Old High German). The overview of position-dependent agreement in these languages will of course be much less detailed than that of the phenomenon in Middle Low German.

5.5.1 Old Saxon

In the plural verbal paradigm, Old Saxon has a unitary inflection ending *-ađ/-ođ* in the present tense, whereas the endings in the past tense are *-un/-on*. As already mentioned in section 5.2, the plural present paradigm derives from an older system in which all persons in the plural had their own φ -agreement morphemes on the verb, i.e. first person had the ending *-m*, second person *-th* and third person *-nđ*. This unitary inflection is the one that is most common in Old Saxon written sources, although the old third person plural ending is still sporadically attested as well (Gallée, 1891: 246).

To see if the Old Saxon text(s) (fragments) used to have position-dependent agreement, I looked at *Heliand* (HeliPad, Walkden, 2016a; Sehr, 1925), *Genesis* (Wadstein, 1899) and the *Kleinere altsächsische Sprachdenkmäler* (Wadstein, 1899). The search through these text(s) (fragments) yields 52 clauses in which there is a first or second person verb and subject pronoun in an inversion context, of which 7 are in the first (187a) and 45 in the second person plural (187b). The examples found all show the same picture: A reduced ending without the final consonant in inversion contexts is not present at all in Old Saxon, neither in the first nor in the second person plural. That is to say, Old Saxon does not show any evidence of position-dependent agreement.

- (187) a. than faran uui thar alla tuo

than faran uui thar alla tuo
 then move.1PL we there all to

‘then we all go/let us all go to that place’ (Heliand 2567)

- b. Sô uuitin gi ôk bi thesun tēknun

Sô uuitin gi ôk bi thesun tēknun
 so know.2PL you.2PL also by this sign

‘So you also know by this sign’ (Heliand 4344)

Behaghel (1897: 239) mentions, however, that there is one special form, viz. *wīta*, which has no final consonant. According to Holthausen (1899: 144, Anm. 3), it derives from the verb form **wītan* ‘let us’. In all cases of this verb form in the *Heliand*, the verb form appears without a subject pronoun. According to Behaghel (1897), the verb form raises the question whether native speaker intuition (*‘Sprachgefühl’*) considered it to be related to the first person. *Wīta* is usually used as an interjection in combination with an infinitive (which keeps its final ending), the whole of which is considered an adhortative. In that respect, it must be remarked that adhortatives in other Germanic languages only appear in the first person plural. All three of these special forms are marked with the tag UTP in HeliPad and given here (Walkden, 2016a).

- (188) a. uuita kiesan im oðerna niudsamana namon

uuita kiesan im oðerna niudsamana namon
 WITA choose him other pretty name

‘Let us choose him another pretty name’ (Heliand 223-224)

- b. uuita ess thiena fader fragon

uuita ess thiena fader fragon
 WITA it of.it father ask

‘Let us ask the father about this’ (Heliand 228)

- c. uuita im uuonian mid

wuita im uuonian mid
 WITA him stay with

‘Let us stay with him’

(Heliand 3995)

It should be noticed that the other adhortative in *Heliand*, given in (187a) above, which is not used in combination with *wita*, does have an ending and is followed by the first person plural pronoun. *Wita* is cognate with the Old English *wuton/uton*, which is used in the same way as in Old Saxon and which remarkably enough always has an *-n*. Furthermore, there is no alternative for adhortatives without inversion. Because of this, and based on the low level of occurrence, it is not likely that these special forms are related to position-dependent agreement in Middle Low German at all.

5.5.2 Modern Low German dialects

The Modern Low German dialects still have unitary inflection in the plural on *-(e)t* or *-(e)n*, the former being more common in the Western areas and the latter in the Eastern ones (Lindow et al., 1998). Some city dialects, such as that of Hamburg, have a different form in the second person plural (in non-inversion contexts), which according to the *Niederdeutsche Grammatik* is due to High German influence. The paradigm in inversion is not described for all verbs in general. However, shortened endings are possible if the first or second person plural pronoun follows the verbs *schölen* and *dörven/dröffen*. In other verbs, the Middle Low German distinction between first and second person plural verb endings in inversion and non-inversion contexts is still made at the end of the 20th century (Höhle, 1997: 109-110). This is for instance the case in Mecklenburgish, in which the ending, *-en*, in the first or second person plural changes to *-e* in inversion contexts (Nerger, 1869: 156). Another example is the ending *-et* in the Westphalian dialect of Ravensberg, which changes to *-e* when the pronouns *wi* or *ji* follow in the present tense (Jellinghaus, 1877: 84).

Besides these dialects, the Eastern Dutch dialects are also particularly interesting, as they form a dialect continuum with the Western Low German ones (Entjes, 1968; Heeroma, 1955; Kremer, 1977; Nerbonne and Kleiweg, 2000; Rakers, 1939). For this reason, I count the Eastern Dutch dialects as Modern Low German here. The dialects from Overijssel, for instance, show exactly the same position-dependent agreement effects as in Middle Low German and modern Low German, as they have a unitary

inflection ending *-et* in non-inversion contexts, whereas the ending in inversion contexts in the first person plural is *-e* or the stem without a suffix (Entjes, 1968: 319, Bezoen, 1938: 82). The position-dependent agreement effects in some other Eastern Dutch dialects are even more interesting. In the dialect of Vriezenveen, for instance, the unitary inflection ending is, just like in the surrounding dialects, *-et* in the present and *-en* in the past forms in non-inversion contexts. In the second person plural, the *-t* is absent in the present and the *-en* is absent in the past. In the first person plural, the ending *-en* stays present in the past, whereas the present ending *-t* in non-inversion contexts becomes *-en* instead in inversion (Entjes, 1968; Höhle, 1997). This means that some modern Low German dialects distinguish all persons and numbers in the present tense in sense of their agreement morphology on the verb, but solely in inversion. Examples from the dialect of Vriezenveen are given in (189) for the present paradigm and in (190) for the past paradigm. In non-inversion contexts in the plural, the unitary inflection is maintained.

- (189) a. *wii/ii/zii kiikt*
 ‘we/you/they look’
 b. *kiiken wii*
 lit. ‘look-1PL we’
 c. *kiik ii*
 lit. ‘look-2PL you’ (Höhle, 1997:109, ex. 4, my own English translation)
- (190) a. *wii/ii/zii bjeten*
 ‘we/you/they asked’
 b. *bjeten wii*
 lit. ‘asked-1PL we’
 c. *bjet ii*
 lit. ‘asked-2PL you’
 (Höhle, 1997:110, ex. 5, my own English translation)

Another Eastern Dutch (i.e. Low Saxon) dialect, located closer to the German border, shows a similar plural paradigm. In the dialect of Haaksbergen, the verbal endings of the present as well as the ones of the past tense distinguish all persons of the plural in inversion (Hoekstra, 2001: 351). In non-inversion contexts, the present verbs have a unitary inflection in *-t*, whereas they have a unitary inflection in *-n* in the past forms. The present paradigm in Haaksbergen is presented in (191), the past paradigm in (192).

(191) a. *wie/ieleu/zee brekt*

‘we/you/they break’

b. *brekt wie*

lit. ‘break-1PL we’

c. *brek ieleu*

lit. ‘break-2PL you’

(Hoekstra, 2001: 351, ex. 30, from Dijkhuis, 1995: 346, my own English translation)

(192) a. *wie/ieleu/zee brokn*

‘we/you/they broke’

b. *brokke wie*

lit. ‘broke-1PL we’

c. *brok ieleu*

lit. ‘broke-2PL you’

(Hoekstra, 2001: 351, ex. 30, from Dijkhuis, 1995: 346, my own English translation)

The third person plural endings are again the same as the unitary inflection endings, whereas the first and second person plural (in inversion) have developed new forms ending in *-e* in the first person and in *-∅* in the second person in the past tense. In the present tense, only the second person plural has developed another form in inversion.

5.5.3 Position-dependent agreement in the Ingvæonic languages

Middle Low German is not the only Germanic language in which position-dependent agreement is common. The absence of the final consonant in inversion contexts in the

first and second person plural is particularly common in the other Ingvæonic languages apart from Old Saxon (i.e. in Old Frisian and in Old English).

Old Frisian shows position-dependent agreement phenomena which are very similar to the ones in Middle Low German. The languages also partly overlap in time and even in place in the region of Groningen (resulting in the Friso-Saxon dialects). The unitary inflection of the plural, *-ath* is replaced by *-a* in the first or second person plural if the verb precedes the subject pronoun. In Modern Frisian, this corresponds to the ending *-e* in inversion (Hoekstra, 2001).

(193) a. Om thet torn ther j mi habbad dan

Om thet torn ther j mi habbad dan
because-of the trouble REL you to-me have done

‘Because of the trouble you have caused me’

(Hoekstra 2001, ex. (3b), my own glosses and English translation)

b. Thit habba j min koning end mi to laster dan

Thit habba j min koning end mi to laster dan
this have you my king and me to slander done

‘You have done this to my king and me for slander’

(Hoekstra 2001, ex. (3a), my own glosses and English translation)

The alternation of the endings is found in lexical verbs as well as in preterite-presents in Old West Frisian. Hoekstra does not find cases in Old East Frisian, which could be due to the fact that the texts from this area are older than the Old West Frisian ones. Hoekstra (2001) argues that it is possible that the deletion started at a time from which Old East Frisian sources are not available. An argument that speaks against this is according to him that modern East Frisian dialects show deletion effects. This could in turn be proof of the fact that Old East Frisian had deletion as well, but that it was just not present in these particular cases. Consequently, this could mean that the phenomenon is quite old (i.e. from before the first Old Frisian charters, which date from about 1300). Other resemblances with the Middle Low German data are that the ending of some verbs, for instance of *scilla* ‘shall’ and *willa* ‘wollen’, sometimes only keep the stem of the verb in inversion contexts, exactly like *schölen* and *willen* do in Middle Low German, see section 5.4.2. This can be seen in example (194).

- (194) Her koning ho lange wil j alhier to stan / Thet ghi hier om nin herferd/willad dwan

*Her koning ho lange wil j alhier to stan Thet ghi hier om nin
lord king how long want you here to stand that you here for no
herferd/willad dwan
campaign want*

‘Lord king, how long do you want to stand around here, that you don’t want to do a campaign for this’

(Hoekstra 2001, ex. (4), my own glosses and English translation)

Hoekstra (2001) further mentions that the ending does not drop when there is no pronominal subject after the verb (195). The given example is entirely in line with what I have observed in the second conjunct examples with conjunction reduction connected to a first conjunct with inversion in Middle Low German.

- (195) So willa wi romra van hiara riocht qwyt dwan / and willad nima thi user hand

*So willa wi romra van hiara riocht qwyt dwan and willad nima thi
so want.1PL we romans from their right lost do and want take it
user hand
in-our hand*

‘In that way, we want to take away the right of the Romans and we want to take it in our hand’

(Hoekstra 2001, ex. (2), my own glosses and English translation)

Differently from the Middle Low German data in the corpus that I used is that the reduced endings in Old Frisian also appear in non-inversion contexts, though only rarely (196). It is possible that this reduced ending is generalised in West-Frisian, in which the present tense of all the persons in the plural is *-e* (Hoekstra, 2001: 353).

- (196) And wi scilla in tha arck gan

*And wi scilla in tha arck gan
and we shall in the ark go*

‘And we shall go into the ark’

(Hoekstra 2001, ex. (5b), my own glosses and English translation)

Deletion in the first and second person plural is also robustly attested in Old English (Bammesberger, 1981; Benskin, 2011; Brunner, 1965; Hogg and Fulk, 2011). When the plural verb form is followed by a first or second person plural pronoun (*we/wit* or *ȝe/ȝit*), the ending can often be *-e*. This ending alternates with *-að* in the indicative present and the second person plural optative forms, and with *-en* in the optative present and the past, with *-un/-on* in the indicative present and with *-an* in the adhortative (Brunner, 1965: 276). Hogg & Fulk (2011, 214-215) mention that the deletion is most typical for West Saxon Old English, which is why the phenomenon often is referred to as ‘West Saxon concord’. In the York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE, Taylor, 2007; Taylor et al., 2003), I found that deletion of the ending happens in Old English prose texts in 61% ($N = 1018$) of all the occurrences of a verb followed by a first or second person plural pronoun. An example with a second person pronoun plural from the corpus is given in (197a), an example with a first person plural verb and pronoun in (197b).

(197) a. hu come ge hyder on þas gesomnunga [...]?

hu come ge hyder on þas gesomnunga
how come you-2PL here in to meeting

‘How did you come into this meeting [...]?’ (The Gospel of Nichodemus)

b. Ða ferde we in Agustes monþe [...]

Ða ferde we in Agustes monþe
then went we in Augustus month

‘Then we went in the month of August [...]’

(Alexander’s Letter to Aristotle)

Just like in Middle Low German and in Old Frisian, the reduced ending is present in all kinds of verbs and in present as well as in past forms.

5.5.4 Position-dependent agreement in other West Germanic languages

In Old High German, which did not have unitary inflection in the plural, the final consonant is never deleted in the second person plural. Old High German does however display position-dependent agreement effects in the first person plural. However, examples are only found sporadically, for instance in the Old High German *Tatian*, a text written in the East Franconian dialect (Braune, 2004: 263, Anm.7). The earliest examples of position-dependent agreement in the Referenzkorpus Altdeutsch³ date from the early 9th century, for instance example (198).

(198) *des sculu uuir pitten den halmahtigun truhtin*

des sculu uuir pitten den halmahtigun truhtin
this shall we ask the almighty lord

‘this we shall ask the almighty lord’ (Freisinger Paternoster 2)

This is in all probability an assimilation effect, as these endings sporadically alternate in inversion contexts with the ending *-m* (199a). They also alternate with *-n* (199b), which is the reduced version of *-m* (Axel and Weiß, 2011: 38-39).

(199) a. *thanne bittem uuir, thaz sin namo in uns mannom uerdhe giuuihit thuruh guodiu uerc*

thanne bittem uuir, thaz sin namo in uns mannom uerdhe
then pray we that his name in us people becomes-SUBJ
giuuihit thuruh guodiu uerc
consecrated through good work

‘Then we pray that his name will become consecrated in us, people, by doing good’ (Kleinere althochdeutsche Denkmähler)

b. *ni múgun wir thar wénken*

ni múgun wir thar wénken
never may we of-that deviate

³<http://www.deutschdiachrondigital.de/home/>

‘We may never deviate from it’ (Otfrid)

The older long ending *-mes* can still be found sporadically (200).

(200) *Tho quadun sie imo : quæmemes uuir mit thir [...]*

Tho quadun sie imo quæmemes uuir mit thir
there spoke they to-him come we with you

‘There they spoke to him: If we come with you [...]’ (Tatian)

According to Eggenberger (1961: 104-108), this ending can (in *Tatian*) combine with a referential null subject, while the shorter ending cannot.

The *-n* in the first person plural often drops in the Middle High German of the 13th and 14th century, which is overlapping in time with Middle Low German, when the pronoun follows the verb as well (Höhle, 1997; Paul et al., 2007: 244, Anm.7). This can be seen in examples (201a) and (201b). The examples occur across dialects, but seem to be more common in Bavarian.

(201) a. *Ouh sahe wir dar cleine fugele*

Ouh sahe wir dar cleine fugele
also saw we there small birds

‘We also saw small birds there’ (Straßburg-Moslheimer Handschrift)

b. *Obe den wazzeren dere scantlichen burch da sazze wir*

Obe den wazzeren dere scantlichen burch da sazze wir
at the water the.GEN shameful city there sat we

‘We sat along the water of the shameful city’ (Windberger Psalter)

Paul et al. (2007: 363) also mentions one case of an adhortative in Middle High German in which the *-n* is deleted. There is an intervention of *ouch* between verb and subject though.

(202) *nû rûme ouch wir den tan*

nû rûme ouch wir den tan
now leave also us the wood

‘Let us leave the wood now!’

(NL 946, Paul et al. (2007: 363), my own English translation)

The double agreement effects that are typical for inversion contexts in the first person plural in Lower Bavarian, which have among others been described by Axel and Weiß (2011); Bayer (1984) and Grewendorf and Weiß (2014), are, as in High German, based on assimilation. In this Bavarian sub-dialect, the enclitic subject pronoun *ma* was reanalyzed as an inflection marker (Bayer, 1984: 251-254). An example of this phenomenon is given in (203).

(203) Fahr-ma (mir) noch Minga?

Fahr-ma (mir) noch Minga?
drive-1PL (we) to Munich

‘Do we drive to Munich?’

Bayer, 1984: 251, ex. (105a)

One of the other languages which can be looked at is Old Dutch. There are only very few sources of the language, which means that examples of inversion with a first or second person pronoun in the ONW are rare (Quak et al., 2002: 23-29). I have searched for verbs in the plural followed by a first or second person plural pronoun in the ONW, which is annotated with morphology and inflection and shows the pronouns in contexts (Pijnenburg et al., 2009). In the dictionary, there is exactly one verb in the first person plural in inversion in which the final consonant of the ending is absent (204a), alternating with several ones in which it is present (204b). It must be mentioned, however, that this example could be influenced by Old High German, as it is from the *Leiden Willeram*, which is strongly influenced by the High German original of the text (Sanders, 1974: 111-266). In the second person plural, for which there is only one relevant example without an imperative and with inversion, the ending does not disappear (204c).

(204) a. wanda uano thir Christo heyze wir Christiani

wanda uano thir Christo heyze wir Christiani
because of you Christ name-1PL we Christians

‘Because from you, Christ, we are named Christians’ (Leiden Williram)

b. Zich mich nah thir, so loupfen wer in themo stanke thinero saluon.

zich mich nah thir so loupfen wer in themo stanke thinero saluon
 pull me after you so walk we in the fragrance of.your ointment
 ‘Take me in tow, so we walk in the fragrance of your ointment’
 (Leiden Williram)

- c. Inthiser naht sprach er so mich thie ivden uahn, so scult ir min alle abe gan

Inthiser naht sprach er so mich thie ivden uahn, so scult ir min
 in=this night spoke he so me the judes catch so shall you-2PL me
alle abe gan
 all away go

He spoke: “When the Jews will catch me tonight, you will all leave me”.
 (Middle Franconian Rhymed Bible)

Furthermore, there is one well-known example, ‘*hebban olla vogala (...)*’, which shows a verb followed by a subject pronoun in the first or the second person plural. According to many researchers, the *probatio pennae* written in the abbey of Rochester in Kent in the last quarter of the 11th century is written in South West Flemish (Cotman and Tældeman, 2003; Schönfeld, 1933, 1959; Willemyns and Daniëls, 2003). If that is true, the dialect would not be Low Franconian, but Saxon, as the area was colonised by Saxon tribes in the 5th century (Devos, 2002, 2006). As can be seen in figure 5.1, the sentence in question is not well readable in the manuscript.

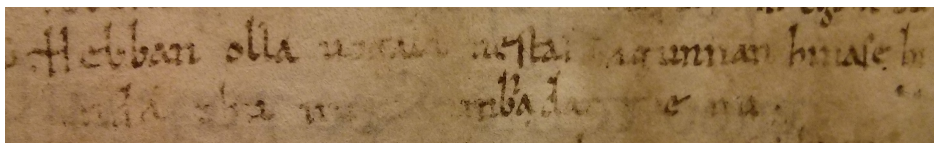


Figure 5.1: *Hebban olla vogala (...)*, Bodleian Library Oxford, Ms. 340 fol. 169v., my own picture

Usually, two possible readings of the sentence are proposed, which are given in examples (205a) and (205b).

- (205) a. *Hebban olla uogala nestas [h]agunnan hinase hi[c] [e]nda thu u[uat] [u]mbida[n] [uu]e nu*

Hebban olla uogala nestas hagunnan hinase hic enda thu uuat
 have all birds nests begun except.for me and you what
umbidan uue nu
 wait we now

‘All the birds have started their nests, except for me and you. What are we now waiting for?’

- b. *Hebban olla uogala nestas hagunnan hinase hi[c] [e]nda thu uu[at] **unbida[t]** **g[h]e** nu*

Hebban olla uogala nestas hagunnan hinase hic enda thu uuat
 have all birds nests begun except-for me and you what
unbidat ghe nu
 wait you-2PL now

‘All the birds have started their nests, except for me and you. What are you now waiting for?’

Both *umbidan uue* and *unbidat ghe*, marked in bold in the examples, are relevant contexts for possible position-dependent agreement effects. The manuscript itself does not decide in favor of one form or another: the visible elements between *unbida* and the *-e* at the end of the pronoun are clearly characters from the other side of the document shining through. On the one hand, it is thus possible that this is an early attestation of the position-dependent agreement effect in South West Flemish (which is in fact also Ingvæonic, see Devos, 2002, 2006). On the other hand, it could be an argument in favor of the idea that the text is written in a West Saxon dialect or even in Kentish (de Grauwe, 2004). Both in the first as well as in the second reading, deletion of the final consonant of the finite verb would certainly have been possible in West Saxon (see sections 5.5.3 and 5.6), leading to a transcription *unbida g(h)e* or *unbida uue*.⁴ An extra element supporting the idea that this fragment exemplifies a case of position-dependent agreement in which the final consonant is missing, is that the *-n* of *hebban*

⁴Many of the words in this sentence, in particular the first word *hebban*, have been discussed extensively in the literature. Depending on these theories, the proposed translations of the fragment differ from each other. I will not go into the discussion and refer the reader to the references given above, as it is not relevant for position-dependent agreement in the fragment. The translation of the example I have used here is based on the Dutch translation given in the ONW.

‘have’ indicating agreement with the third person plural subject *olla uogala* ‘all (the) birds’ is very well visible, which is remarkable in contrast to the missing first/second person agreement marker in the same fragment.

In Middle Dutch, the final consonant in the plural is absent in a substantial number of cases. However, the final *-n* of the ending in the first person plural is the only one which seems to stay absent (Van Loey, 1980: 57). A rough search through the online version of the *Corpus Gysseling* (Gysseling and Pijnenburg, 1980)⁵, shows that plural verbs followed by a subject pronoun in the first person plural (*wie/wi/we* have an ending in *-e* in 795 of the 2265 cases with inversion, i.e. in about 35% of all cases, which is significantly less than the deletion in Middle Low German which applies in about 95% of all cases (see section 5.4.1 above). The reason that there are no cases in which there is deletion with a second person plural subject pronoun is that the corpus is not diversified enough for genre. This is because it is mainly based on charters, and it consequently has only a very small number of second person plural pronouns, none of which appear in inversion contexts. An example of some query results from the *Corpus Gysseling* of non-inversion and inversion contexts in Middle Dutch are given in (206a) and (206b) respectively.

- (206) a. Ende omme dat wi willen dat dese voerseide quite scheldinghe ende onserliede vrientsce bliue ewelike vast

Ende omme dat wi willen dat dese voerseide quite scheldinghe
and for that we want that this aforementioned lost declaration
ende onserliede vrientsce bliue ewelike vast
and our friendship stays eternally fixed

‘And therefore, we want that this aforementioned let off and our friendship last forever’

- b. Nv reste wi en lettelkijn Onss seluen. want wi moede sijn

Nv reste wi en lettelkijn Onss seluen want wi moede sijn
now rest-1PL we a little our selves because we tired are

⁵<http://gysseling.corpus.taalbanknederlands.inl.nl/gysseling/page/search>

‘Now we rest a little, because we are tired’

Van Loey (1980: 57) mentions that Middle Dutch often had contracted forms in the second person plural, such as *sechdi* ‘lit. say you’ or *maecti* ‘lit. make you’. In these cases, there is no loss of (a part of) the verbal ending. Later, the ending of the verb became voiced, which led to the use of another pronoun (see section 5.6). It might be important to mention that Old Dutch and Middle Dutch did not have a unitary inflection ending in the plural. In Middle Dutch for instance, the first and third person plural end in *-n* and the second in *-t*. The unitary inflection in the plural, which can be seen in contemporary Standard Dutch, is a newer phenomenon whose origin must be situated in the 19th century (De Vogelaer, 2009: 125, 129).

Just like in Middle Low German and in Old Frisian, which are both overlapping in time, irregular verbs in Middle Dutch show position-dependent agreement effects as well (207). This is supported by Van Loey (1980), who mentions that there are cases, such as *hebwi* ‘lit. have we’, in which only the stem is kept in inversion. An example from the *Corpus Gysseling* is given in (207).

(207) a. vort doe wi cont dat [...]

vort *doe wi cont* *dat*
furthermore do we known that

‘Furthermore, we proclaim that [...]’

Second conjuncts with conjunction reduction after a first conjunct with an inversion context show exactly the same pattern as in Middle Low German and Old Frisian as well (208).

(208) voert gheloue wi hen, ende hebben gheloeft goet rechtere ende goet here te wesene van al haren goede

voert *gheloue wi hen, ende hebben gheloeft goet rechtere ende goet*
furthermore believe we them and have promised good judges and good
here te wesene van al haren goede
lords to be of all her good

‘Furthermore, we believe them, and we have promised to be good judges and good lords of all her good’

In Standard Dutch, similar position-dependent agreement effects can be seen in the second person singular. These will be briefly presented in section 5.6.

5.5.5 Intermediate findings

It is remarkable that Old English, Old Frisian and Middle Low German share many similar properties regarding position-dependent agreement. All these languages have position-dependent agreement in the first or second person plural and the exceptions are similar as well. Furthermore, they all share the property that they have unitary inflection in the plural.

Old Dutch and Old High German, which share with each other the property that they do not have a unitary inflection ending in the plural, behave differently. Old High German seems to have another type of position-dependent agreement in the first person plural, which is in all probability due to assimilation between the final nasal in the verb and the labial *w-* of the following subject pronoun. Old Dutch (Low Franconian) could in this respect behave like Old High German, as the only real example of the absence of the final consonant is found in a text which is heavily influenced by Old High German. Middle Dutch however shares a lot of properties with the Middle Low German examples, which could point to a similar phenomenon in Middle Dutch. If *hebban olla vogala* really were Southern West Flemish (and not Kentish), the (probable) deletion in it might be a phenomenon typical for the coastal Flemish areas, which are Saxon dialects as well (see for instance Devos, 2002, 2006 for an overview of the origin and the structure of the Southern Dutch dialect area and for some common Saxon features in the (Saxon) Dutch dialects respectively). An in-depth historical study of the distribution of the phenomenon in Middle Dutch could shed light on this.

For now, it can at least be said that the Ingvæonic languages Old English and Old Frisian and the (Saxon) Middle Low German writing languages have position-dependent agreement in the first and second person plural in common. Further in-depth research will need to deter-

mine what the exact properties of the loss of the final consonant in Old High German, Middle High German, and in the examples in Old Dutch and Middle Dutch are.

5.6 Original environment and spread

As the absence of the final consonant in Middle Low German is virtually omnipresent, it is hard to trace one specific environment in which the loss of the final consonant in inversion in the first and second person plural might have originated. Another difficulty with tracing the origins of the structure is the fact that Old Saxon has no occurrences of position-dependent agreement at all, except for the special hortative forms. One possibility is that the amount of data we have from Old Saxon is too small to be able to see the phenomenon represented, and that Old Saxon thus could have had sparse examples of deletion that coincidentally did not show up in the small amounts of texts that still exist. This hypothesis can be tested by comparing the number of examples with (and without deletion) in the Old Saxon dataset to the extensive Old English dataset from the YCOE, by means of Fisher’s Exact test of independence, conducted on table 5.13, in which I have not taken the *wita*-forms into consideration.

	Deletion	No deletion	Total
Old English	621	397	1018
Old Saxon	0	52	52
Total	621	449	1070

Table 5.13: Input for Fisher’s Exact test of independence comparing the Old English and the Old Saxon dataset

The resulting p -value shows that the difference between deletion in Old Saxon and Old English is statistically significant at the 1 percent level ($p = 2.2 \cdot 10^{-16}$), which means that it is highly unlikely to be a coincidence that the Old Saxon text(s) (fragments) show no deletion while the Old English ones do. Both datasets are thus inherently different concerning this phenomenon, as they show no significant correlation. There are three possibilities to explain this, one being that the deletion in Old Saxon only developed after the 9th century during the time in which there is an attestation gap between Old Saxon and Middle Low German written attestations. A second option is that these facts support the idea that the attested Old Saxon texts are not representative of the predecessor language of Middle Low German (see section 1.2). Furthermore, it is possible that

Old Saxon texts such as *Heliand* only reflect the written and not the spoken language, which could entail an archaic or polished language. The idea that the Old Saxon documents might not be representative of the spoken Old Saxon language could be supported by the fact that the closely related (but temporary very diverse) Old Frisian and Old English do have deletion and by the fact that Middle Low German has it to such a great extent, even in the earliest texts. The absence of the final consonant in Old English in particular suggests that this absence is a much older phenomenon in general, which had been present in Ingvæonic even before the Anglo-Saxon settlement.

In section 5.5.3, I showed on the basis of the verbal endings in the YCOE that deletion is very common in Old English, though not as common as in Middle Low German. As the Old English cases are presumably the oldest examples of position-dependent agreement effects in the Germanic languages, the large amount of Old English data can indirectly shed a light on the question whether it originated in a certain environment from which it spread. In order to test the hypothesis that the absence of the final consonant originated in a certain environment, I designed multiple queries to search through all clauses with a finite verb followed by a first or second person plural pronoun in inversion in the YCOE, which could be done fairly easy because the corpus is tagged and parsed. Forms of *be* ‘to be’ were excluded from the study as they behave differently in Middle Low German. The corpus queries were executed with CorpusSearch (Randall et al., 2005). The query results, summarized in table 5.14, make it clear that person, type of verb and tense have a statistically significant influence on the possibility of deletion and that the verbs actually do seem to originate in a specific environment.

In the first place, the deletion is significantly more common in the second than in the first person plural ($p = 5.784 \cdot 10^{-13}$ in a chi-squared test of independence). The final consonant of the unitary inflection ending in the plural is absent in about 68.15% of the cases in the second person plural, while it is only missing 46.36% of all cases in the first person. A further relevant distinction is that between lexical verbs and modals/*have* and auxiliaries (henceforth MHA verbs), which are all labelled separately in the corpus. The latter always have *-n* as final consonant in the unitary inflection ending in the plural, unlike the lexical verbs, which end in *-t*. Combined with the distinction in person, the deletion is most common in lexical verbs in the second person plural (68.37% of all cases), but only slightly less frequent in the MHA verbs (deletion in 67.03% of all inversion cases). The percentages of deletion in the first person plural are lower and

differ between the verb types: there is 60% deletion in MHA verbs, but only 30% in lexical verbs, which is statistically significant in a chi-squared test of independence ($p = 0.004981$). Furthermore, tense has a statistically significant influence on the occurrence of deletion as well: deletion happens in 61% of all cases in the present, whereas it happens in the past in only 39% of all cases ($p = 4.478 \cdot 10^{-06}$ in a chi-square test). Based on the absolute and relative quantities found in the corpus, the interaction of the three parameters is shown in table 5.14, which shows that the leading environment for deletion is that of the second person plural verbs in the present tense. The deletion is least common in lexical verbs in the past tense in the first person plural, with a difference of almost 60%.

Person/ number	Tense	Type	No consonant	Consonant	Total cases	%no consonant
2PL	present	LEX	268	61	329	81.46%
2PL	present	MHA	57	23	80	71.25%
2PL	past	LEX	38	19	57	66.67%
1PL	past	MHA	5	3	8	62.50%
1PL	present	MHA	120	82	202	59.41%
2PL	past	MHA	4	5	9	44.44%
1PL	present	LEX	113	149	262	43.13%
1PL	past	LEX	16	55	71	22.54%
Totals:			621	397	1018	61.00%

Table 5.14: Percent of endings missing a final consonant in inversion in the YCOE, by person, time and verb type

To test the importance of the environment more in-depth statistically, I performed a multiple regression analysis in Rbrul which measures the strength of the interaction between the factors described above, i.e. between deletion and the variables person (1/2), tense (present/past) and type of the verb (lexical/auxiliars). The only statistically significant relation is the one between person and function ($p = 7.2 \cdot 10^{-05}$), which confirms that the environment predicting most deletion to happen is that featuring lexical verbs in the second person plural. The results of the analysis are given in table 5.15.

Person:function	Coef	Mean
2PL:LEX	0.111	0.741
1PL:MHA	0.111	0.610
2PL:LEX	-0.111	0.578
1PL:LEX	-0.111	0.328

Table 5.15: Influence of the factors person and function of the verb on deletion

To know for sure if there is diachronic change in the ending, it is of course necessary to link these results to dates. A problem in this regard is the fact that most of the texts in the YCOE are not dated, though certain efforts have been made. Based on a balanced corpus of Early English texts, Zimmermann (2013) applies machine learning techniques to draw observations from dated Early English texts to develop a classifier which can indicate which period a given, undated text belongs to. The classifier is based on 12 syntactic features which measure changes in early English and makes use of the Naive Bayes Algorithm. The classifier is quite robust, as it classifies 91% of the Early English texts (in the test set) in the right period. Based on this idea, Ecay et al. (2016) are developing an alternative method which integrates quantitative information on syntactic features to be able to come up with an estimated date and an estimated period.⁶ The method is based on regression models for syntactic features such as relative clause constructions, the relative order of genitives, verb movement to C and so on. I have linked my data to the texts that were dated within this project, which is about half of all the texts in which I found first or second person plural verbs in inversion contexts. I linked the relative frequency of endings in which the final consonant of the unitary inflection ending was absent to the estimated dates and periods of the texts, after which I performed a correlation test on the dataset. This test indicates whether there is a correlation between the variables period/date and ending, expressed by a correlation coefficient. The correlation coefficient linked to period is +0.57, which means that there is a moderate positive linear relationship. The link between the exact year and the ending is a bit less strong ($r = 0.5$). The relationship is represented with a scatter plot

⁶Ecay et al. (2016) classify the data into three period ranges, namely:

1. 850-900
2. 900-990
3. 990-1100

and an estimation line in figure 5.2. Though this graph is based on estimated dates and is thus not able to provide conclusive evidence, it does at least suggest that there is a diachronic evolution in Old English, in which the final consonant of the unitary inflection gets used less often over time, which might have looked similar in Old Saxon as well.

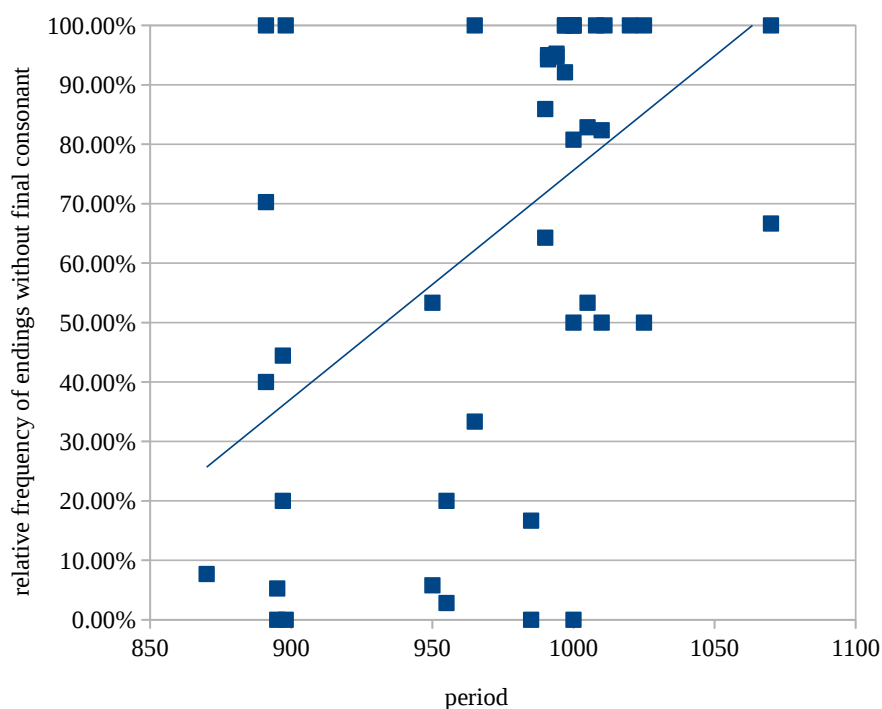


Figure 5.2: Relation between estimated period of writing and first or second person plural ending without consonant.

The relation between period and absence of the final consonant is strongest when only looking at the second person plural in Old English ($r = 0.66$ for period and $r = 0.58$ for exact year), whereas it is less strong in the first person plural ($r = 0.52$ for period and $r = 0.44$ for exact year). Both graphs are given in figures 5.3 and 5.4 respectively.

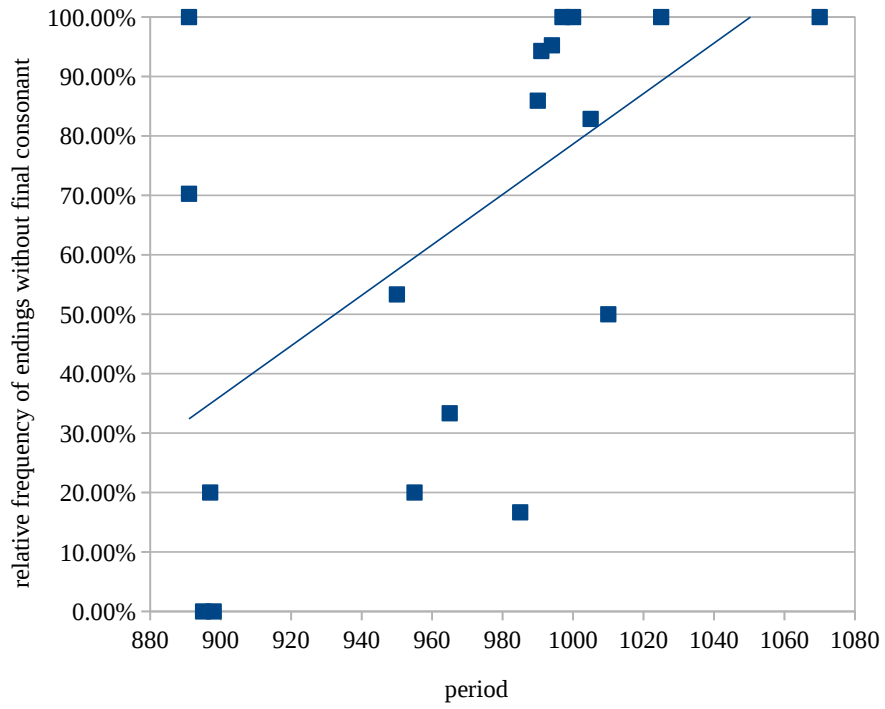


Figure 5.3: Relation between estimated period of writing and second person plural ending without consonant.

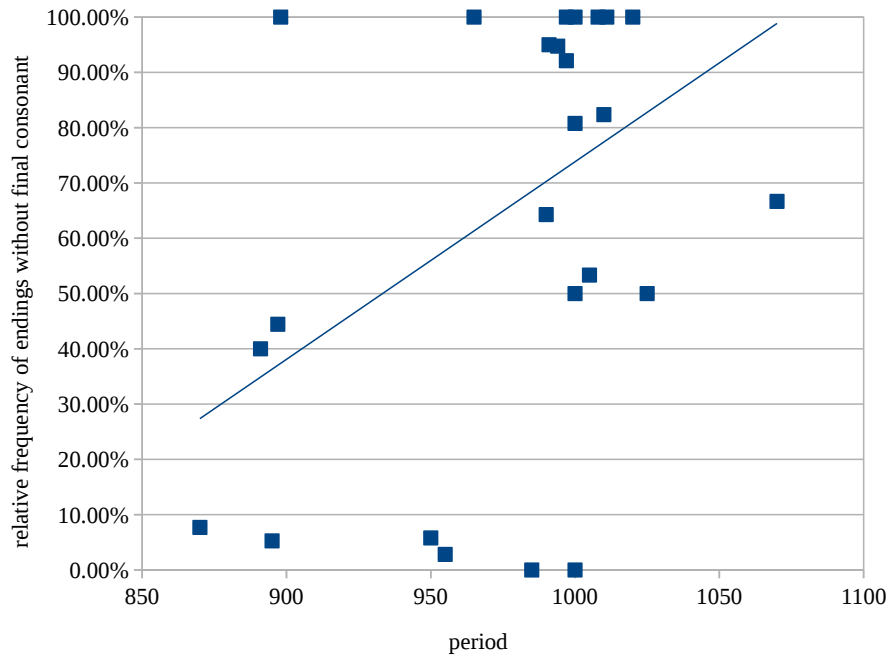


Figure 5.4: Relation between estimated period of writing and first person plural ending without consonant.

It is remarkable that this proposed overview of the factors that have an influence on the presence or absence of the final consonant in Middle Low German, viz. especially the Eastern Dutch Dialects, also fit the data of the modern Low German dialects which I presented in section 5.5.2. Applying the parameters time, person and verb type from table 5.14 to the verbal paradigm of Vriezenveen and Haaksbergen, for instance, we see that final consonant is absent in all forms of the second person plural, in the present as well as in the past.

The assumption that deletion in Middle Low German originated from the same environment as it did in Old English, i.e. from the second person plural, is supported by the fact that the second person plural seems to influence other verbal endings as well. In Middle Low German, there are many examples of polite address of single persons using the second person plural form in Middle Low German letters, which show deletion of the final consonant of the ending in inversion contexts as well. Furthermore, related Standard Dutch also has these effects in the second person singular. The ending of the

verb in the second person singular in Dutch results from the second person plural which used to be *-t* in Middle Dutch (see section 5.5.4). Just like in Middle Low German, it was used for polite addresses in the singular as well. Though no relevant non-inversion second person plural examples could be found in the *Corpus Gysseling* due to the included text types, it is certainly possible that this alternation derives from a similar phenomenon in Old/Middle Dutch, though different from the evolution in Middle Low German. The traditional view on how the alternating ending in the second person singular in Dutch emerged, first described by Verdenius (1924), is that the velar of the pronoun remained unpronounced and that the *-t* of the finite verb in non-inversion contexts became voiced. The voiced consonant was then reinterpreted as part of the pronoun and through lenition eventually led to the new pronoun *jij* (f.i. *hebt ghi* > *hebdi* > *hebdzji* > *heb je*). The Standard Dutch pronoun *je* thus had its origin in enclisis, but later also spread to non-inversion contexts (De Vogelaer, 2005).⁷ This loss of the final consonant of the finite verb in inversion contexts in the second person singular in Standard Dutch and in Middle Low German is undoubtedly a much younger evolution than deletion in the second person plural in Old English for instance. An example of deletion of the final consonant in the second person singular in Standard Dutch is given in example (210a) for inversion contexts and in (210b) for non-inversion contexts.

(210) a. Jij klaagt elke dag over iets anders.

Jij klaagt elke dag over iets anders.
 you complain-2SG every day about something different

⁷ Notice that Dutch has cases of conjunction reduction which have exactly the same properties as the conjunction reduction examples with a first conjunct with inversion in Middle Low German and Old Frisian. This is however considered a stylistic error, called *Tante Betje achter het gordijn* (lit. ‘Aunt Betty behind the curtain’). Such an example, in which the first conjunct has an inversion context with the expected inversion-ending without the final *-t*, while the second conjunct keeps the *-t*, is given in ex. (209) (Entjes, 1972; Mesland, 1971).

(209) Thuisgekomen **breng je** gauw de kadootjes naar boven en **stopt** ze onder je bed.

Thuisgekomen breng je gauw de kadootjes naar boven en stopt
 home=came bring-2SG you-2SG quickly the gifts to upstairs and put-2SG
ze onder je bed.
 them under your bed.

After coming home, you quickly bring the gifts upstairs and put them under your bed.
 (example from Mesland (1971), my own translation and bold marking)

‘You complain about something different every day.’

- b. Klaag jij elke dag over iets anders?

Klaag jij elke dag over iets anders?

complain you every day about something else

‘Do you complain about something different every day?’

Examples (211a) and (211b) show the alternation in the verbs in a formal address of a single person in a Middle Low German inversion and non-inversion context in Middle Low German respectively.

- (211) a. gy heffet my gesant x gulden

gy heffet my gesant x gulden

you have-PL me-ACC sent ten guilder

‘You have sent me ten guilder’

(Göttinger Liebesbriefe)

- b. des moghe gy gelouen my

des moghe gy gelouen my

this may-2PL you believe me

‘You may believe me in this’

(Göttinger Liebesbriefe)

The Old English data show that the deletion started and spread from verbs in the second person plural. In addition to this, Hogg and Fulk (2011: 215) suggest, following Bammesberger (1981: 80), that deletion might have been initiated by analogy to the verbs in the third person singular in the optative mood. Furthermore, they mention that “Gmc [Germanic] subjunctive corresponds formally to the PIE optative rather than to the PIE subjunctive, and hence in many handbooks it is called an optative” (Hogg and Fulk, 2011: 211). Brunner (1965: 276-277) argues for an origin in the optative as well, especially because the verb in inversion takes the stem vowel of the optative. This assumption is however not necessarily true according to Benskin (2011: 160):

[...] Brunner held the prime evidence in its favour to be West Saxon *hæbbe*, with the root vowel of the subjunctive, as the indicative form in the verb-pronoun sequence: the inversion corresponding to *we habbað* is not ***habbe*

we, but *hæbbe we*. The vocalism, however, is less weighty evidence than Brunner thought. The West Saxon reflex of West Germanic *a* is generally *æ*, except (i) before a nasal consonant, and (ii) before certain consonant groups; but in (iii) syllables closed by non-nasal geminate consonants, it is usually *a* if a back vowel follows (Campbell, 1959: §158). Phonologically, therefore, *hæbbe* and *habbað* conform to type, whereas ***habbe* and ***hæbbað* do not; and since *hæbbe* is otherwise a present indicative, in the first person singular, the phonological distribution of *a* and *æ* is reinforced from within the indicative paradigm. Rather, Brunner's forms telling in favour of Sweet's history are *habbon we* and *nallon 3e*, cited from the Old Northumbrian gloss to the Rushworth Gospels: these are functionally indicative, but have subjunctive endings.

Unfortunately, the hypothesis of an origin in the optative cannot be tested in the YCOE, as plural forms in *-e* followed by a plural subject pronoun are always unmarked in the corpus.⁸ The Middle Low German examples in which the subjunctive plural forms of *sin* do lose their ending and the indicative ones do not, speak to the advantage of an equal origin in Middle Low German, although an alternative reason for this will be presented in the next section.

5.7 Analysis

This section deals with the questions (i) why another verb form arises, (ii) why deletion exclusively takes place in inversion, (iii) why it only ever happens in the first and second person plural and (iv) why the ending of the imperative is not affected.

5.7.1 Assimilation

One of the ideas about the alternating ending in the first and second person plural in Middle Low German is that it is a result of assimilation of the last syllable of the verb to the onset of the first syllable of the pronoun. Assimilation effects causing some sort

⁸<http://www-users.york.ac.uk/~lang22/YCOE/doc/annotation/YcoePos.htm#mood>

of double agreement can be seen in Middle Low German, but only ever in the second person singular. The pronoun in inversion contexts in the second person plural is almost always connected to the verb form in the orthography, whereas the clitic in the first and second person plural dataset are (with the exception of one single case) detached from the verb, as can be seen in example (212).

(212) *du bist eyn Konig israhel*

du bist eyn Konig israhel

you are a king of.israel

‘you are a king of Israel’

(Qvatuor Evangeliorum)

The second person singular verbal ending *-st* in Middle Low German, and also in for instance Middle English, Middle High German and Middle Dutch, derives from the pronoun *ðu*. It developed from reanalysis of the verb and the pronoun in inverted position, so the ending *-s* became *-st*, bearing a rest of the *ð-* of the pronoun (Brunner, 1965: 271). In Middle Low German the pronoun remains *du* in non-inversion contexts, but it appears as a clitic or as a deficient pronoun with assimilation to *-t*. Example (213a) shows a second person singular in a non-inversion without a topic, (213b) shows one with a topic. Both examples show the deficient clitic subject pronoun attached to the verb.

(213) a. *bistu simon en sone der vrowen johannem*

bist=u simon en sone der vrowen johannem

are=you simon a son of.the wife to.johannes

‘are you Simon a son of the wife of Johannes’

b. *we bistu denne*

we bist=u denne

who are=you then

‘who are you’

(Qvatuor Evangeliorum)

Next to assimilation effects, different researchers mention that the phenomenon does not correspond to any other known Germanic sound rules (see for instance Höhle (1997: 110)

for Old English and Old High German or Hoekstra (2001: 342) for Old Frisian). Walde (1900: 125, footnote 1) cannot find any regular sound changes in Germanic that can account for this phenomenon either, but wonders if there might be deletion of the original endings *-om*, *-eð*, *-að* before *w-* or *j-* (instead of with deletion of the final consonant of the unitary inflection ending). At least for the first person plural, this would look similar to the situation in Lower Bavarian. This possibility does not seem plausible to me for Middle Low German, as the consonantless ending in inversion only appears after a period in which most of these older endings already disappeared. The Old English data presented in the last section clearly showed that there was a diachronic development in which the consonantless ending was used less only after the use of the unitary inflection ending in *-n* or *-t* had become more common. The same could account for the other languages that were presented in section 5.5.

This explanation could hold up for the position-dependent agreement effects seen in pre-alphabetic Old Norwegian, which used to distinguish the three persons in the plural with different morphology markers on the verb.⁹ In early Old Norwegian, this distinction is lost due to analogical leveling by a change starting in inversion contexts in the first and second person plural. Concretely, the first person plural ending *-um* alternates with *-u* in inversion contexts, i.e. when the pronoun *vér/vit* ‘we’ is immediately following the verb, but it also spreads to contexts in which there are intervening elements or to non-inversion contexts. A similar phenomenon applies in the second person plural, in which the ending *-uð* becomes *-u* in inversion contexts. Similar to what happens in the second person singular in Middle Low German, the ending of the verb is reanalyzed and ends up at the subject pronoun (second person plural *it* ‘you’ for instance becomes *þit*). A similar explanation was given for the position-dependent agreement effects in Old High German in section 5.7.2.

I thus believe that what happens in Old Norwegian is similar to the unification of the endings in the plural, described in section 5.2, which has taken place in the Ingvæonic languages before the loss of the consonant: The Germanic endings in the plural of the indicative present, consisting of a stem vocal and a final consonant (cluster) *-*m*,

⁹I am most grateful to Tam Blaxter, author of a PhD thesis on the evolution of the ending in the first person plural in Old Norwegian, for sharing data with me. They also shared their observations on the second person plural and on the evolution of the pronoun in Old Norwegian and in Modern Swedish and the Modern East Norwegian dialects. My analysis of the origin of the new endings does not reflect their view about this.

$-\delta$ and $-\ast n\beta$, unified, leading to a unitary inflection for all persons in the plural. The deletion of this unitary inflection ending in the Ingvæonic languages is a separate development that happens only after the consolidation of the unitary inflection, or at least when the new ending in the first and the third person plural was already productive. The change in Old Norwegian, however, might be an argument supporting the view on the emerge of the unitary inflection in Germanic through leveling which I have adopted in the beginning of this chapter.

5.7.2 Towards an interface approach

Having the Old English data in mind, it might be assumed that second person plural verbs must have been the leading environment for change in Old Saxon/Middle Low German as well. I assume an initial environment in which the final consonant of the unitary inflection ending $-t$ disappeared under influence of the initial velar in the second person plural pronoun. This is thus very similar to what Walde (1900) says, though I believe that this deletion only applied after the unitary inflection in the plural was (almost) fully developed. I would propose the ending in $-t$ as the origin of the change for several reasons. It is a sound which is only present in the present tense in Middle Low German, which seems to be the tense in which deletion is most common in Old English. The ending corresponds to the non-inversion endings $-\beta$ and $-\delta$ in Old Frisian and Old English respectively. Furthermore, Old English has this ending in $-\delta$ in the present, and not an ending in $-n$, as the change seems to originate in the Old English present. Another argument is that the ending in $-t$ is, according to Lasch (1914), the most common one in the high-frequent verbs such as *hebben* and *geven* (see section 5.2 and Lasch, 1914: 226). Therefore, the most affected verb forms were initially in all probability the ones with $-t$ as their unitary inflection ending in inversion as well.

The reason why the last consonant in these structures exactly drops before the velar remains unclear. A complete overview of the possibilities presented for Old English (i.e. for the West Saxon concord) is given by Benskin (2011). I refer the reader to his article to read the full explanation of the approaches of Horn (1921, 1923) and Luick (1922, 1924), which I briefly present below. Horn (1921, 1923) suggests that the endings in the Old English plural forms that were affected might have become functionless, as the number becomes clear from the pronoun. This approach would however not explain why the third person is not affected. Another a much more plausible approach, which does

take this difference between first and second person on the one hand and third person on the other hand into approach, is the one of Luick (1922, 1924), which is based on stress patterns. In a sequence of an unstressed verbal ending and an unstressed first or second person plural pronoun, the formed consonant clusters are reduced in an unusual way, as the initial consonants of the pronouns are kept. In the third person, however, such a reduction does not take place in the third person plural due to the resulting consonant clusters *-bh-* and *-nh-*: The initial vowel of the third person plural pronoun *hie* ('they') was lost instead, though this is not represented in the orthography. If a pronoun with another initial consonant had followed, the ending of the verb would have been deleted (Benskin, 2011: 161-162).

The question remains how the theory of Luick (1922, 1924) could account for the corresponding Middle Low German pronoun *sie* (from Old Saxon *sia/sea/sie*, see Gallée, 1891: 237) or for Old Frisian *se* (alternating with *hia*). Krogh (1996: 319-323) describes extensively how these forms derive from a West Germanic pronominal stem **si*, which must have been common in all West Germanic languages. In short, the personal pronouns deriving from this West Germanic stem are still common in the nominative and the accusative of the singular feminine pronouns and of all the nominative and accusative plural pronouns of all genera in the paradigms of Old High German, Old Dutch and Old Saxon. Furthermore, there are remnants in Old Frisian (i.e. the above-mentioned third person plural pronoun *se* and in Middle Kentish, which has in the accusative singular feminine and in all genera of the accusative plural the pronouns *es* and *is*. An alternative explanation to the one of Luick (1922, 1924) is therefore necessary.

The initial deletion might have been influenced and/or accelerated by analogy to the first and third person (polysyllabic) verb forms, which were identical to the second person plural one after deletion (see for instance *hebbe we* (lit. 'have we') vs. *hebbe ick* (lit. 'have I') or *hebbe he* (lit. 'has he')). Even if this assumption were right, the question why the deletion of the final consonant spreads to the first but not to the third person plural still needs to be dealt with. A possible explanation for that is purely phonological as well. Before the unitary inflection was formed, the coda of the third person plural ending in the indicative and in the imperative used to be the consonant cluster **-nh-* in Germanic (Krogh, 1996: 331-336). As I said in section 5.2, this cluster pre-existed a long time before changing to the unitary inflection ending: the old ending *-nt* still appears in Westphalian texts from the 13th and 14th century (Lasch, 1914) and there are

forms in which the nasal before the spirant is still written in Old Saxon as well (Gallée, 1891: 246). This complex coda may have prevented deletion effects from applying in the third person plural. There are two elements which can support this theory. The first one is that we learned from the Old English data that deletion originates in the present tense, which is the only tense in which the ending *-nð* used to occur in Old Saxon. A second argument is that deletion often does not happen in forms of the verb *sin* ‘to be’. The fact that *sin* only sometimes drops *-n/-t/-nt* at the end of the verb could be due to the fact that *sin* ‘to be’ is an irregular, suppletive verb, consisting of four different roots (Nübling, 2000: 296), see section 5.4.2. Alternatively, it is possible that deletion in the forms with *-(n)t* is blocked due to the complex coda, as I showed in example (178a), repeated here.

(178a) Leuen heren Nu sint wy an desseme dage gantz vrolick gewest

Leuen heren Nu sint wy an desseme dage gantz vrolick gewest
 dear lord now are-1PL we on this day very happy been

‘Dear Lord. We have been very happy upon this day.’ (Veer Koepluden)

This possibility is strengthened by the fact that the deletion does apply in all subjunctive forms of *sin* (for instance *were* instead of *weren*, as was illustrated with example (179a), repeated here.

(179a) Beter were wij vngeboren

Beter were wij vngeboren
 better were-1PL we unborn

‘We would better be unborn’ (Bordesholmer Marienklage)

Still, the absence of the final consonant cannot be explained purely by the adjacency of two elements, as the deletion does for instance not happen in just any sequence of consonant/coda and initial velar in Middle Low German. Some examples are for instance *dat gold* ‘that gold’, *dat geschah* ‘that happened’, *de worden geheten ridders* ‘which are called knights’ (all from *Sassenchronik*). It also never happens in the sequence of complementizer and pronoun, elements which take the same syntactic position as the verb and the first or second person pronoun in inversion in Middle Low

German, for instance in *dat gi [...] scolen anbeden* ‘that you will worship’ (from *Quatuor Evangeliorum versio Saxonica*). Complementizer agreement is however possible in this exact environment in other West Germanic dialects (Hoekstra, 1997), like for instance in West-Flemish (Haegeman and Van Koppen, 2012) and (non-Ingvæonic) Bavarian (Weiß, 2005), in which the agreement morpheme on the complementizer is moreover the same as the ending of the verb in inversion. The change is therefore in all probability linked to these clausal positions as well. A link between position-dependent agreement and complementizer agreement has often been described in the literature already (Haegeman and Van Koppen, 2012; Weiß, 2005; Zwart, 1997, 2012).

Deletion only happening in a sequence of verb and pronoun has also been linked to the fact that verb and pronoun seem to form some sort of prosodic unit, which was also the original idea behind the theory of Luick (1922, 1924) described above. Zwart (2012) proposes, based on Goeman (2000), that Dutch dialects developed complementizer agreement via analogical extension of a pattern formed by first singular verb forms of monosyllabic auxiliaries forming a morphophonological unit with unstressed pronouns. The idea of a unit consisting of verb and pronoun is appealing and has been formulated earlier by Solà (1994) as well. He proposes that the enclisis of a pronoun can convey a morpheme in itself, independently of the content of the host, though he does not give an in-depth elaboration of this idea. A more tangible variation on the idea of a unit has been formulated by Ackema and Neeleman (2003, 2017) using the framework of Distributed Morphology and is partially based on prosody (DM; Halle and Marantz, 1993, 1994; Siddiqi, 2010). This idea will be presented in the next section, preceded by a short introduction to the framework in general. I refer the reader to the many articles about DM cited here, to have a broader overview over the framework.

5.7.3 Position-dependent agreement within Distributed Morphology

There are two major ideas within DM, the first one being that syntactic structure applies “all the way down”, which means that morphology and syntax have the same type of constituent structure. In DM, syntax thus deals with syntax and morphology at the same time, as it operates on sub-word units (Bobaljik, to appear). Secondly, the idea of late insertion is important. The sub-word units lack a phonological form, which they

receive when vocabulary insertion happens post-syntactically, when the mapping of syntax to phonological form takes place (Bobaljik, to appear).

As a consequence, phonological features are mappings of morpho-syntactic features. There is however no one-on-one mapping of morpho-syntactic to phonological features: Although forms are always fully specified with morpho-syntactic features, the (phonological) Vocabulary Items (VIs) themselves can be underspecified (Halle and Marantz, 1993). DM also has allomorphic rules (also called readjustment rules, morphophonological rules etc.), i.e. rules which can influence the spell-out of an underlying set of morpho-syntactic features (Bobaljik, to appear). These rules could offer an explanation for the deleted agreement endings in Middle Low German, since they are applied to morphemes within the immediate environment of other morphemes. Within DM, these rules are part of a morphological operation called readjustment (Siddiqi, 2010) and take place on the level of the morphological structure. It is possible for VIs to encode different phonological realizations of identical sets of morpho-syntactic features in different contexts, which is called allomorphy. In such a case, two types of allomorphy can occur: phonologically conditioned allomorphy and morphologically conditioned allomorphy. In the first case, the realization of a certain sound depends on the surrounding sounds. In the second case the realized features depend on the stem an affix is attached to. The application of allomorphy rules occurs after the VIs have been inserted.

Ackema and Neeleman (2003, 2017) propose deletion as it happens in position-dependent agreement in the Dutch second person singular to be an interface phenomenon within phonological phrases in which readjustment rules can apply. In that way, the spell-out of features can be triggered or inhibited. This approach is particularly interesting for the Middle Low German data, as first and second person plural pronouns differ from third person plural pronouns in the fact that they carry speech act participant features, i.e. a speaker feature in the first person plural and a participant and a speaker feature in the second person plural. Concretely, Ackema and Neeleman (2003) give the Standard Dutch second person singular examples of *jij loopt* ‘you walk’ and *loop jij* ‘do you walk’, lit. ‘walk you’, in which the second person singular verb has the ending *-t* in subject-initial clauses, but does not spell-out the same ending in inversion contexts, as *-t* is absent there. They state that the observed alternation in the ending of the verb, which I have already introduced in (210a) and (210a), is due to an allomorphy rule that applies to the underlying morphological features if verb and pronoun belong to the same

prosodic phrase. Their proposal is thus that there is a third type of readjustment rule which is not based on surrounding sounds or stems, nor on syntactic adjacency, but on prosody. The difference between clauses with inversion and subject initial ones is that subject and verb belong to a different prosodic phrase in non-inversion contexts (214a), whereas they belong to the same prosodic phrase in clauses with inversion (214b). In languages such as Dutch, the right edges of syntactic phrases correspond to the right boundaries of prosodic phrases, as can be seen in (214c) for inversion and in (214d) for non-inversion contexts. Ackema and Neeleman (2003, 2017) base their findings on many publications which argue convincingly for a relation between phonology and syntax, and more specifically between phonological phrases and syntactic phrases, such as McCarthy and Prince (1993); Selkirk (1986, 1984) and Truckenbrodt (1999).

(214) a. Jij loopt dagelijks met een hondje over straat.

Jij loopt dagelijks met een hondje over straat.

you walk daily with a dog over street

‘You walk daily with a dog on the street.’

b. Dagelijks loop jij met een hondje over straat.

Dagelijks loop jij met een hondje over straat

daily walk you with a dog over street

‘Daily you walk with a dog on the street.’

c. {Jij} {loopt dagelijks} {met een hondje} {over straat}

d. {Dagelijks} {loop jij} {met een hondje} {over straat}

(Ackema and Neeleman, 2003: 693, ex. 19)

The rule thus applies if one prosodic phrase contains multiple terminal nodes which contain the same set of morpho-syntactic features: in those cases one of the features that both terminal nodes have in common is not realized any more. This can have a phonologically noticeable influence on one of the terminals if the language has a particular spell-out for the deleted morpho-syntactic feature. The morpho-syntactic features they detect for verbs in the Dutch present tense are participant (in the speech act, Prt), addressee (Add) and plural (PL), resulting in the paradigm of VIs for verb endings given in example (215).

- (215) [Prt] \rightsquigarrow /
 [Prt, Add] \rightsquigarrow /-t/
 [PL] \rightsquigarrow /-en/
 elsewhere form: /-t/ (Ackema and Neeleman, 2003: 693, ex. 22)

For the position-dependent agreement phenomenon in Dutch, the allomorphic rule they propose is given in example (216).

- (216) {[_V Prt Add] [_D Prt Add]} \rightsquigarrow {[_V Prt] [_D Prt Add]}
 (Ackema and Neeleman, 2003: 693, ex. 23)

In this case this means that the subject and the verb (D and V respectively) in an inversion context belong to the same prosodic phrase and can be presented as the two feature bundles above. In the case of the second person singular in inverse constructions in Dutch, the VP loses a feature which happens to have a certain spell-out in Dutch, i.e. it loses the Addressee feature and the spell-out of the *-t*, which is, according to Ackema and Neeleman, the phonological realization of the addressee-feature. This *-t* is consequently not spelled out on the verb anymore. Meanwhile, in a clause without inversion, the XP boundary induces also a prosodic phrase boundary, but preceding the verb, which means that the subject does not end up in the same prosodic phrase as the verb. Hence, the prosodic rule cannot be applied, since the allomorphy rule can only be applied within a prosodic phrase.

Although this theory seems appealing as a basis for the analysis of position-dependent agreement in Middle Low German, since it concerns both syntactic and phonological information, an adaptation of the rule is necessary to deal with the plural Middle Low German data. Though this loss of an addressee feature might hold for contemporary Dutch data, it does not for all diachronic data. This is because the phenomenon which occurs in the Dutch second person singular was originally the result of a diachronic process in which the plural double-agreement phenomenon was transferred to the singular. The position-dependent agreement properties of the original second person plural were thereby kept. I therefore propose to adapt the theory developed by Ackema and Neeleman (2003) to deal with the plural data only. Contrary to Ackema and Neeleman (2003), I propose the introduction of a feature instead of the loss of it.

Just like in Dutch, the right edges of Middle Low German syntactic phrases correspond to the right boundaries of prosodic phrases, as can be seen in example (217).

- (217) a. {wi} {bidden}
 b. {bidde wi}
 c. [TP [DP wi] [T bidden] [...]]
 d. [CP [C bidde] [TP [DP wi] [...]]]

An advantage of this approach is that it is independent of the theoretical approaches to the place of the finite verb in the syntactic structures, whether one assumes the verb to move from I/T to C in inversion contexts (see for instance Zwart, 1993) or for it to stay in C while the subject pronoun moves from IP to CP (as for instance in the pre-minimalist approach of Den Besten, 1983).

I propose a change that originates in the prosodic phrase of second person plural verb in the present subjunctive mood followed by the second person plural pronoun. This change is initially phonologically triggered by the adjacency of the consonant in the coda of the verb and the initial velar of the pronoun, for instance in (218).

- (218) [CP [C hebbe~~f~~] [TP [DP gie] [...]]]

The process is extended by analogy to the first and third person singular of polysyllabic verbs, which are identical to this new plural form if the final consonant in the plural drops. Compare for instance the inversion forms of *hebben* ‘have’ in (219).

- (219) 1 SG hebbe ik
 3 SG hebbe hie/sie
 2 PL hebbe gie

Deletion analogically extends to the first person plural, but not to the third, as it is initially blocked there by the longer coda.

- (220) hebbe~~f~~ gie
 hebbe~~f~~ wie
 hebbent sie

Even when the consonant cluster *-nt* disappears in the third person plural, consolidating the *Einheitsplural*, the loss of the final consonant of the unitary inflection in the plural

does not spread to this environment and it remains a feature specific to first and second person environments. This is because the deletion of the final consonant in first and second person plural, a phonological change, is reinterpreted as a systematic one which opposes the third person plural to the first and the second person plural, i.e. a difference between the default third person/plural and persons bearing speech-act participant features. The morphologicalization of an originally phonological rule is predicted by the life cycle of phonological processes as, among others, described by Bermúdez-Otero and Trousdale (2012) and Bermúdez-Otero (2015). The deletion spreads to other moods and tenses in the first and second person by analogical leveling.

The allomorphic rule behind the new systematic change in Middle Low German means that the common morpho-syntactic features that are carried by the verb and the pronoun and which are normally only spelled out by the pronoun will be spelled out by the verb as well in this specific environment, if the verb and the pronoun holding a common plural feature are in the same phonological phrase. In non-inversion contexts, only the plural feature is spelled out, resulting in the regular endings of the unitary inflection in the plural. The rule for the first person plural is given in (221a), the one for the second person plural in (221b). A change in the third person plural is therefore impossible, as it is impossible to express more or fewer features than the one that are expressed already (i.e. in this case just one, plural (PL)).

- (221) a. $\{\{v \text{ PL} \} \dots [D \text{ PL}, \text{Prt}]\} \rightarrow \{\{v \text{ PL}, \text{Prt} \} \dots [D \text{ PL}, \text{Prt}]\}$
 b. $\{\{v \text{ PL} \} \dots [D \text{ PL}, \text{Prt}, \text{Add}]\} \rightarrow \{\{v \text{ PL}, \text{Prt}, \text{Add} \} \dots [D \text{ PL}, \text{Prt}, \text{Add}]\}$

That is, although on the surface, the *-n/-t* is deleted in first and second person plural, one or two extra feature(s) is/are actually expressed. The associated paradigm cells for the verbal paradigm in Middle Low German, which are the underlying morpho-syntactic features found in inversion contexts, are given in (222). The VIs and the paradigm cells which correspond to the first and the second person plural are marked in bold in each example. The paradigm cells show some sort of feature inventory of relevant features for interpreting the word (see for instance Sims, 2015: 127). They are in this example based on the present paradigm of the strong verbs exemplified with *riden* ‘to drive’, as was given in the introduction of the chapter in table 5.1. As there is no one-on-one mapping of morpho-syntactic to phonological features, the VIs based on the given inventory can

be underspecified. This is for instance the case in the unitary inflection in the plural, for which the VIs are presented in (223).

- (222) <rid- [n: SG, Participant]>
 <rid- [n: SG, Participant, Addressee]>
 <rid- [n: SG]>
 <rid- [NUM: PL, Participant]>
 <rid- [n: PL, Participant, Addressee]>
 <rid- [n: PL]>

- (223) [n: SG, Participant] \rightsquigarrow /-e/
 [n: SG, Participant, Addressee] \rightsquigarrow /-st/
 [n: SG] \rightsquigarrow /-t/
 [n: PL] \rightsquigarrow /-en///-et/ (non-inversion)

In inversion, two interpretations of the mapping of the speech act participant features to spell-out of the plural in Middle Low German are possible: One option is that only the feature Participant has a phonological expression, the other is that both Participant and Addressee have a phonological expression, but that they are identical in the Middle Low German dialects. The VIs for the first option are given in ex. (224), the ones for the second option are given in ex. (225).

- (224) [n: SG, Participant] \rightsquigarrow /-e/
 [n: SG, Participant, Addressee] \rightsquigarrow /-st/
 [n: SG] \rightsquigarrow /-t/
 [n: PL, Participant] \rightsquigarrow /e/
 [n: PL] \rightsquigarrow /-en///-et/ (inversion option 1)

- (225) [n: SG, Participant] \rightsquigarrow /-e/
 [n: SG, Participant, Addressee] \rightsquigarrow /-st/
 [n: SG] \rightsquigarrow /-t/

[n: PL, Participant]	\rightsquigarrow /e/	
[n: PL, Participant, Addressee]	\rightsquigarrow /e/	
[n: PL]	\rightsquigarrow /-en///-et/	(inversion option 2)

The second option (225) is supported by data from the modern Low German dialects (see section 5.5.2), in which all persons and numbers are distinguished for each person, but only in inversion. This suggests that the/some Ingvæonic languages and their descendants display some sort of person cycle. This would mean that the verbal endings evolve from distinguishing all persons in the plural over a unified plural ending towards a distinction of persons in the plural again. The expression of more information with a reduced form may seem surprising from the point of view of quantitative iconicity, but is supported by similar findings about complementizer agreement in other West Germanic languages. In the case of complementizer agreement, more features are expressed in this specific domain as well. In languages with complementizer agreement, the endings on C are moreover identical to the inversion endings on the verb (Zwart, 1997).

There are multiple advantages to this analysis. In the first place, it offers a way to deal with the fact that the deletion does not happen in the third person plural, not even after the consolidation of the unitary inflection and despite the difference in initial consonants of the pronouns in all the affected languages. It also explains why the modern Eastern Dutch dialects developed a new ending in the first as well as in the second person plural. Another major advantage is that the analysis is independent of the different theoretical approaches to the position of the finite verb within the syntactic structure, though in both cases, the outcome results from the interplay between syntax and prosody and the mapping of phonological and syntactic phrase edges.

As an outcome of this analysis, it can be concluded that there is a person cycle in Ingvæonic and its more recent descendants. The Germanic verbal paradigm in the plural is unified into one form, though in inversion, a new paradigm arises. Proof of the fact that this new person/speech act participant-marker is really interpreted as such, is also found across dialects, since in Middle English as well as in Old Frisian the new ending is sporadically found in non-inversion contexts as well. It is important to note that this implies that there are no changes to the underlying morphological features given in the paradigm cell in (222): it is only the spell-out which changes over time, depending on readjustment rules taking place on the level of the morphological structure.

5.7.4 Imperatives

A last point that should be addressed is the status of the expressed subject/agent in imperatives. This is because imperatives seem to pattern exactly with second person plural phonological phrases with inversion at first sight, although no deletion applies. Examples like (226), however, seem to show that imperatives might be located further to the left than indicative verbs. Here, for instance, there is an interjection of *o* between the imperative and the vocative.

(226) *Seet o sote maria [...]*

Seet o sote maria [...]
see-IMP.2SG INTJ sweet Mary

‘See o sweet Mary [...]

(Dat myrren bundeken)

This could mean that the imperative or the subject of the imperative in these Middle Low German examples is not part of the same phonological phrase as the subject, or too far away in the structure to form a phonological unit. This idea is supported by research on the (internal structure) of vocatives, which usually places the covert imperative subject as well as the overt imperative vocative at the left periphery of the relative clause in the specifier of a higher functional projection such as VocP (‘vocative phrase’) (Espinal, 2013) or SAhP (‘Speech Act Projection’) (Hill, 2013). This means that the structure of imperatives is similar to that of clauses without inversion in that the subject structurally precedes the verb, and in that the verb and the overt or covert vocative are not in the same prosodic phrase. It explains why the imperative verb keeps its ending, even if *gy* ‘you’ as part of a vocative follows the verb. Extra support for the assumption that the overt imperative subject structurally differs from a genuine pronoun following the verb in inversion contexts is obviously that there is always a pause between the imperative and the overt imperative subject in the prosody in the modern Germanic languages.

5.8 Summary

In this chapter I have focused on a special kind of verbal ending in Middle Low German arising in inversion contexts in the first and second person plural, as in those cases the regular consonant in the unitary inflection ending, i.e. *-t/-n*, is absent. Based on

an extensive corpus study delivering new data from the whole period in which Middle Low German was written, I showed that this type of deletion is robustly attested in the corpus. Furthermore, the chapter shed light on the syntactic distribution of deletion in Middle Low German, as the consonant is absent in about 95% of all the relevant inversion contexts. Exceptions to the generalization are found in verbs which only keep the stem in inversion and in imperatives; real exceptions in which there is no deletion at all are found in forms of the verb *sin* 'to be' and very rarely in other verbs ($N = 2$).

Indirect evidence from closely related languages, especially from Old English, indicates that the phenomenon is part of a diachronic change and that person, tense and type of the verb had an influence on the emergence of the structure. I argued that the structure most probably dates from before the Anglo-Saxon settlement, as there are numerous examples of the same type of position-dependent agreement in Middle Low German, Old English and Old Frisian. This would mean that the phenomenon probably happened in Old Saxon as well, but that the Old Saxon text fragments are not representative for the language. In Middle Dutch and Middle Low German, position-dependent agreement seems to occur more frequently.

I have proposed an analysis in which the trigger for deletion is fully phonological at the start, emerging in a context where the finite verb and the subject pronoun are contained within a phonological phrase, with a sequence of a verbal coda containing a consonant and an initial velar in the pronoun (i.e., 2PL). The deletion then spreads to the first person plural as well. As the right edge of phonological phrases aligns with the right edge of syntactic phrases, this only happens in inversion contexts. As a conclusion from the fact that the deletion did not spread to the third person plural, even after the consolidation of the unitary inflection in the plural, I proposed that the structure developed a systematic character, as a different ending in the first and second person plural corresponds to a distinction between a regular plural marker (i.e. in the third person) and a speech act participant marker in the plural (i.e. plural + participant (+ addressee) in the other persons in the plural). This change can be explained using the framework of Distributed Morphology, in which readjustment rules can be applied within phonological phrases, which can inhibit or trigger the spell-out of morphological features.

The resulting readjustment rule explains the situation in the Middle Low German and in the Modern Low German dialects, and is moreover nicely reflected in one

specific Eastern Dutch dialect, which distinguishes all persons in the plural (again), but only in inversion. The rule also applies to the Ingvæonic languages in general, which leads to the major insight that the Ingvæonic languages display a person cycle, in which the verbal endings go from distinguishing all persons in the plural over a unified plural ending towards a distinction of persons in the plural again.

6.1 Conclusion

The main goal of this dissertation was to provide insight into three syntactic topics in Middle Low German which are all related to agreement between the subject (pronoun) and the verb. Each chapter was an in-depth corpus study of 23 Middle Low German texts. In chapter 2, I presented the corpus which I compiled and the ways in which I encoded the data to shed light on the three studied topics, viz. (i) referential null subjects, (ii) non-restrictive relative clauses with a first or second person head and (iii) position-dependent agreement. Each of these three topics was placed in a descriptive, a theoretical, a historical and a comparative perspective.

Chapter 3, which placed its focus on the referential null subject, was in the first place dedicated to the question what the properties of referential null subjects in Middle Low German were, for instance in terms of relative frequency, syntactic distribution and their relation to verbal agreement. I briefly sketched the recent typology of null-subject languages and the criteria used to differentiate between the types of such languages in order to be able to classify Middle Low German in this system. I showed that most older Germanic languages, including the (arguable) predecessor of Middle Low German, Old Saxon, and closely related languages which also overlapped in time such as Middle Norwegian and Early New High German, belonged to the category of partial null-subject languages. I performed a corpus study on about 14,000 finite clauses of which I presented the data. It showed in the first place that Middle Low German referential null subjects are quite rare. Furthermore, an important finding was that referential null subjects are

often not accessible in the structure, as the antecedent of the pronoun does not always c-command the gap, for instance when the antecedent occurs inside a subordinate clause which precedes the gap. Several internal linguistic factors such as clause type, person and number as well as language external factors such as genre and scribal language significantly influence the frequency of referential null subjects. The relation between such factors pointed out, among other things, that referential null subjects in the second person singular are most common in the position after C, while third person (singular and plural) pronouns prefer to be in SpecCP. Furthermore, there is an increase of the amount of referential null subjects in SpecCP, whereas there is an increase in referential null subjects in the position after C as well, though more gradually. In order to measure this variation and to support these statements, I provided the results of detailed statistical analyses and probability calculations, mainly performed with Rbrul and R.

Based on the properties of referential null subjects described above, I argued that Middle Low German typologically belongs to the category of partial null-subject language. This is because referential null subjects appear, but are not that common. Furthermore, the ability to have a covert pronoun is not linked to verbal agreement. Through comparing the clause structure of clauses with overt referential pronouns with that of clauses containing a referential null subject, I showed that the presence of referential null subjects is linked to V-to-C movement and I confirmed, following Farasyn and Breitbarth (2016), that covert referential pronouns can occupy two different positions in Middle Low German, namely either SpecCP, patterning with the position of strong overt pronouns, or in the Wackernagel position, patterning with the position of deficient pronouns (clitics). The latter null pronouns arose through the loss of a D-layer, which created the need to encliticise to C to recover the missing functional layers. The null subjects in SpecCP were analysed as full DPs, which are phonetically null because they bear an uninterpretable D-feature. This feature is for referential null subjects in the third person licensed by a null Topic operator in SpecShiftP (Walkden, 2014), whereas the operator is located in Λ_{AP} or Λ_{pP} (in the first or second person respectively). I further explained how referential information can, regardless of the lack of c-command, be recovered using the context-linking mechanism proposed by Sigurðsson (2011, 2014).

In the section concerned with the rise of such a structure in Middle Low German, I showed that Middle Low German shows a certain continuity with Old Saxon, for instance because referential null subjects are more common in main clauses than

in subordinate clauses. Furthermore, referential null subjects are still more frequent in the third person (singular as well as plural). However, there is also a relaxation of the person constraint, allowing more first and second person pronouns to stay covert. I argued that this is because there are two innovations in Middle Low German, both involving changes in syntactic features. On the one hand, there is a change from [uAn] to [$u\varphi$] as the probing feature on the null operator in ShiftP, which makes a connection with a logophoric agent in $\Lambda_{AP}/\Lambda_{PP}$ possible in case of [uD] null DPs in SpecCP, which causes a situation where third as well as first and second person pronouns can be null in SpecCP. On the other hand, there is the loss of the D-layer and [uD]-feature which plays a role in the rise of null Wackernagel clitics. The person relaxation and the rise of the topic drop pronouns bearing [$u\varphi$]-features is supported by the frequencies measured over time. Mainly the increasing prominence of the SpecCP-type null arguments and the fact that there is an observable split into two types of null pronouns in Middle Low German indicate that Middle Low German is in the transition to a topic drop language of the modern V2-Germanic type.

Chapter 4 focused on establishing agreement and agreement patterns in non-restrictive relative clauses with a first or second person head, for which I used the same corpus as the one in the first chapter. After a brief introduction of relative clauses and the nature of the non-restrictive clauses concerned in general, I focused on the properties of non-restrictive relative clauses in Middle Low German, among other things concerning relative frequency and syntactic distribution. By encoding the function of the antecedent of its clause, I identified five types of antecedents which can be modified by this type of clauses, one of which introduces the antecedent quite implicitly, viz. the possessive head. Furthermore, the results of the corpus study showed that two types of agreement are possible in non-restrictive relative clauses with a first or second person head in Middle Low German, namely head agreement and resumptive pronoun agreement, both of which display first or second person morphology on the finite verb in the relative clause. Again supported by statistical evidence, I showed that it is mainly the genre of the text which influences the possibility of finding relevant data, though the properties of (agreement in) the clause are not significantly affected by such factors. The type of the agreement pattern is furthermore not significantly influenced by factors such as the locality of the head and the modifying clause, the person of the head or the type of the head, which led to the claim that resumptive pronoun agreement and

head agreement are in fact two sides of the same coin. I proposed, following Trutkowski and Weiß (2016) for High German, that each of these types of agreement patterns in fact contains a resumptive pronoun, either overt (viz. head agreement) or covert (viz. resumptive pronoun agreement).

To analyse how agreement can be established exactly in the relevant clauses, I focused on the role of the element introducing the relative clause, which, as the corpus study revealed, is always *de* in non-restrictive relative clauses with a first or second person head in Middle Low German. By comparing these and other types of relative clauses in the different scribal languages, I concluded that *de* in the clauses under investigation must be a relative pronoun, as it is able to bear features, which would not be possible if it were a relative particle. The φ -features of this pronoun are however underspecified. I also provided a schematic overview which shows that this pronoun is located in SpecCP in Middle Low German, whereas the resumptive pronoun is located in the Wackernagel position. For the further analysis, I adopted the idea proposed in Salzmann (2017) concerning Checking and Matching, making it possible to establish agreement between elements if the probe only has a subset of the features of the goal, which causes the fully underspecified relative pronoun *de* to match everything, after which checking between the (null) resumptive and the finite verb in the relative clause facilitates the first or second person feature morphology on the verb.

For each of the other types of more peculiar headed relative clauses, I provided some extra theoretical preliminaries. In relative clauses modifying the head in a matrix clause with a copula and a first or second person clefted XP, I presented cases in which the relative clause showed properties of both the clefted XP and the predicate. I proposed, following Reeve (2012), that such clauses must have two antecedents, one of which facilitates feature checking under c-command, while the other features are provided by the syntactic head of the clause. In relative clauses modifying a possessive head, I assumed that the possessive can project its first or second person feature to a dominating node, making it possible that the node containing the possessive also really has a first or second person feature and thus can behave like any other first or second person head. In the last particular case of long distance examples, in which the clause is quite far away from the head in the discourse, I followed Koster (1995, 2000), who argues that relative clause and antecedent form a set union, connected by a Boolean operator (\cup). In these clauses, the Boolean operator is the head of a phrase called the

colon phrase (:P), of which the specifier is the head of the relative clause.

When looking at the diachronic development of the structure, I provided evidence from other (West) Germanic languages which showed that first and second person clauses all behave in a certain way. In the first place, I showed that they all have in common that the verb agrees with the head in person and number. Furthermore, in all of the historical languages presented, the first or second person features are always available in the relative clause mediating between the head and the finite verb. This is because the first or second person relative clauses are either introduced by combinations of elements specified with syntactic φ -features in SpecCP or C^0 , viz. topicalized pronouns and relative pronouns, or because the features are encoded in resumptive pronouns clause-internally (for instance in the Wackernagel position in Middle Low German). I concluded that this means that the relative pronoun agreement pattern, which is for instance found in High German nowadays, must be a more recent innovation, as is the system with an overt resumptive pronoun, since neither is found in the older stages of the West Germanic languages.

Chapter 5 focused on position-dependent agreement in Middle Low German and raised the question whether there are differences in the ending of the verb purely dependent on the relative position of verb and subject, or if it would be possible to deliver a more fine-grained picture of the environment in which the alternative endings appear. Based on the corpus that I used in the preceding two chapters, I showed that position-dependent agreement is the norm rather than the exception in Middle Low German. I encoded the data for several additional factors such as properties of the function and type of the verb, the final consonant/vowel and provided, as in the preceding chapters, detailed statistical analyses and probability calculations which mainly showed the importance of the second person for double agreement being present.

A look into closely related West Germanic languages showed that there are many resemblances with other Ingvæonic languages such as Old Frisian and Old English, in which position-dependent agreement is robustly attested as well. Therefore, I argued that the structure most probably dates from before the Anglo-Saxon settlement, as there are numerous examples of the same type of position-dependent agreement in Middle Low German, Old English and Old Frisian. It is, however, puzzling that the phenomenon is not attested in Old Saxon, which could be due to the fact that Old Saxon is heavily influenced by other languages and/or that written Saxon blurs the phenomenon,

which might have been more related to spoken language. Indirect evidence from closely related languages, especially from Old English, indicates that the phenomenon could be part of a diachronic change influenced by person, tense and type of verb.

As concerns the analysis, I proposed that position-dependent agreement effects can neither be explained purely phonologically nor purely syntactically. Therefore, I argued for an interface approach, in which the trigger for deletion is fully phonological at the start, emerging in a context where the finite verb and the subject pronoun are contained within a phonological phrase, with a sequence of a verbal coda containing a consonant and an initial velar in the pronoun (i.e., 2PL). The deletion spread to the first person plural as well. As phonological phrases align with syntactic phrases, I argued following Ackema and Neeleman (2003) that the deletion could only happen in inversion contexts. The puzzling fact that the deletion did not spread to the third person plural even after the consolidation of the unitary inflection in the plural remained unanswered in almost all the literature on this topic. I suggest that the change did not spread easily to the third person plural as the ending of the verb consisted of a bigger consonant cluster, which prohibited spread. I proposed that the structure consequently developed a systematic character, as a different ending in the first and second person plural corresponds to a distinction between a regular third person marker and a speech act participant marker in the plural encoding participant and addressee features in the other persons in the plural. I embedded this change using the framework of Distributed Morphology, in which readjustment rules can be applied within phonological phrases, which can inhibit or trigger the spell-out of morphological features.

The proposed readjustment rule explains the situation in Middle Low German and is supported by the situation in the Modern Low German dialects, some of which distinguish all persons in the plural (again), but only in inversion. A major topic for further research is the idea that the Ingvæonic languages display a person cycle, in which the verbal endings go from distinguishing all persons in the plural, as they go from a plural distinguishing all persons in the plural over a unified plural ending towards a distinction of persons in the plural again.

6.2 Outlook

Though I tried my best to present a very detailed overview of the three Middle Low German topics that I researched based on an extensive dataset, this dissertation certainly has limitations and shows that there is room for further research.

In the first place, all the clauses that I examined have been encoded manually, which limits the number of data that could be processed. As the phenomena which I examined are all very rare (each phenomenon or exception to the general rule, in case of chapter 5, occurs in less than four percent of all the clauses), a 14,000-clause corpus could only provide initial insights by indicating tendencies in the data. Yet, I consider the approach employed here very valuable, as it allowed me to look at all the properties of the examined examples in the greatest detail, without losing the overview or having to put aside certain groups of examples. A data-driven approach based on the future large-scale CHLG enriched with morphological and syntactic information will however be indispensable to verify the provided insights and tendencies. This clearly leaves room for extending and adapting the proposed theoretical analyses.

Furthermore, Middle Low German, which never became fully standardised, has always been under-researched in comparison to West Germanic languages which did evolve into standard languages, such as its geographic neighbours that evolved into Standard Dutch and Standard German today. As I showed in the introduction, the main reason for this which is usually given in the literature is that many researchers believe that there is no Middle Low German syntax as such, which led to the title of this dissertation: “Fitting in or standing out?”. It is certainly true that Middle Low German perfectly fits into the Continental West Germanic Dialect Continuum, showing tendencies which are common in closely related languages as well, for instance in having a special way of forming non-restrictive relative clauses with a first or second person head, or for marking speech act participants in the elements introducing the relative clause (see chapter 4). The analysis of diatopic variation provided in each chapter has shown that Middle Low German syntax behaves fairly uniformly in this respect. The diatopic variation in the area of the *Altland* is usually very limited, while the newly emerging scribal language of Lübeck is marked by language contact of settlers with different mother languages, giving a more innovative impression with features of dialect mixing and language leveling. This was for instance clear in chapter 3, in which refer-

ential null subjects were strongly disfavoured, whereas we saw that deletion of the final consonant was (slightly) favoured (see chapter 5). However, the comparative overview of the topics studied has also shown that Middle Low German does not behave exactly like its related and neighbouring languages. Chapter 4, for instance, showed that Middle Low German superficially has two ways of building non-restrictive relative clauses modifying a first or second person head, which are partly different from the ones in the neighbouring languages, while chapter 5 showed that the loss of the final consonant sets Middle Low German apart from Middle Dutch and Early New High German in terms of number, as it does in terms of frequency compared to Ingvæonic languages such as Old Frisian. I am therefore wholly convinced that Middle Low German definitely stands out, and that this once so important West Germanic language still has many secrets and interesting properties waiting to be revealed by future research. I can only hope to be able to contribute to this research in the future.



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Agneta Willeken = Agneta Willeken, Hamburg: Brief von 1535

Bordesholmer Marienklage = Bordesholmer Marienklage, 1475/76, Hs.

Cronecken der sassen = Cronecken der sassen, Druck: Mainz, Peter Schoeffer, 1492
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Göttinger Liebesbriefe = Göttinger Liebesbriefe (Stadtarchiv Göttingen)

Gandersheimer Reimchronik = Gandersheimer Reimchronik des Priesters
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Goslarer Kramerrecht = Älteste Hs. des Goslarer Kramerrechts, 1281 (Digitalisierte
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Prayer 1 = First prayer in the supplement of *Dat myrren bundeken*

Prayer 2 = Second prayer in the supplement of *Dat myrren bundeken*

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Südwestfälische Psalmen = Südwestfälische Psalmen, um 1300

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