Elisabeth Witzenhausen

Negation – Exception – Contrast

The post-cyclical development of *ne/en* in Middle High German, Middle Low German and Middle Dutch

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

2019

Universiteit Gent
Faculteit Letteren en Wijsbegeerte
Vakgroep Taalkunde

Nederlandse vertaling:
Ontkenning – Uitzondering – Contrast. De post-cyclische ontwikkeling van de preverbale ontkenning in het Middelnederduits, Middelhoogduits en Middelnederlands

Cover image: Anna-Lena Witzenhausen “Fenja”

Universiteit Gent
Faculteit Letteren en Wijsbegeerte
Vakgroep Taalkunde
Afdeling Duits
Blandijnberg 2
9000 Gent

Doctoraatsbegeleidingscommissie

Promotor:	Prof. dr. Anne Breitbarth
Overige leden DBC:	Prof. dr. Agnes Jäger
	Dr. Sheila Watts

Decaan:	Prof. dr. Gita Deneckere
Rector:	Prof. dr. Rik Van de Walle

Für Carola und Günter

Acknowledgements

First and foremost, I want to thank my supervisor Anne Breitbarth who provided constant support, encouragement and taught me a lot. You gave me the opportunity to work on this great project, you were always there to answer questions and discuss problems, provided the right ratio of guidance and independence, introduced me to many people and encouraged me to ask questions. I enjoyed the hours at the office, study trips and lessons you taught very much.

I want to thank Eckhard Meineke who planted the seed for my love for historical linguistics by letting me be his student assistant, for supervising my "Examensarbeit" and actively supporting my career path into syntax. Barbara Aehnlich is a great mentor and friend who helped me pursue my dreams and taught me a lot.

I am very grateful for the discussions and reading groups with Elly van Gelderen. Thank you for inviting me to be a visiting scholar at ASU and always making time to discuss questions. I thank all people from the syntax reading group at ASU for the interesting discussions and the warm welcome. I want to thank my DBC members Agnes Jäger and Sheila Watts for their support and encouragement. Special thanks go to Agnes Jäger for the discussions and interesting seminars. Furthermore, I want to thank Sophia Oppermann, Michael Frotscher and all colleagues at the University of Cologne for interesting conversations, great seminars and fun coffee breaks. I thank Roxane Vandenberghe for helping with difficult Middle Dutch sentences as well as Pieter van Reenen for kindly providing me with the tagged version of the Corpus van Reenen-Mulder and answering questions about the corpus. I am very grateful for the valuable comments of my jury members Katrin Axel-Tober, Jürg Fleischer and Ulrike Vogel. I thank Stef Slembrouck, Melissa Farasyn and Karen De Clercq for being chair and secretary for my defense and Gitte Callaert and Adrian for helping with the cover and printing.

Special thanks also go to Melissa Farasyn, my mentor at UGent and "Doktorschwester", who was always there to help, correct my writing and to save me from mosquitoes. I enjoyed our conference trips and hours at the office a lot. I am very grateful for meeting Metin, who is and always has been a great friend, irrespective of my problems being a private or a syntactic matter. I want to thank all colleagues in the German department, Leen, Ruth, Torsten and Martine as well as the colleagues in the literature department - especially Thorsten for always cheering me up and Carolin for the great study trip. I thank the DiaLing group for all the helpful comments and nice receptions, especially Liliane Haegeman, Lieven Danckaert, Karen De Clercq and Alexandra Simonenko for discussing my questions.

A huge thank-you goes to my proof-readers Jessica, Marianne, Michael, Melissa, Metin, Robert and Sofie.

I had a wonderful time with the DH Research Lab organizing lectures and talking DH, especially Julie, Jasper, Annemieke, Jetze and Joke who I worked with most frequently (and Thorsten for introducing me to the group). I want to thank Katharina for helping me with statistics and being a great house-mate and friend, Francois for the nice evenings and keeping everything in order. I want to thank Jan for helping me with my first Python script and Sofie for the continuous support and being such a good friend. Thank you, Hugo, Cindy, Dona, Gowaart and Eva for the writing groups. I thank Svetlana Petrova for the inspiring discussions about *ne/en* in MHG.

I already want to thank Eric Fuß and Ben Lowell Sluckin for discussing some of the problems and questions I encountered conducting this research and for helping with the start of new projects. Furthermore, I want to thank Marco Coniglio, Inga Siegfried, Christian Zschieschang and Michael Prinz for the great cooperation.

My family and friends in Germany were a great support during the time of my PhD. I cannot mention you all, but you know. Ich danke der AG Prop, besonders Felix und Lea, dass ich in eurem Büro immer einen Platz zum Arbeiten hatte und immer an eurem Spaß teilhaben durfte. Mama, Leni und Oma Daddi: eure Liebe, Stärke und euer Humor haben mir durch schwere Zeiten geholfen. Ich kann euch nicht genug danken! Ohne Caro, Pia und Sophie hätte ich das nicht geschafft. Papa, danke für deine Unterstützung, deine Liebe und dass du immer an mich glaubst. Oma Carola und Opa Günter danke ich für die Unterstützung, Motivation und das "Neugierigmachen". Der ganzen Strickrodt- und Witzenhausen-Großfamilie danke ich für den Zusammenhalt und die (viel zu seltene) gemeinsame Zeit. Hendrik,

du hast mir geholfen, immer wieder Freude an der Arbeit und Gent zu finden, du bist mein Zuhause und mein Rückhalt. Danke für die Unterstützung beim Programmieren, bei Grafiken, Postern und Vorträgen. Mit dir macht einfach alles Spaß!

Summary in English

This thesis investigates how the Middle High German, Middle Low German and Middle Dutch negative marker *ne/en* (< *ni*) assumes new functions after it ceases to express sentential negation on its own. These contexts, in which the negative marker does not truth-conditionally negate a sentence, are referred to as 'post-cyclical'. Middle High German, Middle Low German and Middle Dutch all underwent Jespersen's cycle (Jespersen 1917), whereby a single preverbal clitic is first joined by a negative adverbial *niht* and later on is replaced by it. In the languages under investigation, negation is expressed in a bipartite manner (*ne*=V...*niht*) or with the adverbial *nicht* alone. I show that the particle *ne/en* was reanalyzed as a discourse marker, appearing in exceptive and adversative adverbial clauses. It is shown that in the course of the cyclical renewal of negation markers, old markers are not simply lost but can assume new non-negative functions.

The thesis consists of four parts: In the introduction, the research question, its motivation as well as theoretical and terminological foundations are explained. Part II describes the corpus study which provides empirical data for the analysis of post-cyclical *ne/en*. I analyzed samples of all clauses appearing with a negative particle from the MHG Referenzkorpus Mittelhochdeutsch (ReM) and samples of clauses with single preverbal *ne/en* from the Middle Dutch Corpus Gysseling and Corpus van Reenen-Mulder. For MLG, I analyzed all clauses with a negative particle from a set of texts from the Referenzkorpus Mittelniederdeutsch/Niederrheinisch (ReN) which was available in April 2016. For each language, I provide an overview of the expression of sentential negation with single *ne/en* (stage I) before describing the post-cyclical uses. Regarding the use of stage I negation, I show that literary and religious in both prose and verse texts retain stage I negation longer than charters and law texts. In general, the particle in negative uses appears longer in North-Western dialects of Middle High German and adjacent Mid-

dle Low German dialects. In chapter 4, it is shown that post-cyclical *ne/en* most frequently appears in exceptive clauses in all three languages under investigation. Exceptive adverbial clauses appear as subjunctive V2 clauses without a complementizer. These constructions can be divided into monoclausal and biclausal structures (Breitbarth 2014b). Monoclausal exceptive clauses are more frequent than the biclausal structure. The second most common clause type are corrective adversative clauses. They also show V2 word order with post-cyclical *ne/en* cliticizing to the finite verb. In the Middle High German data, I found twelve asyndetic V2 clauses that function as complement clauses to negated or semantically negative verbs. Complement clauses are therefore the least common context in which post-cyclical *ne/en* appears. In part III, I develop a unified account for the meaning of post-cyclical *ne/en* in adverbial clauses and discuss possible accounts for the particle in complement clauses. In adverbial clauses, *ne/en* almost exclusively functions as an exceptive or adversative discourse marker. After showing that both adverbial discourse relations are often expressed using the same lexical items or lexical items which share a common origin, I demonstrate that *ne/en* entered a cline of semantic change from exceptive to contrastive meaning. This can explain its use in various non-negative contexts in the languages under investigation as well as in present-day Flemish Breitbarth et al. (forthcoming). I argue that *ne/en* was reanalyzed in conditional structures, in which *ni* > *ne/en* was ambiguous between sentential and metalinguistic negation (Horn 1985). In the syntactic analysis of the asyndetic V2 clauses with post-cyclical *ne/en* I propose that *ne/en* resides in the head of FamP, the lowest topic position in the left periphery. The structure is argued to be an under-specified dependent clause. Depending on the context as well as verbal mood, the V2 clause is argued to receive an exceptive, adversative or complement clause reading.

Samenvatting in het Nederlands

Dit proefschrift onderzoekt hoe de Middelnederduitse, Middelhoogduitse en Middelnederlandse negatieve marker *ne/en* (< *ni*) nieuwe functies krijgt wanneer hij zelf geen zinsontkenning meer uitdrukt. De hier bestudeerde contexten, waarin een negatieve marker de inhoud van de zin niet langer tenietdoet, worden 'postcyclical' genoemd, waarmee gerefereerd wordt naar de ontwikkeling van *ne/en* 'buiten' de Jespersen-cyclus. Middelnederduits, Middelhoogduits en Middelnederlands ondergingen alledrie de Jespersen-cyclus, waarbij een alleenstaand preverbaal cliticum *ni* (stadium I) eerst samen met de negatieve bijwoordelijke bepaling *niet/niht* verschijnt (stadium II) en later wordt vervangen door *niet/niht* (stadium III). In het Middelnederduits, Middelhoogduits en Middelnederlands wordt ontkenning uitgedrukt als tweevoudig '*ne*=V...*niht*' of enkelvoudig met het bijwoordelijk *niet/niht* (stadium II of III). Ik laat zien dat het partikel *ne/en* geheranalyseerd wordt als een 'discourse marker', die voorkomt in uitzonderlijke en tegenstellende bijzinnen. De scriptie bestaat uit vier delen. In de inleiding worden de onderzoeksvraag, de motivatie ervan en de theoretische en terminologische grondslagen toegelicht. Deel II beschrijft de corpusstudie die empirische gegevens verschaft voor de analyse van het postcyclische *ne/en*. Ik analyseerde steekproeven van corpusresultaten van de Middelhoogduitse Referenzkorpus Mittelhochdeutsch (ReM) en van het Middelnederlandse Corpus Gysseling en Corpus van Reenen-Mulder. Voor het Middelnederduits Referenzkorpus Mittelniederdeutsch/Niederrheinisch analyseerde ik alle zinnen met een negatief partikel uit een reeks teksten die beschikbaar was in april 2016. Voor elke taal geef ik een overzicht van de uitdrukking van zinsnegatie met enkele *ne/en* (stadium I) alvorens het postcyclische gebruik te beschrijven. Ik laat zien dat stadium 1 langer behouden blijft in religieuze

en literaire teksten geschreven in vers of proza dan in handvesten en wetteksten. Over het algemeen lijkt het partikel met negatieve toepassingen langer in gebruik te blijven in noordwestelijke dialecten van het Middelhoogduits en aangrenzende Middelnederduitse dialecten. In hoofdstuk 4 van Deel II toon ik aan dat postcyclisch *ne/en* het vaakst voorkomt in uitzonderlijke bijzinnen in alle drie de talen die worden onderzocht. Uitzonderlijke bijzinnen verschijnen als subjunctieve V2-clausules zonder een voegwoord. Deze constructies kunnen worden onderverdeeld in monoclausale en biclausale structuren (Breitbarth 2014b). Monoclausale bijzinnen die een uitzondering uitdrukken komen vaker voor dan de biclausale structuren. De op één na meest voorkomende zinnen zijn corrigerende tegenstellende bijzinnen. Ze vertonen ook V2-woordvolgorde met het postcyclische cliticum *ne/en* na het persoonsgebonden werkwoord. In de Middelhoogduitse gegevens vond ik twaalf asyndetische V2-clausules die fungeren als complementzinnen voor genegeerde of semantisch negatieve werkwoorden. Complementzinnen vormen daarmee de minst gebruikelijke context waarin postcyclisch *ne/en* verschijnt. In deel III ontwikkel ik een uniforme uiteenzetting over de betekenis van postcyclisch *ne/en* in bijwoordelijke bijzinnen en bespreek mogelijke verklaringen voor het partikel in complementzinnen. In bijwoordelijke bijzinnen functioneert *ne/en* vrijwel uitsluitend als een exceptieve of tegenstellende discourse marker. Nadat ik heb laten zien dat beide bijwoordelijke relaties vaak worden uitgedrukt met dezelfde lexicale items of lexicale items die een gemeenschappelijke oorsprong delen, toon ik aan dat *ne/en* een universeel beschikbare 'cline' van semantische verandering invoerde, van een exceptieve naar een contrastieve betekenis. Dit kan het gebruik ervan in verschillende niet-negatieve contexten in de onderzochte talen en in de Vlaamse dialecten verklaren (Breitbarth et al. forthcoming.). Ik beargumenteer dat *ne/en* geheranalyseerd werd in voorwaardelijke structuren, waarin de *ni* > *ne/en* enigszins meerduidig was: de betekenis ervan lag tussen sententiële en metalinguïstische negatie (Horn 1985). In de syntactische analyse van de asyndetische V2-clausules met post-cyclische *ne/en* poneer ik dat het partikel zich in het hoofd van een lage projectie in de 'left periphery', FamP, bevindt. Ik beargumenteer dat de structuur een niet-gespecificeerde afhankelijke clausule is. Ik stel voor dat – afhankelijk van de context en de verbale stemming – de V2-clausule een uitzondering, een adversatieve of een complementzin is. Hiermee is aangetoond dat in de loop van de cyclische vernieuwing van ontkenningsmarkers oude markeringen niet zomaar verloren gaan, maar nieuwe, niet-negatieve functies kunnen aannemen.

Contents

List of abbreviations

Alem.	Alemannic
CG	Central German
CGy	Corpus Gysseling
CP	complementizer phrase
CRM	Corpus van Reenen/Mulder
EE	East Elbian
EN	emphatic negation
EP	Eastphalian
FamP	Familiar Topic Phrase
FE	Feature Economy
FinP	Finiteness Phrase
FocP	Focus Phrase
ForceP	Force Phrase
GEN	genitive case
MS	Minimize Structure
L	scribal language of Lübeck
LR	Low Rhenish
MD	Middle Dutch
MHG	Middle High German
MLG	Middle Low German
NCl	negated clauses
NegP	Negation Phrase
NLS	North Low Saxon
OD	Old Dutch/Old Low Franconian
OHG	Old High German

Op	operator
OS	Old Saxon
PAST	past tense
PoS	part of speech
PRES	present tense
PRT	particle
PN	paratactic negation
ReM	Reference Corpus of Middle High German
ReN	Reference Corpus Middle Low German/Low Rhenish
SBJV	subjunctive mood
SN	standard negation
Spec	Specifier
TopP	Topic Phrase
T	Tense
TP	Tense Phrase
UG	Upper German
V1	verb-first word order
V2	verb-second word order
V-end	verb-end word order
VP	Verb Phrase
WP	Westphalian

List of Tables

Part I

Introduction

Chapter 1

Introduction

1.1 About this book

This thesis is concerned with the post-cyclical development of preverbal negation in Continental West Germanic languages. The expression of negation in Middle High German (MHG), Middle Low German (MLG) and Middle Dutch (MD) underwent the diachronic development known as *Jespersen's Cycle* (Jespersen 1917; Dahl 1979), whereby the expression of standard negation undergoes a cyclical renewal. The term 'post-cyclic' refers to the use of the particle *ne/en* < *ni* 'outside' of Jespersen's cycle, i.e. where it does no longer express sentential negation.[1] I will show that *ne/en* was reanalyzed as a discourse marker, expressing an exceptive or contrastive discourse relation in MHG, MLG and MD.

The different stages of Jespersen's cycle are often demonstrated using the history of French (Lucas 2007; van Gelderen 2011; Breitbarth 2019). While Old French, stage I of the cycle, only has a preverbal marker, Modern Standard French has bipartite negation, where *ne* is joined by *pas*, which grammaticalized[2] from the minimizer *pas* ('step'). In present-day Colloquial French, the preverbal marker is left out and *pas* functions as the only marker of negation (stage III).

[1] The term was first introduced by Anne Breitbarth in a project proposal in 2014 for the BOF-grant 01N03315 which funded this research.

[2] Throughout the thesis, I use the term 'grammaticalize' as an umbrella term for different interacting processes on different levels of linguistic structure resulting in the change of more lexical, free and contentful material to more abstract, functional and fixed structures (Meillet 1921) (cf. section 1.3).

(1) Old French, Stage I

jeo ne dis.
I NEG say

'I do not say'

(2) Modern Standard French, Stage II

je ne dis pas.
I NEG say NEG.

'I do not say.

(3) Modern Colloquial French, Stage III

je dis pas.
I say NEG

I do not say.

MHG, MLG and MD are generally described as transitioning between stage II and stage III of Jespersen's cycle (Van der Horst and Van der Wal 1979; Jäger 2008; Breitbarth 2014b), as *ne/en* does not suffice to express sentential negation on its own. It either co-occurs with *niht*, disjunction, or (n-marked)[3] indefinites, or *niht* is used to express sentential negation on its own (Burridge 1993; Jäger 2008; Breitbarth 2014b). The following examples from Low German exemplify the development in the languages under investigation. The single preverbal negative clitic *ni* in Old Saxon (OS), Old Dutch/Old Low Franconian (OD) and Old High German (OHG) expressed negation on its own (stage I), as in (4). Towards MLG, MHG and MD, *ne/en* < *ni* was adjoined by the negative adverbial *niht/niet* (stage II), as in (5) and was later on replaced by it (stage III), (6).

(4) OS, Heliand 785, 9th century

he ni uuas odrun mannun gilic
he NEG was other man alike

[3]With 'n-marked', I refer to indefinite pronouns and adverbs with negative morphology.

'He was not like any other man.'

(5) MLG, Sachsenspiegel Oldenburg MS, 14th century (6r line 7/8)[4]

Des ne kan ich alene nicht ghedon
das NE kann ich alleine NE tun

'I cannot do this alone.'

(6) MLG, Herforder Rechtsbuch, 1375 (4ra line 14/15)

dar vmme nemet se der moder erve nicht
therefore take her the mother inheritance not

'For that reason she does not take the inheritance of the mother.'

This development might lead to the conclusion that the old preverbal marker simply disappears from a language when *niht/niet* assumes its new function of expressing sentential negation. As studies like Breitbarth (2014b); Breitbarth and Haegeman (2014, 2015) and Breitbarth et al. (forthcoming) show, residual preverbal *ne/en* could and still can appear in certain contexts in West Germanic languages. Contexts in which *ne/en* does not express sentential negation will be referred to as 'post-cyclical' or 'non-negative', as *ne/en* has acquired new functions as a discourse marker. These functions will be categorized outside the 'cyclical' use within Jespersen's cycle, where – on its own or in combination with other negative elements – it was used to express sentential negation. In present-day Flemish, *en* still appears as a discourse marker in negative an non-negative sentences (Neuckermans 2008, Breitbarth et al. forthcoming) where it conveys that a proposition is unexpected in a given discourse context (Breitbarth and Haegeman 2014, 2015), as in example (7), and/or has a contrastive meaning, as in (8).

[4]For texts which are not available in the current version of the ReN corpus, I provide page numbers '6r' (page 6 'recto') as well as line numbers '7/8' as indicated in the diplomatic transcription underlying the annotation in the corpus. For texts available in the corpus, I provide a link to the query result in a footnote, as there is no diplomatic transcription available outside of the ANNIS search interface. For results from the MHG ReM corpus, I provide page and line numbers as represented in the PDF document "Diplomatischer Lesetext" on the homepage (https://www.linguistics.rub.de/rem/corpus/texts.html). Note that I used the annotation layer "tok_anno" for the representation in all examples.

(7) Dialect of Heist, personal correspondence with Liliane Haegeman

ik kom eenen tegen met buikgriep, k'en en der van.
I come one against with stomach bug I=EN have there of

'I meet someone with a stomach bug: I pick it up.'

(8) Dialect of Pittem, cited from Breitbarth et al. (forthcoming)

met zijn beste kleren aan [...] *je had dien een keer moeten en zien.*
with his best clothes on [...] you had him one time must EN seen

'With his best clothes on [...] you should have seen him.'

Breitbarth and Haegeman (2014, 2015), looking at *en* in negative clauses only, argue that *en* assumed a new function and became a discourse particle. In the process of reanalysis, it was dissociated from the expression of sentential negation and now marks polarity emphasis (Breitbarth and Haegeman 2014) or rather that the negative clause is unexpected, i.e. that the positive counterpart of the negated proposition is the most expected (Breitbarth and Haegeman 2015:89). In addition to these present-day occurrences, grammars of MHG and MD (de Boor and Wisniewski 1998; Paul et al. 2007; Stoett 1923) list a number of clause types where single preverbal *ne/en* is preserved, even though in those languages *niht* already appeared together with the negative clitic or on its own in order to express sentential negation (Jespersen's cycle stage II - III). Those cases are called paratactic negation (Jespersen 1917; Burridge 1993; Van der Wouden 1997), also called 'expletive' negation (Jäger 2008), and asyndetic V2 subjunctive clauses 'konjunktionslose Konditionalsätze mit Verbzweitstellung' (Paul et al. 2007:393). There is a certain terminological inconsistency in the literature, which I will address in section 2.3. In section 1.3, I provide a definition for term 'paratactic negation' following Van der Wouden (1997). While the general idea is that paratactic negation appears with either *ne/en* (9) and *niht* (10) (Van der Wouden 1997:199), asyndetic V2 subjunctive clauses only show preverbal *ne/en*, as in (11).

(9) MD, Boeck van Surgien, cited from Burridge (1993:182)

Mer daerom zal ment niet laten men en sal die enden
but therefore shall one-it NE neglect one NE shall the ends
vanden pesen tegader nayen
of-the tendons together sew

'But one shall not neglect it therefore, but rather shall sew the ends of the tendons together.'

(10) MHG, Schwabenspiegel, late 13th century (M339 IV 3 P_SwSp–055vb,09-10)

wil aber er lovgenen dc er da nivt were
wants but he deny that he there NIHT be.PAST.SBJV

'but if he wants to deny that he is there.'

(11) MHG, Hartmann von Aue: Gregorius, cited from Paul et al. (2007:393)

daz niemen vrumen des verdrôz ern spraeche sîn
that no-one capable that.GEN become tired he=NE spoke his
êre
praise

'That no-one capable became tired of speaking his praise.'

I aim to describe the asyndetic V2 clauses in detail and to provide a formal analysis for the post-cyclical seemingly non-negative uses of *ne/en*. I assume generative syntax and more specifically the cartographic approach as the theoretical framework in this thesis. However, I do not adopt a strict antisymmetric approach (Kayne 1994). This means that I do not assume all clauses to be head-initial, nor that adjunction has to proceed leftwards.

1.2 Research questions

Investigating the use of single preverbal *ne/en* in MHG, MLG and MD, this thesis aims to answer the following questions:

- Which post-cyclical, i.e. non-negative, uses of *ne/en* can be determined in MHG, MLG and MD?
- What are the syntactic and semantic properties of the post-cyclical constructions with *ne/en*?
- What is the diachronic development of the different post-cyclical constructions?
- Does the decline of preverbal *ne/en* in the expression of sentential negation relate to the post-cyclical uses of the particle?
- Is it possible to propose a unified formal analysis of post-cyclical *ne/en*?

The thesis is organized in four parts. In the remaining section of this chapter, I will explain the terminology used in this thesis. In chapter 2, I discuss theoretical approaches to Jespersen's cycle and provide an overview of the development in the languages under investigation. In part II, I will describe and report the corpus studies I carried out. Chapter 3 describes the corpora used for this study and chapter 4 presents the results. This chapter is divided into three sections: MHG, MLG and MD. It closes with an interim summary recapitulating the most important findings in the data. In part III, I will develop a formal analysis for capturing the functional change of *ne/en*. Part IV gives a summary and outlines questions for further research.

1.3 Terminology

1.3.1 Negation and post-cyclical contexts

I use the terms *sentential negation* and *standard negation* following Miestamo (2005). He describes *sentential negation* as the syntacto-semantic counterpart of the logical notion of propositional negation (Miestamo 2005:5), i.e. what is expressed by a negative item. Klima (1964) proposed syntactic tests for identifying sentential negation, such as the permission of an *either*-clause

or a *not even*-tag, to which Payne (1985) added the 'performative paraphrase' test. According to this test, sentential negation can be translated by *I say of X that it is not true that Y*. The sentence *Ghent is not an ugly city* therefore paraphrases as *I say of Ghent that it is not true that it is ugly*. In Miestamo's terms, *standard negation* is a construction expressing sentential negation. He notes that sentential negation cannot be equated with standard negation (Miestamo 2005:4). According to Payne (1985:198), standard negation (SN) is the "type of negation that can apply to the most minimal and basic sentence". While sentences with standard negation express sentential negation, i.e. they pass the syntactic test proposed by Klima (1964) and Payne (1985), both concepts cannot be equated because there can be non-standard negation constructions which can express sentential negation, such as German *einen feuchten Kehricht* ('a wet dirt').[5] The sentence in (12) yields a sentential negation meaning even though no standard negation marker is involved.

(12) Present-day Colloquial German

Deine Geschichte interessiert mich einen feuchten Kehricht.
your story interests me a wet dirt.

'I am not interested in your story.'

Miestamo (2005:42) defines standard negation as follows:

> A SN construction is a construction whose function is to modify a verbal declarative main clause expressing a proposition p in such a way that the modified clause expresses the proposition with the opposite truth value ~ p or the proposition used as the closest equivalent to ~ p in case the clause expressing ~ p cannot be formed in the language, and that is (one of) the productive and general means the language has for performing this function.

Additionally, he states that "only obligatory (fully grammaticalized) elements are taken into account as belonging to the constructions." Due to a process of change which is taking place in the languages under investigation, I will

[5]The minimizer *einen feuchten Kehricht* ('a wet dirt') can only be used with a limited number of predicates (Breitbarth 2013).

mostly refer to the function of markers expressing sentential negation. The status of the different markers as SN will be discussed in section 2.2.

Regarding word order, with *ne/en* being a clitic on the verb or the first constituent in the clause, the particle will not be analyzed as occupying a separate position. Clauses such as (13) will therefore be called 'V1', while clauses like the complement clause in (11) repeated here as (14) will be called 'V2'.

(13) MLG, Sachsenspiegel MS Oldenburg, early 14th century (14v line 9/10)

ne es uader nicht, it nimpt sin moder
NE is father NEG it takes his mother

'If there is no father, the mother takes it.'

(14) MHG, Hartmann von Aue: Gregorius, cited from Paul et al. (2007:393)

daz niemen vrumen des verdrôz ern spraeche sîn êre
that no-one capable that.GEN become tired he=NE spoke his praise

'That no-one capable became tired to speak his praise.'

There are different items which can appear in the scope of negation. Indefinite pronouns and adverbs with negative morphology will be called 'n-marked'. If these pronouns or adverbs do not show negative morphology, I refer to them as 'n-free'. There are other elements co-occurring with negative markers, especially with preverbal *ne/en*, such as quite frequently disjunctive *noh* ('nor'). Where the corpus query allows for a detailed picture, I will list these separately in the data description. As the function of *ne/en* will be addressed in part III of this book, I will use NE to gloss the particle in order not to presuppose any specific function.

Regarding the term 'paratactic negation', I will adopt the first part of the definition by Van der Wouden (1997:196), namely that an element of negative import, i.e. sentential negation markers or semantically negative

verbs, triggers paratactic negation in the subordinate clause. Some authors treat exceptive clauses[6] on a par with paratactic negation (Hoeksema 2014). The definition of paratactic negation by Van der Wouden (1997) identifies elements of negative import to trigger paratactic negation. As exceptive clauses (15) do not always depend on a main clause with negative import, (Breitbarth 2014b), I will describe exceptive clauses separately from paratactic negation, even though there are cases where both concepts overlap (cf. section 2.3).

(15) Herbort von Fritzlar: Liet von Troye (MS S), 13th century (M541S-7957[215])

Daz der funfte kvme genas [...] *Er en lege tot oder lam*
That the fifth hardly recover [...] he NE lie.PRES.SBJV dead or lame

'That the fifth [...] hardly recovered unless he lie dead or lame.'

In order to be able to refer to paratactic negation and exceptive clauses at the same time, I will refer to the clauses in which non-negative *ne/en* appears as 'post-cyclical' uses of *ne/en*.

(16) **Definition 'post-cyclical *ne/en*'**
The term 'post-cyclical *ne/en*' defines *ne/en* as not contributing a sentential negation reading to the clause it appears in. Furthermore, it is characterized as appearing on its own in the clause, meaning not in connection with other negative marker or (negative) polarity items.

It will be shown that there are adversative clauses (English 'but') among the paratactic uses (depending on a negative main clause). As they have a different meaning from exceptive clauses, I describe them separately and refer to them as 'adversative clauses'.

Furthermore, when describing clause types with post-cyclical *ne/en*, I sometimes say that a clause 'is' an adverbial or complement clause. As will be shown, the structures themselves are under-specified. Therefore, it would

[6] Asyndetic V2 clauses translating as English 'unless' as in example (15), cf. section 2.3.

only be correct to say the clauses 'receive' a complement or adverbial reading. Whenever I use the copula for reasons of style or space, I actually mean that the clauses receive the respective reading/function.

1.3.2 Grammaticalization and exaptation

I do not understand grammaticalization as grammaticalization theory, that is a phenomenon by itself explaining syntactic change, but as an umbrella term for different processes on different levels of linguistic structure resulting in the change of more lexical, free and contentful material to more abstract, functional and fixed structures (Meillet 1921; Narrog and Heine 2017). In generative terms, one of these processes is the reanalysis of an item in a lower head as being merged directly in a higher functional head (Roberts and Roussou 2003).

Another type of reanalysis is exaptation. In contrast to grammaticalization, exaptation can be characterized as a "grammatical promotion" (Haiman 2017:51), as it starts out with redundant or meaningless material, i.e. "junk" (Lass 1990), which is not the case in grammaticalization. The reanalysis of *ne/en* is an example of exaptation (Breitbarth 2014b:36). In this thesis, I argue that *ne/en* is reanalyzed as a discourse marker which is base-generated in the head of a left-peripheral discourse projection. I follow Haimain's definition of exaptation:

> the promotion of meaningless or redundant material so that is does new grammatical (morphosyntactic or phonological) or semantic work.
>
> (Haiman 2017:52)

Chapter 2

Jespersen's cycle

In this section, I will first address formal approaches to Jespersen's cycle. Along the lines of Breitbarth (2014b, 2017a), I will review the empirical advantages of a NegP free approach. Subsequently, I will characterize Jespersen's cycle in High German, Low German and Dutch, before I describe those post-cyclical uses that have been described in the literature.

2.1 Formal approaches to Jespersen's cycle

2.1.1 Jespersen's cycle and NegP approaches

As noted in section 1.1, MHG, MLG and MD, like all West Germanic Languages, underwent Jespersen's cycle (Jespersen 1917; Dahl 1979). This cyclic change of the expression of sentential negation follows three stages:

> [T]he original negative adverb is first weakened, then found insufficient and therefore strengthened, generally through some additional word, and this in its turn may be felt as the negative proper and may then in the course of time be subject to the same development as the original word.
>
> (Jespersen 1917:4)

Most formal syntactic approaches treat Jespersen's cycle as the grammaticalization of a negative item in the Specifier of NegP, the functional projection

where sentential negation resides (Pollock 1989).[1] As Breitbarth (2014b) notes,

> [...] there are probably few functional projections on whose existence there is so much agreement, yet on whose exact number, syntactic position, and precise contribution to interpretable content there is so much division.

According to Ouhalla (1990), NegP can be located high, under CP, or lower in the clausal spine, namely above VP. NegP tries to capture cross-linguistic variation in the expression of sentential negation. Negative Concord, two or more negative elements yielding one semantic negation (Giannakidou 2000), is explained by assuming that all elements in NegP "work together to form one single negative meaning" (van Gelderen 2011:292). Breitbarth (2014b; 2017a) shows that assuming one (complex) NegP results in various theoretical problems and false predictions when trying to capture cross-linguistic variation in the expression of sentential negation.

For Jespersen's cycle in the languages under investigation, a NegP approach suggests the following analysis: As the particle *ne/en* in OHG and OS as well as MHG, MLG and MD cliticizes to the finite verb, *ne/en* is argued to be the head of NegP (Jäger 2008). The verb picks up the particle when moving through Neg^0 to C^0. As *niht* is not sensitive to verb movement, it cannot be analyzed as a functional head (Jäger 2008). Accounts differ regarding the featural setup of the negative elements involved. While van Gelderen (2011), Jäger (2008) and Willis (2011) would assume the head of NegP to contain an [iNeg] feature, Jäger and Penka (2012) following Penka (2011) assume a covert negative operator [¬ Op] in SpecNegP (Zeijlstra 2004), which provides an [iNeg] feature. This is motivated by the fact that the position of *ni* depending on the position of the verb does not affect the scope of negation in OHG and OS. Therefore, [¬ Op] is the bearer of semantic negation (Ouhalla 1990).

I will review the account by Jäger and Penka (2012) based on (Jäger 2008) as an example for NegP approaches[2] before I address Breitbarth's

[1] Breitbarth (2014b:123) lists approaches which assume that diachronic variation results from whether or not a NegP is projected at all. This section only discusses approaches in which negative elements target NegP positions in the course of grammaticalization, such as van Gelderen (2011) or Jäger (2008).

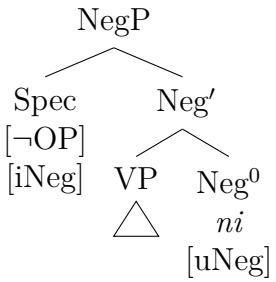
[2] For English, Roberts and Roussou (1999); van Kemenade (2000); van Gelderen (2004)

(2014;2017) NegP-free account. Jäger and Penka (2012:9–10) describe the syntactic status of the particles in the respective NegP position as follows:

- stage I: Neg^0 overt
- stage II: grammaticalization of SpecNegP > SpecNegP and Neg^0 overt
- stage III: loss of overt Neg^0 > only SpecNegP overt

In OHG, the particle *ni* is argued to have a [uNeg] feature, which is formally checked by the [iNeg] feature of a negative operator [¬ Op] in SpecNegP. The tree in (17) shows stage I of Jespersen's cycle in OHG, where the negative particle *ni* has a uninterpretible [uNeg] feature which is checked by [iNeg] of the covert negative operator [¬ Op] in SpecNegP.

(17) OHG, stage I

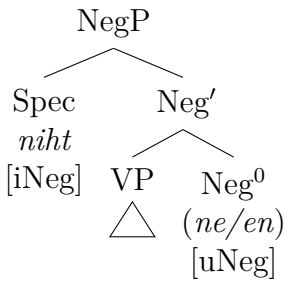


For MHG, Jäger and Penka (2012) argue that Neg^0 is optionally filled by *ne/en* < *ni*, while "the newly grammaticalized second negative particle *niht* [...] stands in a fix position in the 'middle field'[3] that can be analysed as SpecNegP" (Jäger and Penka 2012:10), as in the tree in (18). As SpecNegP is the locus of semantic negation, they assume *niht* to carry an [iNeg] feature.

provide a different analysis. They assume that n-indefinites obligatorily move through SpecNegP. This is based on the Neg-criterion (Haegeman and Zanuttini 1991), which requires a Spec-head relation between a negative XP and a negative head. In order to check its negative feature against Neg^0, the n-indefinite *nought* originally moves to SpecNegP from a VP-internal position. Over time, this movement is lost and *not* is reanalyzed as being base-generated in SpecNegP.

[3]The part of the clause between the finite verb or complementizer (C^0 in generative terms) and the final verbal elements is called the 'middle field' (German 'Mittelfeld'). The topological model goes back to Drach (1937) (cf. also Höhle 1986).

(18) MHG, stage II



The grammaticalization of *niht* is argued to be due to adjacency of *niht* and SpecNegP. The reinforcer *iouuiht* ('anything')/*niouuiht* ('nothing') is of nominal origin. It first becomes reanalyzed from an argument position to residing in a VP adjoined adverbial position. Once analyzed as a VP adjunct, *(nio)uuiht* is reanalyzed as located in SpecNegP in a second step (Jäger 2008; Jäger and Penka 2012).

Bridging contexts for this reanalysis are contexts with ambiguous argument structure such as optionally transitive verbs (e.g. English *eat* or *drink*) or predicates permitting an optional extent argument (Jäger 2008; Breitbarth et al. 2013; Breitbarth 2014b). In (19), the verb *belgan* ('to anger') can be argued to take *uuiht* ('anything') as an optional argument indicating the extent of the anger.[4]

(19) Heliand 4895, cited from Breitbarth (2013:196)

ni sculun us belgan uuiht
NEG shall.PL REFL be angry anything

'We shall not be angry at all.'

Another bridging context is the indefinite *(nio)wiht* appearing with a genitive attribute. Breitbarth (2013:195) provides – among others – an example for Old Low German, where *wiht* appears as a head noun with a genitive attribute (20). She notes that especially in cases such as (21) where the

[4]Breitbarth et al. (2013) show that verbs of caring and indifference cross-linguistically often allow for an optional argument indicating the extent of care or indifference respectively.

genitive element appears disjoint from *wiht* are bridging contexts in which the (negative) indefinite can be reanalyzed as a specifier of NegP, while the pronoun is analyzed as the argument of 'to recognize' (Jäger 2008).

(20) Heliand 1691-2, cited from Breitbarth (2013:195)

Ne sculun gi ênigumu manne unrehtes uuiht derbies
NEG shall you any man injustice.GEN anything hostile
adêlean
give

'You should never pronounce even the slightest detrimental, unjust judgement on any man.'

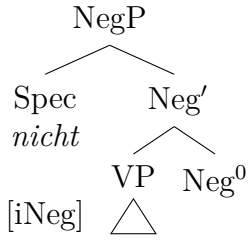
(21) Heliand 813, cited from Breitbarth (2013:196)

sô is thea ni mahtun antkennian uuiht
so he.GEN those NEG could recognize anything

'They did not recognize him at all.'

The tree (22) shows stage III as proposed by Jäger and Penka (2012) in present-day German (MG). Towards ENHG and present-day Dutch, the optional head of NegP *ne/en* finally disappears, which results in *ni(c)ht* becoming the only marker of sentential negation. It carries an [iNeg] feature. Jäger and Penka (2012) explain the fact that Negative Concord between negative indefinites and *nicht* is not available in present-day German by assuming that negative indefinites in German can only be licensed by a covert negation operator (Jäger and Penka 2012:14).

(22) MHG, stage III



2.1.2 A NegP-free account of Jespersen's cycle

Breitbarth (2014b, 2017a) proposes a NegP-free approach. According to her, negative markers differ in the amount of internal structure they have, parallel to the analysis of different types of pronouns and adverbs by Cardinaletti and Starke (1999); Grosz (2007) and Cardinaletti (2011). In order to account for the renewal of negative markers in language change, Breitbarth adopts two principles, namely Feature Economy (FE) (van Gelderen 2011) and Minimize Structure (MS) (Cardinaletti and Starke 1999). Van Gelderen (2011) explains cyclical change based on third-factor principles (Chomsky 2005). According to FE, uninterpretable features are more economical than interpretable features. Therefore, lexical items carrying an [iNeg] feature change to carrying a [uNeg] feature:

(23) Feature Economy: Minimize the semantic and interpretable features in the derivation, for example:

Adjunct/argument	Specifier	Head	affix
semantic	> [iF]	> [uF]	> [uF]

(van Gelderen 2011:17)

FE reformulates the Head Preference Principle ("Be a head, rather than a phrase") and Late Merge ("Merge as late as possible") (van Gelderen 2004), which explain that specifiers become reanalyzed as heads and that heads become reanalyzed as higher heads.

The other principle assumed by Breitbarth (2014b, 2017a) is an economy principle in the sense of Chomsky (2005) as well. Minimize Structure (MS) (Cardinaletti and Starke 1999) requires the smallest structure to be used in a derivation:

(24) Economy of Representations: Minimize Structure
Only if the smaller structure is independently ruled out, is the bigger alternative possible.

(Cardinaletti and Starke 1999:45)

In Cardinaletti and Starke (1999), MS explains the distribution of the different series of pronouns. The pronoun with the smallest structure (a weak

pronoun) is preferred over a more complex structure (a strong pronoun) unless the smaller structure leads to a crash in the derivation. Furthermore, Cardinaletti and Starke (1999) analyze pronouns to have three functional layers: C, $\sum$, and I. Referentiality and case are located in the C-layer, prosodic information reside in $\sum$, while phi-features are encoded in I. Depending on which layers of structure are missing, the items have to occur in positions in which the missing information can be recovered, e.g. weak pronouns without a C-layer occur in the specifier of agreement projections. Breitbarth (2014b, 2017a) extends this analysis to the cross-linguistic typology and grammaticalization cline of negative markers and understands Minimize Structure (MS) as an effect of grammaticalization. One language can have different negation markers with different degrees of grammaticalization, i.e. strong and weak forms which can also be homophonous (such as German *niht*). She determines four classes of negative markers which differ with respect to their internal structure which results in different syntactic behavior, listed in table 2.1.

Table 2.1: Breitbarth's (2014b, 2017a) classes of negative markers and their properties

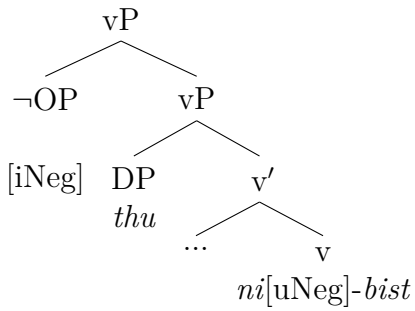
neg marker	size	distribution	formal feature
strong	$C_{Adv}P$	free, constituent neg	[iNeg]
weak	$\sum_{Adv}P$	adjoined to vP	[iNeg]
clitic	$I_{Adv}P$	clitic (e.g. on T)	[iNeg] > [uNeg]
affix	AdvP	affix on verb	[uNeg] > ø

The C-layer encodes focus. Therefore, strong negative markes can express narrow focus, while weak negators without a C-layer need to adjoin to vP. Parallel to pronominal elements, the $\sum$-layer is equipped with prosodic information. Clitic negators lacking this layer therefore need a functional head to attach to. The I-layer is equipped with an interpretable formal negation feature. According to Breitbarth (2014;2017), affixal negators which lack this layer may have a [uNeg] feature but, under FE, eventually lose their [uNeg] feature. With these notions at hand, it becomes possible to account for the change in the expression of sentential negation without assuming a NegP. Breitbarth exemplifies this for Low German. In OS, she analyses the negative marker *ni* immediately preceding the finite verb as

an affix with a [uNEG] feature, as shown in (25) (Breitbarth 2017a:41). Indefinites in OS are analyzed as carrying an [iNeg] feature, as they were not able to co-occur with each other (cf. chapter 2.2).

(25) OS, Heliand 919, stage I

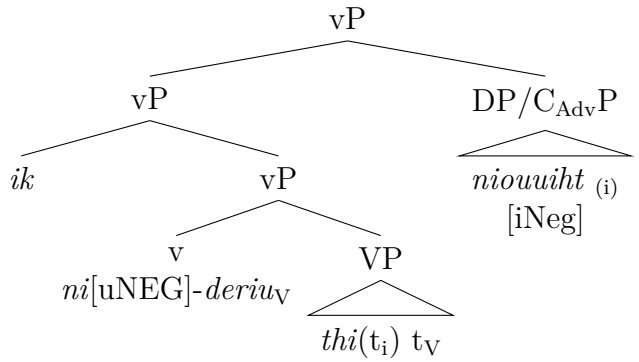
thu ni bist
you NEG are



The negative marker *niet* is grammaticalized from a (negative) indefinite argument *(n)iouuiht* ('anything/nothing'). Being used as an optional extent argument, as in (26), it is reanalysed as a strong negative adverb (Breitbarth 2017a:41). It therefore has a C-layer and can be used for narrow scope and focus negation. Note that in the tree in (26, there is only movement of *niouuiht* if it is still an extent argument. Once reanalyzed as an [iNeg] adverb, there is no movement, i.e. no trace in the VP.

(26) OS, Heliand 3892, stage I

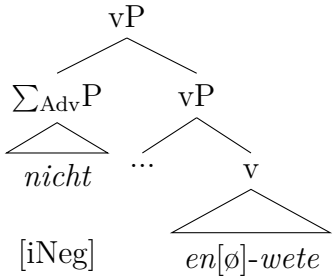
ik thi geth ni deriu neouuiht
I you also NEG damage nothing



From the status of an adverbial negator, *niht* is reanalyzed as a weak adverbial negator adjoined to vP in MLG (due to FE), (stage II), while the former affixal marker is stripped of its [uNeg] feature under FE and is therefore lost eventually.

(27) MLG, Braunschweig 1349, cited from Breitbarth (2017a:41), stage II

nicht enwete
NEG NEG=know



The stages of Jespersen's cycle are explained as an interaction between MS and FE. MS requests the insertion of the smallest form where two forms are available, while under FE the reduction of [iNeg] features to [uNeg] and

eventually ø is triggered. It has to be noted that "MS does not create more deficient forms to be used by itself" (Breitbarth 2017a:39), nor does FE "apply without being triggered" (Breitbarth 2017a:39). Beitbarth points to the fact that the grammaticalization of new negation markers is a "complex interplay of semantic and syntactic properties of input items, lexical bridging contexts, and the loss of original syntactic and semantic distributional restrictions" (cf. Breitbarth et al. (2013)). For Low German, the grammaticalization of an [iNeg] $C_{Adv}P$ was triggered by [iNeg] indefinites in that language. The strong marker became weak under MS, at the point that the new [iNeg] emphazisers became available. Under FE, the [uNeg] feature of the preverbal marker was lost (Breitbarth 2017a:39). For MHG, MLG and MD in the transition between stage II and stage III of Jespersen's cycle, we can therefore assume that *ne/en* carries a [uNeg] feature which is in process of being lost, while *niht/niet* carries a [uNeg] feature after losing its [iNeg] feature under FE. For reasons of simplicity, I will assume a covert operator [¬OP] carrying an [iNeg] feature which checks the [uNeg] features on negative items in the clause.[5] Even though High German, Low German and Dutch all underwent Jespersen's cycle, they differ in chronology and duration of the different stages (Breitbarth 2009, 2013; Breitbarth and Jäger 2018). In the following sections, I will review previous studies on Jespersen's cycle in the three languages under investigation and point out post-cyclic uses of the particle.

2.2 Jespersen's cylce in High German, Low German and Dutch

Old Saxon/Old Low German (OS) (28), Old Dutch/Old Low Franconian (OD), (29) and Old High German (OHG) are generally described as stage I of Jespersen's cycle. The standard negation in these languages is the particle *ni* which precedes the finite verb (Jäger 2008; Breitbarth 2013).

(28) Heliand 915, cited from Breitbarth (2013:193)

'ni bium ic', quaðhe, 'that barn godes …'
NEG am I spoke=he the child God.GEN

[5]Breitbarth (2017a) notes that this cannot account for the fact that negative indefinites have to move out of their base position in order to take scope and proposes to treat negation as a quantifier.

'I am not the child of God, he said.'

(29) Wachtendonck Psalms, cited from Breitbarth (2013:193)

ne farlāt tu mi
NEG forsake you me

'Do not forsake me!'

(30) Otfrid, cited from Jäger (2008:29)

sí ni mohta inbéran sin
she NEG could do without him

'She could not do without him.'

The languages differ with respect to the textual attestation and elements co-occuring with the preverbal particle. For OS, Breitbarth (2014b) shows that almost all negative clauses, except for some negative conjuncts introduced by the disjunction *ni/ne* ('and not'), appear with preverbal *ni*. About 9% of the clauses appear with emphasizers. There are more n-free indefinites in the scope of negation than n-marked ones, while generalizers such as *(io)uuiht*, as in (20) above, are among the most common emphasizers (Breitbarth 2013:195). In OHG, the n-marked *niouuiht* also appears as one of different negative strengtheners (Jäger 2008:103). In both OS and OHG, n-indefinites did not express sentential negation on their own but co-occured with the preverbal particle (negative doubling). There are only four clauses in Jäger's corpus and none in Breitbarth's data, where an n-marked indefinite was the only marker of sentential negation (Jäger 2008; Breitbarth 2014b).

Jäger (2008) shows that around 92% of negated clauses in her OHG corpus appear with the particle *ni*. Exceptions are elliptical constructions where *nalles* is used as a negator as *ni* has nothing to cliticize to, or a few cases in which a negative indefinite is the only means of expressing sentential negation (Jäger 2008:62). In 77% of the clauses, *ni* is the only negative marker in the clause, but, as noted above, n-marked indefinites as well as n-free indefinites and minimizers are used as strenghteners in OHG. OHG and OS both showed negative doubling (31). Negative spread is sparsely attested in OHG, as in (32) (Jäger 2008:214), but not attested OS (Breitbarth 2014b:73).

(31) Tatian 45, 21, cited from Jäger (2008:213)

got nioman nigisah io in altere
God nobody NEG=saw ever in ages

'Nobody has ever seen god.'

(32) Notker Boethius 45, 15f., cited from Jäger (2008:214)

Tiu niom-er niomanne guis neuuirdet
which never nobody sure NEG=becomes

'which never will be certain to anybody.'
(Quam non relicturam nemo umquam poterit esse securus)

Breitbarth (2014b:74) argues based on data from older and younger records that originally, Continental West Germanic languages did not allow for negative doubling but changed towards negative doubling being optional.

There are only a few texts from the OD period. Breitbarth (2013) notes that her OD data from the Leiden Willeram (late 11th century) and the Wachtendonck Psalms (9th or 10th century) can only be reported without formulating generalizations because both texts are translations and it is therefore not clear how much they can be taken to be representative for OD syntax. The majority of clauses in the two texts are negated by preverbal *ni*. In the older Wachtendonck Psalms, two clauses already show *niuueht* expressing sentential negation. While in the Wachtendonck Psalms, *ni* does not co-occur with other negative elements, over 80% of the negative clauses in the later Leiden Willeram appear with adverbial *niht* or an n-marked indefinite. 64% of the clauses only containing single preverbal *ni* appear with a modal verb, a context which is known for its conservative behaviour in MD and MHG regarding the old preverbal particle (Paul et al. 2007; Van der Horst and Van der Wal 1979). The Leiden Willeram shows strict negative doubling, as in (33), while negative spread is optionally available (34) and becomes standard in MD (Breitbarth 2013:221).

(33) Leiden Willeram, cited from Breitbarth (2013:221)

Thich neminnot nieman, her nesii recht
tou NEG-loves noone he NEG-be righteous

'Nobody loves you who is not righteous.'

(34) Leiden Willeram, cited from Breitbarth (2013:221)

thaz sie nietemer neheine uirtutem nimugan hauen nisi
that they n.to.more no virtue NEG=can have unless
tantum per me
only through me

'That they cannot (even a little) have any virtue, unless it be through me.'

While the n-marked indefinite *niouuiht* was not the most prominent strengthener in all three languages, it was grammaticalized as a standard negator towards MHG, MLG and MD (cf. section 2.1.1 for bridging contexts in which the n-indefinite was reanalyzed). According to Jäger (2008:117), *niouuiht* had already been used as an adverbial strengthener in Late OHG and grammaticalized subsequently. The few attestations in OD point to a similar time as a transition between stage I and II of Jespersen's cycle: in 11th century Leiden Willeram, *ni* needed an additional element in 80% of the clauses. The attestation gap between the OS and MLG period makes it difficult to determine a time of grammaticalization in Low German. By the 13th century, when the first MLG texts are written, *niht* expressed sentential negation and had lost its emphatic use (Breitbarth 2013:196).

There are well described contexts in which *ne/en* continues to express sentential negation while *niht* already appears as an additional or only marker of negation in all three languages under investigation:[6]

- certain verbs: *ruochen/ruoken* and *wissen/weten* (Behaghel 1918:231), 'modal verbs' as well as *lazen/laten* and *tuon/doen* (Paul et al. 2007; Stoett 1923) - Burridge (1993:180) just calls them "common usage verbs" (cf. also de Boor and Wisniewski (1998); Lockwood (1968)
- verbs which take a wh-complement (Stoett 1923; Postma 2002)

[6]In addition to these contexts which are described for both MHG and MD and in part for MLG (Breitbarth 2014b), Postma (2002) based on Stoett (1923) describes more preserving factors which I will discuss when reporting the results from my MD corpus investigation.

- elliptical constructions (Behaghel 1918:232)
- clauses introduced by certain compelmentizers, such as MHG *wanne* (Behaghel 1918:232)
- in rhetorical questions (Stoett 1923:155)

According to Jespersen (1917:14), verbs meaning 'to know' have a cross-linguistic preference of being conservative regarding negation. Hoeksema (1997:145) notes that the verb *roeken* ('to matter') is an impersonal psych-verb but cannot be characterized as very common or frequent. He describes the psych-verbs which are often used in negative contexts ('I don't care', 'It doesn't matter') as "polarity-sensitive in a statistical, rather than absolute sense" (Hoeksema 1997:146). The conservation of the old preverbal marker with certain verbs can therefore be described as a frequency effect which leads to preservation of obsolete characteristics (Bybee 2003:604). Postma (2002) argues that these instances that appear like residual stage I actually always co-occur with a negative polarity item or phrase (Postma 2002:46). According to him, wh-subordinate clauses have the status of a negative polarity item. Even though they also co-occur with *niet*, it suffices if they co-occur with preverbal *ne/en* to express sentential negation. In section 4.4, I will discuss Postma's generalizations in more detail and show whether they also hold for my MHG, MLG and MD data. In part II, I will only explicitly point out wh-complements/subordinate interrogative questions if they do not co-occur with *ruohen/ruoken* and *wissen/weten*. Section 4.4 will provide a comparison of *ruohen/ruoken* and *wissen/weten* co-occuring with wh-complements in MHG, MLG and MD.

In Breitbarth's (2014) MLG data, preverbal *ne/en* is very rare on its own (0,2%). There is only one case in which it appears on its own with a modal verb and four cases where an n-free indefinites co-occurs with *ne/en* (Breitbarth 2014b:31). The newly grammaticalized *niht* appears in all negative clauses, except for clauses with n-marked indefinites in the scope of negation. Between 1375 and 1424, 55% of the MLG clauses without n-marked indefinites are negated by *niht* alone, by 1574, the percentage is at 87,2%. In MHG, the particle disappears much earlier: in Upper German texts, it is very rare from the 13th century onwards (Lehmann 1978; Jäger 2008; Schüler 2016), while it is still frequent in charters from Cologne (Ripuarian) in the 13th century (Schüler 2017). In MLG, the transition between stage II and

III of Jespersen's cycle also shows differences across scribal languages (Breitbarth 2014b:43). Westphalian is more conservative, favoring the bipartite construction, while clauses from Lübeck and Stralsund more frequently and from earlier on appear with *niht* alone. In MD, the transition between stage II and stage III occurred much later (Breitbarth 2013). While according to Burridge's (1993) data, stage III was reached around 1650 in the northern dialects, the corpus data presented in Hoeksema (2014) suggest that it was rather 1750. In southern dialects, the preverbal marker was only dropped in a little more than half of the clauses around 1750 (cf. also Beheydt 1998). The position of the verb also seems to have an effect on the loss of preverbal *ne/en*. In MD and MLG, V1 clauses lose the particle first, i.e. V1 are more likely to appear without the preverbal particle (Burridge 1993; Breitbarth 2014b,a; Hoeksema 2014), while Jäger (2008) did not observe such an tendency in her MHG data. Summing up, High German was the first to reach stage III of Jespersen's cycle, followed by Low German and Dutch. In all three languages, a large diatopic variation can be observed. Regions and cities with a large linguistic diversity and population movement, e.g. due to trade, seem to be especially fast in loosing bipartite negation (Rutten et al. 2012; Vosters and Vandenbussche 2012; Breitbarth 2014b; Hoeksema 2014).

2.3 Non-negative uses of preverbal *ne/en*

Descriptions of negation on Continental West Germanic languages differ with respect to how they characterize paratactic, expletive and negative uses of *ne/en*. Burridge (1993:181) for example, takes paratactic *en* in Middle Dutch to be a linking device, the clause containing paratactic negation according to her has to be translated as an adverbial clause in English, German or Dutch. Jespersen (1917) describes a clause with paratactic negation as a complement to a negated or negative verb. Hoeksema (2014) does not differentiate between paratactic negation and exceptive clauses (Breitbarth 2014b). As noted in chapter I, I will adopt Breitbarth's (2014b:32) account and take exceptive clauses as distinct from paratactic negation, as exceptive clauses do not always depend on negation. Exceptive clauses are subjunctive verb-second clauses translating as 'unless' or 'except' (35).

(35) Stralsund 1392, cited from Breitbarth (2014b:32)

vnde dar moste numment yn, he ne gheue V mar vp dat
and there must noone in he NEG give.SBJV five marks on the
minste
least

'and no one shall enter there, unless he give/pay at least five marks.'

Breitbarth (2014b:32) provides different arguments for treating these clauses separate from negative conditionals. While negative conditionals, as in (36), show V1 word order or are introduced by a complementizer (37), exceptive clauses always show V2 word order and subjunctive on the verb (35).

(36) MLG, Sachsenspiegel MS Oldenburg, early 14th century (14v, line 9/10)

ne es uader nicht, it nimpt sin moder
NE is father NEG it takes his mother

'If there is no father, the mother takes it.'

(37) MHG, Sachsenspiegel, 13th century (I-LV)

darumme mot men wol kesen enen gogreven [...] *of se des*
therefore must man well chose one earl [...] if they the
belenden richteres nicht hebben en mogen
liege judge NEG have NE can

'Therefore, one has to chose an earl if there is no liege judge.'

Furthermore, negative conditionals appear with *niht*, while exceptive clauses do not. Breitbarth also notes that exceptives follow the main clause to which they express an exception and that the particle *denne* (German *es sei denn* - 'it be.SBJV DENN' meaning 'unless') eventually replaces *ne/en* in the exceptive construction. Breitbarth (2015a) identifies two types of exceptive clauses, namely monoclausal (38) and biclausal (39) structures. Monoclausal

exceptives are V2 clauses with the verb in subjunctive mood. Biclausal exceptives consist of a dummy matrix clause[7] with an expletive pronoun followed by the verb *sīn* ('to be') in subjunctive mood followed by a complement clause encoding the exception.

(38) Uelzen, 1457 cited from Breitbarth (2015a:13)

ide en=love und swere ersten ome zinen rad gelik unsem
he NE=vow and swear first on his council like ours

'unless he vow and swear first on his council as he does on ours.'

(39) Braunschweig 1361, cited from Breitbarth (2015a:12)

it ne were, dat he worde begrepen vppe der handhaftighen dat enes
it NE were that he were caught on the actual act of
dodslaghes
manslaughter

'unless he were caught redhanded comitting an act of manslaughter.'

The dummy matrix clause grammaticalized towards German *es sei denn* (1) and Dutch *tenzij* (2) (both 'unless').[8]

[7] I will refer to the first clause which is modified by the exceptive adverbial clause as 'main clause'. With 'dummy matrix clause', I refer to the matrix clause in the biclausal structure (*iz ne=si/wāri* 'it NE be.SBJV') which is followed by a complement encoding the exception.

[8] In contrast to German *es sei denn*, *tenzij* is a subordinator, as it introduces a clause with V-end word order. If *es sei denn* is not followed by the complementizer *dass* ('that'), the clause following it shows V2 word order. Therefore, Pasch et al. (2003) refer to *es sei denn* as a 'coordinator', as it did not grammaticalize to become a full subordinator such as *tenzij*, which triggers V-end word order.

(1) present-day German

Ich gehe nicht in die Schule, es sei denn, du fährst mich.
I go not in the school it be.SBJV DENN you drive me

'I don't go to school unless you take me there by car.'

As noted in section 1.3, I adopt the first part of the definition for paratactic negation by Van der Wouden (1997:196), namely that an element of negative import triggers paratactic negation in the subordinate clause. He uses the term 'complement' to refer to the dependent clause, but as there are also adverbial clauses in the data analyzed in this thesis, I will refer to a clause as containing paratactic negation if it contains a negative marker without being truth conditionally negated and if it semantically depends on a main clause which contains implicit negation, e.g. semantically negative verbs (Horn 2010), or an overt negation marker. This sets apart exceptive clauses from paratactic negation, as the main clause in the former can also contain a modal or non-negated proposition. In the data descriptions, I will divide the sections on post-cyclical uses of preverbal *ne/en* into 'exceptive clauses' and 'paratactic negation'. It has to be noted that there is not always a difference between categorizing a clause as an exceptive structure or as a paratactic structure. Especially in cases where the exceptive modifies a negative main clause, the classification is not clear-cut. I will therefore report the status of the main clause preceding the exceptive for each language.

(2) present-day Dutch[9]

Tenzij de nationale wetgeving anders bepaalt, zijn de rechten voortvloeiend uit
unless the national law other provides be the rights arising out
deze garantie de enige rechten van de koper.
this warranty the only rights of the buyer

'Unless otherwise provided by national law, the rights arising from this warranty are the sole rights of the buyer.'

Part II

Corpus Study

Chapter 3

Corpora used for this study

In order to investigate the functional change of the old sentential negation marker *ne/en*, I searched corpora and databases for MHG, MLG and MD for clauses containing the preverbal particle and exceptive constructions specifically. The type and extent of tagging of the resources and corpora used for this thesis varies. Therefore, I will give detailed accounts of the different corpus searches which I conducted. For all corpora, I saved the clauses I extracted in a csv-file with one row for each clause, which included cells for meta-data annotation as well as syntactic information such as 'word order', 'verb type' or 'verbal mood'. For sampling the MD and MHG corpus results, I used the "=RAND()" function in Microsoft Excel to generate a random number for each row. In a second step, the data was sorted according to the random numbers which resulted in a random order of rows. Depending on the sample size, I then extracted the first 50, 169 (25% of the total MD corpus results) or 3 929 rows (20% of the total MHG corpus results).[1] A list of all primary sources in the samples is provided in the appendix.

[1]Originally, I planned to take a 20% sample from both MD and MHG corpora. As the MD results were too small in number, I decided to take a 25% sample from the MD corpus results. Due to the different degree of tagging between the MD corpora and the reference corpora for MHG and MLG, I was not able to analyze the same amount of clauses for MD as for MHG and MLG.

3.1 Middle High German

For MHG, I used the Referenzkorpus Mittelhochdeutsch (ReM)[2] to search for sentences containing single preverbal *ne/en*. Additionally, I searched the database of the Middle High German Dictionary in order to find different types of exceptive clauses and instances of paratactic negation.[3]

3.1.1 Referenzkorpus Mittelhochdeutsch (ReM)

I used the fully lemmatized and PoS-tagged ReM corpus (Klein et al. 2016), which has only been available since the end of 2016, in order to analyze the development of the two negative particles *ne/en* and *niht* in MHG. The core of the corpus texts are the MiGraKo, a corpus used for the MHG grammar which is well balanced. For the ReM, the MiGraKo corpus was expanded with other MHG corpora and earliest MHG texts.[4] Therefore, the corpus is not well-balanced (cf. table 3.1), but allows users to search within a large amount of MHG texts, especially early and smaller texts that were not accessible before. In this corpus, all instances of negative particles (PoS="PTKNEG") were retrieved. As this led to all sentences with bipartite negation to appear twice in my query results, I used Microsoft Excel to filter out duplicates and to take a random sample of 20% (n=3 929) of all sentences containing a negative particle (n=19 645). As the main interest of this thesis is to investigate single preverbal *ne*, I did not search for negative indefinites or other n-words that could also be used to express sentential negation in MHG (Jäger 2008). Table 3.1 gives the number of tokens per century and dialect area, which corresponds to the meta-annotation "language-type" in the ReM corpus.[5] Note that the percentages within the 'total' row/column provide the fractions compared to the whole corpus, i.e. all cells within a 'total' row/column add up to 100%. Within each row, percentages provide the fractions of each dialect area within one period, i.e. one row except for its 'total' cell adds up to 100%.

Most texts are assigned to the first or second part of a century (e.g. 1250-

[2]https://www.linguistics.rub.de/rem/

[3]http://www.mhdwb-online.de/

[4]https://www.linguistics.rub.de/bla/019-klein-dipper2016.pdf

[5]Some texts in the ReM corpus only receive a "language-type" annotation, while most also have value for "language-area", which corresponds to a more fine-grained dialect specification.

Table 3.1: Token number per century and dialect area in the ReM

Century	CG		UG		UG/LG		CG/LG		CG/UG		LG/UG		total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1000-1100	19	1,6%	1 158	98,4%	-	-	-	-	-	-	-	-	1 177	0,05%
1050-1100	18	0,07%	25 147	99,6%	-	-	-	-	59	0,2%		-	25 224	1%
around 1100	-	-	27 271	99,4%	-	-	-	-	158	0,6%	-	-	27 429	1,1%
1100-1200	17 597	47,6%	6 926	18,75%	-	-	6902	18,7%	4 033	10,9%	1 477	0,03%	36 935	1,5%
1100-1150	711	2,8%	24 560	97,2%	-	-	-	-	-	-	-	-	25 271	1%
1150-1200	5 195	1,4%	309 363	88,8%	21 544	6,2%	498	0,1%	11 764	3,4%	-		348 364	14,1%
around 1200	31 225	15,3%	120 337	59%	-	-	-	-	52 204	25,6%	-	-	203 766	8,3%
1200-1300	12 330	25,2%	21 488	43,9%	-	-	-	-	15 174	30,97%	-	-	48 992	2%
1200-1250	146 485	33,5%	247 480	56,6%	-	-	43 183	9,9%	-	-	-	-	437 148	17,3%
1250-1300	225 262	46,7%	256 685	53,2%	-	-	-	-	514	0,1%	-	-	482 461	19,6%
around 1300	12 910	30,7%	29 138	69,3%	-	-	-	-	-	-	-	-	42 048	1,7%
1300-1400	38 395	39,8%	58 031	60,2%	-	-	-	-	-	-	-	-	96 426	3,9%
1300-1350	410 234	63,1%	239 022	36,8%	-	-	377	0,05%	-	-	-	-	649 633	26,3%
1350-1400	17 624	43,2%	23 195	56,8%	-	-	-	-	-	-	-	-	40 819	1,7%
total	918 005	37,2%	1 389 801	56,36%	21 544	0,9%	50 960	0,02%	83 906	3,4%	1 477	0,001%	2 465 693	

CG: Central German UG: Upper German LG: Low German

1300), but for some only the century (e.g. 1100-1200) or the transition phase between two centuries (around 1300) is given in the meta-data. As there are only a few texts from the beginning of the MHG period, there is no differentiation between first and second half of the 11th century. In contrast to the MD corpora, the ReM contains a lot of non-chancery texts of which a precise dating and localization is not possible. Therefore, sometimes only language characteristics or information about the codex can be used to determine the language area and century of origin. Texts that show various features are assigned to two dialect areas, e.g. Low German (LG) and Central German (CG).[6] There are fewer tokens in Central German (CG) texts (37,2%) than in Upper German (UG) texts (56,36%). The table also shows a general increase of tokens towards the end of the MHG period. Furthermore, it has to be noted that the ReM meta-data annotation provides the variable "genre" which only differentiates between 'verse', 'prose' and 'charters' as well as the variable 'topic' which gives the topic of the text such as 'religion', 'poetry' or 'science'. I adopt the meta-annotations from the ReM corpus and point to potential problems as needed when analyzing the data.

3.1.2 Database of the Middle High German dictionary

Before the ReM corpus became available, I used the database of the MHG dictionary[7] in order to find different types of exceptive clauses and non negative uses of *ne/en*. Therefore, the results do not contain contexts in which the preverbal particle still expresses sentential negation. The database consists of digitized editions of literary, legal and religious texts. The texts are partly lemmatized. Using the information about the number of lemmatized tokens, it was possible to calculate the overall corpus size (24 texts, 922 926 lemmatized tokens). In order to retrieve all sentences containing single *ne/en*, I searched for the lemma *ne* (n=1 100). As exceptive clauses in MHG can appear with *denne*, I additionally looked for all instances of

[6]The ReM corpus consists of MHG texts only, but according to the meta-data annotation, 12 texts show Low German dialect features, namely Christus und Pilatus (M046-N1), Eilhart von Oberg: 'Tristrant' (M) (M064M-N), Eilhart von Oberg: 'Tristrant' (St) (M064S-N1), Schleizer Psalmenfragmente (M187-N1), Mittelfränkische Reimbibel (A) (M199A-G1), Mittelfränkische Reimbibel (C) (M199C-N1), Pfaffe Konrad: 'Rolandslied' (A) (M205A-N1), Pfaffe Konrad: 'Rolandslied' (M) (M205M-N1), Pfaffe Konrad: 'Rolandslied' (S) (M205S-N1), König Rother (H) (M206-N1), Pfaffe Lambrecht: Tobias (M226-N1), Hamburger Beichte (M543-N1).

[7]http://www.mhdwb-online.de

MHG *denne* (n=4 300) from the database and manually sorted out exceptive clauses. Besides providing additional examples for exceptive clauses, the data set provides an insight into exceptive clauses with *denne*, which was not independently searched for in the ReM corpus, due to its larger size. Overall, I found 267 clauses with single non-negative *ne/en* in the MHG database, of which 142 appeared in the literary text Prose Lancelot. This text is younger than the rest of the texts (Zimmermann et al. 2003). Consequently, the Prose Lancelot was excluded in the overall description of the data from the Middle High German Dictionary's database, as it would have skewed the picture. The database of the Middle High German dictionary uses digitized editions that might deviate from the original manuscripts and was not compiled to comply to the standards of the reference corpora for historical German to which the ReM belongs.

3.2 Middle Low German

For Middle Low German, I used the texts of the Referenzkorpus Mittelniederdeutsch/Niederrheinisch[8] in the form in which they were available and lemmatized in April 2016 (25 texts, 305 382 lemmatized tokens). The sample contains religious (30%, n=90,631), literary (26%, n=78,757) and legal texts (23%, n=70 537). As can be seen from table 3.2, it is biased towards Westphalian (WP) (33,1%), North Low Saxon (NLS) (29,7%, n=90,712) and East Elbian (EE) (21,2%). Eastphalian (EP) (8,5%), Low Rhenish (LR) (6,3%), and the scribal language of Lübeck (L) (1,2%) are underrepresented. Westphalian and North Low Saxon are the only language areas represented in the 13th and 14th century. In table 3.2, the percentages within the 'total' row/column provide the fractions compared to the whole corpus, i.e. all cells within a 'total' row/column add up to 100%. Within each row, percentages provide the fractions of each dialect area within one period, i.e. one row except for its 'total' cell adds up to 100%.

As the texts are tagged for PoS and sentence boundaries are annotated, it was possible to search for clauses containing negative elements, such as the negative adverb *niht* and the negative particle *ne/en* (PoS="PTKNEG"). I found 2 423 clauses containing *ne/en* or *niht* and manually sorted out the clauses with single preverbal *ne/en*. Additionally, due to the tagging, I found 177 clauses which were negated by an n-marked indefinite only. These were

[8]https://www.slm.uni-hamburg.de/ren.html

Table 3.2: Token number per century and dialect area in the ReN subcorpus

Century	WP		NLS		LR		EE		EP		L		total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1201-1300	2 376	100%	-	-	-	-	-	-	-	-	-	-	2 376	0,8%
1251-1300	-	-	41 868	100%	-	-	-	-	-	-	-	-	41 868	13,7%
1301-1350	6 805	-	15 395	69,3%	-	-	-	-	-	-	-	-	22 200	7,3%
1351-1400	24 470	100%	-	-	-	-	-	-	-	-	-	-	24 470	8%
1401-1450	28 678	47,5%	-	-	-	-	31 629	52,4%	-	-	-	-	60 307	19,8%
1451-1500	38 797	42,5%	23 187	25,4%	-	-	-	-	25 806	28,2%	3 598	3,9%	91 388	29,9%
1501-1550	-	-	10 262	16,4%	19 144	30,5%	33 268	53,1%	-	-	-	-	62 674	20,5%
total	101 12	33,1%	90 712	29,7%	19 144	6,3%	64 897	21,3	25 806	8,5%	3 598	1,2%	305 283	

WP: Westphalian NLS: North Low Saxon LR: Low Rhenish EE: East Elbian EP: Eastphalian L: scribal language of Lübeck

excluded from the description, as the other corpora for MHG and MD did not tag in a way to have n-marked indefinites included.

3.3 Middle Dutch

The Middle Dutch corpora used for the study are the Corpus Gysseling (CGy) and the Corpus van Reenen-Mulder (CRM), which are both PoS-tagged and lemmatized. The CGy contains chancery and literary texts from the Middle Dutch period from 1200 until 1300 (1 600 000 tokens), and the CRM contains of chancery texts from the 14th century only (750 000 tokens). Hence, there is a lack of literary texts towards the later records used for this study. While the CGy offers an interface to search the corpus online[9], the CRM in its lemmatized and tagged form comes in csv-format.[10] In both corpora, I searched for the lemma *ne/en* and manually sorted out the clauses in which *ne/en* appears without *niht* or another (n-marked) indefinite (CGy n=698; CRM n=197). I then took a random sample of 25% from both corpus results in order to analyze the clauses with single preverbal *ne/en* in more detail (CGy n=168, CRM n=50).

3.3.1 Corpus Gysseling

Table 3.3[11] shows that in the Corpus Gysseling West Flemish texts from the second half of the 13th century make up the largest portion of tokens, followed by Brabant West and the province East Flanders. There is a general bias towards texts originating in the second half of the 13th century.

3.3.2 Corpus van Reenen-Mulder

Table 3.4 provides an overview over the proportions of tokens per province and century of the CRM. As the lemmatized corpus is a csv-document, the numbers refer to the the number of rows in each document, which means

[9] http://gysseling.corpus.taalbanknederlands.inl.nl/gysseling/page/search

[10] I thank Prof. Pieter van Reenen who provided me with the files and advice on how to use the corpus.

[11] Again, the percentages within the 'total' row/column provide the fractions compared to the whole corpus, i.e. all cells within a 'total' row/column add up to 100%. Within each row, percentages provide the fractions of each dialect area within one century, i.e. one row except for its 'total' cell adds up to 100%.

Table 3.3: Token number per century and province in the CGy

Province	1200-1250		1250-1300		total	
	#	%	#	%	#	%
West Flanders	265	0,03%	758 825	99,97%	759 090	48,2%
Brabant West	-	-	247 573	100%	247 573	15,7%
East Flanders	15 299	8%	181 967	92%	197 266	12,5%
Brabant North	13 592	34%	6 921	66%	20 513	1,3%
Brabant East	-	-	35 666	100%	35 666	2,3%
Limburg	18 679	19%	78 962	81%	97 641	6,2%
Nederrijn	6 764	16%	36 323	84%	43 087	1,7%
East Holland	-	-	37 497	-	37 497	2,4%
Utrecht	-	-	5 685	-	5 685	0,4%
West Holland	-	-	90 297	-	90 297	5,7%
Zeeland	-	-	4 075	-	4 075	0,3%
no specification	-	-	37 644	-	37 644	2,4%
total	54 334	3,4%	1 521 435	96,6%	1 575 769	

punctuation and markup lines are included. Due to the corpus design, it was not possible to provide absolute token numbers. Nonetheless, the percentages show where biases towards provinces/dialects and decades exist. While the corpus is biased towards Antwerp, East Flanders and West Flanders in the first half of the 14th century, there are more tokens for Limburg, Brussels and Brabant in the second half of the 14th century. The northern provinces of Drenthe and Groningen are the most underrepresented in the corpus.

Table 3.4: Token number per century and province in the CRM

Province	1300-1350		1350-1400		total	
	#	%	#	%	#	%
Antwerp	44 408	15,3%	65 787	7,5%	110 195	9,5%
Brussel	9 431	3,2%	100 972	11,5%	110 403	9,5%
Drenthe	1 046	0,3 %	12 325	1,41%	13 371	1,1%
Flemish Brabant	16 177	5,6%	18 836	2,15%	35 013	3%
Gelderland	6 600	2,3%	61 422	7%	68 022	5,8%
Groningen	0	-	22 739	2,6%	22 739	1,9%
Limburg	6 805	2,3%	94 352	10,77%	101 157	8,7%
Limburg (NL)	1 246	0,4%	38 899	4,4%	40 145	3,5%
North Brabant	23 976	8,3%	91 579	10,5%	115 555	9,9%
North Holland	6 580	2,3%	38 402	4,4%	44 982	3,9%
East Flanders	67 037	23,1%	74 956	8,6%	141 688	12,2%
Overijssel	7 614	2,6%	70 282	8,2%	77 896	6,7%
South Holland	27 833	9,6%	69 895	8%	97 728	8,4%
Utrecht	13 515	4,7%	38 517	4,4%	52 032	4,5 %
West Flanders	31 405	10,8%	51 409	5,9%	82 814	7,1%
Zeeland	25 919	8,9%	25 469	2,9%	51 388	4,4%
total	289 592	24,8%	875 841	75,2%	1 165 433	

Chapter 4

Results

4.1 Middle High German

4.1.1 Results from the Referenzkorpus Mittelhochdeutsch

4.1.1.1 The sample

From all clauses containing a negative particle in the ReM corpus (n=19 645), I took a random sample of 20% (n=3 929). The sample contains data from the 11th to the 14th century from 257 written records (see appendix). 42 clauses contained constituent negation with *niht* and were therefore excluded from the analysis. In this chapter, I will first describe the remaining sample (n=3 887). Secondly, I will address the decline of preverbal *ne/en* in its function expressing sentential negation and describe contexts in which *ne/en* continues to be able to express sentential negation on its own. In the third part, I will describe the post-cyclical contexts in which the particle appears alone and does not express sentential negation.

The 3 887 clauses in my sample are negated by a negative particle (PoS "PTKNEG"), which can be either the negative adverbial *niht*[1], the particle *ne/en*, or both particles co-occurring. N-marked indefinites or disjunction (*noh* 'nor') can also appear in the clause. If no exact date could be determined, only the century, e.g. "1200-1300", or the transition between two centuries, e.g. "around 1300", is given. Table 4.1 shows the distribution of the negative clauses per period.

[1] In contrast to the cases of constituent negation I excluded, *niht* is a sentential negation marker in these clauses.

Table 4.1: Number of negative clauses per period in the ReM sample (n=3 887)

Century	#	%
1000-1100	170	4,4%
around 1100	13	0,3 %
1100-1150	43	1,1%
1100-1200	95	2,4 %
1150-1200	504	13%
around 1200	410	10,5%
1200-1250	903	23,2%
1200-1300	64	1,7%
1250-1300	660	17%
around 1300	39	1%
1300-1350	675	17,4 %
1300-1400	184	4,7%
1350-1400	127	3,3%
total	3 887	

Due to the fact that there are fewer texts transmitted from the early MHG period, only 5% of the clauses in my sample date back to the 11th century. The 14th (26%) and 12th century (22%) are nearly equally represented. Texts from the 13th century (47%) make up the biggest part of my sample.

The sample is biased towards religious texts and poetry,[2] as can be seen in table 4.2. Regarding the annotation 'genre', more than half of the texts (56%) are written in verse, 40% are prose texts, 4% are charters.

Table 4.3[3] compares the token number of the main dialect regions subdivided by time period. Texts written in an Upper German (UG) variety are slightly more frequent than Central German (CG) texts. Compared to the whole corpus, my sample is more balanced regarding the dialect areas.

[2]Recall that the annotations for 'topic' and 'genre' are adopted from the ReM corpus. It has to be noted that I grouped the texts according to the annotations but I did not take into account the order of the key-words, i.e. a text annotated as "topic=religion,poetry" was grouped together with a text annotated as "topic=poetry,religion". The ReM handbook does not indicate whether the order of key-words is important, nor whether the annotation followed specific criteria.

[3]The percentages within the 'total' column provide the fractions compared to the whole sample, i.e. all cells within the 'total' column add up to 100%. Within each row, percentages provide the fractions of each dialect area within one period, i.e. one row except for its 'total' cell adds up to 100%.

Table 4.2: Number of negative clauses per topic in the ReM sample (n=3 887)

Topic	#	%
Religion	1666	42,8%
Poetry	822	21,1 %
Science	56	1,4%
Rel./Poet.	409	10,5%
Rel./Scien./Poet.	306	7,9 %
Scien./Rel.	253	6,5 %
Law	375	9,6%
total		3 887

Table 4.3: Number of negative clauses per period and dialect (features) in the ReM sample

Century	UG		CG		CG/LG		CG/UG		LG		UG/LG		total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1000-1100	169	99,4 %	1	0,6%									170	4,3%
around 1100	13	100%											13	0,3%
1100-1200	468	72,9%	54	8,4%	19	2,9%	24	3,7%	8	1,3%	69	10,8%	642	16,5%
around 1200	160	39%	250	61%									410	10,5%
1200-1300	818	50,3%	807	49,6%			2	0,1%					1 627	41,9%
around 1300	30	77%	9	23%									39	1%
1300-1400	378	38%	608	62%									986	25,4%
	2 036	52%	1 729	44,5%	19	0,5%	26	0,7%	8	0,2%	69	1,80%	3887	

CG: Central German UG: Upper German LG: Low German

4.1.1.2 The data

In order to describe the decline of *ne/en* towards the end of the MHG period, I looked at the general occurrence of the particle *ne/en*, irrespective of whether it appears in stage I or stage II negation or in non-negative uses. The bivariate table 4.4 provides the observed frequency of clauses negated with *ne/en* as well as the observed frequency of clauses not containing *ne/en* clauses. Texts that could not be assigned a clear-cut dialect region were excluded (n=255) which results in a total of 3 662 clauses.
The table shows that *ne/en* becomes less frequent in UG after 1200, while CG is slower in losing *ne/en* overall. It is therefore striking, that in the 12th century, the particle *ne/en* only appears in 41,8% of all clauses with a negative particle in Central German dialects. Looking into the records, it appears that there are 22 out of the 32 clauses in the 12th century from the

Table 4.4: The decline of *ne/en* in Central and Upper German dialects in the ReM sample

Year	CG		UG	
	# *ne/en*	# no *ne/en*	# *ne/en*	# no *ne/en*
1000-1100	1 (100%)	-	158 (93,5%)	11 (6,5%)
1100-1200	23 (41,8%)	32 (58,2%)	385 (80%)	96 (20%)
1200-1300	894 (84,6%)	162 (15,4%)	344 (44,3%)	433 (55,7%)
1300-1400	434 (70,3%)	183 (29,7%)	101 (24,2%)	316 (75,8%)
total	1 352 (78,2%)	377 (21,8%)	1 077 (55,7%)	856 (44,3%)

CG: Central German UG: Upper German

text *Trierer Interlinearversion zum Psalter* which are only negated by *niht* alone. This indicates that the numbers have to be interpreted with caution as there can be a lot of variation between texts. Recall that in contrast to charters, for most literary and religious texts in the ReM corpus it is difficult to determine an exact date and place of origin. Hence, the meta data annotations can only be taken as an approximation.

Table 4.5 provides a more fine grained picture of clauses with *ne/en* in the Central German dialects in the 13th and 14th century. The table shows that the Central German dialects located more towards in the east, namely Hessian and Thuringian, lose *ne/en* faster than the dialects in the west (Franconian).[4]

Only data from texts tagged as "East Central German" seem to alter this picture, as 78% (n=50) of clauses containing a negative particle still appear with *ne/en* in the 14th century compared to no attestations in the 13th century. First, it has to be noted that the lack of attestations for "East Central German" in the 13th century and "West Central German" in the 14th century is due to the meta-annotation in the ReM corpus. There are a few texts in the ReM corpus which are not assigned a specific dialect ("language-area") and are hence only tagged as "East/West Central German" ("language-region"). That there are zero occurrences in the 13th century for East Central German and in the 14th century for West Central German is only due to the fact that texts in this period all have a more specific dialect ("language-area") assigned to them. Still, the question arises why the

[4]Thuringian is an Eastern Central German dialect. Hessian is a Western Central German dialect, but is adjacent to Thuringian, which is why I assigned it to 'WCG/ECG' in the table.

Table 4.5: Percentage of clauses with *ne/en* in Central German dialects relative to all negated clauses in the ReM sample

Dialect	1200-1300		1300-1400	
	# *ne/en*	# no *ne/en*	# *ne/en*	# no *ne/en*
Ripuarian Franconian (WCG)	188 (96,4%)	7 (3,6%)	182 (93,8%)	12 (6,2%)
Rhine Franconian (WCG)	109 (73,2%)	40 (26,8%)	84 (71,8%)	33 (28,2%)
Central Franconian (WCG)	44 (81,5%)	10 (18,5 %)	36 (94,7%)	2 (5,3%)
Moselle Franconian (WCG)	1 (100%)	-	36 (90%)	4 (10%)
Hessian (WCG/ECG)	132 (81,5%)	30 (18,5%)	24 (51%)	25 (49%)
Thuringian (ECG)	59 (86,8%)	9 (13,2%)	18 (31%)	40 (69%)
East Central German	-	-	50 (78%)	14 (22%)
West Central German	6 (66,6%)	3 (33,3%)	-	-
total	539 (84,5%)	99 (15,5%)	430 (76,8%)	130 (23,2%)

WCG: West Central German ECG: East Central German

percentage for East Central German is still quite high (78%) compared to e.g. Thuringian with 31%. As genre or topic do not appear to be influencing factors, we can conclude that even if abstracted over larger dialect regions a tendency can be observed, there is still a lot of variation between different texts in the 13th and 14th century.

Schüler (2017) showed that Ripuarian Franconian preserves the preverbal particle longer than other Central German dialects. Except for the few texts which lack specific meta data for origin/dialect area described above, the results in table 4.5 confirm the results in Schüler (2017), as the Central German dialects in the east, Hessian and Thuringian, show fewer instances of *ne/en* in the 14th than in the 13th century.

4.1.1.3 Clauses expressing sentential negation

The negative particle *ne/en* without the adverbial *niht* appears in 1 141 clauses. In 65% (n=740) of the cases, there is some other n-marked or disjunctive element in the clause (cf. table 4.6). The remaining clauses contain only *ne/en* (n=401). As table 4.6 shows, the most common element to appear with single *ne/en* is an n-marked indefinite (n=516) such as *nieman* ('nobody'), *kein* ('none') or *nie* ('never') (3). If there is more than one indefinite in a clause, they can be all n-marked (negative spread), as in (4).

(3) Heinrich, Reinhart Fuchs, early 13th century (M106-0766)

ich ne weiz der zuo neheinen list
I NE know there to no trick

'I do not know any trick for this.'

Table 4.6: Elements co-occurring with *ne/en* in a clause (ReM sample)

Element	#	%
n-marked	516	69,6%
n-free	20	2,7%
noh	144	19,4%
noh + n-marked	51	6,9%
noh + n-free	1	0,1%
noh + n-marked + n-free	1	0,1%
n-marked + n-free	6	0,8%
total	740	

(4) Pfaffe Lambrecht: Tobias, early 13th century (M226-44,240)

des ne ded er nie neheine claget
that NE do he never no complaint

'He never complained about that.'

N-free indefinites such as *dehein* ('anything') are less frequent (n=20) (5). In seven cases, they co-occur with an n-marked indefinite (6).

(5) Hartmann von Aue: Iwein, early 13th century (M312 III 0 V_Iw–7738)

er n tvot iv dehein vngemach
he NE do you any discomfort

'He does not cause you any discomfort.'

(6) Wolfram von Eschenbach: Parzival, early 13th century (M325 III 0 V_Parz–028,09)

ih en wart nie wip decheines man
I NE was never wife any.GEN man

'I was never anyone's wife.'

The newly grammaticalized negative marker *niht* occurs in 1 340 clauses without preverbal *ne/en*. In contrast to the clitic, it only co-occurs with n-marked indefinites in 17 clauses, such as (7).

(7) Rappoltsteiner Parzifal, early 14th century (M333 V 3 V_Rapp–32791)

und gruoste svi nie niht
and greeted her never NEG

'And never greeted her.'

Single *ne/en* also often appears with disjunctive *noh* ('nor') (n=144) (8), while n-words or indefinites, as in (9), also co-occur with both *noh* and the preverbal particle.

(8) Herbort von Fritzlar: Liet von Troye (MS H), around 1300 (M541H2–15248)

Ih ensol noch enmac
I NEG=shall nor NE=can

'I neither should nor can.'

(9) Kölner Klosterpredigten, 14th century (M547–39,42–43)

dat ingeine heilicheit noch ingeine durnetlicheit so groiz in mag sin
That any holiness nor any perfection so great NE can be

'That neither holiness nor any perfection can be that great.'

4.1.1.3.1 Single *ne/en* expressing sentential negation

Among the 401 clauses in which *ne/en* appears without any other element known to trigger a sentential negation reading, there are 225 clauses in which it marks sentential negation. As can be seen in table 4.7, the negative marker in the function of marking sentential negation becomes less frequent towards the end of the MHG period ('total NCl' = total of clauses with a negative particle PTKNEG, namely *ne/en* and/or *niht* per period). This confirms the results from previous studies, according to which single preverbal *ne/en* changed its function in the 13th century (Jäger 2008). The few instances of sentential *ne/en* in the 12th century can be argued to be due to the fact that there are more texts from Upper German (UG) dialect areas for the earlier time periods in the ReM corpus.

Table 4.7: Single *ne/en* marking sentential negation in the ReM sample

	total NCl	sentential *ne/en*	
Century	#	#	%
1000-1100	170	95	56%
around 1100	13	-	-
1100-1150	43	1	2,3%
1100-1200	95	5	5,2%
around 1200	504	30	6%
1200-1250	903	29	3,2%
1250-1300	660	17	2,6%
around 1300	410	38	9,3%
1300-1350	675	8	1,2%
1300-1400	255	2	0,7%
total	3 885	225	5,8%

Regarding the differences across dialects, table 4.8 presents the normalized frequencies per 1000 negated clauses (NCl) for single *ne/en* expressing sentential negation in the 13th and 14th century in Central German (CG) and Upper German (UG) dialects. While Central German generally has a higher frequency of single *ne/en* expressing sentential negation, the normalization shows that in both dialect areas the number of clauses decreases by approx. 2/3. This shows that in addition to preserving *ne/en* in various contexts,

Central German also preserves *ne/en* in stage I negation longer than Upper German.

Table 4.8: F_n per 1000 NCl of single *ne/en* marking sentential negation per century and dialect (ReM sample)

Century	F_N CG	F_N UG
1200-1300	35,9 (F_o=29)	15,8 (F_o=13)
1300-1400	13,1 (F_o=8)	5,2 (F_o=2)

CG: Central German UG: Upper German

In the 14th century, there are only ten clauses (out of 930 negated clauses, i.e. 1,1 %) in which *ne/en* marks sentential negation, of which six contain the verb *wizzen* ('to know') and one *ruohen* ('to take care', 'to worry'), which are well described as preserving stage I negation longer (cf. section 2.2).

(10) Leben der heiligen Elisabeth, early 14th century (M305 V 4b V_Elis–04944)

Si en wiste ouch in den ziden Wi si ir kint gedegete
she NE know too in the times how she her child nurse

'Back then, she did not even know how to nurse her child.'

(11) Passional, early 14th century (M326 V 5 V_Pass–19,071)

en ruche dich Ich bin di warheit genant
NE worry you I am the truth called

'Do not worry, I am called the truth.'

One clause (12) contains the copula *sīn*, a comparative, and it is followed by a relative clause containing negation. The comparative, as described for MD by Stoett (1923) and Postma (2002), or the negation in the relative clause could be argued to trigger a sentential negation reading of single *ne/en* in the main clause.

(12) Johannes Tauler: Predigten, early 14th century (M340 V 4a P_Taul–166r,18–19)

diese in sin verre besser die is neyt in doynt dan sy
DEM NE are much better DEM it NEG NE do than they

'They who do not do it are not much better than them.'

There is one clause in the 14th century in which *ne/en* appears on a matrix verb which takes a wh-clause as a complement (13).

(13) Freiburger Urkunden, early 14th century (M347 V 3 U_Freib–01,13)

der vorgenanten kinde mag vnd salman haben ovch
the aforementioned child.GEN.PL maid and warden have also
gelobet [...] *obe si en werin wer ze sinde*
sworn [...] if they NE were warden to be

'The aformentioned maid and warden of the children swore [...] if they were not the warden.'

There is one instance of an interrogative complement/subordinate question in the 13th century, presented in (14).[5]

(14) König Rother, early 13th century (M206–1220)

Die anderin nerochtin Ob wir also uere werin
the others NE=worried whether we so far were

'The others did not worry whether we were far away.'

In my sample, there is only one clause expressing sentential negation in the 14th century, in which *ne/en* cliticizes to a lexical verb which is not listed as typical context to preserve stage I negation (cf. section 2.2), namely (15) with the verb *geben* ('to give').

[5]For Middle Dutch, Stoett (1923) argues that a wh-element renders single *ne/en* as a sentential negation marker felicitous. Postma (2002) analyzes the wh-clauses as negative polarity items (cf. section 2.2).

(15) Die Erlösung, early 14th century (M306 V 4b V_Erlös–6058)

antwrte en gab er dannoch mir
answer NE gave he anyhow me

'Anyhow, he did not answer.'

This shows that by the 14th century, *ne/en* could not be used to mark sentential negation anymore, except for very few verbs and contexts which are well described for MHG and MD (Stoett 1923; Paul et al. 2007; Behaghel 1918) (cf. section 2.2). While in my data, it appears that *wizzen* and *ruohen* preserve the preverbal negative marker longer, contrary to de Boor and Wisniewski (1998) and Paul et al. (2007) (cf. section 2.2), modal verbs do not. This can be seen in table 4.9.

Table 4.9: Co-occurence of single *ne/en* marking sentential negation with a modal or lexical verb (ReM sample)

Century	modal		lexical		total	
	#	%	#	%	modal	lexical
1000-1100	28	62,2%	49	47,57%	45	103
around 1100	0	-	0	-	4	9
1100-1150	1	9,1%	1	3,3%	11	30
1100-1200	0	-	4	5,55%	29	61
1150-1200	14	8,3%	7	2,3%	164	302
around 1200	9	7,8%	6	2,7%	115	222
1200-1250	4	1,5%	10	1,9%	267	540
1200-1300	0	-	0	-	20	34
1250-1300	2	0,8%	5	1,4%	231	349
around 1300	0	-	0	-	8	16
1300-1350	0	-	1	0,2%	192	404
1300-1400	0	-	0	-	53	110
1350-1400	0	-	0	-	43	69
total	58		83		974	2 259

The table provides the observed frequency of modal verbs negated with single *ne/en* across centuries as well as the percentage compared to other negative markers. Modal verbs show the same behavior as lexical verbs with regard to *ne/en* as a sentential negation marker: they can still co-occur in the 11th

and 12th century but the construction decreases during the 13th century and is basically extinct in the 14th century.

The remaining 176 instances of single preverbal *ne/en* are clauses that can be analyzed as post-cyclic contexts, paratactic negation and exceptive clauses.

4.1.1.4 Clauses with single preverbal *ne/en* not encoding sentential negation

4.1.1.4.1 Exceptive clauses

The largest share of clauses containing single *ne/en* make up exceptive clauses (n=132), i.e. clauses that can be translated as English *unless* (Breitbarth 2014b). We can distinguish two types of exceptives: monoclausal and biclausal structures (ibid). Recall that monoclausal exceptives are V2 clauses with the verb in subjunctive mood, as in (16). Biclausal exceptives consist of a dummy-matrix clause with an expletive pronoun followed by the verb *sīn* ('to be') in subjunctive mood followed by a complement clause encoding the exception, as in (17).

(16) Herbort von Fritzlar: Liet von Troye (MS S), 13th century (M541S–7957[215])

Daz der funfte kvme genas Daz ir in deme strite was Er en
That the fifth hardly recover that her in the fight was he NE
lege tot oder lam
lie.PRES.SBJV dead or lame

'That the fifth who was in the fight for her hardly recovered unless he lie dead or lame.'

(17) Leipziger Predigten, early 14th century (M536_131ra,09–10)

wir ne mochten anders nihit erlost sin worden [...] iz ne
we NEG could other NEG redeemed be become [...] it NE
wre daz gotis svn geborn wre
be.PAST.SBJV that god.GEN sun born was

> 'We could not have be redeemed [...] unless the son of god had been born.'

The monoclausal structure (n=116) is much more frequent than the biclausal one (n=16). Table 4.10 gives an overview over the occurrences of exceptives in the different dialect areas and centuries. It shows that in my sample, 60 % (n=79) of the exceptive clauses are found in Central German texts, 40% appear in texts written in an Upper German dialect.

Table 4.10: Number of exceptive clauses per century and dialect area in the ReM sample

Century/Dialect	biclausal	monoclausal	total
CG	9 (11,3%)	71 (88,7%)	80
around 1200	1	11	12
1200-1250	1	20	21
1250-1300	3	11	14
around 1300	1	1	2
1300-1350	3	17	20
1300-1400	0	7	7
1350-1400	0	4	4
CG/UG	1 (100%)	0	1
1100-1150	1	0	1
UG	5 (10,2%)	44 (89,8%)	49
1050-1100	1	0	1
1100-1150	0	2	2
1100-1200	0	1	1
1150-1200	1	9	10
around 1200	0	4	4
1200-1250	0	13	13
1200-1300	0	1	1
1250-1300	2	8	10
1300-1350	1	4	5
1300-1400	0	2	2
UG/LG	1 (50%)	1 (50%)	2
1150-1200	1	1	2
total	16 (12,1%)	116 (87,9%)	132

4.1.1.4.2 Monoclausal exceptive clauses

Most monoclausal exceptive clauses have a pronoun as first constituent preceding *ne/en* (n=112). The pronoun can be a personal pronoun (n=110), as in (16) or (18), or the indefinite *man* ('one') (n=2).

(18) Die Lilie, late 13th century (IV 4a V_Lilie–54,28–29)

dat si suolen iren uliz han [...] *it in si*
that they shall their enthusiasm have it NE be.PRES.SBJV
grozliche inde offenbare wider got
grossly and openly against god

'That they shall keep their enthusiasm unless it is grossly and openly against God.'

There are four clauses with a single noun (n=2), as in (19), or noun phrase (n=2), given in (20) and (21), as a first constituent. Maschek (1913) already noticed that the first constituent in the monoclausal constructions always seems to be unstressed. As we cannot determine the phonological properties of the pronouns based on written records, I will refer to the nature of the first constituent as 'non-salient'. Even if the pronoun could be stressed, it is obvious that full nouns or noun phrases are very rare in the construction. The cases with a full noun phrase are an exception, but my sample confirms this tendency.

(19) Hartmann von Aue: Iwein, early 13th century (M312 III 0 V_Iw–7415)

Got en welle mich s erlan
God NE want.PRES.SBJV me it release

'Unless God released me from it.'

(20) Mühlhäuser Rechtsbuch, late 13th century (M320 IV 5 P_MüRB–19v,01–03)

sprichet he aber ja [...] *so in sal min sien zu burgeri nicht*
says he but yes [...] so NE shall man him to citizen not
inpha sien heri in irloib iz vme dan
receive his lord NE allow.PRES.SBJV it him then

'But if he says 'yes', one shall not receive him as a citizen unless his lord allows him to.'

(21) Straßburger Alexander, early 13th century (M008 III 5 V_AlxS–4377–78)

iz ne mac njeren gegan daz lant ne si dar ebene
it NEG can nowhere go the land NE be.PRES.SBJV there flat

'it cannot go anywhere unless the land was flat.'

The verb always appears in subjunctive mood, and it can be a lexical (n=65), a copula (n=28) a modal (n=18) or an auxiliary verb (n=5). There are monoclausal exceptive clauses introduced by *iz* ('it') that resemble the biclausal structures as they also contain the verb *sīn* ('to be'). But additionally, they contain a noun or adjective which is further modified by a *daz* ('that') clause (22).

(22) Mühlhäuser Rechtsbuch, late 13th century (M320 IV 5 P_MüRB-21v,21–24)

so sal he wetti sex phennigin iz in weri dan also
so shall he deposit six pennies it NE be.PAST.SBJV DENNE SO
vieli daz daz he nicheinien vorsprachin gihabi nicht in mugi
many that that he no defender have NEG NE can

'He shall deposit six pennies unless there are so many that he could not have a single defender.'

In (22), the complement clause to *also vieli* 'so many' contains sentential negation. It is important to notice that the exceptive clause itself never contains any 'negative' element other than *ne/en*. As will be shown in the next section on biclausal exceptives, negative propositions are always encoded within the complement clause in a biclausal structure.

4.1.1.4.3 Biclausal exceptive clauses

The verb *sīn* ('to be') in biclausal exceptive clauses can appear as present (n=11) (23) or past subjunctive (n=5), as in (17) above.

(23) Herbort von Fritzlar: Liet von Troye (MS H), around 1300 (M541H2–10870)

Ich wil kere hinnen Ez en si daz mir werde Ein
I will return from here it NE be.PRES.SBJV that me get an
here zv guten verde
army to good value

'I will turn away from here unless I get a valuable army.'

All biclausal exceptives but one appear with an expletive pronoun. Example (24) shows verb first word order, as *ne/en* is a clitic to the verb. Note that there are null subject pronouns in OHG and OS (Axel and Weiß 2011; Walkden 2014). For MHG, it is argued that spoken language most likely showed null subjects even though the highly stylized literary language does not have null pronouns (Held 1903:105) (cf. also the discussion in Fleischer and Schallert (2011:202f)). The presence of null subjects can be taken as indicative for the presence of expletive null subjects (Biberauer et al. 2010:8). This suggests that MHG had expletive null subjects as well. Therefore, these cases could also be argued have a null expletive pronoun in first position.

(24) Wiener Genesis, late 11th century (M088–3742[1873b]–[1874a])

Got werte in des und anderes maniges ne
God protected him this.GEN and other plenty NE
ware daz er ime doch tete so ie was sin site
be.PAST.SBJV that he him still do.SBJV as always was his custom

'Got protected him from this and many other things unless he still did to him as has always been his custom.'

Nonetheless, this construction resembles OHG negative conditionals with V1 word order, as in (25), where the conditional precedes the clause it restricts.

(25) Otfrid 59, 9th century

ni wari tho thiu giburt tho wurti worolti firwurt
NEG were there the birth so were world lost

'If it were not for the birth, the world would be lost.'

In the Wiener Genesis there are three attestations of the subordinating conjunction *newære* ('except', 'unless') which later on grammaticalized towards present-day German *nur* ('only') (cf. section 5.1.2). Therefore, *ne ware* in (24) could be a spelling variation of this exceptive complementizer.

One interesting pattern is that in six of the 16 biclausal exceptive clauses, the subject in the complement clause is full noun or a noun phrase such as *gotis sun* ('god.GEN son') in (17), repeated here as (26). In two cases, the excepted proposition is negative, such as in (27). Recall that monoclausal exceptive clauses rarely (n=4) show a full noun or noun phrase as a first constituent, such as (20) or (21), and never contain an element triggering a sentential negation reading. This suggests that the biclausal structure can function as an 'evasion strategy' if it is not possible to realize a canonical monoclausal exceptive clause with a pronoun as a first constituent or if the excepted proposition is negative. If one considers the biclausal structure as an evasion strategy of the monoclausal exceptives, the alternative monoclausal realizations of six biclausal exceptive clauses would have a complex noun phrase as a first constituent preceding *ne/en*, e.g. 'gotis svn ne werde geborn' (gods son NE be.PAST.SBJV born) would be the monoclausal counterpart to (26). I will refer to this 'salient' (meaning more complex than a pronoun) subject in the complement clause of the biclausal exceptive as 'first constituent' for reasons of comprehensibility.

(26) Leipziger Predigten, early 14th century (M536–131ra,09–10)

wir ne mochten an=ders nihit erlost sin worden [...] *iz ne*
we NEG could other NEG redeemed be become [...] it NE
wre daz gotis svn geborn wre
be.PAST.SBJV that god.GEN sun born was

'We could not have been redeemed [...] unless the son of god had been born.'

(27) Pfaffe Konrad: Rolandslied, late 12th century (M205A-2555[1609]–[1610])

Thaz ih then rom erwerue Iz ne si thaz er niemer ne
That I the honor get it NE be.PRES.SBJV that he never NE
sule ersteruen Uon neheiner slahte wafen
shall die from no battle weapon

'That I shall receive the honor unless he never dies from any battle weapon.'

It seems that biclausal and monoclausal structures are not interchangeable because 37,5% of the biclausal exceptive clauses would render an atypical monoclausal structure with a salient first constituent (subject of the complement clause in the biclausal structure) preceding *ne/en*, while another 12,5% would not be translatable because the excepted proposition is negative (27). None of the monoclausals encode a negative exception, i.e. there are no n-words nor negative polarity items in the clause. This shows that there is a clear preference for biclausal exceptives to be chosen when there is a complex initial XP (most frequently the subject) or negative proposition in the excepted proposition (8 of 16 clauses).

In order to test whether this difference in number between biclausal and monoclausal structures is significantly large, I performed a Fisher's exact test. The null hypothesis states that the ratio between occurrences of biclausal vs. monoclausal exceptive clauses is the same for salient as for non-salient first constituent. In other words, the null hypothesis states that there is no association between salience and form. The alternative hypothesis, in contrast, states that monoclausal form occurs more often with non-salient than with salient first constituents (subject). The resulting p-value indicates how likely the observations are under the assumption of independence. A p-value lower than 5% indicates significant evidence for an association between form and salience of the first constituent.

Table 4.11: Contingency table displaying the frequency of salient/non-salient constituents in different forms of ecxeptive clauses (ReM sample)

	salient	non-salient
monoclausal clause	4	112
biclausal clause	6	10

I obtained an odds ratio of 16.07144 and a p-value of 0.0002. Therefore, it can

be stated that there is a significant relationship between the first constituent being salient and the form of the exceptive being monoclausal/biclausal. The odds ratio indicates that the ratio of monoclausal versus biclausal form is 16 times larger for salience versus non-salience of the first constituent.

4.1.1.4.4 The main clauses restricted by exceptive clauses

The exceptive clauses in my sample from the ReM corpus usually follow the clause they express an exception to. There is only one case in my sample where the exceptive is inserted between the verb *wizzen* ('to know') and its complement (28).

(28) Passional, early 14th century (M326 V 5 V_Pass–08,060–061)

Dv salt ver war daz wizzen Dv en gebest im di ere
you shall for sure that know you NE give.SBJV him the honor
wider Daz din ere lit dar nider
back that your honor lie there low

'You should know for sure that – unless you give him his honor back – your honor will lie down low.'

An anonymous reviewer to an abstract once pointed out to me that the main clauses which are restricted by V2 exceptive clauses always contain a modal, e.g. *sullen* ('shall') in (28), or negation, as in (21) and that these modals/negation "license" the exceptive clause. As table 4.12 shows, this is true for 83% (n=114) of the examples in my sample. If one also counts semantically negative verbs (e.g. 'to lose'), as in (29), or adverbs meaning 'rarely' as well as verbs in subjunctive mood, these cases make up 91% (n=122).

Table 4.12: Modal/negative elements in the main clause which the exceptive clause restricts (ReM sample)

Element	#	%
Negation	55	41,7%
Modal verb	37	28 %
Negation + modal verb	19	14,4%
Disjunction	3	2,3 %
Verb in subjunctive mood	4	3%
Semantically negative element	4	3%
Verb in indicative mood	10	7,6%
total	132	

(29) Hartmann von Aue: Iwein, early 13th century (M312 III · 0 · V_Iw–4877)

ih [...] *weiz wol swederz ich kivse. daz ich dar an verlivse.*
I [...] know well whichever I choose that I there on lose
ich n mohte ir beider gepflegn
I NE can.SBJV them both take care of

'I know that whichever I choose: I lose unless I can take care of both.'

Only 9% (n=10) of the exceptive clauses modify a clause that contains a lexical or copula verb without negation or modality, as in (27) and (30), where *Swaz er getun mochte oder chunde daz si im des wol gunde* is the main clause.

(30) Anegenge, early 13th century (M012-0623–25)

Swaz er getun mochte oder chunde daz si im des wol gvnde
what he do want or can that she him that well granted
Si ne mocht ez minnechlichen erwenden
She NE can.SBJV it loving prevent

'What he wanted or could do, she granted him unless she could prevent it lovingly.'

4.1.1.4.5 Exceptive clauses with *denne*

From the 13th century on, MHG exceptives also appear with the particle *denne*, as in the biclausal structure in (31) and the monoclausal structure in (32). The dummy-matrix clause with *denne* is the root for the German *es sei denn* ('unless') that grammaticalized to become a 'connector' in present-day German (Pasch et al. 2003; Breitbarth 2015a). The status as a connector is due to the clause following *es sei denn* showing V-end word order (cf. section 5.4 for a more detailed discussion of *es sei denn* and clauses introduced by it).

(31) Deutschordensregeln und -statuten, around 1300 (M527-14v,12–16)

Die auer nach uesperin steruint die behaldit man ovuer naht
These but after vespers die those keep one over night
[...] *it in si danne dat von sachen der pleger des*
[...] it NE be.PRES.SBJV DENNE that from things the nurses the
spitales anders ze tuonne werde ze raide
hospital.GEN different to do were to advice

'The ones that die after vespers are kept over night [...] unless the nurses of the hospital advise differently.'

(32) Mittelfränkische Urkunde, late 13th century (M544 MU13–N223–170,45–,45)

si in is vns des nit schuldich wider ze kerene si ne
she NE is us that NEG guilty back to come she NE
will et dan gerne duon
want.PRES.SBJV it DENNE willingly do

'She does not owe us to come back unless she willingly does it.'

The particle *denne* either directly follows the finite verb in the monoclausal exceptive clause or is preceded by a pronoun as in (32). In the dummy-matrix clause of the biclausal exceptive, *denne* appears right after the copula. I will discuss the status of *denne* in section 5.4.

Table 4.13: Number of exceptive clauses occuring with *denne* per century and dialect area (ReM sample)

Century/Dialect	biclausal	monoclausal	total
CG	6 (42,9%)	8 (57,1%)	14
1200-1250	1	3	4
1250-1300	3	1	4
around 1300	1	1	2
1300-1350	1	1	2
1300-1400	0	1	1
1350-1400	0	1	1
UG	3 (27,3%)	8 (72,7%)	11
1200-1250	0	2	2
1250-1300	2	5	7
1300-1350	1	1	2
total	11 (44%)	14 (56%)	25

Table 4.13 gives an overview of the distribution of *denne* throughout the centuries. It shows that in raw numbers, *denne* appears more frequently in Central German dialects and does not appear in the earlier texts from the sample, namely the 12th and 11th century. Recall from table 4.10 that my sample generally contains more exceptives from Central German dialects. In percentages, 18% (n=15) of exceptives in Central German and 22% of the Upper German dialects contain *denne*. I will provide more data on *denne* in section 4.1.1.

4.1.1.4.6 Other non-negative uses of *ne/en*

In this section, I will describe clauses that express a positive proposition but appear with single preverbal *ne/en* (n=44). Most of them (n=40) semantically depend on a negative clause or a clause containing a semantically negative verb, such as *vermīden* ('to avoid').[6] They can therefore be cate-

[6]I will refer to the predicates as semantically negative and not 'non-assertive' (Hooper 1975). Even though the class of verbs triggering paratactic negation includes non-assertive verbs, negated verbs such as *lāzen* ('to let') suggest that assertive force is not a necessary criterion for verbs taking complement clauses with paratactic *ne/en*.

gorized as paratactic negation and will be discussed first. Recall that not all exceptive clauses described in the previous section followed a negative main clause. In the last part of this section, four special cases that stand out because of their syntactic characteristics will be discussed.

4.1.1.4.7 Adverbial clauses

Adverbial clauses are the most common clause type appearing with paratactic negation (n=26). Among them, 19 clauses can be translated as corrective adversative clauses, such as (33) and (34). As the main clause is always negative, which results in a construction of the type *not A but B*. Note that the second conjunct containing single *ne/en* cannot be translated as inherently negative.

(33) Niederrheinischer Tundalus, early 13th century (M232 III 4 V_RhTun–125–126)

Nu in solen wir iz nit lengen Wir in varen vort uil
Now NEG shall we it NEG protract we NE continue further much
balde
soon

'Now we should not protract but continue soon.'

(34) Salomons Haus, late 13th century (M337 IV 4b P_SalH–097,16–02)

so salt v provin rechte frvntsaft [...] *daz er nivt vor dier in*
so shall you prove right friendship [...] that he NEG for you NE
sparit er n habe dier z zv gvde gekerit
save he NE have you it to good turned

'So you shall prove good friendship [...] that he does not spare you but changes it for the better for you.'

One clause rather translates as a contrastive adversative clause (present-day German *aber* 'but') presented in (35).[7]

[7]At this point, it has to be noted that (35) is a borderline case in the data. If trans-

(35) Herbort von Fritzlar: Liet von Troye (MS S), 13th century (M541S-8222[476]–8223[477])

die selbin sarewat Die ir ime genuomin hat Sie in werdin
the same armor that you him taken have they NE become
mir wiedere
me back

'The same armor however which you took from him, I will get it back.'

Translating the clauses with a corrective adversative reading (n=19), there are cases which are not clear-cut. Seven clauses could also be translated as consecutive clauses, such as (36) and (37), focusing on the result of an event that is introduced in the previous clause.

(36) Frauenfelder Flore, early 13th century (M307 III 3 V_Flor-7234–35)

do ne moht ir niet uirlazin er ne moste deste miltir
then NE could he NEG let=happen he NE must the=more kind
sin
be

lated as a relative clause, the clause with post-cyclical *ne/en* would be translated as not containing sentential negation, namely 'The same armor you took from him, it will be mine again.' As an adverbial reading with non-negative *ne/en* is possible and as there is no relative pronoun, I categorized (35) among paratactic, i.e. non-negative uses of *ne/en*. In contrast to this, the example below (Pfaffe Konrad) with the same structure – except for indicative morphology on the verb – would have to be translated as 'in which they do not have protection', i.e. as a relative clause containing sentential negation.

(1) Pfaffe Konrad: Rolandslied, late 12th century (M205A-2300[1354]–[1355])

Iz ne wirt niemer thiu stunde Sie ne hauen warnunge
It *ne* become never the hour they NE have protection

'It never comes the hour in which they do not have protection.'

The clause in (1) was therefore grouped among the clauses where *ne/en* expresses sentential negation, as no adverbial reading with non-negative *ne/en* is possible. In formal terms, there is no licenser for single *ne/en* in (1), but there are still attestations of stage I negation in the MHG records from the 12th century. The previous context describes how it is impossible to kill the emperor, so it is the only reasonable reading to understand *ne/en* as a sentential negation marker. Furthermore, it could be due to rhyme that there is no *niht* or n-marked indefinite in the second clause.

'Then he could not let it happen, so that/but he had to be even more kind.'

(37) Gottfried von Straßburg: Tristan, early 13th century (M342 III 0 V_Tris–18304–07)

daz mich dehein ander wip imer von dir gescheide wir n sin
that me any other woman ever from you separate we NE are
immer beide der liebe unde der triuwe staete unde niuwe
always both the love and the faithfulness steady and new

'That no other woman ever separate me from you, so that/but we are always steady and fresh to both our love and faithfulness.'

In addition to these relatively frequent adverbial clause types, one translates as indicating the purpose of an action (38). The main clause it depends on contains the semantically negative *den lib geven* ('the body give', i.e. 'die'/'not live').

(38) König Rother, early 13th century (M206-4077-4078)

Die woldin alle den lib geven Se ne losten rothere daz leven
They wanted all the life give they NE save Rother that life

'They all wanted to die in order to save Rother's life.'

Two clauses translate as 'not until', but can alternatively be translated as 'unless'-clauses. The close semantic relationship between the adverbial uses of paratactic *ne/en* will be discussed in section 4.4.

(39) Priester Wernher: Driu liet von der maget, early 13th century (M241i-58r,01)

Wir wellen biten niht langer dv ne rihtest bi wem dv
we want ask NEG longer you NEG reports by whom you
sist swanger
be.PRES.SBJV pregnant

'We will ask no longer until you say by whom you are pregnant.'

(40) Summa Theologiae, late 12th century

er ni wil uurdir nicht irsterbin uoni duv so ni mag zuischiligu
he NE want away NEG die from you so NE can before
douffi werdin
baptized become

'He does not want to die away from you, not until he was baptized before by you.'

One example from Central Franconian shows that the complementizer *al* ('although') can also introduce a clause with non-negative *ne/en*. This adverbial clause is given in (41) and translates as a concessive clause ('although').

(41) Niederrheinischer Tundalus, early 13th century (M232 III 4 V_RhTun-250–251)

Di sele al en dede si iz node da si muoste
The soul although NE do.SBJV she it reluctantly there she must
ime volgen nach
him follow after

'The soul, even though it did do it reluctantly, there it had to follow him.'

Another conjunction introducing adverbial clauses with non-negative *ne/en* is *âne* ('without') (n=2), as in (42) and (43). Note that these clauses show V2 word order as well.

(42) Rheinisches Marienlob, early 13th century (M335 III 4 V_RhMl-0017[001,17]–[001,18])

din knecht . min vater . si dir beuolen
your boy my father be.PRES.SBJV you entrusted
bekenne on ane en si sin name verholen
acknowledge him without NE be.PRES.SBJV his name concealed

'Your boy, my father, be entrusted to you. Acknowledge him, or his name shall be concealed.'

(43) Rheinisches Marienlob, early 13th century (M335 III 4 V_RhMl-2271[060,17]–[060,20])

nie en twanc in die engelsche creature dat he an sich
never NEG forced him the angelic creature that he on himself
neme die engelsche nature ane en si groz ire
take the angelic nature without NE be.PRES.SBJV large her
otmudicheit, die dine otmude doch uerre uuergeit
humility which your humility still much exceed

'The angelic creature never enforced that he took on himself angelic nature, without this her humility would be great, which exceeds your humility by far.'

It seems that the exceptive conjunction *âne* licenses non-negative *ne/en*. But it does not obligatorily do so: A query for *âne* introducing a clause in the text 'Rheinisches Marienlob' (n=16) showed that eleven clauses contain paratactic *ne/en*, while five clauses do not appear with *ne/en*, such as (44). The following two examples (44) and (45) are not part of my sample but are presented here to demonstrate the different constructions with *âne* in the text Rheinisches Marienlob.

(44) Rheinisches Marienlob, early 13th century (M335 III 4 V_RhMl-3957[103,25]–[103,26])

Inde wat dede ich grozes da mide ane dede ich wider den
and what did I great there with without did I against the
iudesschen siden
Jewish customs

'What great thing would I do with it? Without, I would act against Jewish custom.'

(45) Rheinisches Marienlob, early 13th century (M335 III 4 V_RhMl-0413[012,13]–[012,15])

ich muze der erste sin . an deme dine mildicheit wirdet schin .
I must the first be . on which your kindness becomes open .
Vuant ane ensis du beslozsen den sunden
because without NE=be.PRES.SBJV you doomed the sins

'I must be the first to receive the light of your kindness, because without it you would be doomed to sins.'

It seems to be independent of mood and verb form whether paratactic *ne/en* occurs, as three of the clauses without paratactic *ne/en* show indicative and two subjunctive mood on the verb. Five clauses with paratactic *ne/en* are in indicative, six in subjunctive mood (42). There are two clauses in the text where *âne* is preceded by the conjunction *want* ('because') (45).

4.1.1.4.8 Complement clauses

The second most common clause type with paratactic negation are complement clauses (n=12). Ten clauses are complement to a matrix clause with a negated verb (46), two are complement clauses to a semantically negative verb (47). Note that all clauses have V2 word order.

(46) Gottfried von Straßburg: Tristan, early 13th century (M342 III 0 V_Tris–18163–65)

nv was tristrande ein bote getan . daz er z dur niht
Now was Tristan a messenger done . that he to through NEG
solte lan er n sprache die chungin ze stete
shall let he NE speak.PRES.SBJV the queen to spot

'Now Tristan was sent a messenger that he should not be allowed to speak to the queen directly.'

(47) St. Pauler Predigten, early 13th century (M409 III 1 P_PrPa–171,07–10)

wer solt nv zwiveln si ne sin alle heilich di mit dem
Who shall now doubt they NE are all sacred who with the
plvte des almehtigen gotes werdent besprenget
blood the almighty god.GEN are splashed

'Who shall doubt that they are all holy who were splashed with the blood of the almighty god.'

It has to be noted that in two main clauses, there is only a semantically negative verb, *vermīden* 'to avoid' or *zwīveln* 'doubt'. The other main clauses contain (semantically negative) verbs plus a marker of sentential negation, as in (47). Table 4.14 provides an overview of the predicates introducing complement clauses with paratactic *ne/en* in my ReM sample. It is striking that most frequently negated semantically negative verbs trigger V2 clauses with paratactic *ne/en*.

Table 4.14: Matrix predicates taking V2 complements with non-negative *ne/en* (ReM sample)

Matrix predicate	Translation	#	Source
vermīten	avoid	1	Graf Rudolf
zwīvel(e)n	doubt	1	St. Pauler Predigten,
nit vermīten	NEG avoid	1	Ulrich von Türheim: Rennewart (B)
niht zwīvel(e)n	NEG doubt	1	Pfaffe Konrad: 'Rolandslied'
niht lazzen	NEG let	2	Straßburger Alexander, Pfaffe Konrad: Rolandslied
niht dor lān	NEG let through	1	Gottfried von Straßburg: Tristan
niht lougenen	NEG deny	1	Nibelungenlied
niht irgān	NEG happen	1	Frauenfelder Flore
niht bewaren	NEG prove	1	Herbort von Fritzlar: Liet von Troye
niht getruwen	NEG believe	1	König Rother
niht utgān	NEG miss out	1	Mittelfränkische Reimbibel

4.1.1.4.9 Special cases

There are six clauses which are not as easily categorized as the 38 adverbial or complement clauses described above.

Two examples from the early 14th century, one adverbial clause (48) and one complement clause (49), stand out as they do not show V2 verb order as all other clauses do. (48) can be analyzed as a purpose adverbial clause.

(48) Oxforder Benediktinerregel, early 14th century (M324 V 4b P_OxBR-12v,09–,10)

des da iet vunden daz die eptissin niet gegeben en
DEM there something find that the abbess NEG give NEG
hât die sal grôzer buozen underligen dz diz vbel
has she shall larger compensation submit that this discomfort
bitalle von in genomen in werde
all from him taken NE be.PAST.SBJV

'Who finds something that the abbess did not give him – she [the abbess] shall submit to a larger compensation (so) that this discomfort is taken from him in full.'

Interestingly, the clause containing paratactic negation in (48) does not depend on a negative clause but on the clause *die sal grôzer buozen underligen* ('she shall submit to a large compensation'). Only the background information for this compensation, namely the abbess forgetting to give out all clothes and paraphernalia for a guest, is expressed as a negative relative clause to *iet* ('something').

The clause in (49) is introduced by a preposition and a relative pronoun (*an welchen* 'on which'), which resembles a free relative clause. As *finden* ('to find') has two arguments, the clause containing paratactic negation is best analyzed as an object complement clause.

(49) Evangelienbuch des Matthias von Beheim, early 14th century (M318 V 5 P_MBeh–144v,05–06)

si funden nicht an welchen teile si en in brechten
they found NEG on which part they him NE bring.PAST.SBJV
vor der schare
for the crowd

'They did not find a body part on which to carry him in front of the crowd.'

Three clauses do not semantically depend on a negative clause but have a negative clause semantically depending on it:

(50) Hessische Reimpredigten, early 14th century (V 4b V_PrRei–167a,12–14)

Sitdaz sin selbis sone nit en wolde schonen got er en
Since=that his self son NEG NE wanted spare god he NE
mvoste ie liden den dot
must ever suffer the death

'Since God did not want to spare His own son, he had to suffer death.'

(51) St. Trudperter Hohelied, early 13th century[8]

want aber si si nieht uirtruchent ne muogin novch ne
When but she herself NEG dampen NE can nor NE
girrin si ne behaben ir suozin smacht
oppress they NE keep her sweet scent

'If she does not let herself [a child as a lily among thorns] be suppressed nor opressed, she keeps her sweet scent.'

The second clause in (52) could also be translated as introduced by 'therefore'.

(52) Hartmann von Aue: Iwein, early 13th century (M312 III 0 V_Iw–0173)

ich n han iv selhes niht getan ir n moht mich wol lebn lan
I NE have you such NEG done you NE can me well live let

'Because I haven't done such thing to you, you can let me live.'

[8]There is no PDF version of the text. The lines can be accessed in ANNIS: https://linguistics.rub.de/annis/annis3/?id=5ef141c1-d6bc-4c65-9aa9-b30051add761

Interestingly, there is only one clause which translates as a relative clause containing paratactic negation. This relative clause stands out because it modifies a noun within a clause headed by *suntir* ('but'). I will discuss the relation between *but*-clauses and other exceptive structures and the occurrence of single preverbal *ne/en* in section 5.4 .

(53) Buch Daniel, early 14th century (M538–0851–53)

Den vremden gibt er ez nicht Svndir volke daz en gicht Wesen
The stranger give he it NEG but people that NE confess to be *rich*
rich

'He will not give it to the strangers but to the people who confess to be rich.'

Other V2 clauses which translate as relative clauses do not appear with paratactic negation, meaning non-negative *ne/en*. Single *ne/en* in relative clauses such as (54) always translates as sentential negation.

(54) Pfaffe Konrad: Rolandslied, late 12th century (M205A-2300[1354]–[1355])

Iz ne wirt niemer thiu stunde Sie ne hauen warnunge
It *ne* become never the hour they NE have protection

'It never comes the hour in which they do not have protection.'

4.1.2 Results from the Database of the Middle High German Dictionary

I found 267 clauses not expressing sentential negation containing either *ne/en* or *denne* in the database of the MHG dictionary.[9] 142 of these clauses are exceptive clauses which appeared in the literary text Prose Lancelot, which I excluded from the overall description as it would have skewed the picture.

[9]In contrast to the other corpus queries, I focused on non-negative uses of *ne/en* and exceptive structures. Therefore, I excluded residual stage I negation while searching the data, e.g. with the verb *ruohen* or *wissen*.

Table 4.15: Forms of exceptive clauses in the database of the MHG dictionary per dialect area

Dialect/Form	*ne/en denne*		*denne*		*ne/en*		total
	#	%	#	%	#	%	
UG	30	51,7%	9	15,5%	19	32,8%	58
CG	16	32,7%	11	22,4%	22	44,9%	49
other	6	60%	1	0,1%	3	30 %	10
total	52		21		44		117

CG: Central German UG: Upper German

After the general description of the data, table 4.16 provides an overview of the exceptive constructions in the prose Lancelot.

Among the 125 remaining clauses, 52 clauses contain single preverbal *ne/en*, 21 appear with single *denne* following the finite verb and 52 show both items. Exceptive clauses (n=117) are the most common clause type among these non-negative contexts. Additionally, there are four complement clauses, and four adversative adverbial clauses ('but'-clauses) in the data set.

4.1.2.1 Exceptive clauses

As in the other MHG sample, monoclausal exceptive clauses (n=106) are more frequent than biclausal exceptives (n=11). The only difference to the sample to the ReM corpus is that *denne* can be shown to have a clear tendency to appear in clauses written in Upper German, mostly Alemannic dialects (cf. table 4.15, image 4.1). This bias appears so clearly as the particle *denne* was searched for independently. Recall that the ReM corpus was only searched for negative particles ('PTKNEG').
While in Central German dialects, clauses which are only marked by *ne/en* make up half of the exceptives (44,9%), in Upper German dialects it is 12% less (32,8%). Figure 4.1 provides a more fine grained picture of the various constructions in High German dialects. Each millimeter on a bar represents one clause, i.e. longer bars mean more attestations in that area.

The tendency observed here is not confirmed in the data set from the ReM. It has to be noted that, while I explicitly searched for *denne* in the database of the MHG dictionary, all exceptives with *denne* appear in clauses also showing preverbal *ne/en*, as this is the particle I searched for in the

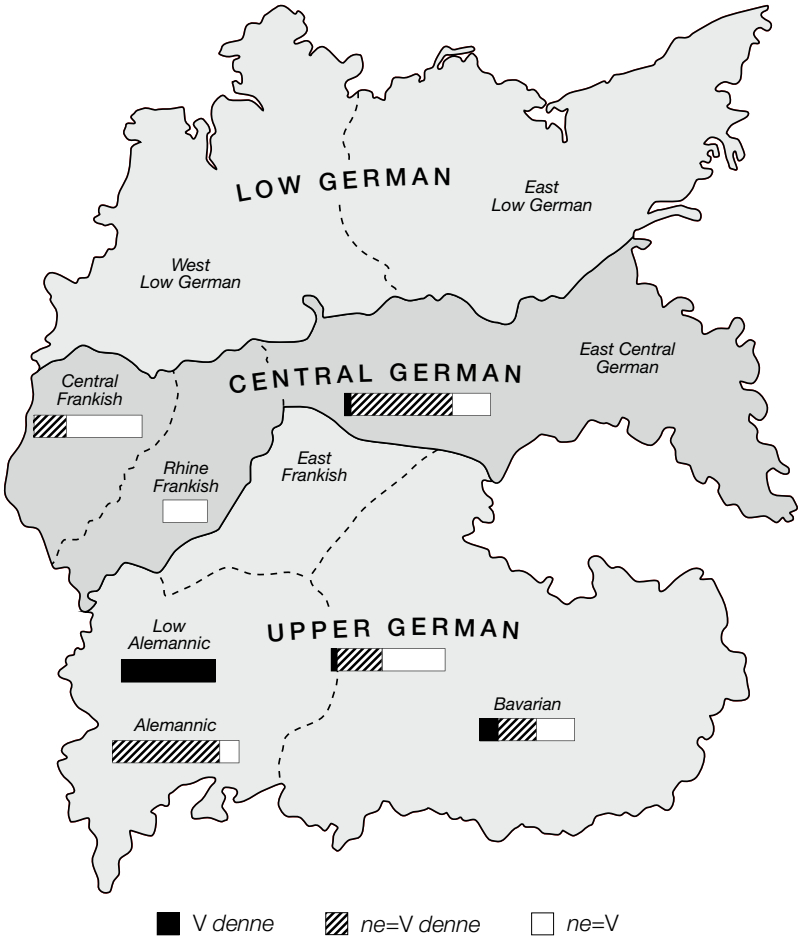


Figure 4.1: The distribution of *denne* and *ne/en* in MHG dialects

ReM corpus. A corpus study explicitly searching for *denne* in the ReM corpus would be necessary to test this tendency. The ReM would provide a larger corpus which is not based on editions as it is the case for the database of the MHG dictionary.

If we take the construction with *denne* to be of Upper German origin, it has to be noted that these dialects are the first to lose the preverbal clitic *ne/en* expressing sentential negation (cf. chapter 4.1.1). The earliest record of the construction with *denne* alone is from the beginning of the 12th century. Therefore, the form with *denne* must have developed in parallel to the construction with *ne/en* in the 11th century. There is only one record of a biclausal exceptive in the sample which resembles the present-day German form *it si denne* without the old preverbal negative marker (55). Therefore, it can be shown that *denne* was used to mark exceptives quite early in MHG.

(55) Oberaltaicher Predigtsammlung, early 13th century (PrOberalt 172, 28)

(si sei offen [...] *aller der werlt* [...] *ez si dann daz*
she be open [...] all the world [...] it be.SBJV.PRES DENNE that
er si in disem leben mit siner beicht und mit siner
he her in this life with his confession and with his
riw bedech vor den augen des almæchtigen
repentance covered before the eyes the.GEN almighty
gotes
god.GEN

'It [the sin] will be unveiled to all the world unless he has covered it in this life with confession and repentance before the eyes of the almighty god.'

Interestingly, up until the 20th century, there are monoclausal V2 exceptives with *denne* alone (56), while the structure with *ne/en* disappears towards Early New High German (ENHG). I will discuss the syntactic status of *denne* in section 5.4.3.

(56) German, August Kopisch: Ein Carnevalsfest auf Ischia (1910)

(Bei großer Strafe darf hier niemand aus und eingehn), er
with great penalty may here nobody out or in-go he
hebe denn diese zierliche Perrücke weg
lift.SBJV.PRES DENNE this graceful wig away

'Nobody is allowed to enter or leave this room under threat of penalty unless he lifts this graceful wig.'

4.1.2.2 Other non-negative uses of single preverbal *ne/en*

As in the ReM data, a few clauses with single preverbal *ne/en* are complement clauses (n=4) or concessive adverbial clauses (n=4). All of these clauses (n=8) appear in literary texts and show V2 word order.

The concessive adverbial clauses have in common that they modify a negative main clause, such as *din helfe nit werde uersagit* in example (57), and that they can be translated as 'but'-clauses (n=4).

(57) Heinrich: Litanei, early 13th century (Litan 1024)

daz uns heilige magit din helfe nit werde uersagit wir
that us holy maiden your help NEG be.PRES.SBJV refused we
ne uolgen dime sige
NE follow your vicotry

'So that your help, holy maiden, won't be refused to us, but we will follow your victory.'

All complement clauses are complements to a negated semantically negative predicate, such as (58) ('do not deny'). The other complements are *nicht irwinden* ('not desist from'), *nicht ne liez* ('not let go from') and *Des inwere negein zuivel* ('there was no doubt that'). This is similar to the tendency observed in the ReM data.

(58) Trierer Silvester, 12th century (TrSilv 740)

ich neloukene des niet iz ne si min wille.
I NE=deny this NEG iz NE be.PRES.SBJV my will

'I do not deny that this is my will.'

4.1.2.3 Results from the Prose Lancelot

As noted above, the Prose Lancelot was excluded from the calculation above due to its high number of exceptives. As can be seen in table 4.16, most clauses appear with *denne* alone (n=133), as in (59) below.

Table 4.16: Forms of exceptive clauses in the Prose Lancelot

Form	*ne/en denne*		*denne*		*ne/en*		total
	#	%	#	%	#	%	
monoclausal	6	4,5%	125	94,7%	1	0,75%	132
biclausal	2	20%	8	20%	0		10
total	8	5,6%	133	93,7%	1	0,7%	142

(59) Prose Lancelot, late 15th century (Lanc 524, 3)

sie mochten auch keyn urteil off so hohe sach sagen sie
they could also no opinion about so high thing say they
wustens dann zuerst von wisen bischoffen und von prelaten
knew DENNE first from wise bishops and from high clerics

'They could not come to an opinion unless they knew it from wise bishops and high clerics.'

The structures predominant in the ReM data, namely in the clauses with *ne/en* and *denne* or *ne/en* alone are much less frequent in the older Prose Lancelot. This indicates a development already pointed out above, namely that *denne* replaces *ne/en* in marking exceptive clauses and stays the only marker of exceptive V2 structures until the 19th century, as in (56).

4.1.3 Summary for the Middle High German resources

Summing up, the first section discussed the sample from the ReM corpus (n=3 887) taken from all clauses containing a negative particle in the corpus (n=19 645). In the second part, the smaller data set retrieved from the

database of the MHG dictionary was discussed. The first data set is a representative sample from the ReM corpus, which is not well balanced due to a lack of written records in certain centuries and dialect regions. In contrast to this, the database of the MHG dictionary was not designed as a well balanced corpus. The data were retrieved before the ReM became accessible. Nonetheless, the data are interesting for this study because exceptive clauses appearing with *denne* alone were retrieved in addition to clauses only containing the particle *ne/en*. The ReM data only contain clauses appearing with *ne/en* (PoS=PTKNEG). As the database relies mostly on editions, I did not check for the expression of sentential negation but filtered out post-cyclical uses of *ne/en* only.

Comparing the occurrence of *ne/en* expressing sentential negation in the ReM data set, it became clear that West Central German dialects preserve the particle longer in negative contexts (stage I and II negation) (Schüler 2017). While Central German dialects could be shown to also show a larger percentage of stage I negation, there was no difference between West and East Central German dialects. In both data sets, monoclausal exceptive adverbial clauses are the most frequent clause type to preserve preverbal *ne/en*. As exceptive clauses do not always depend on a negative main clause, they were discussed separately from paratactic negation, which appears in adverbial and complement clauses that depend on a negative main clause. If one excludes the fact that exceptive clauses can also modify a modal or non-negative main clause, they can be treated as related to other adversative adverbial clauses preserving single *ne/en*. Table 4.17 provides an overview of the clause types with post-cyclical single preverbal *ne/en* in the ReM sample.

Table 4.17: Clause types with post-cyclical *ne/en* in the ReM sample

clause type	adverbial						compl.	other
subtype	exc.	adv.	conc.	'not until'	*āne*	purp.		
frequency	132	20	1	2	2	1	12	6
total	158						12	6

All clauses, except for one adverbial, (48), and one complement clause, (49), show V2 word order. Except for exceptive clauses and clauses introduced by *āne* , there is also always some (semantically) negative element in the main clause or associated clause. By far the most common clause type to pre-

serve single preverbal *ne/en* are adverbial clauses. Exceptive clauses (exc.) (n=132) and adversative clauses (adv.) (n=20) are the most frequent adverbial clause types. One clause introduced by *al* ('although') translates as a concessive (conc.) adverbial clause. Furthermore, there are two clauses introduced by *ānе* ('without'), one purpose (purp.) adverbial clause as well as three clauses which rather translate as a main clause (50), (51) and (52) in the sample.

The results from the database of the MHG dictionary suggested that the exceptive construction with *denne* is more frequent in Upper German dialects. Furthermore, it was shown that *denne* was used from the beginning of the MHG period to mark exceptive clauses. While *ne/en* disappears towards the end of the MHG period, there are V2 exceptive clauses from the 19th century which are marked by *denne*. Beside the 117 exceptive clauses, four adversative adverbial clauses and four complement clauses which contained paratactic *ne/en* appeared in the data. All of them depend on a negative main clause and show V2 word order. The cases of paratactic negation in complement and adverbial clauses occur most frequently in literary and religious texts in both data sets.

4.2 Middle Low German

Among the clauses containing a negative particle (n=2 423)[10], 892 (36,8%) contained bipartite negation with both *ne/en* and *niht*, 461 (19%) appeared with *ne* and another (n-marked) indefinite or disjunction. 898 clauses (37%) showed stage III of Jespersen's cycle, where *niht* is the only marker of sentential negation.

Table 4.18 compares the observed frequency as well as the percentage of *ne/en* in among all clauses containing a negative particle across dialects and centuries. Note that in contrast to the tables for the MHG corpora, I do not provide the numbers and percentages of clauses not negated by *ne/en* due to lack of space. The numbers e.g. 246 and 84% mean that 84 of all clauses (n=246) are negated using *ne/en*. This includes uses in collocation with *niht* and other n-marked indefinites (stage II) as well as its appearance

[10]Due to the way of tagging, the results additionally contained 177 clauses which showed no negative particle but were negated by negative indefinites alone. These were excluded from this data description because the tagging of the other corpora for MHG and MD did not include indefinites when searching for particles.

on its own in residual stage I negation and non-negative uses. While in general the particle becomes less frequent from 1300 onward, it is striking that Low Rhenish preserves the particle quite long. It has to be noted that the corpus consist only 6,3% of Low Rhenish texts (cf. chapter 3.2), but the Low Rhenisch makes up almost 1/3 of the tokens in first half of the 16th century. Low Rhenish is a dialect adjacent to Ripuarian Franconian, which was also shown to preserve the particle longer (cf. 4.1.1).

Table 4.18: The decline of preverbal *ne/en* across dialects and centuries in the ReN subcorpus

Year	L		LR		NLS		EE		EF		WP		total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1201-1300	-	-	-	-	246	84%	-	-	-	-	9	75%	255	83,60%
1301-1350	-	-	-	-	337	89,40%	-	-	-	-	57	83,80%	394	88,50%
1351-1400	-	-	-	-	-	-	-	-	-	-	150	69,5	150	59,52%
1401-1450	-	-	-	-	-	-	-	-	-	-	153	61,9	153	59,50%
1451-1500	3	5,50%	107	68,60%	304	77,40%	-	-	10	19,2	70	94,60%	494	68%
1501-1550	-	-	55	98,21%	5	5%	6	2,20%	-	-	3	16,70%	69	15,60%
total	3	5,50%	162	76,40%	892	76,70%	6	2,20%	10	19,2	442	65,90%	1515	62,60%

WP: Westphalian NLS: North Low Saxon LR: Low Rhenish EE: East Elbian EP: Eastphalian L: scribal language of Lübeck

There are 174 (7,2%) clauses which appear with single preverbal *ne/en*, which I will describe in the following section.

4.2.1 Clauses with single preverbal *ne/en* expressing sentential negation in the ReN subcorpus

In 34 clauses (1,4%), the preverbal particle is used to express sentential negation. Table 4.19 gives the instances of sentential *ne/en* for each verb form across the centuries.

Table 4.19: Single *ne/en* expressing sentential negation in the ReN subcorpus

Century	verb form						
	aux	copula	lexical	modal	*weten*	total	
1201-1300	0	1	0	1	2	4	0,16%
1301-1400	1	2	0	0	1	4	0,16%
1401-1450	0	0	0	4	0	4	0,16%
1451-1500	1	5	10	3	2	21	0,8%
1501-1550	0	0	0	0	1	1	0,04%
total	2	8	10	8	6	34	1,4%

Contexts described as preserving stage I negation (cf. section 2.2) are elliptical constructions (n=3) as well as modal verbs (n=2) and the verb *weten* (n=2), as in (60). Table 4.20 shows the percentage of modal verbs compared to lexical verbs preserving stage I negation. In contrast to MHG, there is a higher percentage of modal verbs appearing with stage I negation than lexical verbs.

Table 4.20: Co-occurence of single *ne/en* marking sentential negation with a modal or lexical verb (ReN sample)

Century	verb form			
	modal		lexical	
1201-1300	1	11%	0	-
1301-1400	0	-	0	-
1401-1500	7	6,8%	10	1,5%

This goes against the observation in Breitbarth (2013) who concludes that modal verbs are not as conservative as previously stated. Note that the results might be due to the fact that not all dialect regions and periods are represented equally in the MLG texts conducted for this thesis.

(60) Stader Stadtrecht, 1279[11]

spreke auer ein man dhat he it ghekoft hadde oppe dheme
spoke however a man that he it bought had on the
setten markete he ne wete wedher wene so is he
respective market he NE know.PRES.SBJV from whom so is he
dher dhuue vnsculdich
the theft inculpable

'However, if a man said that he bought the item on the respective market and did not know from whom, so he is inculpable of theft.'

Among the eleven clauses which appear with a full negative *ne/en* between 1201 and 1350, only two do not belong to any of these well described contexts, namely (61) and the V1 conditional in (62). The conditional in (62) contains the adverb *mer* ('anymore'), which are argued to be negative polarity items in MD (Postma 2002) and can therefore co-occur with single preverbal *ne/en* (Stoett 1923).

(61) Sachsenspiegel, MS Oldenburg, early 14th century (13r, 2/3)

de ir gŏt mit eme ghenomen hebbet vnde to gheplichtet ne
who her item with him taken has and to endorsed *ne*
hebbet
has

'Who took her item with him and did not endorse it.'

(62) Stader Stadtrecht, 1279[12]

ne ware dhar mer ein kint so scal dhe urowe hebben
NE be.PAST.SBJV there more one child so shall the woman have
half dhat goet
half that good

[11] http://annis.corpora.uni-hamburg.de:8080/gui/?id=2d5718c6-dc26-427b-87a5-f90ce0d9a13b

[12] http://annis.corpora.uni-hamburg.de:8080/gui/?id=224d353c-fdac-4336-8d5a-15beccb9c11d

'If there was no child, the woman should receive half the goods.'

There seems to be an increase of stage I negation towards the end of the MLG period. Interestingly, most examples of stage I negation from the 15th century (n=19) appear in the *Qvatuor Evangeliorum versio Saxonica*, a Bible translation from the late 15th century. Most clauses in this text are negated with *ne/en* and *niht* or another (n-marked) indefinite (n=282, 71%) or *niht* alone (n=89, 22,3%) (stage II and stage III of Jespersen's cycle). It is striking that all clauses negated with single preverbal *ne/en* (stage I of Jespersen's cycle) (n=20) appear as direct speech by Jesus or another figure in the text, as in (63).

(63) Qvatuor Evangeliorum versio Saxonica, late 15th century[13]

vorwar segge ik iv gi ne eten dat vlesk des mynschen sone
truly say I you you NE eat that meat the.GEN man.GEN son

'I truly tell you that you are not eating the meat of son of man.'

This indicates that this old expression of negation is used as a stylistic device to imitate historical language. This is also true for one clause appearing in the Kölner Bibel, given in (64).

(64) Kölner Bibel, late 15th century[14]

wente ik segge iw ik en drincke vortme van dessem
because I say you I NE drink henceforth from this
gheslechte des winrauen
generation the.GEN grapevine

'Because I tell you "I will henceforth not drink from this kind of of grapevine"'.

[13]http://annis.corpora.uni-hamburg.de:8080/gui/?id=22fd0843-b849-4097-906a-5183469c9429

[14]http://annis.corpora.uni-hamburg.de:8080/gui/?id=011d21eb-c01c-4d44-b815-22dec0e96605

Beside this archaic use in religious texts, the other 3 clauses showing stage I negation after 1400 appear either with a modal verb (n=2) or with the verb *weten* (n=1).

The two clauses showing a modal verb appear in the *Spieghel der leyen*. While one clause in addition to having a modal verb shows ellipsis, one instance of single *ne/en* appears in a main clause, which is modified by adverbial clauses containing an n-marked indefinites (65).

(65) Spieghel der leyen, mid-15th century (45v, line 17–18)

En wo uns neen krachte en is ghegheuen Dar en moghe wi
and where us no power NE is given there EN may we
mede verdenen dat ewighe leuen
with earn the eternal life

'And where no power is given to us, we cannot earn eternal life.'

4.2.2 Non-negative uses of single preverbal *ne/en*

The majority of clauses with a non-negative use of single preverbal (n=140) are exceptive clauses (n=133). There are two adversative adverbial clauses, given in (66) and (67), one adverbial clause translating as 'not until' and three concessive adverbial clauses introduced by *al* ('although') (68).

(66) Osnabrück, Sühne (= Koldenbeker Urkunde), late 13th century[15]

were dat also dat her Euert van varendorpe de nicht enberen
were that also that lord Ebert van Warendorf they NEG lose
en wolde he ne wolde heren Rolue scult geuen
NE wanted he NE wanted lord Rolf guilt give

'If Ebert van Warendorf did not want to lose them, but wanted to blame lord Rolf.'

[15] http://annis.corpora.uni-hamburg.de:8080/gui/?id=dee9db18-3b08-47b6-b918-c562d69d20ea

(67) Sächsische Weltchronik, MS Bremen, early 14th century (tokens 409–430)

och n is it so nicht beleuen legene ne si uil
also NE is it so NEG popular lies NE be.PRES.SBJV frequently
ghescreuen och de horet gerne eyn goch
written also those hears gladly a fool

'Also it is not that popular but lies are frequently written that are also gladly heard by fools.'

The clause in (67) can also be translated as a complement clause, 'it is not popular that lies are frequently written'.

There is one adverbial clause which can be translated as 'not until', presented in (68). As has been noted in chapter 4.1.1, these clauses can also be translated as exceptive clauses ('unless').

(68) Soest, Schrae im Statutenbuch, late 14th century (2va, line 4–5)

so en dueruen sey den stoyl nicht rumen dey sake en
so NE may NEG they the chair not leave the charge NE
si eyrst vorantwordet
be.PRES.SBJV first faced

'So they [the judges] may not leave the chair unless the charges are first faced.'

Three clauses from 1301-1350 are introduced by *al* ('although'), as in (69). The conjunction also introduces adverbial clauses with non-negative *ne/en* in MHG.

(69) Sachsenspiegel MS Oldenburg, early 14th century, early 14th century (20r, line 9)

de ene in den leuende hebbe ghesen al ne uare ut
which one in the life has seen although NE go out
in enen iare
within one year

'Which one has seen in life [which one has ever seen], although having been out for a year.'

4.2.2.1 Exceptive clauses

In MLG, as in all languages under investigation, monoclausal exceptives like (70) (n=105) are more frequent than biclausal exceptives like (71) (n=29).

(70) Stader Stadtrecht, 1279[16]

dhe scal ome sin wulle loen gheuen he ne hebbe it
who shall him his demanded wage give he NE have.SBJV it
uerboret mit bosheit
forfeit with mischief

'Who shall give him the demanded wage unless he has forfeited it in ill dealings.'

(71) Stader Stadtrecht, 1279[17]

dhe gift scal to recht stede wesen Jt ne si also dhat
the gift shall to right legal be it NE be.PRES.SBJV so that
dhe nagesten vrint buten landes sint
the closest relatives out land be

'The gift shall be legally binding unless the closest relatives are abroad.'

Table 4.21 shows the number of constructions per century and relative to all clauses with a negative particle. It becomes clear that the construction becomes less frequent towards the end of the MLG period.
The exceptive clauses in my MLG data always follow the main clause they express an exception to. As table 4.22 shows, the main clause most frequently contains a modal verb and negation (n=62), as in (73) below, but also either a modal (n=38), a verb in subjunctive (n=2) or negation (n=18) on their own are attested. In 14 cases, the main clause contains a non-negative and non-modal statement, such as *Drunckenschap is een doetlike sunde sware* ('Drunkenness is a very deadly sin') in (78).

[16] http://annis.corpora.uni-hamburg.de:8080/gui/?id=e8a9bd62-12e7-4eaf-ad40-d836e7aa076c

[17] http://annis.corpora.uni-hamburg.de:8080/gui/?id=4826bed6-dbb1-4fba-b6b9-4b222fcb2add

Table 4.21: Types of exceptive clauses across centuries in the ReN subcorpus

Function	biclausal		monoclausal		total	
	#	%	#	%	#	%
1201-1300	12	3,6%	34	10,3 %	46	13,9%
1301-1350	6	1,3%	42	9,2 %	48	10,5 %
1351-1400	7	2,5%	19	7%	26	9,5%
1401-1450	4	1,5%	2	0,8%	6	2,3%
1451-1500			6	0,8%	7	0,9%
1501-1522			1	0,2%	1	0,2 %
Grand Total	29	1,2%	105	4,3%	134	5,5%

Table 4.22: Modal/negative elements in the main clause which the exceptive clause restricts (ReN subcorpus)

Element	#
Negation + modal verb	62 (46%)
Negation	18 (13,4%)
Modal verb	38 (28,6%)
Verb in subjunctive	2 (1,5%)
Verb in indicative mood	14 (10,5%)
total	134

Even though coordination is rare, there are two coordinate structures of exceptives, such as the example presented in in (72).

(72) Herforder Rechtsbuch, late 14th century (4vb, line 4–6)

went dat nemant eghen is van rechte he en sy
because that nobody in bondage is by law he NE be.PRES.SBJV
eghen gheboren van vader efte van moder eft he ne
in bondage born from father or from mother or he NE
hebbe sik suluen eghen gegheuen
have.SBJV him self in bondage made

'Because nobody is in bondage by law unless he is born in bondage or has assumed the status himself.'

4.2.2.1.1 Monoclausal exceptive clauses

Monoclausal exceptive clauses are most frequently introduced by a personal pronoun (n=93), as in (73). The 3rd person singular pronoun *it* ('it'), as in (74) appears in 21 monoclausal exceptive clauses.

(73) Stader Stadtrecht, 1279[18]

Nyeman [...] *magh hir in desser stat herve kopen he en*
nobody [...] may here in this city heritage buy he NE
si vse borger ofte bur
be.PRES.SBJV our citizen or inhabitant

'Nobody is allowed to buy heritage in this city unless he is our citizen or inhabitant.'

(74) Sachsenspiegel MS Oldenburg, early 14th century (37v, line 9/10)

sint ne mach he sic nicht untreden it ne beneme
the NE can he himself NEG arrange terms it NE behaves.SBJV
eme echte not
him real misery

'Then he may not arrange terms unless he is in real misery.'

There are seven instances of a full noun phrase in first position, (75), as well as three clauses introduced by an adverbial, (76) and two clauses introduced by an indefinite pronoun, (77).

(75) Stader Stadtrecht, 1279[19]

Ein knecht dhe ne mach sines heren goet buten landes noch
a servant that NE may his lords good out land nor
binnen landes nicht ueruechten noch uerdobelen dhe here ne
in land NEG forfeit nor gamble away the lord NE
ghaue dhar iawort to
give.SBJV there consent to

[18] http://annis.corpora.uni-hamburg.de:8080/gui/?id=ce76a448-b3ae-496b-891b-7b9e1d4fe079

[19] http://annis.corpora.uni-hamburg.de:8080/gui/?id=42b682ce-c8af-4079-b21b-36f30a15f531

'A servant is not allowed to forfeit or gamble away the goods of his lord in and outside of the country unless the lord has given his consent.'

(76) Sachsenspiegel MS Oldenburg, early 14th century (40v, line 10/11)

nicht ne mot men ouer ene richten dar ne se de
neg NE may one over one judge there NE be.PRES.SBJV the
hanthafte dat
genuine crime

'One is not allowed to initiate a trial against someone unless there is a genuine crime.'

(77) Chronik Wassenberch, 1518 (token 12794–12819)

ende woisten oick geynen rait woe sy ommermeyr dair vyt
and knew also no advice how they ever there out
mochten komen men en neme dan eyn gemeyn schattinge van
could come one NE take then a common fee from
den gemeynen burgeren
the common citizens

'And did not know any way out, unless they take a common fee from the common citizens.'

The exceptive clause in (77) is also the only example in my corpus result showing *denne* (spelled <dan>). As had been shown in chapter 4.1.2, *denne* seems to appear under Upper German influence in exceptives from the early MHG period on.

Lexical verbs (n=36), copula (n=31) an auxiliaries (n=24) are the most frequent verb forms to appear in MLG monoclausals; modal verbs appear in 13 clauses.

4.2.2.1.2 Biclausal exceptive clauses

Biclausal exceptives are introduced by a dummy-matrix clause in present subjunctive, (71) (n=17) or past subjunctive (n=12), (78).

(78) Spieghel der leyen, mid 15th century (9v, line 1–2)

Drunckenschap is een doetlike sunde sware Et en were
Drunkenness is a deadly sin heavy it NE be.PAST.SBJV
dat wen dorste vnde dan druncke mit luste
that someone thirst.SBJV and then drank.SBJV with joy

'Drunkenness is a very deadly sin unless someone was thirsty and would then drink with joy.'

It is striking that most biclausal exceptive clauses appear in legal texts, except for four clauses from the *Spieghel der leyen*, a religious text from the mid 15th century. In the complement clause, the verb can appear in verb final or verb late position. The verb most frequently appears in subjunctive mood (78). Only four complement clauses show indicative morphology, whereby they are either plurals, such as (79), or need to fit a rhyme scheme.

(79) Spieghel der leyen, mid 15th century (54v, line 19–20)

Hijr bi syn ghi iuncg of old clene og groet het en sy
Here by are you young or old little or tall it NE be.PRES.SBJV
dat ghi iv seluen ghewelde doet
that you your self violence do.2PL

'Here you can be young or old, little or tall unless you do not hurt yourselves.'

There is evidence for analyzing the biclausal structure as an avoidance strategy in case certain requirements for a canonical monoclausal exceptive clause are not met: namely that the first constituent is non-salient and that the excepted proposition is inherently positive (cf. chapter 4.1.1 for the same observation in MHG). Recall that there were seven clauses with a full noun phrase among the 104 monoclausal clauses, while among 20 biclausal structures there are 14 with a complex NP as the only possible first constituent, if it were to be rephrased as a monoclausal. Trying to translate the clause in (80) into a monoclausal exceptive would mean that the constituent before the finite verb with the clitic *ne/en* would be a very complex NP, namely 'dhe raet vnde dhe voghet vnder sinder'. A Fisher's exact test as presented in

full length in section 4.1.1 results in a p-value of 0,0001, which indicates that there is a significant relationship between the first constituent being salient and the form of the exceptive (biclausal/monoclausal).

(80) Stader Stadtrecht, 1279[20]

It blift anders unstede it ne si dhat dhe raet vnde
it stays different illegal it NE be.PRES.SBJV that the council and
dhe voghet vnder sinder achte up stan
the reeve and=the lawyer verdict up stand

'It stays illegal unless the council, the reeve and the lawyer push the verdict.'

Another reason for the biclausal structure to be chosen is if the excepted proposition is itself negative (n=2), as in (81). As the particle seems to have developed a new function when appearing on its own, it is not possible to co-occur with another negative item in one clause without resulting in sentential negation. Therefore, the dummy-matrix clause creating a clause boundary between *ne/en* as an exceptive marker and the excepted negative proposition is used.

(81) Stader Stadtrecht, 1279[21]

dat scal stede wesen It ne ware also dhat se
that shall binding be it NE be.PAST.SBJV that they NEG
nicht endrachtich ne waren
unanimous NE were

'That shall be binding unless they were not unanimous.'

4.2.3 Summary Middle Low German

The data from the ReN corpus showed that *ne/en* irrespective of the context becomes less frequent in the 14th century. Low Rhenish is the only dialect

[20]http://annis.corpora.uni-hamburg.de:8080/gui/?id=6b6b9b9d-dbdf-4d38-ba5a-8178ca2dc796

[21]http://annis.corpora.uni-hamburg.de:8080/gui/?id=7600ce4d-38b7-464d-94ac-dc8aa800a5e8

which preserves the particle until the end of the MLG period. While *ne/en* is generally used very rarely to express sentential negation on its own, it still appears in connection with modal verbs or the verbs *weten* and *ruohen*. There are only two clauses which still appear with stage I negation between 1200 and 1350, which do not belong to one of those contexts. After 1350, there is an increase of old stage I negation, which was shown to be a stylistic device to imitate archaic language in religious texts. The three clauses with non-archaic stage I negation appeared with ellipsis, n-marked indefinites in a dependent clause or the verb *weten*.

Within the post-cyclic contexts, exceptive clauses (n=134) are the most common clause type in which single *ne/en* appears. In MLG, as well as in MHG, monoclausal exceptive clauses (n=105) are more frequent than bi-clausals (n=29). In contrast to MHG, there are no complement clauses with post-cyclical *ne/en* and only three adverbial clauses with post-cyclical *ne/en*.

4.3 Middle Dutch

4.3.1 Corpus Gysseling

In the Corpus Gysseling (CGy), I found 6 507 instances of the lemma *ne/en*. Searching through the results manually, I found 698 sentences (12% of all clauses with preverbal *ne/en*) in which *ne/en* appears on its own, meaning without (n-marked) indefinites or *niet*. The way in which I searched the corpus does not allow for a more detailed picture about the different (n-marked) indefinites or disjunction co-occuring with *ne/en*.[22]

In order to provide a detailed picture of the clauses with single preverbal *ne/en* (n=689) in the CGy, I took a random sample of 25% (n=168) which will be described in the following section. As in the overall corpus, there are more clauses in the second half of the 13th century.
As can be seen in table 4.23, single *ne/en* most frequently appears in adverbial clauses (n=113). In 53 clauses (32%) which appear to be residual stage I, it marks sentential negation. There are only few adversative adverbial clauses (n=5). In the following sections, I will first describe the clauses where *ne/en* expresses sentential negation, before I discuss the post-cyclical uses of the preverbal particle.

[22]Cf. Burridge (1993) and Breitbarth (2013) for a detailed discussion of Jespersen's cycle in Middle Dutch.

Table 4.23: Function of single *ne/en* in all clauses in the CGy sample

Function	#		
	1200-1250	1250-1300	total
adversative adverbial clause	1	4	5 (3%)
exceptive adverbial clause	7	103	110 (65,5%)
sentential negation	4	49	53 (31,5%)
total	12	156	168

4.3.1.1 Clauses with single preverbal *ne/en* expressing sentential negation

Among the 53 clauses with single preverbal *ne/en* expressing sentential negation, a clear genre bias stands out: Except for two clauses, all instances appear in literary texts. These two occurrences of negative *ne/en* in charters are both elliptical constructions, such as (82).

(82) Corp.I, 0009AA, Gent, 17 maart 1253

Ende worde tuist jof de scoutte gesocht ware jof ne ware
and were dispute or the fault investigated were or NE were
So soudet de bode nemen up sinen eet
so shall=it the deputy take on his oath

'If a dispute or fault were investigated - whether or not there is one - the deputy shall take it on his oath.'

Table 4.24 gives an overview over the verb forms and word order patterns with which *ne/en* is still used as a marker of sentential negation.
Lexical verbs (n=30) and the copula *sīn* ('to be') (n=10) are the most common verb forms co-occurring with the old negator, but also modal verbs (n=9) and auxiliaries (n=4) are negated by it. It has to be noted that, except for 17 clauses with lexical or modal verbs which are provided in the appendix 1, all clauses can be shown to co-occur with an element that has been argued to provide some negative value that makes single *ne/en* felicitous, i.e. a negative polarity item in the sense of Postma (2002).

Example (83) shows the most common clause type to show residual stage I, namely with a lexical verb an V2 word order.

Table 4.24: Single *ne/en* expressing sentential negation in the CGy sample

Verb position	Verb class				
	lexical	modal	copula	auxiliary	total
V1	3	2	4	2	11 (20,6%)
V2	16	2	5	0	23 (43,4%)
Vlate	6	1	1	0	8 (15%)
V-end	5	1	0	1	7 (13,2%)
ellipsis	0	3	0	1	4 (7,5%)
total	30	9	10	4	53

(83) Jacob van Maerlant, Rijmbijbel 1285 (209:23–24)

Alse langhe alse leuede samuel Doe ne quamen int land van
as long as lived Samuel they NE came in=the land from
Israhel
Israel

'They did not come to Israel as long as Samuel lived.'

V2 clauses (n=23) and V1 clauses (n=11), such as (84), are more common than Vlate (n=8) or V-end (n=7). As mentioned above, two of the four elliptical constructions with *ne/en* appear in the only charter texts in my sample which appear with *ne/en* marking sentential negation.

(84) Willem van Affligem, Sente Lutgart 1265 (MS K)

Daer mi vwe ewelike hulde Es an belanc got here
because me your eternal affection is on importance God Lord
mijn En magic dan wel droeue sijn
mine NE may=I then well sad be

'Because your eternal affection is dedicated to my Lord, God, am I not allowed to be sad?'

Based on Stoett (1923), Postma (2002) aims at providing a systematic overview over contexts in MD which preserve single *ne/en* as a marker for sentential negation. Only 17 of the 53 clauses in my CGy sample do not

fit into one of the categories Postma postulates (cf. appendix 1). He argues that, in all cases of what appears as residual stage I, there is actually a negative polarity item or phrase which co-occurs with the marker. Hence, all of these cases should be analyzed as stage II of Jespersen's Cycle, according to Postma. As has been noted above, his generalization does not account for all clauses in my sub-sample. One class of verbs he disregards completely are modal verbs, which have been argued to preserve stage I negation longer (Stoett 1923) due to their status as 'common usage verbs' (Burridge 1993). Nine clauses with residual stage I in my sample and without any negative polarity item in Postma's sense appear with a modal verb (85) (cf. table 4.24). Note that the clause in (85) is a rhetorical question.

(85) Willem van Affligem, Sente Lutgart 1265 (MS K)

Want ic vergelden nit ne can Met mire macht al mine schulde
Because I repay NEG NE can with my power all my guilt
[...] *En magic dan wel droeue sijn Dat ikker dos verboren*
[...] NE may=I then sure sad be that I=her than acquit
moet
must

'Because I cannot repay all my guilt with my power, can't I be sad that I have to acquit it?'

As my corpus search does not allow for retrieving the total number of modal and lexical verbs, I can only compare the number of occurrences. Against the generalizations in grammars (Stoett 1923), comparing the numbers indicates that modal verbs are not more conservative in preserving stage I negation than lexical verbs. This is a tendency that I observed in the MHG but not in the MLG data set.

Regarding the cases which Postma did describe, the most frequent context in my MD data is the verb *weten* ('to know'), as in (86) and (87) (n=11). All clauses with *weten* co-occur with a dependent interrogative clause ("WH-bijzinnen" Postma 2002:49).

(86) Het Luikse Diatessaron, 1291-1300

Wi ne weten wanen dat het quam
we NE know where that it came

'We do not know where it came from.'

(87) Nederrijns Moraalboek, 1270 (386:34)

Jnde en wet war hi gait
and NE know where he go

'And does not know where he goes.'

The verb *ruoken* ('to worry', 'to care') (n=1), in (88), also takes an interrogative clause as its complement.

(88) Nederrijns Moraalboek, 1270 (398:5)

Want huome en ruokt waner hie stiruet
Because him NE care when he dies

Because he does not care when he dies.

There is an additional clause with *hebben* ('to have') which takes a wh-complement and is negated by *ne/en*, given in (89).

(89) Der Naturen Bloeme by Jacob by Maerlant, 1287, MS D (315:30)

die worme ne ebben wat verteren
the worms NE have what digest

'The worms do not have anything to digest.'

The other 23 clauses in which, according to Postma, *ne/en* co-occurs with a negative polarity item, contain:

- the verb *laten* ('let') (n=4)
- ellipsis (n=4)
- comparative constructions (n=3)
- the adverbs *meer* ('anymore'), *bore* ('very'), *cume* ('hardly') and other minimizers (n=8)
- rhetoric questions (n=4)

While the data from the CGy show that MD predominantly exhibits stage II negation, literary texts appear to be linguistically more conservative. This tendency is confirmed with the data from the CRM (cf. section 4.3.2).

4.3.1.2 Exceptive clauses

4.3.1.2.1 Monoclausal exceptive clauses

Like in MHG and MLG, monoclausal exceptives (n=74) are more frequent than the biclausal structure (n=36). Table 4.25 shows the verb forms which appear in monoclausal exceptives. The copula *sīn* ('to be') (n=52) is the most common verb form in monoclausals, (90), lexical verbs (n=18) (91), auxiliaries (n=4) (92) and modals (n=1) are less frequent.

Table 4.25: Verb forms in monoclausal exceptive clauses in the CGy sample

Verb form	#		
	1200-1250	1250-1300	total
Copula	6	45	52 (70,3%)
Lexical	1	17	18 (24,3%)
Auxiliary	1	3	4 (5,4%)
Modal	1	0	1 (1,6%)
total	9 (12,2%)	65 (87,8%)	74

(90) Corp.I, 0566B, Brugge, 1284

Het ne gheorlouet ghenen vreemden knape te werkene in dese stede
it NE allowed no foreign squire to work in this city
et ne si vp al suilc versoec [...]
it NE be.PRES.SBJV on all such request [...]

'A foreign squire is not allowed to work in this city, unless there is a request such as [...].'

(91) Corp.I, 1340, Brugge, 1294

Ende waren dese lakene te smal datmen hem ghenen loy
and were the broadcloth too small that=one him no salary
souden gheuen het ne dochte ghesuorne goed
shall give it NE seem sworn official good

'And if the broadcloth were too small he should not receive a salary unless the sworn official thought it was good.'

(92) Corp.I, 1340, Brugge, 1294

Waer dat sake dat die meester enich werc met hem dade hie ne
were it case that the master any work with him did he NE
had betoghet vor ghesuorne hie verbuerde
has proven for sworn official he forfeit

'Were it the case that the masters did any work with him - unless he has reported to the sworn official - he forfeits.'

The clause in (92) stands out because it is one of the few examples in the MD data (n=6) where the exceptive clause precedes the clauses it expresses an exception to. Another example is given in (115) below.

Table 4.26 provides an overview over the constituents preceding the verb in the monoclausal exceptives found in my sample. As shown, personal pronouns are the most common type of constituent, whereby the (expletive) pronoun *het* (n=41), as in 91, is by far the most frequent.

Table 4.26: First constituents in monoclausal exceptive clauses in the CGy sample

Verb form	#		
	1200-1250	1250-1300	total
Personal pronoun	4	56	60 (81%)
NP	0	2	2 (2,7%)
Zero	5	6	11 (14,9%)
Adverb	0	1	1 (1,4%)
total	9 (12,2%)	65 (87,8%)	74

In contrast to MHG and MLG, zero pronouns (n=11) are more frequently attested in monoclausals (93).[23] Full noun phrases (94) and adverbs (95) rarely occur as first constituents.

[23]I assume zero pronouns in these structures. I do not analyze them as V1 conditionals for the following reason: OHG and OS had null subject pronouns (Axel and Weiß 2011; Walkden 2014), which I take as indicative for the general availability of expletive null subjects (Biberauer et al. 2010:8) in MLG and MHG. As the exceptive structures are similar in MD, following the main clause and showing single *ne/en*, I assume that there are zero pronouns in the MD structures as well. Nonetheless, I acknowledge the fact that these MD structures can be analyzed as V1 conditional clauses with stage I negation.

(93) Corp.I, 0778A, Holland, grafelijke kanselarij, 21 maart 1288

Voert so eest dat ghesproken dat ic herman van worden
Furthermore so is that spoken that I Hermann van Worden
noch en ghene mire nacomelinghe ont houden ne mach ballinghe
nor nobody my descendants retain NE may outlaws
van dere grafscap van hollant in die herscap van worde <u>en</u>
from the county of Holland in the control of Worde NE
<u>si</u> bi orloue ende bi wille miins heren
be.PRES.SBJV with permission and with will my.GEN lord

'Furthermore it is spoken that neither I, Hermann van Worden, nor my descendants may retain outlaws from the county of Holland in the control of the family van Worden, unless it is by will and permission of my lord.'

(94) Corp.I, 0012, Middelburg, 11 maart 1254

Negheen man ne mach portres goed van middelburg veruechten
no man NE may citizens good from Middelburg lose
of verboren portre ne verbord zelue of veruechte met
or forfeit citizen NE forfeit.PRES.SBJV self or lose with
zire hant
his hand

'No one is allowed to lose or forfeit goods owned by citizens of Middelburg unless the the citizen forfeits it himself or loses it with his hands.'

(95) Corp.I, 0566E, Brugge, 1284

Het ne gheorlouet nemmer danne .x. weuers te gadre te wesene
it NE be allowed anymore than ten weavers together to be
omme enighen raet te hebbene [...] *daer ne ware .i.*
to united council to have [...] there NE be.PAST.SBJV one
ghesuorne mede van haren ambochte
sworn official with from their function

'More than ten weavers are not allowed to form a workers' council unless there is a sworn official present in his function.'

4.3.1.2.2 Biclausal exceptive clauses

Biclausal exceptive clauses (n=36) appear with an expletive (96) or zero (97) expletive pronoun.

(96) Corp.I, 1340, Brugge, 1294

Vort *dat* *niemene ghene witte say* *tewets* *moet nemen*
Furthermore that nobody no white serge to salary must take
no *houden* [...] *het ne ware* *dat* *hiese* *wettelike*
nor keep [...] it NE be.PAST.SBJV that he=her knowingly
ghepant hadde [...]
pawned [...]

'Furthermore, that nobody shall take nor keep white serge as a salary, unless he has pawned it knowingly.'

(97) Nederrijns Moraalboek, 1270 (407:17–18)

Jnde darumbe sech ic dat minne gelikt *den lewe Want*
and therefore say I that love resembles the lion because
sine *lopt* *nieman uop en si* *dat* *hise* *siit*
she=NE walks nobody up NE be.PRES.SBJV that he=her sees

'And therefore I say that love is like a lion - it does not attack anybody unless it sees them.'

The dummy-matrix clause takes a complement clause which is mostly introduced by *dat* ('that') (n=30) but also *of* ('or') (n=5) or no complementizer (n=1) as in (99) is attested. The clause in (99) stands out because the exceptive clause precedes the main clause *hie wort ints grauen ghenaden van liue en van goede* and because the complement to the dummy-matrix clause is an infinitival clause.

(98) Corp.I, 1632A, Holland, grafelijke kanselarij, 30 september 1297

Voert *gheloue wi* [...] *tehelpene tieghens elken man diene*
Furthermore swear we [...] to help against every man that=he
anevechten iof zoeken wille in zinen lande vp ons zelfs cost [...] *het*
attack or search want in his land on our own cost [...] it

ne ware iof hi die voerseyde ondadighe liede
NE be.PAST.SBJV or he the aforementioned inactive people
brenghen wilde binnen den ghestifte van vtrecht
bring want into the convent of Urtecht

'Furthermore we [...] swear to help against any man who wants to attack or find him in his land on our own cost [...] unless he brings the aforementioned inactive people into the convent of Utrecht.'

(99) Corp.I, 0347, Brugge, (25 mei 1281)

So wie die sine hant doet an scepenen in euelen wille jof het ne
so who the his hand do to alderman in evil will or it NE
si sinen lachame te verwerne [...] *hie wort ints*
be.PRES.SBJV his body to protect [...] he is in=it
grauen ghenaden van liue en van goede
count.GEN mercy from life and from goed

'So who harms an elderman - unless he does it to protect is life - depends on the count's mercy.'

In 66% of the biclausals, the copula *sīn* in the dummy-matrix clause shows past subjunctive morphology (n=24) (98), 12 clauses appear in present subjunctive (99).

4.3.1.2.3 The main clauses restricted by exceptive clauses

As table 4.27 shows, the main clauses the exceptive clause expresses an exception to can either contain negation (n=30) as in (97) above, a modal (n=29), like in (100), a negative marker and a modal verb (n=36), as in (94) and (96) or a verb in indicative mood (n=15) as in (98) above.

Table 4.27: Modal/negative elements in the main clause which the exceptive clause restricts (CGy sample)

Element	#
Negation	30 (27,3%)
Modal	29 (26,4%)
Negation + modal	36 (32,7%)
Verb in indicative mood	15 (13,6%)
total	110

(100) Corp.I, 0566D, Brugge, 1284

dat hie mach weuen in die port het ne ware dat enighe
that he may weave in the port it NE be.PAST.SBJV that some
claghe vp hem quame
complaint up him came

'That he may weave in the port unless a complaint was filed against him.'

The coordination of exceptive clauses is rare but possible (n=6). An example for two coordinated exceptives is given in (101).

(101) Corp.I, 0566E, Brugge, 1284

Het ne gheorlouet gheretiere say of te doene vanden ramen het
it NE is allowed no serge of to do from=the loom it
ne hebbe sinen loy het ne ware
NE have.PRES.SBJV his tanning it NE be.PAST.SBJV
datment wilde verbetren van varwene die hier ieghen
that=one=it wanted clean from paint which here against
dade
did

'It is not allowed to take serge from the loom unless it has its tanning and unless one wants to clean it of paint which it was stained with.'

4.3.1.3 Other non-negative uses of single *ne/en*

Five clauses in the sample do not translate as exceptive *unless* clauses but as adversative *but*-clauses, as (102). Except for the clause in (103), all appear in literary texts.

(102) Jacob van Maerlant, Rijmbijbel 1285 (401:20–21)

du diet wistes en es niet bleuen Dune heuesti
you who=it knew NE are.2SG NEG stayed you=NE have=you
ieghen gode verheuen
against God risen up

'You who knew it have not stayed but risen up against god.'

(103) Corp.I, 0029, Gent, 1263

dit uorseide gotshus en hadde jegen vrou auen geen lant
this aforementioned church NE had against miss Ava no land
gecocht daer jan up was gedaen jn wetteleken huweleke hi ne
bought there Jan up was done in legal wedding he NE
hadde desen vorseiden pant geset te pande
have.PRES.SBJV this aforementioned property set to deposit

'The aforementioned church did not buy any land from Ava who was married to Jan, but he gave the aforementioned land as a deposit.'

In contrast to the MHG data, there were no complement clauses which showed post-cyclical *ne/en* in the MD sample.

4.3.2 Corpus van Reenen-Mulder

In the CRM there are 2 340 sentences expressing sentential negation containing either both *ne/en* and *niht* or only one of the negative markers. 1 428 sentences appear with bipartite negation, 659 show *ne/en* with an n-marked indefinite. 56 sentences are negated with *niht* alone.

Table 4.28 gives the observed and normalized frequencies of sentences appearing with *ne/en* alone of all negated sentences (NS). Note that the function and clause type is not specified.

Table 4.28: Occurences of clauses with single *ne/en* per province and century in the CRM

	1300-1350			1350-1400			total		
	single ne		all NS	single ne		all NS	single ne		all NS
Province	#	%		#	%		#	%	
Antwerp	2	2,6	75	1	0,6	152	3	1,3	227
Flemish Brabant	1	2,7	36	4	9,5	42	5	6,4	78
Brussels	1	4,1	24	6	2,7	221	7	2,8	245
Drenthe	0	0	4	3	8,6	35	3	7,6	39
Gelderland	1	5,9	17	20	0,8	225	21	8,6	242
Groningen	0	0	0	5	8	62	5	8	62
Limburg	3	17,6	17	5	2,1	238	8	3,1	255
Limburg (NL)	0	0	2	6	10,3	58	6	10	60
North Brabant	4	15,4	26	11	8,5	129	15	9,7	155
North Holland	1		4	5	9	55	6	10,2	59
East Flanders	9	5,3	167	20	1,3	156	29	8,9	323
Overijssel	2	16,6	12	21	11,5	183	23	11,8	195
South Holland	2	6,6	30	39	27,9	140	41	24,11	170
Utrecht	14	25,5	55	5	6,09	82	19	13,9	137
West Flanders	1	9	11	1	5	20	2	6,4	31
Zeeland	2	6	33	2	6,9	29	4	6,4	62
total	43	513	154		1 827	197		2 340	

The provinces Limburg (BE), Limburg (NL), North Brabant, Overijssel, South Holland and Utrecht stand out because these sentences make up more than 10% of all sentences containing a negative marker. This might lead to the assumtion that single *ne/en* in those areas still more frequently expresses sentential negation. A closer look into the texts shows that the majority of those clauses are exceptive clauses. The reason for the high numbers simply lies in the nature of those texts: they happen to contain many rules to which - in some cases more than one - exceptions are given. For instance, in only eight charters from the city of Dordrecht in South Holland (1355-1386) there are 32 exceptive clauses. The charters from other regions in the CRM just happen to transmit less of those exceptions to rules.

4.3.2.1 Constructions preserving single *ne/en*

In order to provide a more fine grained description of the constructions with single preverbal *ne/en*, I took a random sample of 50 clauses (25%) of those 197 clauses from the CRM.

As can be taken from table 4.29, the sample contains clauses originating from all provinces which are represented in the overall results (table 4.28) except Flemish Brabant, Drenthe and West Flanders. Compared to the numbers in table 4.28, Limburg is overrepresented while Flanders has comparably low numbers. Nonetheless, the present sample suffices to give a picture of the constructions with single preverbal *ne/en* for MD charters in the 14th century.

Table 4.29: Number of clauses preserving single *ne/en* in CRM sample per province and century (n=50)

Province	1300-1350	1350-1400	total
Antwerp	1		1
Brussels	2		2
Gelderland	1	2	3
Groningen		2	2
Limburg	2	3	5
Limburg (NL)	0	2	2
North Brabant	2	5	7
North Holland	1	2	3
East Flanders	3	2	5
Overijssel		3	3
South Holland		11	11
Utrecht	5	1	6
total	17	33	50

Within the sample, 88% (n=44) of the clauses with single preverbal *ne/en* are exceptive clauses, which I will discuss below. In four clauses (10%) *ne/en* expresses sentential negation, but these are all elliptical constructions such as (104).

(104) K602r31301, Woudrichem 1313

dat Soude staen tot onser prouinghe weder si tebroeken
that shall stand until our investigation whether she broken

ware of en ware
be.SBJV or NE be.SBJV

'This shall be valid until our investigation shows wether she is broken or not.'

One clause shows that the borders between exceptive and other adverbial meanings are blurred. Even though translating (105) 'unless I have the city's goodwill' is possible, 'not until' or German 'bevor nicht' seems more adequate. This was also observed in the MLG and MHG data.

(105) C608r35501, Groningen 1355

so solde ic self vierde mit vier perden riden to Groninghen an de
so shall I self fourth with four horsen ride to Groningen at the
stad [...] *ende van Groninghen nicht riden ic en hadde*
city [...] and from Groningen NEG ride I NE have.PRES.SBJV
der stad goeden moet
the city good will

'I shall ride to Groningen with four horses and shall not leave before I have the city's goodwill.'

There is one clause with single preverbal *ne/en* which translates as a corrective adversative adverbial clause, (106).

(106) F133p38701, Deventer 1387

dat die vorseyde aleyt sijn nichte [...] *gheen ghemeyne*
That the aforementioned Adelheid his niece [...] no common
werc daer doen en darf [...] *sie en wilt doen want sie*
work there do NEG may [...] she NE want=it do because she
hoers liues alse cranclic en onmechtich is dat sie daer niet
her body too sick and weak is that she there NEG
nutte to en is
use NEG is

'That his niece the aforementioned Adelheid is not allowed to do common work, even though she wants to do it, beause her body is too sick and weak so that she is of no use.'

Except for these few exceptions, the sample almost only consists of exceptive clauses, which I will describe in the following paragraphs.

4.3.2.1.1 Exceptive clauses

All exceptive clauses follow the main clause they formulate an exception to (n=44). Table 4.30 shows that most of the main clauses contain negation and a modal verb (n=26), as in (107), or negation with a lexical verb (n=5), as in (108). In nine cases there is only a modal verb, as (109), and four of the main clauses contain neither a modal nor negation, (110).

(107) K094p37401, Dordrecht 1375

die en zal met nyemende werken hi en heeft dien
they NE shall with no one work he NE have.pres.sbjv the
meester voldaen
master fulfilled

'They shall not work with anybody unless he has finished his master.'

(108) K094p36701, Dordrecht 1367

oec dat nyment in dorecht en backe hi en si
also that no one in Dordrecht NE bake he NE be.PRES.SBJV
port en hebbe des ghilden ghemoede
citizen and have the guild approval

'Also that no one bakes in Dordrecht unless he is a citizen and has the guild's approval.'

(109) K150p37801, s-Hertogenbosch 1378

die souts sijn also dicke alse hijt dede [...] *et en*
she shall=that be as often as he=it did [...] it NE
dede kenlijc noetsake
do.pres.sbjv evident necessity

'It (the amount of money) shall be given as often as he would do it unless there is evident necessity.'

(110) E597r33101, Haarlem 1331

Wi [...] *maken Cunt dat wi* [...] *Dat ghiertruid Aelbrecht*
We make known that we that Gertrud Albrecht
Wouters sones wijf ende alle haere kindere die si bi
Wouters son.GEN wife and all her children which she at
Aelbrechte vorscreuen hadde vri coften [...] *ten*
Albrecht aformentioned had free buy it=NE
ware sake dat si hem namaels verdienen
be.PAST.SBJV thing that they him later win

'We proclaim that we buy the freedom of Gertrud, Albrecht Wouter's wife, and all her childen that she had with the aforementioned Albrecht unless they win him before.'

Table 4.30: Modal/negative elements in the main clause which the exceptive clause restricts (CRM sample)

Element	#
Negation	5 (11,4%)
Modal	9 (20,4%)
Negation + modal	26 (59,1%)
Verb in indicative mood	4 (9,1%)
total	44

4.3.2.1.2 Monoclausal exceptive clauses

Monoclausal exceptives (n=35) are more frequent than biclausal exceptives (n=9). Like in the exceptive structures in the other languages under investigation, the verb is always in second position and appears in subjunctive mood. Monoclausals can occur with a lexical (n=12), (109), copula (n=17), (110) and (112), auxiliary (n=4),(107) or modal verb (n=2), (111). The copula *sīn* most frequently shows present subjunctive marking (n=12), as in example (112), but it also occurs in past subjunctive (n=5), (110).

(111) K150p37801, s-Hertogenbosch 1378

soe en sal nyemant dese voirseide ambachten aenvaen hi
so NE shall nobody those aforementioned office take on he
en sal irst porter sijn der voirseide stat
NE shall first citizen be the aformentioned city

'So no one shall take the aformentioned office unless he shall first be a citizen of this city.'

In all of the clauses, the element before the verb is a pronoun. Personal pronouns, as in (108), are the most frequent elements (n=31), of which the pronoun *het* appears in five clauses. Zero expletives only occur in four clauses (112).

(112) E192p34101, Utrecht 1344

Ende en sel gheen man ouderman wesen en si hem
And NE shall no man elder be NE be.PRES.SBJV him
aengheboren
native

'No man shall be an elder unless he is born one.'

4.3.2.1.3 Biclausal exceptive clauses

Only nine of the exceptive structures are biclausal. They mostly show the copula in past subjunctive mood (n=8), (113). Only one clause exhibit present subjunctive (114).

(113) K094p38601, Dordrecht South Holland

vort en zal men gheenen ghildebroeder dat weecghelt
Furthermore NE shall one no guild brother the allowance
gheuen ten ware dat hi die quetsinghe vercreghen
give it=NE be.PAST.SBJV that he the injury received
hadde op werckedaghe
had on working days

'Furthermore, one should not give a guild brother an allowance unless he has received his injury during a working day.'

(114) O052p30501, Erpe 1305

Dies pants en moghen si nyet verboren jeghen die
this deposit NE may they nothing forfeit against the
voreghenoemde liede en si dat die ene chijs den
aforementioned people NE be.PRES.SBJV that they an interest the
andren verhale
others submit

'Of this property they may not forfeit anything against the aforementioned people unless they give the others interest.'

The element preceding the copula is either the expletive pronoun *het*, in (113), (n=7) or a zero expletive (n=2), (114).

Most of the complement clauses (n=7) are introduced by the complementizer *dat* ('that'), as in 113 and (114). There is one clause without any complementizer (115), and one clause which is introduced by *of* ('or'), in (116).

(115) I241p32801, Gent 1328

En in dat half bunre merschs ne zullen si niet moghen
And in that half bunder marsh NEG shall they NEG may
doen deluen ne waer si moghen re haren hauen vp
do dig NE be.PAST.SBJV they want there their port up
doen maken
do make

'And they shall not dig in this half bunder[24] of marsh unless they want to set up their port there.'

(116) P065p31401, Brussel 1314

[24]A bunder is a unit of land.

beide [...] *partien selen altoes vortane den borne houden op*
both [...] parties shall always from now on the well hold up
haren ghemeinen cost het en waere ocht die borne eneghe
their common cost it NE be.PAST.SBJV or the well any
faute ochte eneghe Crenkenesse hadde
defect or any disease had

'Both parties shall from now on always take care of the well at their own expense unless the well has any defect or carries any disease.'

The dummy-matrix clause *het en zij* grammaticalized towards the subordinating conjunction *tenzij* in present-day Dutch. According to Van der Horst (2008:1010), *tenzij* as a conjunction first appears in the 16th century. He states that before the 16th century *tenzij dat* is more frequent. Regarding the complementizer *dat* ('that'), this can be confirmed by the data presented in the previous sections. The complementizer suggests that *ten zij/tenzij* has the status of a matrix clause in the MD data. Note that the copula most frequently appears in past subjunctive not present subjuncitve mood in the CGy and CRM data.

4.3.3 Summary for the Middle Dutch corpora

There is a clear difference between the two corpora, CGy and CRM, regarding clauses showing preverbal *ne/en*. The older CGy contains literary texts and charters, which reflects in the fact that more clauses still show *ne/en* encoding sentential negation on its own as well as a bigger variety of paratactic uses. For the CGy data, I discussed the proposal made in Postma (2002) that there are in fact no residual stage I contexts but that in these cases there is always some negative polarity item present. There were 17 clauses which do not appear to belong to one of the contexts described by Postma (2002). A has been observed in the ReM data, literary and religious texts from the earlier transmission periods can be argued to be linguistically more conservative, as they very sporadically show stage I negation. Besides exceptive clauses (n=110), there are five adversative adverbial clauses which translate as 'but'. The literary texts in the CGy therefore show the biggest variety of uses – negative and non-negative – of single *ne/en* in all corpora investigated in this study. In contrast to this, the CRM, which consists of younger texts

and charters only, contains much fewer instances of residual stage I negation. Additionally, there is just one paratactic use of *ne/en* in an adversative adverbial clause. The MD data compared to the results from MHG and MLG suggest that literary texts show more uses of non-negative *ne/en* while they also preserve stage I negation longer. In both samples, biclausal exceptive clauses (n=45) are less frequent than monoclausal exceptives (n=100). In contrast to MHG and MLG, the pronoun *het* ('it') appears more frequently as a first constituent of the monoclausal exceptive structure.

4.4 Interim summary

4.4.1 Single preverbal *ne/en* expressing sentential negation

In this section, I will summarize and compare the observations made in the chapters on the MHG, MLG and MD corpus results. As the transmission and digital resources vary with respect to the centuries, genres and number of texts as well as token numbers, the percentages comparing MHG, MLG and MD cannot stand without explanation. MHG, MLG and MD in most instances exhibit stage II and stage III of Jespersen's cycle. Table 4.31 compares the percentage of clauses in which *ne/en* still expresses sentential negation on its own compared to all negated clauses in MHG, MLG and MD. While all languages under investigation only marginally exhibit stage I negation, there are clear differences comparing the two centuries in which the corpora provide data for all three languages. While MHG, especially the Central German dialects, shows around 3,5% stage I negation, this makes up only 0,6% to 1% in the MLG data. The two Middle Dutch corpora differ with respect to the genres they include. While the CG (1200-1300) consists of literary texts and charters, the later CRM includes charters only, which is reflected in the even smaller amount of old stage I negation. In MD, there is a clear bias towards stage I negation appearing in literary texts, while charters only exhibit single preverbal *ne/en* in elliptical constructions. There are two texts in the MLG corpus which exhibit stage I negation as a stylistic device in direct speech of figures such as Jesus or the Prophet. The two percentages in the 1400-1500/MLG cell are provided in order to point out this special phenomenon: the first number is the percentage including the archaic uses (2,5%), while the second percentage includes non-archaic uses

only. The MLG and MHG data showed that Ripuarian Franconian and Low Rhenish preserve *ne/en* in various contexts longer than other dialect areas.

Table 4.31: Percentage of single *ne/en* expressing sentential negation across languages and centuries

	MHG	MLG	MD
1000-1100	56%		
1100-1200	4,30%		
1200-1300	3,70%	0,60%	3,00%
1300-1400	3,60%	1%	0,50%
1400-1500		2,5%/0,4%	
1500-1550		0,20%	

As has been pointed out in section 2.2, there are contexts preserving stage I negation for longer, which have been noted quite early (Stoett 1923; Paul et al. 2007; de Boor and Wisniewski 1998; Behaghel 1918). While not commenting on modal verbs, Postma (2002) argued for MD that all of these cases are actually instances of stage II negation and that there are actually negative polarity items or phrases present when *ne/en* seems to appear on its own (cf. section 4.3.1). The most common of these instances in the languages under investigation are subordinate interrogative clauses ("WH-bijzinnen") as complements to verbs like *weten/wizzen* and *ruoken/ruohen*. Postma argues that there is some feature in the wh-phrase which functions like the new adverbial negator *niht*, resulting in a sentential negation reading if co-occurring with preverbal *ne/en*. As has been shown in the previous sections, *weten/wizzen* as well as – less frequently – *ruoken/ruohen* preserve single preverbal *ne/en* as a marker for sentential negation. Looking at those cases, Postma's generalization about "WH-bijzinnen" in MD can be shown to hold for MHG and MLG as well. There are only two out of 51 clauses from the MHG ReM date in which *ne wizzen* does not take an interrogative clause as a complement. In one case (117), *wizzen* takes a *daz*-clause ('that'-clause) as its complement. The other example (118) is a rhetorical question. Furthermore, the clause is from the 12th century where *ne/en* can be shown to sporadically express sentential negation on its own in various contexts.

(117) Herbort von Fritzlar: Liet von Troye, early 14th century (M541B-14379–80)

Sie en wiste daz er erslagen Vor mangem iare lag
she NE knew that he stroken dead for many years lay

'She did not know that he had lain dead for many years.'

(118) Windberger Psalter, late 14th century (M195 II 1 P_Wind-052,05)

Oder ne wizzen alle die der wurchent unrehticheit die der
and NE know all that there act iniquity that there
uersuelhent
disappears

'Or do not all who act know iniquity which disappears?'

In the MLG and MD samples *weten* ('to know') always appears with a subordinate interrogative clause. It has to be noted that *weten/wizzen* can co-occur with *niht* or *ne/en* and the adverbial marker in MHG, MLG and MD, as Postma (2002) has shown for MD already. In contrast to the generalizations in Paul et al. (2007); de Boor and Wisniewski (1998), modal verbs do not seem to preserve stage I negation in MHG. The MLG data set indicates that this is different in Low German, as in the 15th century 7% of the modal verbs are still negated by *ne/en* alone, compared to to 1,5% of the lexical verbs. For MD, a comparison of the percentages was not possible due to the way in which I collected the data, but while modal verbs are certainly among cases which show single preverbal *ne/en* (cf. also appendix 1), the numbers from MD indicate that modal verbs with single preverbal *ne/en* are not more frequent than lexical or auxiliary verbs. Summing up, except for infrequent examples from literary or religious texts, the languages under investigation clearly show stage II or stage III of Jespersen's cycle.

4.4.2 Post-cyclical uses of preverbal *ne/en*

In this section, I will first describe exceptive clauses and their features in the languages under investigation, before I explain how they differ from paratactic negation and argue that paratactic negation only occurs in adverbial and

complement clauses. Main clauses showing non-negative *ne/en* have been shown to be very rare in the MHG data (n=3), not appearing in MD and MLG at all. Summarizing the results from the corpus study, I will point out shared and distinctive features of all subordinate clauses containing post-cyclic preverbal *ne/en*.

4.4.2.1 Exceptive clauses

The most common post-cyclical use of single preverbal *ne/en* are exceptive clauses. I describe exceptive clause separately from (other) paratactic uses, as (i) they always show the verb in subjunctive mode and (ii) they do not necessarily depend on a (semantically) negative main clause. In section 5.1.1, I will address the question of whether exceptive clauses ('unless') can be analyzed as negative conditionals. Table 4.32 summarizes the types of exceptive clauses in the respective languages. Except for six examples in the MD data, exceptive clauses follow the clause they express an exception to (98,6% of all exceptive clauses).[25] Monoclausal exceptive clauses are always the most frequent type. There are two aspects in which the exceptive clauses show differences across the languages under investigation: (i) the first constituent in monoclausal exceptives. In MD, the monoclausal structure can appear with zero pronouns (15% in the CGy, 11,4% in the CRM), while there is only one example of a zero pronoun in early biclausal exceptives in MHG. Another difference is that in the MD data from the CGy (1200-1300), the pronoun *het* ('it') is the first constituent in 56% of the monoclausal exceptive clauses, while in MLG and MHG *it/es* makes up around 20% only. (ii) the particle *denne*: A large number of MHG exceptive clauses and one MLG example ap-

[25]Note that I found clauses in MHG which precede the main clause they encode an exception to, but which did not appear in my sample (1).

(1) Herbort von Fritzlar: 'Liet von Troye' (H), early 14th century (M541H2-16458–59)

Ez en tu dēne min svnde Ich enwiste noch enkvnde Vō
it NE do.PRES.SBJV DENNE my sin I NE=knew nor NE=could from
warheite wizzē Waz mir si gewizzē
truth know what me be.PRES.SBJV known

'Unless my sin did it/if it were not for my sins, I would not know about truthfulness the way I do.'

pear with *denne* following the finite verb or the Wackernagel position. The data from the database of the MHG dictionary presented in section 4.1.1 suggest that the particle is of Upper German origin. It appears as early as the first exceptive constructions in MHG.

Table 4.32: Types of exceptive constructions in MLG, MHG and MD

	Monoclausal constructions
MLG	[XP ne=V.SBJV (denne)...]
MHG	[XP (ne)=V.SBJV (denne)...]
MD	[XP/ø en=V.SBJV...]

	Biclausal constructions
MLG	[it ne were/si (denne)] [dat XP V.SBJV...]
MHG	[ez (ne) waere/si (denne)] [dat XP V.SBJV...]
MD	[het/ø en ware/si] [dat XP V.SBJV...]

Exceptive clauses most frequently depend on a clause which contains some kind of negation, a modal verb or both, but there are also cases – around 8% in the languages under investigation – which do not depend on a clause with negation or a modal verb in the main clause.

4.4.2.2 Paratactic negation

In all three languages, there are cases of paratactic negation in which an adverbial clause or complement clause with single *ne/en* depends on a (semantically) negative main clause. There are only three main clauses (MHG n=3) containing non-negative *ne/en* which are modified by an adverbial clause containing sentential negation. There are no relative clauses with paratactic negation, except for one case in MHG, which modifies a noun within a clause headed by *suntir* ('but') (53), repeated here as (119). Complement clauses with post-cyclical *ne/en* were discussed separately from adverbial clauses with paratactic negation and exceptive clauses.

(119) Buch Daniel, early 14th century (M538–0851–53)

Den vremden gibt er ez nicht Svndir volke daz en gicht Wesen
The stranger give he it NEG but people that NE confess to be *rich*
rich

'He will not give it to the strangers but to the people who confess to be rich.'

It could be argued that exceptive clauses introduced by a personal pronoun are actually negative relative clauses, such as (73) repeated here as (120):

(120) Stader Stadtrecht, 1279[26]

Nyeman [...] *magh hir in desser stat herve kopen he en*
nobody [...] may here in this city heritage buy he NE
si vse borger ofte bur
be.PRES.SBJV our citizen or inhabitant

'Nobody is allowed to buy heritage in this city (a) unless he is a citizen or an inhabitant / (b) who is not citizen or inhabitant.'

There are three reasons not to analyze these exceptive clauses as relative clauses. First, relative clauses are not introduced by personal pronouns but have a specific set of subordinators introducing them, as summarized in Fleischer (2004) for present-day German and shown for V2 relative clauses in OHG and MHG in Axel-Tober (2012:207ff). Secondly, due to the subjunctive morphology on the verb, they receive a conditional reading. Furthermore, as these clauses need to be translated as relative clauses with sentential negation, these cases cannot be argued to be instances of paratactic negation, as clauses with paratactic/post-cyclical negation do not translate as containing sentential negation.

As noted above, paratactic negation is defined as depending on negation or a semantically negative verb in the main clause (Van der Wouden 1997). Categorizing the structures found in MHG, MLG and MD one runs into difficulties, as some exceptive structures do not follow negative main clauses. Wanting to separate exceptive structures from other adverbial uses would result in all exceptive structures depending on a negative main clause, such as (120), also coinciding with the category 'adverbial clauses with paratactic negation'. The only distinctive feature then would be the subjunctive morphology on the verb in exceptive clauses.

[26] http://annis.corpora.uni-hamburg.de:8080/gui/?id=ce76a448-b3ae-496b-891b-7b9e1d4fe079

Table 4.33: Post-cyclical contexts for preverbal *ne/en*

	MHG	MLG	MD
monoclausal exceptive clauses	116	105	109
biclausal exceptive clauses	16	29	45
paratactic negation in adverbial clauses	26	6	6
paratactic negation in complement clauses	12	0	0
other	6	0	0

Irrespective of these non-clear cut uses in adverbial clauses, table 4.33 shows the numbers of post-cyclic contexts in MHG, MLG and MD. The data from the database of the MHG dictionary are excluded as some texts in the database appear in the ReM corpus too.

In MHG, the category 'other' includes the relative clause in (119) as well as the three main clauses which have a semantically negative subordinate clause depending in them (cf. (50), (51) and (52) in chapter 4.1.1). Furthermore, two subordinate clauses with V-end word order are included here.

In all three languages, single *ne/en* expressing sentential negation is less frequent than *ne/en* in post-cyclical contexts. In the MHG sample, 4,2% of all clauses with a negative particle are post-cyclical contexts, while only 3,2% are cases of sentential negation. Note that I excluded the 11th century from this comparison, as stage I negation makes up half of the occurrences of single *ne/en* in the MHG data. In the ReN subcorpus, 1,4% of all clauses with a negative particle show *ne/en* as a sentential negation marker, while 5,5% are post-cyclical contexts. In the CGy, 68,5% of all clauses with single *ne/en* are post-cyclical contexts, while only 31,5% are cases of stage I negation. In the CRM, only 10% of clauses with the single preverbal marker are cases of sentential negation. 90% of the clauses with single *ne/en* are post-cyclical contexts. Except for four main clauses and two subordinate clauses with V-end word order, the post-cyclical contexts are restricted to adverbial and complement clauses, which – except for two clauses in the whole data set – show V2 word order.

Clauses with paratactic negation always depend on (semantically) negative main clauses, while exceptive clauses always have a verb which shows subjunctive morphology. In order to avoid talking about 'exceptive clauses and adverbial clauses with paratactic negation' as well as 'complement clauses with paratactic negation', I refer to these clauses as 'post-cyclical

contexts' (cf. the definition in section 1.3). In all of these cases, *ne/en* does not result in a sentential negation reading, i.e. the clauses translate as expressing a positive proposition. Using the term 'post-cyclical', one avoids the problem of having to rest the definition of *ne/en* upon the presence or absence of some negative element in the main clause. Note that even though it predominantly appears in dependent clauses, the definition of post-cyclical *ne/en* does to determine the clause type nor the specific meaning or function of post-cyclical *ne/en*. As we will see in the following sections, the meaning of *ne/en* cannot be ascribed to one single semantic import, but as to be understood as a continuum ranging from exception to contrast.

Summing up and working towards an analysis of post-cyclical *ne/en*, it can be stated that in MHG, MLG and MD it almost exclusively appears in adverbial clauses and complement clauses. There are only five clauses, namely four main clauses and one relative clause introduced by *suntir* ('but'), in the MHG, MLG and MD data which contradict this generalization. In the following sections, I will address these clause types separately and propose an analysis for the function of *ne/en* within adverbial and complement clauses.

Part III

Analysis

Chapter 5

Post-cyclical *ne/en* in adverbial clauses

In chapter 4, we saw that the V2 structure with post-cyclical *ne/en* most frequently receives an adverbial clause reading in the languages under investigation. The asyndetic V2 clauses either express an exceptive relation, as in (29) repeated here as (121), or an adversative relation, as (36) repeated here as (122).

(121) Hartmann von Aue: Iwein, early 13th century (M312 III 0 V_Iw–4876–78)

ih [...] *weiz wol swederz ich kivse daz ich dar an verlivse*
I [...] know well whichever I choose that I there on lose
ich n mohte ir beider gepflegn
I NE may.SBJV them both cultivate

'I know that whichever I choose that I lose unless I cultivate both.'

(122) Frauenfelder Flore, early 13th century (M307 III 3 V_Flor–7234–35)

do ne moht ir niet uirlazin er ne moste deste miltir
then NE may he NEG let=happen he NE must the=more kind
sin
be

'Then he could not let it happen, but rather he had to be even more kind.'

In the following chapter, I will first review the literature on the syntax of exceptive clauses and adversative clauses in German and Dutch as well as their semantics more generally in section 5.1. For each of the two clause types, I will discuss other means of expressing the respective discourse relation.[1] The comparison to other adversative and exceptive markers is important for the argumentation, as I want to show that not only in asyndetic V2 adverbial structures, adversative and exceptive meanings are expressed using the same structure. The only difference between V2 exceptive and adversative clauses is verbal mood and the presence of a conditional operator in the former clause type.

I will show that in truth-conditional terms, both discourse relations – even though one is conditional (123) and the other coordinate (124) – relate a negative proposition '$\neg Q$' and a positive proposition 'P'. I use the translations of examples (121) and (122) in order to illustrate the relations.

(123) exceptive clause
$P \rightarrow \neg Q$
'if P is true then Q is not true'
'if I cultivate both then I do not lose.'

(124) corrective adversative clause
$\neg Q \wedge P$
'Q is not true and P is true'
'It is not true for him that he could let it happen and he had to be even more kind.'

Based on these observations, I will relate the function of post-cyclical *ne/en* in V2 adverbial clauses to other exceptive and adversative markers in section 5.1.5. I will point out a path of semantic change which can be observed cross-linguistically, before I address the question how a negative marker can enter this path in section 5.2. In a second step, I will provide an overview of the syntactic literature of adverbial clauses. Because post-cyclical *ne/en* always appears as a clitic on the finite verb in second position, it will be argued that the single preverbal negative marker became reanalyzed as a left-peripheral

[1]With discourse relation, I refer to the connection between main and dependent clause without defining whether the clauses are integrated. Generally, discourse relations (also 'rhetorical relations') characterize the coherence of discourse (Mann and Thompson 1988).

discourse marker.[2] Therefore, I will first address the left periphery of the clause in general and in a second step, discuss left-peripheral particles in OHG. In addition, I will describe the syntactic structure of the Middle Field, because the position and status of *denne* has to be determined for the MHG data. Based on these theoretical sections, I develop an analysis for adverbial clauses with post-cyclical *ne/en* in section 5.4.1. As the external syntax, i.e. the attachment site of adverbial clauses in the main clause, is problematic to determine, I provide a discussion based on the internal syntax in the final section 5.4. I come back to the question whether to analyze the V2 adverbial clauses as embedded or freely adjoined to the main clause CP in section 6 after the discussion on post-cyclical *ne/en* in complement clauses.

5.1 Exceptive and adversative clauses

5.1.1 The syntax and semantics of exceptive clauses

The first intuition about exceptive clauses is that it is simply an alternative realization of 'if not' (Quine 1959). Therefore, the question arises whether exceptive clauses in MHG, MLG and MD are simply negative conditionals that preserved single *ne/en* as a marker for sentential negation longer.

In the following sections, I will address syntactic differences between exceptives and negative conditionals in MHG, MLG and MD in particular. Secondly, I will discuss general semantic differences between exceptive constructions and negative conditionals. Most accounts on the semantics of exceptives are based on English *unless*, but they can be shown to be applicable to the data from MHG, MLG and MD.

5.1.1.1 Syntactic differences between exceptive clauses and conditionals in MHG, MLG and MD

Breitbarth (2014b:32ff) gives four arguments against understanding exceptive clauses as negative conditionals in MLG, which can be shown to hold

[2] I use this term as defined in Fraser (1999) as linking two segments of discourse. In contrast to the term 'modal particle', sometimes also called 'discourse particle', which modifies the illocutionary force of a clause (Thurmair 1989; Coniglio 2011) and therefore operates on one clause, discourse markers express the relationship between two clauses or discourse segments. I discuss the status of *ne/en* as a discourse marker in detail in section 5.4.3.2 comparing it to *denne* which assumes a similar function.

for MHG and MD as well: (i) negative conditionals differ formally from exceptive clauses. The former are either syndetically connected with verb-final word order, as in (37) repeated here as (125), or asyndetically connected with clause initial verb placement, as in (36) repeated here as (126), while exceptive clauses always show V2 word order.

(125) MHG, Sachsenspiegel, 13th century (I-LV)

darumme mot men wol kesen enen gogreven [...] *of se des*
therefore must man well chose one earl [...] if they the
belenden richteres nicht hebben en mogen
liege judge NEG have NE can

'Therefore, one has to chose an earl if there is no liege judge.'

(126) MLG, Sachsenspiegel MS Oldenburg, early 14th century (14v line 9/10)

ne es uader nicht, it nimpt sin moder
NE is father NEG it takes his mother

'If there is no father, the mother takes it.'

(ii) While exceptive clauses only show preverbal *ne/en*, negative conditionals appear with *ne/en* and/or the newly grammaticalized *niht/niet* or negative indefinites, i.e. show stage II or III of Jespersen's cycle (cf. section 2.2), as can be seen in (125) and (126) (Breitbarth 2014b:32).

An observation from the MHG, MLG and MD data that emphasizes this argument is that negated proposition in exceptive structures are always encoded in biclausal exceptive clauses (cf. part II). Recall that in cases like (27) repeated here as (127), *ne/en* is always separated by a clause boundary from the complement clause containing markers of sentential negation. Single *ne/en* as a marker for exceptive clauses only appears in the dummy-matrix clause.

(127) Pfaffe Konrad: Rolandslied, late 12th century (M205A-2555[1609]–[1610])

Thaz ih then rom erwerue Iz ne si thaz er niemer ne
That I the honor get it NE be.PRES.SBJV that he never NE
sule ersteruen Uon neheiner slahte wafen
shall die from no fight weapon

'That I shall receive the honor unless he never dies from any fight weapon.'

Hence, these biclausal structures with a complement containing sentential negation are a further argument for taking *ne/en* in exceptive clauses to be different from sentential negation markers in conditional structures.

(iii) Breitbarth (2014b:33) notes that exceptive clauses begin to show *denne* in the middle field of monoclausal exceptive clauses or the dummy-matrix clause of the biclausal structure, while *ne/en* is gradually lost. This is not the case in negative conditionals. The particle *denne* is still present in the High German connector *es sei denn* ('it be DENN'). I will discuss the origin and meaning contribution of *denne/denn* in section 5.4.3.

(iv) Breitbarth (2014b:34) takes the position of the exceptive clause always following the main clause/apodosis as an argument against analyzing them as conditionals. A conditional protasis tends to precede their consequent (Greenberg 1963).

In addition to these syntactic differences, the literature on the semantics of exceptive clauses also provides insights into the distinctive features of exceptive structures, which will be discussed in the following section.

5.1.1.2 Semantic differences between exceptive constructions and negative conditionals

In this section I argue that the core meaning of an exceptive clause 'Q unless P' is that Q (only) does not hold if P is true. First, I will briefly address Kratzer's analysis (1986) for conditionals. Even though I want to argue that exceptives not to be equated with negative conditionals, exceptive relations will be treated as a special type of conditional.
In Kratzer's view, *if*-clauses are understood as devices for restricting the domains of various operators (Kratzer 1986). Those operators are quantifiers

like *probably*, *usually* or *must*. The domain they quantify over are possible worlds that are restricted by the *if*-clauses. If there is no overt quantifier, Kratzer assumes a covert *must* for necessity. Example (128) exemplifies the relation between operator, restrictor and matrix.

(128) If you watch True Detective, you want to go to New Orleans.
Necessarily, if you watch True Detective, you want to go to New Orleans
Operator[restrictor][matrix]
MUST [you watch True Detective] [you want to go to New Orleans]
'In all possible worlds in which you watch True Detective you want to go to New Orleans.'

In the follwoing sections, I will refer to exceptive clauses as a specific kind of restrictor. In contrast to other adverbial clauses, exceptives are described as restricting the main clause domain, while in other adverbial relations such as adversatives, notions such as 'modification' or 'correction' will be used.

In the following section, I will discuss accounts describing this restriction as 'domain subtraction'.

Declerck and Reed (2000) point out that there is a clear distinction between the semantic meaning and the pragmatic interpretations of *unless*. They determine 'Q in a case other than P' as the basic meaning of exceptives. This results from two main observations: (i) domain subtraction (von Fintel 1993), paraphrased as 'except if' is different from a negative condition 'if not' (Geis 1973). The only reason the two appear to be so similar is that 'except if' triggers a conventional implicature 'if not', i.e. the sentence *I will get a job unless I fail my final exam* implicates 'If I do not fail my exams, I will get a job'. Therefore, both meanings have often been equated (Quine 1959). The second argument by Declerck and Reed (2000) is that a pragmatic effect triggers the interpretation that exceptive clauses encode a unique circumstance under which the proposition in the main clause does not hold (Geis 1973). In the remainder of this section, I will first elaborate on different accounts of exceptives before arguing in favor of Declerck and Reed's (2000) account for exceptives.

Geis (1973) was the first to state that exceptives are different from negative conditionals (*if not*). He defines the meaning of an exceptive *P unless Q* as follows: 'There is a unique circumstance Q, such that for all circumstances C, if $C \neq Q$, then C implies P' (Geis 1973:235). This can be rephrased as

Q encoding the one and only circumstance under which P does not hold. For English, Geis defines three main features that distinguish *unless* from negative conditional *if not*: (i) the subordinate clause in exceptives is inherently positive; (ii) exceptives encode a unique circumstance under which the proposition in the main clause does not hold (exhaustiveness). Therefore, coordination of exceptives is not possible. (iii) He argues that counterfactuality in exceptives is impossible.[3]

With observation (i), that exceptives are 'inherently positive', Geis (1973) points out that the negative semantics of exceptive clause is not to be equated with sentential negation. That this argument also holds for MHG, MLG and MD exceptives is underlined by the fact that negative conditionals differ formally from exceptive clauses (cf. section 5.1.1.1, point (iii)). For English, Geis explains the lack of negative polarity items (NPIs) in exceptive clauses to be due to this difference between a negative condition and domain subtraction, which operates on what he refers to as an internally positive proposition.

[3]Geis suggests for English that counterfactual *unless*-clauses do not exist. Declerck and Reed (2000) show that irrealis *unless*-clauses in fact appear in corpus data (Declerck and Reed 2000:228). They distinguish counterfactual (1) and imaginary (2) *unless*-clauses.

(1) present-day English, cited from Declerck and Reed (2000:228) But unless I had gone along with you, you'd have told your husband, I bet.

(2) present-day English, cited from Declerck and Reed (2000:229) [I didn't go to the party, so I do 't know if I would've become as drunk as you all appear to have been. In fact, I'm afraid] I would've been drunk too, unless I'd brought my wife with me to keep an eye on me.

Declerck and Reed (2000) argue that while the default interpretation of irrealis exceptives is 'if...not', imaginary exceptives can only be interpreted as 'except if' and counterfactual *unless*-clauses can only be understood as 'if not'. They explain the unacceptability of a counterfactual 'except if' reading with the incompatibility of the nonfactual proposition P with a counterfactual reading. It would result in a meaning 'in a case other than the nonfactual case that was in fact the case' (Declerck and Reed 2000:239). This is why counterfactual *unless*-clauses have to be interpreted as meaning 'if not'. It points to the nature of the excepted proposition P if interpreted exceptively ('Q does not hold only if P'), namely that it has to be a potential or non-factual. This is what Breitbarth refers to with 'positive exception' (Breitbarth 2014b:32). Dancygier (2002) accounts for the different uses of *unless*-clauses in terms of mental space embeddings. She also points out that encoding exceptions to asserted statements or speech-acts makes exceptives naturally nonfactual/potential (Dancygier 2002:373).

There are no NPIs in the MHG, MLG or MD data, which is a strong indication of the absence of sentential-scope negation required for their licensing. Their absence can therefore be taken as indicative of their impossibility as predicted by Geis. A test with the present-day German NPIs[4] *jemals* (129) and *etwas wahrhaben* (130) yields the same results:

(129) * *Max wird immer Junggeselle bleiben, es sei denn, er*
Max will always bachelor stay it be.SBJV DENN he
verlässt jemals sein Dorf
leaves ever his village
'Max will always stay a bachelor unless he ever leaves his village.'

(130) * *Du wirst deine Trennung nie verarbeiten, es sei denn,*
You will your divorce never handle, it be.SBJV DENN
du willst sie wahrhaben
you want it true.
'You will never handle your divorce unless you want to realize it.'

In contrast to this, Vostrikova (2018) provides an analysis for the meaning of *unless* based on the observation that *unless*-clauses can host weak NPIs, as in example (131).

(131) Unless anyone objects, we will move on.

Breitbarth (2009:96) addresses such cases and objects that in this case, *any* is actually a Free Choice Items (FCI), not an NPI, as it can precede numerals (132a) and licenses amount relatives (132b) (Carlson 1981).

(132) English, cited from from Breitbarth (2009:96)
a. Unless any three members disagree, we will adjourn the meeting.

b. Unless anyone there is in this room disagrees, we will adjourn the meeting.

Therefore, we will retain that Geis' 1973 first observation holds, i.e. that the excepted proposition in exceptive clauses does not contain sentential

[4]NPIs for testing were taken from the Collection of Distributionally Idiosyncratic Items (CODII) available at http://www.lingexp.uni-tuebingen.de/sfb441/a5/codii/

negation by definition. Declerck and Reed (2000) also emphasize that there is an essential difference between exception and condition.

Geis' 1973 second claim, that exceptives cannot be coordinated, does not hold for the MHG, MLG and MD data. It has been shown in chapter 4 that coordination is rare but does in fact occur. Vostrikova (2018) and von Fintel (1993) state that the exhaustification of alternatives is the central property of exceptives. In their view, this is the central feature that distinguishes them from *if not* statements. In their account, the meaning of *unless* is similar to *only if not* (Vostrikova 2018). How to account for cases of coordination then? Declerck and Reed (2000) and Nadathur and Lassiter (2015) argue that exhaustification should be understood as an implicature resulting from conditional perfection. Conditional perfection says that a conditional statement 'Q if P' is pragmatically interpreted as having a biconditional meaning 'Q if and only if P'. This implicature can be canceled, questioned and be reinforced and is hence analyzed as a generalized conversational implicature (Nadathur and Lassiter 2015:430). Interestingly, coordinated exceptives introduced with *es sei denn* ('it be DENN') are also rare in present-day German. Only 19 out of 51 571 clauses with *es sei denn* in the 'W Archiv geschriebene Sprache' in the German Reference Corpus (DeReKo) show coordination. Therefore, we take exhaustification in exceptive structures to be a generalized conversational implicature. Interestingly, this implicature became hard-wired (conventionalized) into the meaning of the adverb *nur* ('only') which grammaticalized from MHG *newære* ('unless'). I will come back to *nur* in section 5.1.2.

Summing up, the exceptive relation is a type of conditional relation involving domain subtraction. The exhaustive meaning ('only') of exceptives results from a conversational implicature. The meaning of exceptive structures 'Q unless P' is 'Q does not hold (only) if P', whereby 'only' is in brackets as the conversational implicature can be canceled. In truth conditional terms, the relation can be expressed as (133):

(133) exceptive clause
$P \rightarrow \neg Q$
'if P is true then Q is not true '

5.1.2 Other means of expressing exceptive discourse relations in German and Dutch

There are different means for expressing exceptive discourse relations in the history of German and Dutch.

Holmberg (1967) analyzed translations of Latin *nisi* ('if not') in religious prose from the OHG period to early 16th century texts. She shows that there is a wide range of translations for Latin *nisi*:

- an exceptive conjunction (e.g. MHG *dann*, *wan*)
- an asyndetic V2 clause, i.e. exceptive clause
- negative conditional constructions, e.g. MHG *ob...niht* or inverted verb position (V1)

In order to determine different uses of *nisi*, Holmberg distinguishes three different types in Latin:

- NISI I: appears in front of a single constituent
- NISI II: introduces a subordinate sentence which is additionally introduced by a conjunction or pronoun
- NISI III: introduces the subordinate sentence alone

She argues that exceptive clauses are used to express something imagined, ("bloss Vorgestelltes") (Holmberg 1967:19f). Strandberg (2006) shows that exceptive clauses with *es sei denn* in German who derived from these exceptive structures express a potential circumstance. Something factual ("Tatsächliches") is expressed by a clause in indicative mood introduced by an exceptive conjunction such as *wan, dann, sunder* ('except'), as in (134).

These cases are rare in Holmbergs data though (Holmberg 1967:96f). She sets these indicative clauses apart from syndetic clauses in subjunctive mood and shows that these cases do only appear rarely and in strict Bible translations. Therefore, Holmberg (1967:97) argues that it is very likely that syndetic exceptive clauses in subjunctive mood (135) are not popular language use, i.e. influenced by the Latin original.

(134) Evangelienharmonie Cod. theol. 1066, 14th century, cited from Holmberg (1967:177)

so det er da nit vil zeichen wan yn wenig siechen macht
so did he there NEG many wonders except in little sick make
er gesunt
he healthy

'So he did not perform many wonders except that he healed a few sick people.'

(135) Hamburg 105, 1504, cited from Holmberg (1967:181)

Oder in welicher wis mag yemant ingeen in dz huß des
or in which wat may someone in go in the house the.GEN
starcken un berauben sin vaß. Dan er binde zu
strong and steal his belongings except he tie.PRES.SBJV to
dem ersten den starcken
the first the strong

'Or how can someone go into a strong person's house and steal all belongings unless he ties up the strong person first.'

Additionally, Holmberg (1967:12) notes that especially with conjunctions, adversative uses ('but', Latin *sed*) and exceptive uses ('only', 'but', 'unless') are not strictly separated and the different meanings of the conjunctions intersect. In contrast to the asyndetic V2 clause, all of these conjunctions were also used as prepositions introducing a PP or NP.

Regarding the types of exceptive expressions, Holmberg (1967:98f) finds the conjunctions as presented in table 5.1 in the Bible tranlsation. In addition to the different meaning, I added the first texts or dialects in which the conjunctions appeared. In the following paragraphs, I will briefly describe the different conjunctions.

Table 5.1: Exceptive conjunctions studied by Holmberg

form	use	occurence
ûzan/ûzar	exceptive/adversative from the earliest texts on	Alem. texts until the 9th century
nibu	Latin *nisi* type I-III - later taken over by asyndetic V2 clauses	Isidor, Weissenburger Katechismus, Monsee-Wiener Fragmente, Tatian
nub/nube	negative complement ('that not')	Otfrid, Notker
nub/nube	adversative, Latin *sed*	Isidor, Monsee-Wiener Fragmente, Tatian
ni si	exceptive use ('except')	Tatian, Otfrid
newâre > *nur*	exceptive use > exceptive adverb ('only')	Wiener Notker, later in eastern Upper German varieties and East Franconian
wan, *niwan*	in Alem.: *wan* 'except', while *nur* 'only', *niwan* as 'only'; later *wan* also appears as comparative particle	first in Notker gloss – all High German dialect area
dann	exceptive use competing with *wan*	eastern Central German dialects, Middle Dutch
ane	most frequently used as preposition (lat. *praeter*)	not specified
sunder	most frequently used as preposition (lat. *praeter*)	not specified

OHG *nibu*, OS *neba/neban*, OLF *noua* cognate with Gothic *nibai* could be used with potential and factive exceptive clauses. In Tatian, it shows a secondary use introducing negative complements ('that not'). The conjunction *ûzzar/ûzzan*, originally having a spacial meaning 'out/from outside' (lat. *extra*), gained a more abstract meaning of 'being left out' (Holmberg 1967:59). It appears with adversative and exceptive usage from the OHG period onward (Abraham 1979:245), i.e. in the Benediktinerregel as Latin *sed* (136) or *excepto* (137).[5] Meaning 'unless' or 'except', *uzan* is attested introducing clauses with indicative and subjunctive morphology on the verb (Holmberg 1967:60).

(136) OHG Benediktinerregel, 9th century[6]

Indi nialtinoe sunta missituantero uzzan saar so pikinneen
and NEG=ignore sin commit but instantly so begin
ufqhueman uurzhaftor daz so furist megi abasnide
rising with roots that so well can cut off

'And does not ignore sins which are committed but, as soon as they begin to rise, cuts them off by the roots.'

(137) OHG Benediktinerregel, 9th century[7]

Nalles furi si kesezzit friger er deonosti
Not anyhow in front be.PRES.SBJV set free from service
kehuuarbantemu uzzan andriu redihaftiu rahha si
monastery unless other reasonable reason be.PRES.SBJV

'There is no way of leaving the monastery service unless there was another reasonable reason.'

[5] In this section, most examples are cited from Holmberg (1967). Some examples were retrieved from the Reference Corpora DDD (https://www.deutschdiachrondigital.de/) or ReM (https://www.linguistics.rub.de/rem/index.html), for which I provide the link for publication.

[6] https://korpling.german.hu-berlin.de/annis3/?id=d901c57f-e4a8-4642-89ae-496d853f0cbe

[7] https://korpling.german.hu-berlin.de/annis3/?id=94310d77-16a9-4cfa-9bc1-77ebd39f30f2

In the transition between OHG and MHG, the new conjunction *wan/newan* appears. Holmberg bases her generalizations on *wan/newan* additionally on record collections for the MHG dictionary (Holmberg 1967:61ff) and argues that *wan/newan* is the most frequent exceptive conjunction in Upper German and Central German dialects (Holmberg 1967:70). Against some accounts, she analyses the conjunction to cognate with Gothic *wan/wanains* ('deficiency'), OHG /OS *wan* ('deficient'). She argues that the prefix *ni* is paratactic, but regarding the semantics of 'unless', it could be that it literally means 'not except' as in 'Q not except P'. Compared to *wan*, *newan* appears rarely. Only in Alemannic texts, there is a strict separation between *wan* used as 'except' and *niwan* used as 'only', hence *niwan* appears more frequently (Holmberg 1967:65).

Regarding the different adversative and exceptive uses of *wan/newan*, Holmberg notes that the present-day German distinction between corrective *sondern* and contrastive *aber* (both English 'but' cf. section 5.1.4) is not applicable in MHG. Therefore, she argues that *wan/newan* has a restrictive meaning. Summarizing all functions, *wan/newan* could appear as (i) an exceptive conjunction (138) and (139), (ii) as a restricting adverb (140), (iii), an adversative conjunction (141), (iv) a comparative particle (142), (v) introducing a cause in irrealis coordinations (143). As noted above, the exceptive use is the most common one.

(138) Älterer Physiologus, late 11th century (M155-32v,18–20)

den dir dîu ual nieht bidrîgen ne mag uuane uber sih selbo
that the devil NEG tempt NE may except if=he him self
gihéfte mit uuine undemit hovre
arrest with wine and=with whoring

'Who the devil will not tempt unless he detains himself with wine and whoring.'

(139) M. Eberler Bible, cited from Holmberg (1967:65)

dz nieman zuo mir komen mag nuwen es werde ime
that nobody to me come may unless ir be.PRES.SBJV him
denne gegeben
DENNE given

'That nobody may come to me unless it was given to him.'

(140) Das Anegenge, cited from Holmberg (1967:65)

er schuof si wan durch siniu kint
he created her only through his child

'He created her only through his child.'

(141) Speculum ecclesiae, cited from Holmberg (1967:67)

da erbarmit er sich ûber niemin niewan also ieglich
there show mercy he himself over nobody but as any
mennisch erschînet indem selbem bilde wir er erteilet
person appear in the same way be he judged

'There he will show no mercy for anybody but judge everybody in the way in which he appears.'

(142) Heilige Regel 13,14, cited from Holmberg (1967:69)

waz mach erger sin wan daz der mensche hoffe nach dem gute
what may worse be than that the man hopes after the good

'What may be worse than that man hopes for good.'

It seems that *wan* as an exceptive conjunction with an indicative verb does not appear without another conjunction such as *obe* ('if') or *daz* ('that'), as Holmbergs data as well as a look into the 11th and 12th century ReM subcorpora suggests. Holmberg notes that there are a few clauses in Bible translations which show the verb in subjunctive mood and sometimes the particle *denne*, as in (139) which she analyses as a fusion with the asyndetic exceptive clause. Regarding the causal use of *wane*, Holmberg only provides the example in (143), which I translate as an exceptive use ('unless'/'except').

(143) Mainzer MS II, 14, cited from Holmberg (1967:65)

Du hettest nit gewalt vber mich wan daz er dir is enpholphen
You had NEG power over me WAN that he you it entrust

'You would have no power over me because [unless] he entrusted it to you.'

With respect to the comparative use of *wan*, Holmberg notes that the rise of the comparative particle *danne* ('than') caused a decrease in frequency of *wan* in this function. Furthermore, she notes that it is sometimes difficult to distinguish exceptive and comparative use (Holmberg 1967:70)

In contrast to *wan*, which only temporarily expressed comparative meaning, Holmberg (1967:79) notes that clause initial *danne* ('than'), as in (144), derived from a comparative use and influenced the expression of exceptive meaning strongly (cf. section 5.4.3 for a discussion on the particle).

(144) Kasseler Evangelium, cited from Holmberg (1967:79)

der diep komet nit dan daz er stele
the thief comes NEG without that he steal

'The thief does not come unless he steals.'

Like *wan*, *dann* also precedes another conjunction such as *daz* or a relative pronoun. In her data, it also appears with the indicative clause in (134). Holmberg argues that this exceptive meaning was triggered in contexts such as (145).

"[D]ie Berührung zwischen *wan* und *danne* nach negativen komparativischen Ausdrücken führte allmählich zu einer Unsicherheit in der Verwendung von *wan* und *danne*."
The contact between *wan* and *danne* after negative comparative expressions gradually led to an insecurity in the use of *wan* and *danne*.

(Holmberg 1967:78)

(145) Heilige Regel 54,18, cited from Holmberg (1967:80)

Er redet nicht anderez dan er begeret in mir ein vridsam herze
he talks nothing else than he wants in me a peaceful heart

'He does not say anything else than that he wants a peaceful heart within me.'

The earliest uses without a comparative appear in the 13th century in Holmberg's data. She suggests that it was established under MD influence.

The conjunction *âne* (present-day German *ohne*, 'without') appears most frequently in Notker (also as *âne daz*, 'without that'), both as a conjunction and preposition, but also in Luther's Old Testament, *on* is still used as an exceptive conjunction/preposition (146).

(146) Luther Bible 1546, cited from Holmberg (1967:87)

on wenig Siechen leget er die Hende auff
only little sick laid he the hands on

'Except, he laid hands on the ones that were not very sick.'

Besides its adversative use (cf. section 5.1.4) OHG *suntar* and MHG *sunder* ('without') (147) could also be used as an exceptive preposition or conjunction. Holmberg (1967:89) notes that it is common in East Central German texts.

(147) Melker MS (61), cited from Holmberg (1967:89)

und er en mochte do keine tugenden gewirken sundir uf ein
and he NE could there no miracles commit except on a
wenik sicher luite leite er sine hand
little sick people laid he his hand

'He could not commit miracles except that he laid hands on the ones that were not very sick.'

A conjunction/adverb that derived from an OHG dummy matrix clause *ni wari* (NEG be/PAST.SBJV) is *newære/nur* ('only'). Example (148) shows a prepositional use of *newære*, (149) can be interpreted as either an adverbial use translating *newære* as 'only' (*nur*) or as an exceptive conjunction, closer to the use of the dummy matrix clause *it ne ware* ('it NE be.PAST.SBJV). Holmberg (1967:42) notes that *newære* was already used as a fixed expression

with the meaning of 'except' in OHG. In Southeastern dialects, it developed towards exceptive *nur* ('only'), while in Northwestern dialects and Dutch it became adversative *mêr*, present-day Dutch *maar* ('but'). I will discuss these adversative uses in more detail in section 5.1.4.

(148) MHG, Williram von Ebersberg: 'Hoheliedkommentar', late 11th century (M244 I 0 P_Will–12r,24–25)

daz du niet anderes der mite ne meines. neuuare mina minna
that you NEG other thereby NE thinks except my love

'That you do not think about anything else in that way except for my love.'

(149) MHG, Pfaffe Lambrecht: Tobias, early 13th century (M226–44,194–195)

an sinen gelovuen was er vast daz dar nicht ane gebrast
on his belief was he strong that there NEG on lack
newere man ne wiste wi her sich gehete
NEWERE man NE know how he himself behave

'He was strong in his belief which was not lacking, only he did not know how to behave/except that man did not know how to behave.'

Searching through the ReM corpus, the lemma *ne-wære* disappears from the 13th century onwards. The dictionary by Lexer which was used for lemmatization (Klein and Dipper 2016) lists *nur* among *wësen*, which results in the lack of tagging of the lemma in later MHG texts.

Summing up, the conjunctions used to render Latin *nisi* can generally be used as either prepositions forming exceptive constructions with NPs and PPs or conjunctions. If used as the latter, introducing clauses, they often co-occur with other subordinating conjunctions such as *daz* ('that') or *oba* ('if'). Generally, they seem to occur more frequently introducing NPs and PPs. Holmberg notes the tendency for asyndetic V2 exceptive clauses to express something potential, while syndetic structures are less restricted and can express the exception to a factual proposition. All asyndetic V2 exceptive clauses in the data investigated for this thesis confirm this observation. As

Holmberg based her study on Bible texts, which are often direct translations from Latin, the observations about exceptive and adversative conjunctions have to be verified with a more diverse corpus, such as the ReM. Another important finding is that exceptive, adversative and comparative uses of conjunctions intersect in the time they establish.

5.1.3 The syntax and semantics of adversative clauses

After discussing exceptive clauses and exceptive discourse relations in detail, I will focus on the second most frequent clause type appearing with post-cyclical *ne/en*, namely adversative clauses. In section (5.1.2), some adversative uses of exceptive conjunctions and prepositions have already been highlighted. Adversative clauses can express corrective or contrafactual relations. Both are expressed by English *but*:

(150) Contrastive coordination, cited from Repp (2008:360)
Karl hat die Katze nicht gestreichelt, aber Hans den Hund.
'Karl did not stroke the cat but Hans, in contrast, did stroke the dog.'

(151) Corrective coordination, cited from Repp (2008:360)
Karl hat nicht die Katze gestreichelt, sondern Hans den Hund.
'It is not the case that Karl stroked the cat: Hans stroked the dog.[/Karl did not stroke the cat, but Hans stroked the dog]'

The adversative clauses found in the MHG, MLG and MD corpora are mostly corrective adversative clauses (n=21), translated as German *sondern*, as in (33), repeated here as (152). One clause translates as a contrastive adversative clause repeated an (153).

(152) Niederrheinischer Tundalus, early 13th century (M232 III 4 V_RhTun–125–126)

Nu in solen wir iz nit lengen Wir in varen vort uil
Now NEG shall we it NEG protract we NE continue further much
balde
soon

'Now we should not protact but continue soon.'

(153) Herbort von Fritzlar: Liet von Troye, 13th century (M541S-8222[476]–8223[477])

die selbin sarewat Die ir ime genuomin hat Sie in werdin
the same armor that you him taken have they NE become
mir wiedere
me back

'The same armor however which you took from him, I will get it back.'

Repp (2008:360) states that in corrective coordination the first conjunct removes material from the common ground with the second conjunct providing a substitute. In the first conjunct, focus marks which item has to be removed, in (152) it is the vP *iz nit lengen* ('it not extend'). Ferraresi (2018:91), emphasizing the contrastive function of corrective conjunctions, defines the relation as follows: "the proposition in the first conjunct is denied and opposed to the affirmed true proposition in the second conjunct." Therefore, corrective adversative clauses express a contrast between a negated proposition and an affirmative proposition. Furthermore, she notes this contrast depends on the focus relations between both conjuncts (Ferraresi 2018:92). In the second conjunct, the focalized material follows *ne/en*, namely *varen vort uil balde* ('leave very soon'). The pronoun *wir* ('we') is the aboutness topic, while *varen vort uil balde* ('leave very soon') has contrastive focus.

While Ferraresi (2018:90) notes that OHG *oh/ouh* ('but') 'implies' contrast (i.e. that it is a logical consequence), according to Grice (1975) it is actually a conventional implicature which triggers the contrastive reading. In truth conditional terms, the relation would simply be a coordination with 'and', as represented in (154):

(154) corrective adversative clause
$\neg Q \wedge P$
'Q is not true and P is true'

I will follow Grice (1975) in assuming that contrast has no effect on the truth-conditions of a sentence, but is a conventional implicature which is part of the meaning of *ne/en*.

5.1.4 Other means of expressing adversative discourse relations in German and Dutch

In section 5.1.2, it was already pointed out that the OHG/OS dummy-matrix clause *ni wari* (NEG be/PAST.SBJV) was grammaticalized towards present-day Dutch *maar* ('but') and present-day German *nur* ('only'), i.e. that an exceptive structure became an adversative conjunction. In this section, I want to discuss the case of *maar* as well as other means of expressing adversative discourse relations in the languages under investigation and point out how they often share origins with exceptive markers. The observation by Holmberg (1967:42) that *newære* was already used as 'except' in OHG and developed towards exceptive *nur* ('only') in southeastern dialects and adversative *mêr*, present-day Dutch *maar* ('but'), in northwestern dialetcs was already discussed in section 5.1.2. As noted in Philippa et al. (2004), the contracted form *maer* already existed in early MD. In (155), the contracted *maer* is used as a conjunction introducing the clause ('but'), the second *maer* is an exceptive preposition meaning 'but' or an adverb 'only'.

(155) Jacob van Maerlant, Der Naturen Bloeme, 1287, MS D (26:22)

mar sine leuen der iare mar achte
but they=NE live the years only/but eight

'But they live only eight years.'

Interestingly, the adverb *maar* in Dutch from the 16th century onward regularly co-occurs with post-cyclical *en/ne* (Van der Horst 2008:1024), as in (156).

(156) Twee reisjournaals uit de jaren 1570-1585, cited from Van der Horst (2008:1024)

in een doncker camere die met een venster maer lucht en
in a dark chamber which with one window only air NE
hadde
had

'In a dark chamber which had one window and only air.'

Note that there is one clause in my MD sample given in (157) which is introduced by *mar* and shows single preverbal *ne/en*, but cannot be translated as post-cyclical *ne/en*.

(157) Jacob van Maerlant, Rijmbijbel 1285 (602:15–17)

Die papen ende die fariseen. Wilden vaen. ende om tbedieden
The papists and the pharisees wanted catch and to it=report
Mar si ne dursten van den lieden
but they NE dared from the people

'The papists and pharisees wanted to catch [him] in order to report it but they didn't dare because of the people.'

The clause introduced by *mar* in (157) is a case of stage I negation. Recall that there are cases in the Rijmbibel in which *ne/en* marks an adversative clause, e.g. (102), repeated here as (158).

(158) Jacob van Maerlant, Rijmbijbel 1285 (401:20–21)

du diet wistes en es niet bleuen Dune heuesti
you who=it knew NE are.2SG NEG stayed you=NE have=you
ieghen gode verheuen
against God risen up

'You who knew it have not stayed but risen up against god.'

As (157) shows *ne/en* expressing sentential negation after *mar*, but the text also already shows post-cyclical adversative uses of single preverbal *ne/en*, we cannot simply assume that the post-cyclical adversative function of *ne/en* developed after the 13th century in Dutch. This is one of the many examples showing the variation in the use of post-cyclical and negative *ne/en* in the languages under investigation.

Hence, the grammaticalization OHG/OS *ni wari* (and a potential OD/OLF cognate construction) is a good example showing that exceptive and adversative uses are closely related. MD *nemaer* and MHG *newære* grammaticalizing towards present-day Dutch *maar* ('but') and present-day German *nur* ('only') derive from the same negative conditional/exceptive

dummy-matrix clause. In the course of grammaticalization, different 'meaning components' (whether semantic or pragmatic) of exceptives such as exhaustification ('only') or the contrasting of a negative and a positive proposition ('but') became prominent. This is similar to the understanding of semantic bleaching as the redistribution of the semantic load in semantic composition in Eckardt (2002).

The most common conjunction/preposition to express adversative relations in German is OHG *suntar*, OS *sundar*, Gothic *sundrō*, originally meaning 'apart' or 'remote' (Kluge 2011). As pointed out by Schrodt (2004:146), Notker uses *suntar* ('but') as a corrective conjunction, but also in other OHG texts we find *suntar* as a conjunction (159). Example (160) shows that it was also used as a preposition. Holmberg (1967:87) argues that *sunder* as a preposition 'without' is a Central German phenomenon.

(159) OHG, Althochdeutsche Predigtsammlung (212ra, line 7–8)

In imo selbemo nimac si nieman irfullen suntir er scolsi
in him self NEG=can she nobody fulfill but he shall=her
irfullen an einemo anderemo
fulfill on one other

'With himself nobody can fulfill her, but he shall fulfill her with someone else.'

(160) OHG, Althochdeutsche Predigtsammlung (234r, line 62–63)

si nieth kinennit muozzige sunter tode
she NEG called lazy but dead

'She is not called lazy but dead.'

As shown in section 5.1.2, exceptive conjunctions are sometimes used adversatively, and conversely, adversative *suntar* can appear as an exceptive conjunction. Holmberg (1967:66) argues that *wan/niwan* derives from an exceptive use ('only') and was reanalyzed as a corrective conjunction. In example (161) *níwan* together with *gôte* could be a PP ('but God' meaning 'only God'), while *níwan* could also be analyzed as a conjunction introducing the corrective adversative clause.

(161) Millstätter Predigtsammlung, early 13th century (M329 III 1 P_PrMi–015r,07–09)

vn̄ svln den slôzel vnserre gewârheit ír níht enpfêlhent
and shall the key our.GEN protection.GEN her NEG entrust
níwan gôte sôln wir alle vnser actus vnser dínk enphêlhen
but/only God shall we all our actus our thing entrust

'We shall not entrust her with the key of our legal protection but/only to God shall we entrust all our cases.'

Holmberg (1967:77) notes that *wan* can appear in corrective and contrastive use. Example (162) can have a contrastive or corrective reading, translating as present-day German *aber* or *sondern* ('but').

(162) Speculum ecclesiae, cited from Holmberg (1967:67)

da erbarmit er sich ûber niemin niewan also ieglich
there show mercy he himself over nobody but as any
mennisch erschînet indem selbem bilde wir er erteilet
person appear in the same way be he judged

'There he will show no mercy for anybody but he will judge everybody in the way in which he appears.'

Another conjunction which has adversative and exceptive meaning is *uzzan* ('except'). Abraham (1979:245) points out that it could be used in wider contexts than present-day German *außer*.

(163) OHG, Weissenburger Katechismus (150r, line 28–29)

Nileitit got eomannan in ubilo thohheinaz uzzar thanne her
NEG=lead God anyone in sin any except then he
then man farlazzit
the man leave

'God does not lead anybody into any sin, except if he then gave up on the man.'

Besides the exceptive use in (163), there are clauses for which the present-day German translation only allows *sondern* ('but'), such as (164). Abraham notes that *uzzan* translates as *aber* or *sondern* depending on the main clause the subordinate clause modifies. Negative clauses followed by *uzzan* tend to translate as corrective adversative clauses.

(164) OHG, St. Galler Pater Noster (MS page: 320, line 5–6)

enti ni unsih firleiti in khorunka uzzer losi unsih fona ubile
an NEG us lead in temptation but release us from sin

'And lead us not into temptation, but deliver us from evil.'

Ferraresi (2018) shows that the other German adversative connective *aber* <OHG *afur/avur* derived from a repetitive meaning of 'again' and 'back'. Latin *sed* ('but') was translated by *oh/ouh* in the OHG Tatian, which grammaticalized towards present-day German *auch* ('also, too'). According to Pokorny (1989:4), OHG *oh/ouh* derives from IE *aĝō* ('leads away') with Anglo-Saxon *ac* ('but') literally meaning 'leave'. This is another example showing that lexical items with a spatial meaning 'out' are prone to become exceptive or adversative markers. The items analyzed here suggest that an excluding/exceptive meaning is first, before the meaning becomes more abstract expressing 'contrast'. It could be argued that the contrastive meaning is an atom of exclusive/exceptive meaning which becomes prominent when items become semantically bleached, i.e. more abstract (cf. section 5.1.5). This can be reffered to as the redistribution of the semantic load in semantic composition (Eckardt 2002).

Summarizing the corrective adversative conjunctions, it appears that they derive from words with an exceptive or exclusive meaning. The present-day Dutch *maar* (>*newære*) ('but', 'only') as well as English *but* from Old English *būtan* ('outside') preserve the semantic similarity between adversative and exceptive relations.

5.1.5 The grammaticalization of adversative and exceptive discourse markers

In the previous sections, we saw that in the history of German and Dutch, adversative and exceptive discourse relations are often expressed by the same

lexical items.[8]

In this section, I summarize these findings and draw parallels to other languages. I show that exceptive and adversative markers undergo similar clines of change and that *ne/en* can be argued to undergo part of a common cline of semantic change, namely from exception to contrast. The crucial difference between other exceptive markers and *ne/en* is that the latter was used as a marker of sentential negation. While the emergence of exceptive markers presented in this chapter (the change from (spacial) adverb to discourse marker) can be subsumed under the umbrella term 'grammaticalization', the reanalysis of *ne/en* is a case of exaptation. The preverbal negative marker *ne/en* already ceased to express sentential negation on its own when the first exceptive and adversative uses appear in the data investigated in this thesis. Therefore, *ne/en* can be characterized as redundant material assuming a new function, which makes its emergence an example of exaptation (Lass 1990; Haiman 2017). I will discuss how *ne/en* could enter the cline of semantic change in the next section 5.2.

So far, we only saw that both exceptive and adversative discourse relations connect a proposition $\neg Q$ and a positive P. Furthermore, analyzing other means of expressing adversative discourse relations, it was shown that contrastive meaning is closely related to exclusive/exceptive meaning, the former most likely being a meaning atom of the latter which becomes prominent due to semantic bleaching. Some exceptive/adversative markers in the languages under investigation seem to derive from spatial adverbs, as is the case for *uzzan* or *suntar* (cf. section 5.1.2). This results in a cline from less to more abstract as presented in (165).

(165) spatial exclusive > exceptive > contrast

This can also be shown to be true for OE *būtan*/English *but* and Old Frisian (OF) *būta* which grammaticalized from a spatial preposition to an adversa-

[8]Recall that there are nonetheless crucial differences between the two relations. On the one hand, semantically exceptive clauses are a special kind of conditional in which the restriction of the modal domain of the main clause can be characterized as domain subtraction, while exhaustifications ('only') can be argued to result from a conversational implicature, namely conditional perfection. Corrective adversative clauses on the other hand express a contrast between a negative and a positive proposition. While their truth-conditional meaning can be seen as coordination of the two statements, the contrastive reading arises from a conventional implicature which is part of discourse markers such as English *but* or *ne/en* in MHG, MLG and MD.

tive conjunction (Nevalainen 1990; Traugott 1007; Dekeyser 2012; Bremmer 2017).

Dekeyser (2012) argues that the OE spatial adverb *butan* as in (166) is the basic lexical item from which the prepositional and conjunctive use derive.

(166) Old English, ChronA 867.8, cited from Dekeyser (2012:298)

þær was ungemeltic wæl geslægen Norþanhymbra, sume binnan,
there was immense much slaughter Northumbrian some inside
sume butan
some outside

'There was immense slaughter made of the Northumbrians, some inside, some outside.'

OE also used *butan* exceptively, as in (167) and (168).

(167) Old English, ChronA 755, cited from Dekeyser (2012:298)

Ac hie simle feohtede wæran oþ hie alle lægon butan
but they continuously fighting were until they all lay except
anum Bruttiscum gisle
one Welsh hostage

'But they were continuously fighting until all were slain except one Welsh hostage.'

(168) Old English, Ælfred Boeth., cited from Dekeyser (2012:299)

þu sagest nan þing wyrde, bute hin God wille
you say no thing becomes, unless it God will

'You say no thing comes into existence, unless God wants it.'

Dekeyser (2012:300) notes that the use of *butan/but* as a spatial adverb is only sparsely attested in Middle English (ME), as it became gradually replaced by other items such as *outside*. Most uses are semantically blurred, such as (169), allowing for an interpretation "as 'outside' shading into 'except"' (Dekeyser 2012:300).

(169) Middle English, c1225 (?1200) St. Juliana (Bod34) 627, cited from Dekeyser (2012:300)

Ne nis na godd buten he
NEG NEG=is no God except him

'There is no God except him.'

Dekeyser (2012:301) argues that the notion of contrast expressed by *but* emerged in the 13th century. Example (170), besides expressing an exception, also triggers a contrastive reading.

(170) Middle English, a1325 (c1280) S Leg. Pass. (Pep. 2344) 142, cited from Dekeyser (2012:301)

He ne ffond no ffrut þereon bote leues & bow
He NEG found no fruit thereon except leaves and branch

'He did not find fruit thereon but (except) leaves and branches.'

While Frisian stopped in the cline with *būta* as an adversative conjunction marking contrast (Bremmer 2017), English *but* went even further to become a discourse marker as in (171). This use goes back to the Late Middle English period (Dekeyser 2012:302).

(171) But how do you mean that?

The development of OE *būtan* to present-day English *but* can be presented as in (172), taken from Dekeyser (2012:304)

(172) location > exception > contrast > discourse marker

For the analysis of post-cyclical *ne/en*, the investigation by Bremmer (2017) is especially interesting, as he compares the development of OF *būta* and OE *būtan* given the question whether the common development is due to inheritance. He concludes that both parallel developments of OF *būta* and OE *būtan* are a case of autogenesis, as both grammaticalization paths are semantically driven. He provides non-Germanic examples, where spatial adverbs

or prepositions became adversative or exceptive conjunctions, e.g. Spanish *fuera*(*de*) < *forās* ('outside') (173) can be used as an exceptive (174) or adversative marker (175).

(173) Spanish, cited from Bremmer (2017:613)

Dónde esta el gato? Fuera.
Where is the cat outside

'Where is the cat? Outside.'

(174) Spanish, cited from Bremmer (2017:613)

Fuera de este vestido no me he comprado otra cosa
Except from this dress no me have bought other thing

'I haven't bought anything except for this dress.'

(175) Spanish, cited from Bremmer (2017:613)

Fuera en frío fuera en calor, ella siempre iba vestida
Whether in cold whether in hot she always was going dressed
de la misma manera
in the same manner.

'Whether it was cold or hot, she always dressed the same.'

Therefore, we can conclude that there is a close semantic relationship and a path of change in which lexical items develop from a spatial exclusive meaning to an exceptive and/or contrastive meaning which is cross-linguistically available. This can explain why post-cyclical *ne/en* once used for marking exceptive clauses could express a corrective adversative discourse relation as well. Hence, *ne/en* can be taken as another example of an exceptive marker developing to become an adversative/contrastive discourse marker.

In present-day Flemish, *en* is still used as a discourse marker expressing 'contrast':

> Roughly, what *en* expresses is that there is a contrast between the negative proposition in the utterance and an assumption or expectation of the contrary state of affairs entertained by one or more discourse participants.
>
> (Breitbarth and Haegeman 2015:89)

Even though corpus studies investigating the development of the particle after the 14th century have to provide further evidence for this hypothesis, it seems that the exceptive/adversative discourse marker *ne/en* appearing in MD adverbial clauses preserved its contrastive feature and became available in less restrictive contexts in Flemish, where it marks contrast with respect to the previous context.

Recall that there are three main clauses in the MHG data, two of them repeated here as (176) and (177), which show post-cyclical *ne/en*.

(176) Hessische Reimpredigten, early 14th century (V 4b V_PrRei–167a,12–14)

Sitdaz sin selbis sone nit en wolde schonen got er en
Since=that his self son NEG NE wanted spare god he NE
mvoste ie liden den dot
must ever suffer the death

'Since God did not want to spare His own son, he had to suffer death.'

(177) St. Trudperter Hohelied, early 13th century[9]

want aber si si nieht uirtruchent ne muogin novch ne
When but she herself NEG dampen NE can nor NE
girrin si ne behaben ir suozin smacht
oppress they NE keep her sweet scent

'If she does not let herself [a child as a lily among thorns] be suppressed nor opressed, she keeps her sweet scent.'

[9]There is no PDF version of the text. The lines can be accessed in ANNIS: https://linguistics.rub.de/annis/annis3/?id=5ef141c1-d6bc-4c65-9aa9-b30051add761

In these clauses, *ne/en* can be argued to be a contrastive discourse marker, similar to its use in present-day Flemish. Both utterances 'He had to suffer death' (176) and 'She keeps her sweet scent' (177), can be characterized as contradicting an expectation, namely that fathers usually do not sacrifice their sons and that a child in difficult circumstances suffers, i.e. 'loses its sweet scent'. Note that the clauses show the same structure as the asyndetic V2 adverbial and complement clauses. The first constituent is a pronoun, but the verb shows subjunctive morphology, similar to clauses with a corrective adversative reading.

The semantic change of post-cyclical *ne/en* is given in (178), with 'contrast/context' indicating a more general use as a contrastive discourse marker as found in present-day Flemish, exceeding its use in adversative clauses.

(178) negation > exception > contrast/adversative > contrast/context

As noted above, an important difference compared to the grammaticalization of *but* is that *ne/en* was used as a sentential negation marker in OHG, OS and OLF/OD and had become redundant with *niht/niet* being the standard negation in MHG, MLG and MD (cf. section 2). Hence, we can only account for the fact that *ne/en* is used in exceptive and adversative clauses, but there is no explanation why and how *ne/en* acquired an exceptive function in the first place. I want to address this question in the following section, before proposing a formal analysis for post-cyclical *ne/en* in adverbial clauses in section 5.4.1.

5.2 From negation to exception

Before arguing in sections 5.4 and 5.4.1 that *ne/en* was reanalyzed as a discourse marker in the head of the lowest TopP, FamP, in the left periphery (Rizzi 1997; Frascarelli and Hinterhölzl 2007), I want to discuss how this reanalysis was triggered.

In order to understand how the OHG, OS and OLG negative marker *ni* could become a marker for exceptive clauses, it is necessary to find precedent constructions of the V2 clauses with post-cyclical *ne/en*. Holmberg (1967) provides some examples for asyndetic clauses with 'exceptive' meaning in the OHG period.

I will translate these clauses as negative conditional clauses, as they show the OHG sentential negation marker *ni*, subjunctive morphology on the verb and in one case V1 word order. They can, of course, also be translated as exceptive clauses introduced by *unless*. Two facts complicate the picture: V2 verb order is not the canonical order for conditional clauses. In the older Germanic languages, conditionals are usually asyndetic with V1 word order or syndetic, introduced by a complementizer (cf. section 5.1.1). Secondly, the ordering of the two clauses, namely that the exceptive clause follows the main clause in 98,6% of all structures, is not the unmarked order for conditionals from a cross-linguistic perspective (cf. chapter 5.1.1). Holmberg's 'exceptive' clauses show different word orders and clause orderings.

In her examples from Otfrid, there are nine verb-final clauses with the verb in subjunctive mood, as in (179), which follow the clause they encode an exception/negative condition to:

(179) Otfrid: Evangelienbuch cited from Holmberg (1967:111)

Ther díufal sin ni kórati furimán er nan ni hábeti
The devil him NEG tempted for=man he him NEG consider

'The devil would not have tempted him if he had not considered him a person.'

One clause precedes the main clause (180) and appears in subjunctive mood. (181) shows a V1 conditional following the main clause.

(180) Otfrid: Evangelienbuch, cited from Holmberg (1967:111)

Er ni werde wanne irboran [...] *Then ingang er ni*
He NEG be.PAST.SBJV then reborn [...] the entrance he NEG
ruarit
touch

'If he is not reborn then [...] he does not touch the entrance.'

(181) Otfrid: Evangelienbuch, cited from Holmberg (1967:111)

Ir zeichnan ni giscowot [...] *ni giloubet ir zi waru*
You wonders NEG see [...] NEG believe you to real

'You won't see wonders if you do not really believe.'

Holmberg cites three clauses in Notker, which all precede the clause they express an exception to, such as (182).

(182) Notker, cited from Holmberg (1967:112)

vnser truhten nezimberoe daz hus, ferlorne arbeite sint
our Lord NEG=build.SBJV the house, lost work is
dero die iz ilton zimberon
theirs who it self build

'If our Lord does not build the house, the ones who built it on their own wasted their work.'

In the late OHG paraphrase of the Song of Songs by Williram from 1060, the structures appear just as the monoclausal exceptives in MHG, following the main clause and showing the verb in subjunctive mood in second position:

(183) Williram Hohes Lied, cited from Holmberg (1967:114)

Dih neminnot nieman, er ne si reht
You NEG=loves nobody, he NEG/NE be.PRES.SBJV right

'Nobody loves you unless he is right.'

Of course, the data are very sparse and Holmberg's study is based on Bible texts only, but it suggests that neither the word order nor the position of the clause was fixed. Some clauses even appear with a verb in indicative mood. In order to understand how these discourse relations could be encoded, i.e. how the V2 clauses presented by Holmberg received a conditional meaning, we could either assume that the ambiguity is resolved by a pragmatically motivated choice (Sweetser 1990) or, as proposed in Lang (2000) for a different kind of ambiguity, that there are sentence structural cues which help resolve ambiguity or under-specification.

Before addressing the contexts which could trigger *ne/en* to be reanalyzed as a discourse marker, I want to discuss which sentence structural cues can explain the interpretation of the MHG, MLG and MD constructions. I

want to show that features which became obligatory in the development of the construction from OHG/OS/OLG to MHG, MLG and MD can be argued to trigger an adverbial interpretation. It is important to note that the sketched development is only possible assuming that the exceptive reading of *ne/en* was primary, i.e. that exceptive clauses were the first structures to show post-cyclical *ne/en* before it spread to other contexts. I provided independent evidence for this assumption based on the general path of semantic change observed with exceptive and adversative markers cross-linguistically in section 5.1.5. While the interpretation of the earliest examples can be argued to rely on different sentence structural cues (such as subjunctive mood on the verb and word order) and also on pragmatic ones, the structure can be shown to become more 'fixed' with regard to their syntax.

First, subjunctive morphology became obligatory in the languages under investigation compared to the structures found in OHG. Subjunctive mood in the adverbial clauses results in an irrealis reading, which can also be argued to trigger the conditional interpretation of the first clause in (180). Note that clauses with complement interpretation showing post-cyclical *ne/en* also show subjunctive morphology (cf. section 6.2). The clause is not headed by a subordinator and only one of Holmberg's clauses shows V1 word order. I will address whether we can take V1 conditional clauses as a bridging context below. In V2 structures, the conditional meaning is therefore not explicitly marked, but can be said to be triggered by the verb in subjunctive mood.

Secondly, the ordering of the clauses became more fixed. In example (180), the exceptive/negative conditional clause precedes the main clause. Even though there are a few examples in which the clause precedes the main clause in the MD data analyzed for this thesis (cf. section 4.3.1), most clauses follow the main clause they express an exception to. Even though non-canonical for classical conditionals, this order can be argued to facilitate the exceptive/contrastive interpretation.[10]

Independently of these changes in structure, *ni* was reanalyzed from marking sentential negation to marking a restriction of the main clause domain, i.e. exception. I want to suggest that this change proceeded via an intermediate step in which *ni* was reanalyzed as marking metalinguistic negation (Horn 1985) in a conditional statement.

Horn argues that negation is generally pragmatically ambiguous between

[10]Recall Greenberg's generalization that the protasis tends to precede their consequent (Greenberg 1963).

internal negation and external or metalinguistic negation.[11] Metalinguistic negation can negate a conversational implicatum (Horn 1985), as shown by examples (184) and (185), cited from (Horn 1985:132).

(184) Some men aren't chauvinists - All men are chauvinists

(185) John didn't manage to solve some of the problems - he managed to solve all of them

The first sentence in (184) carries an implicature that there are a set of men which are not chauvinists. This implicature is negated. The same is true for (185).

Let us look at the examples from Holmberg (1967), such as (181) repeated here as (186), where *ni* is still a marker of sentential negation. The clause shows V1 word order.

(186) Otfrid: Evangelienbuch cited from Holmberg (1967:111)

Ir zeichnan ni giscowot [...] *ni giloubet ir zi waru*
You wonders NEG see [...] NEG believe you to real

'You won't see wonders if you do not really believe.'

I argue that V1 conditional structures as well as V2 strcutures as in (180) are a bridging context for a reanalysis of *ni* as negating the apodosis (main clause) via an intermediate step where *ni* had a metalinguistic negation reading. I will address the reanalysis of *ne/en* in section 5.4.2. Recall that in negative conditionals there is sentential negation within the protasis: '$Q \Rightarrow \neg P$' ('Q if not P'). In exceptive clauses meaning 'Q in a case other than P' (Declerck and Reed 2000), negation can be understood as 'outside' of the protasis operating on the apodosis, stating in which cases the apodosis does not hold: 'Q does not hold (only) if P is true'. This operation was referred to as 'domain

[11] He argues that conversational implicatures are not part of the logical form, and therefore rejects the approach by Kartunnen and Peters (1976) which analyze scope to be responsible for the difference between the two negation readings. Note that the examples in (184) and (184) require stress on 'aren't' in order to trigger metalinguistic negation. This prosodic difference can be argued to correlate to syntactic differences.

subtraction'. What needs not be explained is how *ni* could be reanalyzed from a marker of sentential negation operating within a proposition to become a discourse marker displaying the relation between two clauses.

In (186), taking aside the subjunctive morphology, we have two utterances: 'You do not see wonders' (u1) and 'You do not really believe' (u2). U2, the protasis, 'You do not really believe' in this context conversationally implicates 'You do not see wonders' (q_{u2}). This conversational implicature is similar to u1, the apodosis. The protasis (u2) implicates the apodosis (u1/q):

u1: 'You do not see wonders' $\neg Q$
u2: 'You do not really believe' $\neg P$
q_{u2}: 'You do not see wonders'
q_{u2} = u1

If we now take the negation within u2 to be metalinguistic negation, the full conditional statement receives a reading: 'The implicature/apodosis that you do not see wonders is not true if you really believe.', i.e. $\neg Q$ does not hold if P. The particle *ni* becomes analyzed as negating the apodosis. Note that there is no interaction between the reanalyzed negation of the apodosis ('does not hold') and the sentential negation within the apodosis ($\neg Q$), i.e. there is no double negation reading. If the apodosis was positive, the same reanalysis could take place.[12] I will exemplify this with the constructed example 'The party takes place if it does not rain.':

u1: 'The party takes place' Q
u2: 'It does not rain' $\neg P$
q_{u2}: 'The party takes place'
q_{u2} = u1

When the negation in u2 becomes reanalyzed as negating u1, the apodosis, '$Q \Rightarrow \neg P$' becomes analyzed as 'Q does not hold if P', which paraphrased would result in 'The implicature that the party takes place does not hold, if it rains', which is analyzed as 'The proposition that the party will take place is not true if it rains.' This results in the exceptive semantics described in section 5.1.1, namely 'Q in a case other than P' (Declerck and Reed 2000), i.e. 'Q does not hold (only) if P is true'.

[12]Note that at least in Holmberg's examples, there is always a negative apodosis. It is for further research to determine whether negation in the apodosis facilitated or was even necessary for the reanalysis.

This leaves the question why exceptive clauses do not simply show V1 word order. As will be discussed in sections 5.4 and 5.4.1, *ne/en* was reanalyzed as a discourse marker in the Fam^0. I want to argue that, as soon as *ni* was reanalyzed as the negation of the apodosis, the V1 structure was ambigous between a negative conditional and an exceptive reading. In the conditional structure, *ne/en* is base-generated above VP and moved to C as it cliticizes to the finite verb. In exceptive structures, it is base-generated in the left periphery. I want to argue that the position (and function) of *ne/en* was disambiguated by filling the prefield with a pronoun which anchors a person or entity in the main clause (cf. sections 5.4 and 5.4.1 for a detailed account of the asyndetic V2 structure in exceptive clauses). Using features, one can argue that the head in which *ne/en* is base generated is equipped with an uninterpretable feature which triggers movement of the pronoun to the specifier of the projection in which *ne/en* resides (cf. section 5.4.1)

Summing up, I want to argue that the special use of *ne/en* as an exceptive marker arose from conditional contexts in which the protasis implicated the apodosis. The negative marker was first reanalysed as metalinguistic negation. This resulted in a reading of *ne/en* negating the apodosis. From this point, *ne/en* could be interpreted as an exceptive marker, signaling the clause which expresses the (only) exception to the event in the main clause. From this exceptive meaning, *ne/en* entered the path sketched in section 5.1.5 becoming a contrastive marker and subsequently being able to appear in various non-negative contexts.

5.3 Towards an analysis of post-cyclical *ne/en* in adverbial clauses

5.3.1 The left periphery of (subordinate) clauses

In order to determine the syntactic position of post-cyclical *ne/en* and how it became reanalyzed, I will in this section first review the literature on the left periphery of the clause and discuss the position of clause-typing particles in OHG.

Rizzi (1997) argues that the left periphery 'CP' consists of an array of projections which follow a fixed order. Originally, he proposed a structure as in (187) mainly based on Romance, but in the last 20 years of cross-linguistic research,[13] the structure became more elaborate as in (188), (Rizzi and Bocci 2017).

(187) Split-CP 1997
[Force [Top* [Foc [Top* [Fin [IP …]]]]]]]]

(188) Split-CP 2017
[Force [Top* [Int [Top* [Foc [Top* [Mod [Top* [Qemb [Fin [IP …]]]]]]]]]]]]]]

Depending on the position of a constituent in one of these projections, different interpretations arise, such as a topic or focalized element. The highest phrase ForceP (Force Phrase) is the locus of complementizers in subordinate clauses. In main clauses, it connects the clause with the previous discourse. In general, Force determines the clause type and illocutionary force (cf. Coniglio and Zegrean (2010) for a proposal to split up Force even further). Italian provides evidence for recursive Topic projections (TopP) in the left periphery. Topics are generally characterized as 'old information' (Reinhart 1981). The Interrogative Phrase IntP is assumed as the locus of certain complementizers which can be preceded by topicalized elements. FocP (Focus Phrase) hosts focalized elements, roughly characterized as 'new information'. The Modifier Phrase ModP attracts adverbs and PP modifiers in the left periphery and the Question embedded Phrase QuemP is assumed to account for wh-elements co-occurring with focused elements in embedded clauses.

[13] Cf. the homepage of the SynCart project for a list of publications: https://www.unige.ch/lettres/linguistique/syncart/home/

Based on Italian and German, Frascarelli and Hinterhölzl (2007) assume three distinct topic positions, each for a different type of topic.

> [D]ifferent types of Topics show different intonational properties and are realized in a specific order in the CP-system. A free recursion analysis will thus be refuted and a hierarchy [is] proposed in which different functional projections are distinguished in terms of prosodic and syntactic properties.
>
> Frascarelli and Hinterhölzl (2007:89)

The order of topics is presented in (189). ShiftP hosts shifting or aboutness topics. ContrP hosts contrastive topics and FamP host familiar, discourse linking topics which are often pronominal (Walkden 2014) and have a low tone (Frascarelli and Hinterhölzl 2007).

(189) Different types of topics and their distinct positions as proposed in Frascarelli and Hinterhölzl (2007)
[Force [Shift [Contr [Foc [Fam [Fin [IP …]]]]]]]]]

This pattern is also adopted by Walkden (2014) who assumes that the verb in early Germanic V2 languages moves to Fin^0, while an Edge Feature on SpecFinP triggers movement of any constituent to this specifier position. Uninterpretable features in higher projections may cause movement to a higher position (Walkden 2014:85f). Complementizers are assumed to be base generated in Fin^0 and then moved to $Force^0$.

5.3.1.1 The structure of the Middle Field

Examining OHG subordinate clauses from Tatian, Petrova and Hinterhölzl (2010) assume a Focus Phrase on the left edge of the Middle Field. For Old English (OE), van Kemenade and Los (2006) show that discourse linked material regularly appears in a special position between the subordinating conjunction and a discourse partitioner *þa*). Petrova and Hinterhölzl (2010:205) argue that OHG *tho* has a similar function as can be observed in (190).

(190) OHG, Tatian 55,29, cited from (Petrova and Hinterhölzl 2010:205)

mit thiu thaz [tho] gisah simon petrus
when this PRT saw Simon Peter

'When Simon Peter saw this.'

Due to the very few examples of *tho* in their data, they assume that the finite verb moves to exactly the position which *Þa* occupies in OE. The finite verb in OHG separates given or presupposed material from the rest of the utterance, namely the focus domain. Their data from the OHG Tatian shows that material following the finite verb shares the status of being new information or presentational focus, while "background material" as well as constituent carrying contrastive focus precede the finite verb (Petrova and Hinterhölzl 2010:206f).

I will go back to this proposal discuss its implications for the position of *denne* in section 5.4.

5.3.2 The availability of left-peripheral particles in Germanic

Post-cyclical *ne/en* in adverbial clauses is used to mark exception or contrast. Hence, I want to argue that *ne/en* adopted the function of a discourse marker in the left periphery. As this seems do be a quite rare development, I want to address the general availability of left-peripheral clause typing particles and discourse markers in Germanic.

OHG shows remnants of a system of clause-typing particles ("sentence particles") (Axel-Tober 2018:30). Against the generalization in Delbrück (1912), even Notker still uses the sentence initial particles *inu* in questions, as in (191). Furthermore, the particle *jā* is used in declarative clauses to "emphatically assert the truth of the utterance" (Axel-Tober 2018:31).

(191) OHG, Notker, Boethius De Consolatione philosophiae, 11th century

Ínno trífet táh téro dehéines ána?
PRT concern you that.GEN any on

'Does it concern you anyhow?'

In OHG, V-to-C movement is obligatory with clause-typing particles and in other operator contexts (Axel-Tober 2018:31). As the preverbal particle cliticizes to the verb, contexts in which the verbs moves to C (or Fin) are

likely to have resulted in *ne/en* being reanalyzed as a discourse marker in the left periphery.

OHG did not have sentence particles in second position, but Ferraresi (2005) shows that Gothic had particles which could – even though sparsely attested – be preceded by a topic, namely *iþ*.

(192) Gothic Bible, Luc 7:39, cited after Ferraresi (2005:154)

sa iþ wesi praufetaus, ufkunþedi þau, hvo jah hvileika
this PRT were prophet know.SBJV THEN WHO and what manner
so qino sei tekiþ imam
the of woman the.REL touched him

'If this man were a prophet, he would know who this woman is and what sort of woman she is.'

Even though Ferraresi glossed *iþ* as 'if', the particle is not equivalent to *jabai* ('if'). *iþ* mostly appears in first position, but can be preceded by other elements in order to signal a change of topic, i.e. Contrastive Topics in terms of Frascarelli and Hinterhölzl (2007), similar to Latin *autem* (Ferraresi 2005:150ff). The Gothic dictionary by Streitberg (1910) furthermore states that when used for emphasizing a contrast it also translates *καιι* ('and').

Ferraresi (2005) does not adopt Rizzi's structure for the left periphery as presented in (187).[14] Resting her claims upon Roussou (2000) and Haegeman (2002), she argues that

> "the label Force represents quite different elements and is therefore not completely adequate to define this position [where complementizers are located], since it covers subordinating elements in embedded clauses and elements which mark the sentence for clause-type in main clauses".
>
> Ferraresi (2005:139f)

Arguing for Force to be a lower position, she adopts Roussou's (2000) C-positions, namely C_{sub}, $C_{clause\text{-}type}$, $C_{modality}$, which she understands as similar

[14] I thank Metin Bagriacik for pointing out to me that Rizzi himself notes that a tripartite C-system is possible (Rizzi 1997:328, fn. 6).

to Haegeman's (2002) Sub, Force and Mod. The highest C provides subordination, the second C clause type and the third is for modality. According to Ferraresi (2005), *iþ* resides in the second $C_{\text{clause-type}}$ which cannot be similar to Rizzi's IntP as Topic and Focus appear between C_{sub} and $C_{\text{clause-type}}$.[15] The details of this discrepancy are irrelevant for the course of my argumentation. Superficially, *iþ* and *ne/en* share certain features, but they cannot be argued to reside in the same position. In section 5.2, I already mentioned that I analyze *ne/en* as base-generated in the low topic projection FamP in sections 5.4 and 5.4.1. In contrast to the discourse marker *ne/en*, *iþ* can be preceded by contrastive topics and must therefore, as argued by Ferraresi (2005), be located in a higher projection in the left periphery.

5.4 The syntax of adverbial clauses with post-cyclical *ne/en*

In this section, I want to discuss the projection in which post-cyclical *ne/en* resides before proposing a syntactic tree structure for adverbial clauses with post-cyclical *ne/en*.

In NegP-terms we would have to argue that the particle changed from Neg^0 to a head of a projection in the left periphery, as proposed in Breitbarth (2009). In contrast to Breitbarth (2009), who assumes *ne/en* to be in the head of a C-related PolP, the present account is restricted to explaining *ne/en* in post-cyclical context, primarily in subordinate adverbial clauses modifying or restricting a main clause they almost exclusively follow. In contrast to Breitbarth (2009) who argues that *ne/en* is a spell-out of Pol^0 also in negative clauses but itself non-negative, I argue that post-cyclical *ne/en* as a distinct lexical item is located in a different position than *ne/en* in bipartite negation. My analysis of post-cyclical *ne/en* in adverbial clauses can account for almost all cases in my corpus data. Recall that there is only one adverbial clause in the data which does not express either an exceptive or adversative relation but can only be translated as a purpose adverbial clause, repeated here as (193).

[15] As the precise accounts in Roussou (2000) and Haegeman (2002) are not relevant to the argumentation outlined here, I refer to the articles as well as Ferraresi (2005) for further discussion.

(193) König Rother, early 13th century

Die woldin alle den lib geven Se ne losten rothere daz leven
They wanted all the life give they NE save Rother that life

'They all wanted to die in order to save Rother's life.'

As noted above, I argue that *ne/en* functions as a discourse marker in the left periphery (Fraser 1999).[16] It is unlikely that *ne/en* is a specifier, as the particle has head-status in OHG as well as MHG (Jäger and Penka 2012) and a reanalysis from head to specifier is not a typical path for reanalysis (van Gelderen 2004).[17]

I take the fact that *ne/en* only appears in V2 clauses indicative of the fact that it must be base-generated in a fixed position high in the clausal spine. In order to determine where to locate post-cyclical *ne/en*, I will first describe the initial constituent in these clauses:

In section 4.4, we saw that both exceptive and adversative structures in the languages under investigation always show V2 verb order, whereby the first constituent is almost exclusively a non-salient XP, namely a pronoun. The pronoun refers to an entity or situation from the previous discourse, such as *ich* ('I') in (194). In the data analyzed for this thesis, there are no contrastive or shifting topics in initital position in the asyndetic V2 clauses with post-cyclical *ne/en*.

(194) Hartmann von Aue: Iwein, early 13th century (M312 III 0 V_Iw–4876–78)

ih [...] *weiz wol swederz ich kivse daz ich dar an verlivse*
I [...] know well whichever I choose that I there on lose
ich n mohte ir beider gepflegn
I NE may.SBJV them both cultivate

[16] I will discuss the definition and characteristics of discourse markers in section 5.4.3.2.

[17] This is the reason why I do not refer to *ne/en* as an "adverbial connective". I follow Blühdorn (2008) in differentiating between different kinds of 'connectives'. While coordinating and subordinating conjunctions can be heads, adverbial connectives are taken to be adverbial adjuncts (Blühdorn 2008:65). I would therefore refer to particles such as present-day German post-initial *aber*, which are analyzed as heads (Catasso 2015), as 'discourse markers' as well. Note that others, e.g. Lenker (2010), have a broader definition of the term adverbial connective, also taking heads to belong to this class of connectives.

'I know that whichever I choose that I lose unless I cultivate both.'

If we do not adopt a free recursion analysis but assume different types of topics as proposed by Frascarelli and Hinterhölzl (2007) (cf. section 5.3.1), these features of the first constituent in exceptive as well as adversative adverbial clauses in MHG, MLG and MD suggest they they are located in FamP as they are Familiar Topics. One of the striking features of exceptive clauses and adversative clauses is that they are not introduced by a complementizer or show V1 words order which is common in Germanic. The fact that they almost exclusively appear with a pronoun which anchors a situation or person from the previous discourse, i.e. is 'old information', indicates that this initial constituent in SpecFamP is crucial for establishing a link to the previous discourse and is hence characteristic for the structure.

But where does *ne/en* reside? Under both NegP and NegP-free accounts, *ne/en* is a head, cliticizing to the finite verb terms. Below Rizzi's 1997 lowest TopP, which is FamP in Frascarelli and Hinterhölzl (2007) terms, there is only FinP. Therefore, *ne/en* could either reside in Fam^0 or Fin^0.

An alternatives to assuming one of these low positions would be that, like OHG clause-typing particles (Axel-Tober 2018), *ne/en* is located in SpecForceP cliticizing to the first constituent, i.e. the pronoun, with the verb moving as high as $Force^0$. As noted above, a specifier position is not something one would expect due to the head status of the particle. Alternatively, we could assume *ne/en* being based generated and cliticizing to the finite verb in $Force^0$. Without this analysis being completely impossible, it does not account for the fact that the first position is restricted to host Familiar topics which are almost exclusively pronouns. Below FamP, there is only FinP which can host the verb and post-cyclical *ne/en*. According to Walkden (2014), V2 structures derive as follows: the verb moves to Fin^0 while an edge feature in Fin^0 attracts a constituent to move to SpecFinP. Uninterpretable features, i.e. [uTop] or [uFoc], in higher heads probe for information-structural features and trigger movement to the respective position via SpecFinP. While *ne/en* being base generated in FinP is an analysis difficult to prove wrong, I want to argue that it is a discourse marker in the head of FamP, Fam^0. One might wonder how the concept of contrast can be associated with a topic position, as contrast is often understood as closely related to focus (Jackendoff 1972; Vilkuna and Vallduví 1998) or contrastive topics which are located higher in the clausal spine (189). But contrast has

also been analyzed as having a dual character, meaning that it shares features with topics and focus (Neeleman et al. 2009; Molnár and Winkler 2010). According to Molnár and Winkler (2010:1393):

> contrast is a complex information-structural notion, which simultaneously serves two functions: it is a highlighting device and thereby closely related to focus, and it is also an important coherence-creating device, sharing this property with the counterpart of focus, namely the topic.

The authors argue that contrast operates orthogonally to topicality and focus, "overlapping and cutting across these two established notions" (Molnár and Winkler 2010:1393) (cf. also Neeleman et. al 2009). While focus is understood in set-theoretical terms quantifying over a range of alternatives, contrast is perceived as pragmatic, working with a limited number of contextually given alternatives. Molnár and Winkler (2010) argue that taking contrast as pragmatically anchored makes it possible to account for focus and topic movement to the left periphery of the clause.[18] Their description of how topic and contrast are related is important for the syntactic position of *ne/en*:

> [C]ontrast plays an important role in information linking and contributes to the integration of the utterance into a larger discourse context. Hence, it is an important coherence-creating device since the set it is operating on is contextually available

(Molnár and Winkler 2010:1396)

[18]The authors provide examples from Italian showing that movement of narrowly focussed constituents to the left periphery is only possible when the relevant set is contextually limited and the relevant alternatives are explicitly mentioned, as in:

(1) Italian, cited from Molnár and Winkler (2010:1395)

GIANNI ha mangiato una mela (non Piero).
Gianni has eaten an apple (not Piero)

Gianni (not Pierco) has eaten an apple.

Here, the left-peripheral position is argued to only be available due to the 'closed-set character' of the context. If the alternatives would not be contextually given and explicitly mentioned, movement would not be licensed (cf. Molnár and Winkler (2010:1395) for a more detailed description).

Based on this account, I want to argue that exceptive discourse markers are available both in topic and focus position. The particle *ne/en* is located in the topic position FamP, where its exceptive > contrastive semantics[19] interact with discourse given alternatives. In contrast, the particle *denne* appearing in the middle field of MHG and some MLG exceptive clauses, which I will discuss in section 5.4, will be argued to be located in a focus position at the left edge of the middle field. The discourse marker *ne/en* operates on discourse given alternatives. In simplified terms, in 'Q unless P', *ne/en* links P to Q, while *denne* highlights the one alternative out of a set of alternatives, which can render the main clause proposition false, i.e. P (cf. section 5.1.1.

Summing up, I analyze post-cyclical *ne/en* as being reanalyzed as a discourse marker base generated in Fam^0 marking exception and later contrast. I take OHG/OS/OLG V2 and V1 structures as bridging contexts. Taking both structures to derive by movement of the verb to Fin^0 (Walkden 2014; Breitbarth 2015b), this is a typical case of upwards reanalysis from a lower projection to a higher adjacent position (Roberts and Roussou 2003), namely from Fin^0 to Fam^0.

The XP=*ne/en* configuration can be best explained as specifier and head of FamP, the lowest TopP hosting familar, discourse linking topics. The function of the projection is to link the adverbial clause to the preceding clause. Only parsing FamP, the structure is underspecified. I want to argue in line with Breitbarth (2015a) that in exceptives, it is the subjunctive morphology on the verb which is responsible for the conditional reading. In contrast to this, indicative mood on the verb triggers an adversative/corrective interpretation.

In section 5.2, I already described the structure as becoming more fixed, not only with respect to verb position and verbal mood, but also with respect to their position. While exceptive and adversative clauses introduced by a conjunction can precede the main clause, the exceptive/contrastive nature of the asyndetic V2 clauses seems more accessible if the clause follows the main

[19]Recall that I argued for a cline of semantic change similar to English *but* in section 5.1.5. Contrast can be understood as one 'atomic building block' of exceptive semantics, together with other semantic features such as 'domain subtraction' and 'exhaustion'. Due to semantic bleaching understood as the "redistribution of the semantic load" (Eckardt 2002:57), contrast is preserved, while other features become less prominent or get lost. In corrective adversative clauses, the relation is less complex, with 'contrast' being the main semantic feature determining the link between the two clauses. Even though sentential negation in the main clause interacts with contrast.

clause it expresses a restriction/correction to.

5.4.1 The structure of exceptive and adversative clauses

We saw in the previous section that the interpretation of adverbial clauses appearing with post-cyclical *ne/en* is best understood as relying on three different factors:

- a discourse linking projection FamP which hosts the initial XP in its specifier
- the possibility of two discourse markers depending on the semantics of the adverbial clause: *ne/en* appears in exceptive and adversative clauses and functions as a marker of domain subtraction/contrast; *denne* only appears in exceptive clauses as it highlights the one alternative which would render the main clause proposition false (cf. section 5.4.3.3 for a detailed explanation of this claim)
- depending on verbal mood, the clause receives a conditional (exceptive) or factive (corrective) reading
- the position of the adverbial clause almost exclusively following the main clause seems to facilitate the exceptive/corrective interpretation

Therefore, we can determine structural cues triggering a certain interpretation of the adverbial clauses (clause order, verbal mood, discourse markers). But there are clauses with fewer structural cues than the canonical asyndetic V2 structure. In these cases, the interpretation has to rely on pragmatic inferences. In the literature, we find cases of exceptive clauses appearing without *denne* or *ne/en*. While MS A,B and C of the MHG Lay of the Nibelungs show *ne* and MS D shows *denne* and *ne*, in the later MS d the exceptive clause does not show any of the two particles:[20]

(195) MHD, Lay of the Nibelungs, MS A,B and C (6th aventiure, line 332)

(*den*	[*līb*]	*wil*	*ich*	*verliesen*)	*si*	*ne*	*werde*	*mīn wīb*
the	life	want	I	lose	she	NE	become.SBJV	my wife

[20]Paul et al. (2007:402) mentions MS b with initial *denne* (cf. section 5.1.2), which I leave out at this point because in this case *denne* functions as a conjunction.

'I want to die unless she becomes my wife'

(196) MHD, Lay of the Nibelungs, MS D

(den [līb] wil ich verliesen) si en werde denne mīn wīb
the life want I lose she NE become.SBJV DENNE my wife

'I want to die unless she becomes my wife'

(197) MHD, Lay of the Nibelungs, MS d

(den [līb] wil ich verliesen) si werde mīn wīb
the life want I lose she become.SBJV my wife

'I want to die unless she becomes my wife'

Sufficient context as well as structural features, i.e. the subjunctive morphology and V2 word order, can be argued to result in an exceptive interpretation even without the discourse markers *ne/en* or *denne*. This is also true for corrective adversative readings. As long as a positive proposition follows a negated one, we can have this reading even in present-day English. In a structure such as *He is not hard-working, he is smart*, the corrective reading is triggered without a contrastive *but*.

Let us now turn to the syntactic derivation of the clauses. The tree in (199) provides the syntactic structure for monoclausal exceptive clauses in MHG, MLG and MD, exemplified with the MHG example (195), repeated here as (198).

(198) MHD, Lay of the Nibelungs, MS. A,B und C

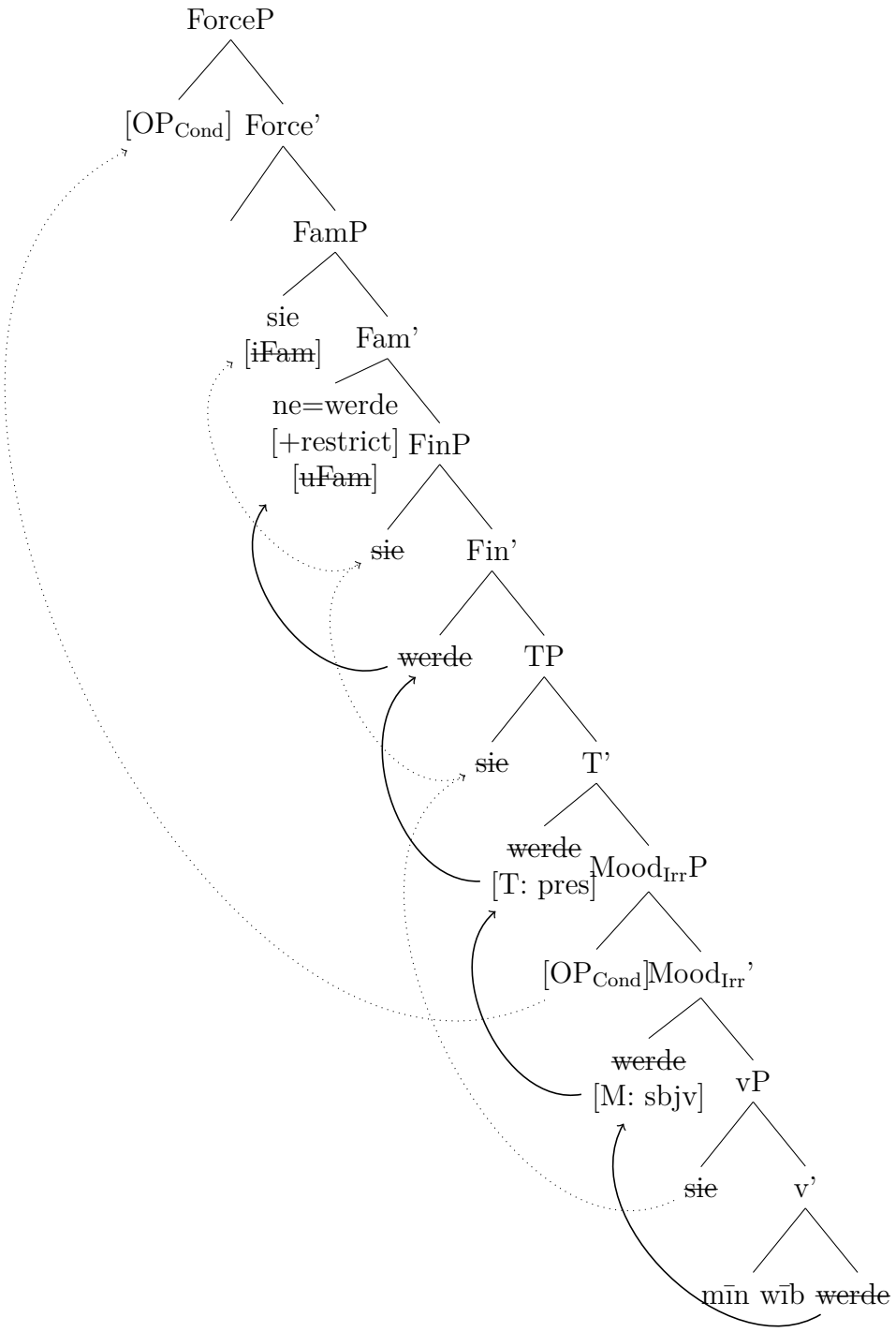
(den [līb] wil ich verliesen) si ne werde mīn wīb
the life want I lose she NE become.SBJV my wife

'I want to die unless she becomes my wife'

I adopt Haegeman's analysis of conditional clauses which argues that the conditional semantics of the clause result from a conditional operator that is moved from $\text{SpecMood}_{\text{Irr}}$ (Haegeman 2010).[21] This is important for the analysis of complement clauses with post-cyclical *ne/en*, which also appear with the verb in subjunctive mood but do not receive a conditional interpretation. I argue that the verb moves through $\text{SpecMood}_{\text{Irr}}$ to pick up subjunctive morphology and it then moves via Fin^0 to Fam^0 to provide a host for the clitic on the verb. The discourse marker *ne/en* has a restrictive interpretation ([+restrict]). In order to establish a discourse link, the subject, or very rarely an object, moves to SpecFamP. Movement to the left-periphery is motivated by information-structural uninterpretable features in the left-peripheral heads (Walkden 2014:87). The pronoun is endowed with an interpretable topic feature [iFam] which causes movement to check the uninterpretable topic feature [uFam] in FamP. The tree in (199) leaves out functional projections which are empty.

[21] The idea that conditionals are derived by operator movement goes back to Bhatt and Pancheva (2006).

(199)


ForceP
[OP$_{Cond}$] Force'
FamP
sie
[~~iFam~~]
Fam'
ne=werde
[+restrict]
[~~uFam~~]
FinP
~~sie~~
Fin'
~~werde~~
TP
~~sie~~
T'
~~werde~~
[T: pres]
Mood$_{Irr}$P
[OP$_{Cond}$]
Mood$_{Irr}$'
~~werde~~
[M: sbjv]
vP
~~sie~~
v'
mīn wīb ~~werde~~

The dummy-matrix clause in the biclausal structure is argued to be derived in a similar way. I analyze the expletive to be a correlate which is base-generated in the middle field. In contrast to a placeholder which is argued to be base generated in SpecFinP (Haegeman 1996; Walkden 2014), the correlate behaves like other pronouns. It is attracted by the [uFam] feature in the head of FamP, causing the expletive to move to SpecFamP.

The tree in (201) provides the structure for corrective adversative clauses such as (200).

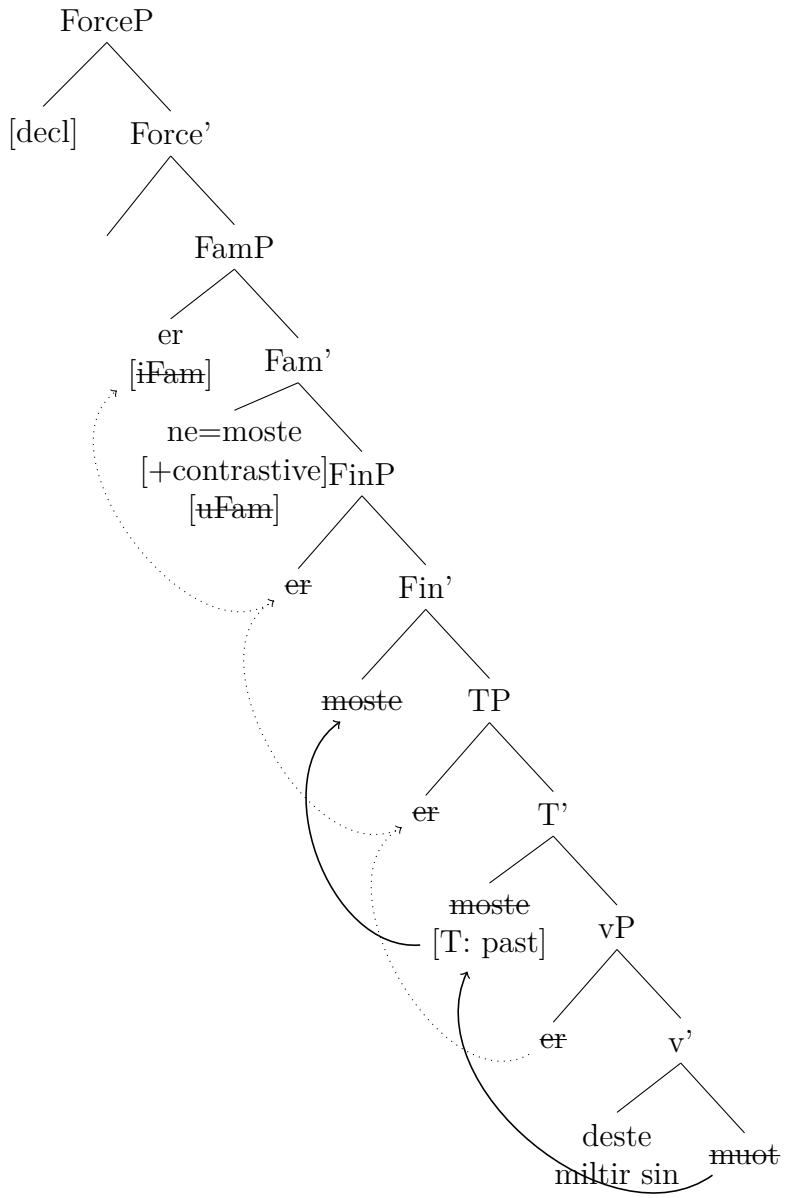
(200) Frauenfelder Flore, early 13th century (M307 III 3 V_Flor–7234–35)

do ne moht ir niet uirlazin er ne moste deste miltir
then NE may he NEG let=happen he NE must the=more kind
sin
be

'Then he could not let it happen, but rather he had to be even more kind.'

The declarative feature [decl] in ForceP triggers a reading as a statement. FamP filled with the pronoun in its specifier and *ne/en* with the finite verb in its head marks the contrastive discourse relation to the previous clause. The tree does not present the main clause preceding the adversative clause. In addition to the structure in the adverbial clause, negation in the main clause is crucial to trigger an adversative reading. I will address the external syntax, i.e. the attachment side of the adverbial clause in section 5.4.

(201)


ForceP
[decl]
Force'
FamP
er
[~~iFam~~]
Fam'
ne=moste
[+contrastive]
[~~uFam~~]
FinP
~~er~~
Fin'
~~moste~~
TP
~~er~~
T'
~~moste~~
[T: past]
vP
~~er~~
v'
deste
miltir sin
~~muot~~

5.4.2 Bridging contexts for the reanalysis of *ne/en*

In section 5.2, I argued that both V1 and V2 conditional clauses are bridging contexts for the reanalysis of *ne/en* as a discourse marker in the left periphery. In the previous section, I analyzed *ne/en* to be located in Fam^0. The reanalysis from a negation marker originating lower in the clausal spine to the head of FamP – located in the left periphery – can be described as a case of upwards reanalysis (Roberts and Roussou 2003). In the present section, I want to address how this reanalysis proceeded and discuss problems with my account. The main challenge to the proposal that *ne/en* was reanalyzed as the head of FamP in V1 structures is that it cannot explain how the surface structure changed from V1 to V2.

In the course of reanalysis, a lower head which was first moved from a lower position becomes reanalyzed as being base generated in a higher position. This is typically associated with phonological reduction and semantic bleaching (Roberts and Roussou 2003:207). Recall that OHG/OS *ni* as well as *ne/en* are clitics on the verb. In OHG V2 negative clauses, the verb and hence *ni* moves to Fin^0 (Grewendorf 2002; Walkden 2014). Adopting a fine-grained left periphery as in (202) (Rizzi and Bocci 2017), FinP is the only projection below the lowest TopP, FamP, which can host the finite verb and the clitic.

(202) Split-CP 2017
[Force [Top* [Int [Top* [Foc [Top* [Mod [Top* [Qemb [Fin [IP …]]]]]]]]]]]]]

In V2 clauses with a conditional interpretation as presented in section 5.2, the particle can, therefore, be argued to be first reanalyzed from the head of NegP to the head of FinP. Here, the surface structure stays the same. The particle stays in second position but is now analyzed to be externally merged in the left periphery.

From V1 conditionals to V2 exceptive clauses in contrast, there is a change in surface structure. In V1 conditionals, the verb is argued to move as high as Force^0 (Munaro 2011; Breitbarth 2015b; Samo 2018), which can be argued to be too high to trigger a reanalysis of *ne/en* as the head of FamP. Within our current understanding of reanalysis (one surface structure, two possible underlying structures), it is difficult to explain how and why the particle was reanalyzed as the head of FamP with a pronoun obligatorily preceding it (V2) in V1 conditional clauses. Breitbarth (2015b) argues based on Kempchinsky

(2009) that English *should* in V1 conditionals first moves to Fin^0. According to Kempchinsky (2009), ForceP hosts an operator quantifying over the world variable. MoodP introduces an interpretable world feature which is checked by an uninterpretable world feature in Fin and Force (Breitbarth 2015b:307). This is why the verb first moves to Fin^0. As no complementizer is merged in ForceP, the verb moves further up to ForceP. Adopting this account, this means that the particle would need to be reanalyzed from the higher ForceP to the lower FamP. One option to avoid this is to argue that this movement does not take place but that the world feature on the verb is checked in Fin^0. Another option is to assume that not all left peripheral projections are projected in OHG and OS, but that ForceP, FamP and FinP are syncretized into a multifunctional CP (Giorgi and Pianesi 1997). For V1 clauses, I propose that the particle was first analyzed as residing in a syncretized CP head before being analyzed as the head of FamP when the individual projections became instantiated towards MHG, MLG and MD. With the verb in the older stages of those languages moving to the left-periphery, the particle which formerly realized a lower NegP head was not analyzed as moving to the syncretized C-head anymore, but became analyzed as the head of this projection. Due to adjacency of FamP and FinP – or rather both Fin and Fam features being present in the syncretic CP – the marker was reanalyzed as an exceptive/contrastive discourse marker in Fam^0.

This does not explain why exceptive clauses do never show V1 word order in MHG, MLG and MD, i.e. why the surface structure before the reanalysis differs from the surface structure after reanalysis. The particle *ne/en* in V2 adverbial clauses is always preceded by a pronoun. One solution would be to argue that only V2 clauses with a conditional interpretation were bridging contexts. Adopting this view, the bridging contexts become very rare which makes a reanalysis of the particle less likely.

It was observed in the literature that V1 contexts are the first to lose the preverbal particle in MLG (Breitbarth 2014b) as well as MD (Van der Horst and Van der Wal 1979; Burridge 1993; Hoeksema 2014). Further studies have to investigate whether there is an underlying structural change that leads to *ne/en* being infelicitous in initial position, leading to the exceptive and adversative clauses exhibiting V2 word order.

5.4.3 Exceptive clauses with *denne*

In section 4.1.1, we saw that – probably under Upper German influence – *denne* co-occurs with the preverbal particle in exceptive clauses, but it also appears on its own from the earliest records on. Before presenting the syntactic trees for adverbial clauses with *denne* in section 5.4.3.3, first I want to discuss the structure of exceptive clauses with *denne* in general and address the position of *denne* in the middle field specifically. In the second part of this section, I will explain why I analyze both particles *ne/en* and *denne* as discourse markers (Fraser 1999) and address the similarities and differences between the two markers.

5.4.3.1 The structure of exceptive clauses with *denne*

In the previous section, I argued that *ne/en* appearing in the head of FamP marks exception or contrast. The particle *denne* (also appearing as *danne*) follows the finite verb (203) or the Wackernagel position (204), i.e. in a high position in the middle field.

(203) Konrad von Megenberg, Buch der Natur, late 15th century

daz tier mag niht lang beleiben, ez hab denne den
the animal can NEG long stay it have.PRES.SBJV DENNE the
zagel oder den sterz in dem wazzer
tail or the tail in the water

'The animal cannot stay long unless it has its tail in the water.'

(204) Mittelfränkische Urkunde, late 13th century

si in is vns des nit schuldich wider ze kerene si ne
she NE is us that NEG guilty back to come she NE
will et dan gerne duon
want.PRES.SBJV it DENNE willingly do

'She does not owe us to come back unless she willingly does it.'

The particle *denne* takes over the function of *ne/en* towards ENHG (Breitbarth 2014b). In present-day German, the dummy-matrix clause has become grammaticalized as a 'connector' (Pasch et al. 2003) *es sei denn* ('it be

DENN'). I will argue that *denne* is a discourse marker deriving from a modal particle that – just like *ne/en* – can be used to mark the exceptive relation.

As FamP has been described as crucial for providing a discourse link and the structure of exceptive clauses with *denne* does not differ from the ones with *ne/en*, I will argue that the left periphery of clauses with *denne* have the same structure as the tree in (199). The only difference is the particle *denne*, which appears preceding the focused constituents of the clause in the middle field, i.e. it introduces the distinctive constituent within the VP which functions as a restrictor to the proposition in the main clause. In (203) it is *den zagel oder den sterz in dem wazzer* ('its tail in the water'), in (204) it is *gerne duon* ('do it willingly').

As has been noted above, it is reasonable to assume that the verb in the V2 structures in MHG, MLG and MD moves into the left periphery as it always appears in second position. In examples such as (204), the Wackernagel position is filled with a pronoun, which is further evidence to assume V-to-C movement (Weiß 2018). Therefore, I want to argue that in contrast to OHG subordinate clauses (Petrova and Hinterhölzl 2010), in exceptive structures, the verb moves beyond the Focus Position to FamP in the left periphery, while the head of FocP in the middle field can be filled by the discourse marker *denne*.

If we determine a focus position in Middle Field to host a marker of exception, should the exceptive marker *ne/en* in the left periphery not also reside in FocP instead of FamP as proposed in section 5.4? The structure of the left periphery (Rizzi 1997) would allow for contrastive markers to appear in Focus positions as well. But I argued in section 5.4 that while *ne/en* with its contrastive semantics has the function to link to the previous discourse, *denne* introduces focus on the one alternative which renders the main clause proposition false. Furthermore, if we want to keep the distinction between different topic positions depending on their function as proposed by Frascarelli and Hinterhölzl (2007), the initial XP can only reside in the lowest TopP, which is FamP.

5.4.3.2 The status of *denne* and *ne/en* as discourse markers

According to Schiffrin (1987), discourse markers *display* relations between units of discourse.[22] In contrast to this, Fraser states that discourse markers

[22]See chapter 1 in Schiffrin (1987) for a detailed discussion of the term 'unit of discourse'.

"*impose* [my emphasis] a relationship between some aspect of the discourse segment[23] they are a part of" (Fraser 1999:938). While the verb 'display' suggests that there is a relation between two discourse segments which is expressed by the marker, the verb 'impose' highlights the idea that the marker forces a certain interpretation which is contextually available. In the asyndetic V2 clause, verbal mood and the presence of discourse markers trigger a certain interpretation. *denne* (and/or *ne/en*) enforce an exceptive reading in contexts where the asyndetic V2 clause receives a conditional interpretation (subjunctive mood). When the two clauses which are linked express two propositions and the first proposition is negative, *ne/en* imposes an adversative reading (indicative mood).

This interaction between discourse marker and interpretation of discourse segments is what Fraser (1999) lists as one of the constituting characteristics of discourse markers. He describes the function of discourse markers as a two-place relation which he represents in their canonical form as "<S 1.DM+S2>", with S1 and S2 being the two discourse segments (Fraser 1999:938). Fraser notes that (i) the segments related by discourse markers do not need to be adjacent, (ii) the discourse marker does not strictly need to introduce S2 but can appear in medial or final position as well (which is the case for both *denne* and *ne/en*, (iii) the grammatical status of the discourse segments can be subordinate or main clauses and (iv) that "the interpretations of the discourse segments S2 and S1, not simply their semantic readings, must be compatible with the particular DM [discourser marker] used in order that a sequence be considered coherent" (Fraser 1999:941). Criterion (iv) can be understood in the context of what I discussed above: each discourse marker has a core meaning that together with the context will render a specific meaning. For *denne*, this meaning is clearly exceptive, imposing an exceptive discourse relation reading. This seems clear because we only find *denne* in exceptive clauses.[24] For preverbal *ne/en*, I showed in section 5.1.5 that we can understand the meaning on a cline from exceptive to adversative/constrastive. Here, the interaction between the interpretation of the discourse segments and the meaning of the discourse marker becomes

[23]Fraser (1999:938) notes that by discourse segment he refers to 'proposition', 'sentence', 'utterance' and 'message'.

[24]MHG also has a modal particle *denne* as in (207) in section 5.4 as well as comparative *denne/danne* (Jäger 2018). As Fraser notes, discourse markers seem to have various sources, e.g. adverbials (Fraser 1999:943). I will discuss possible sources for exceptive *denne* in the next section 5.4.3.3.

clear. Depending on the interpretation of S1 and/or S2, the link results in a conditional relation reading (exceptive meaning) or an adversative relation reading (corrective/contrastive meaning).

5.4.3.3 Temporal or comparative - the origin of *denne*

In the literature, it has been assumed that *denne* is of temporal origin ('then') (Schulze 1885; Holmberg 1967; Paul et al. 2007). Holmberg (1967:67) assumes that the particle has the meaning 'at this point of time'. Paul et al. (2007:410) state that *denne* is used in order to reinforce the future or conditional meaning in the exceptive structure. In section 5.1.2, we saw that the comparative particle *danne* could be used clause initially as a conjunction introducing exceptives, as in (205). This raises the question whether the theory of *denne* having a temporal origin has to be rejected, i.e. whether *denne* in exceptive clauses is in fact a comparative particle.

(205) MHG, Kasseler Evangelium, cited from Holmberg (1967:79)

der diep komet nit dan daz er stele
the thief comes NEG than that he steal

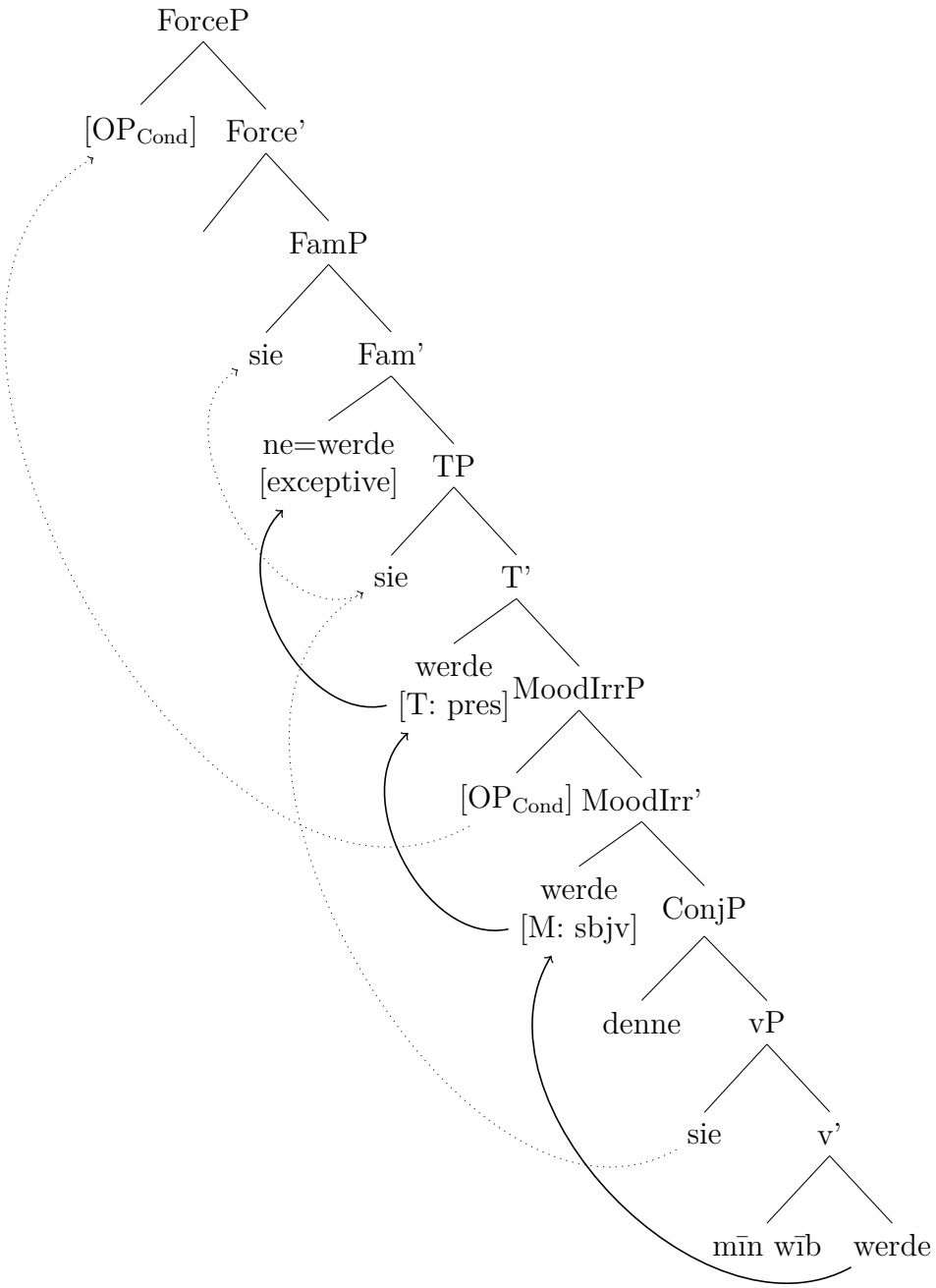
'The thief does not come unless he steals.'

The comparative semantics 'a situation other than' of exceptives suggest that *denne* in the middle field actually derives from a comparative particle (Witzenhausen 2019). One central problem with this account is that the syntactic distribution of the comparative particle, which is still used in MHG, (Jäger 2018) differs from exceptive *denne*. I want to elaborate on this in the following paragraph.

In MHG comparative structures, the standard of comparison is introduced by a comparative particle. In general, no movement out of the standard of comparison XP is assumed. This can be observed in (205), where the standard of comparison is a CP (*daz er stele* 'that he steals'). The comparative particle *danne* introduces the full CP, as the complementizer *daz* ('that') resides in C^0. If we wanted to argue that *denne* in exceptive clauses is a comparative particle, it would only take vP as its complement, as *denne* always follows C^0. This would not result in a V2 word order, as it is generally assumed that V2 involves V to C movement. Another option is to

assume movement out of the standard of comparison vP. This is shown in tree (206). Comparative constructions are assumed to involve a Conjunction Phrase ConjP (Jäger 2018). Within this phrase, the standard of comparison – in this case a CP – is argued to be the head of ConjP. As the tree in (206) shows, we would have to assume movement out of the standard of comparison in order to derive the structure observed in V2 exceptive clauses with *denne* ([XP [(ne=)V [denne...]]]). Such movement is not attested in any other comparative construction (Jäger 2018). Note that I left out FinP for reasons of readability in (206), but I assume that the verb as well as the subject move through Fin^0 and SpecFinP to higher projections (FamP) in the left periphery of the clause.

(206)


ForceP
[OP$_{\text{Cond}}$]
Force'
FamP
sie
Fam'
ne=werde
[exceptive]
TP
sie
T'
werde
[T: pres]
MoodIrrP
[OP$_{\text{Cond}}$]
MoodIrr'
werde
[M: sbjv]
ConjP
denne
vP
sie
v'
mīn wīb
werde

As this movement seems unlikely, one has to disregard the tree in (206) and a comparative origin of *denne*.

With the position of *denne* right in front of the focused constituent – only preceded by the verb or the verb and a pronoun in Wackernagel position – it has the same syntactic position as the MHG modal particle *denne* (207). Recall that *denne* cannot be defined as a modal/discourse particle in the sense of Thurmair (1989); Coniglio (2011) as modal particles do not link two segments of discourse (Fraser 1999).

Similar to present-day German, the MHG modal particle *denne* can appear in questions, as in (207).

(207) MHG, Sermons of Meister Eckhart (around 1300)

Meinen wir denne got lûterlîchen und aleine in der wârheit sô
Believe we DENNE God exclusive and alone in the truth so
muoz er unsriu werk würken
must he our works act

'If we believe that God is exclusive and alone in truth, he must in reality act thorugh our works'

As Coniglio (2011) shows, German modal particles do not fit into the fixed position proposed in Cinque (1999) but occupy positions between 'higher' adverbs, which are adjacent to the high focus position in the middle field proposed in Petrova and Hinterhölzl (2010). Therefore, one possible origin of the exceptive discourse marker *denne* was reanalyzed from the modal particle *denne*.

We cannot determine the precise meaning contribution in clauses like (207), but we can take present-day German as an indication. In present-day German, *denne* is argued to generally highlight the existence of alternatives (Häussler 2015). In the question in (208), it marks that the speaker thinks the addressee might not come to the conference.

(208) Present-day German, cited from Häussler (2015:86)

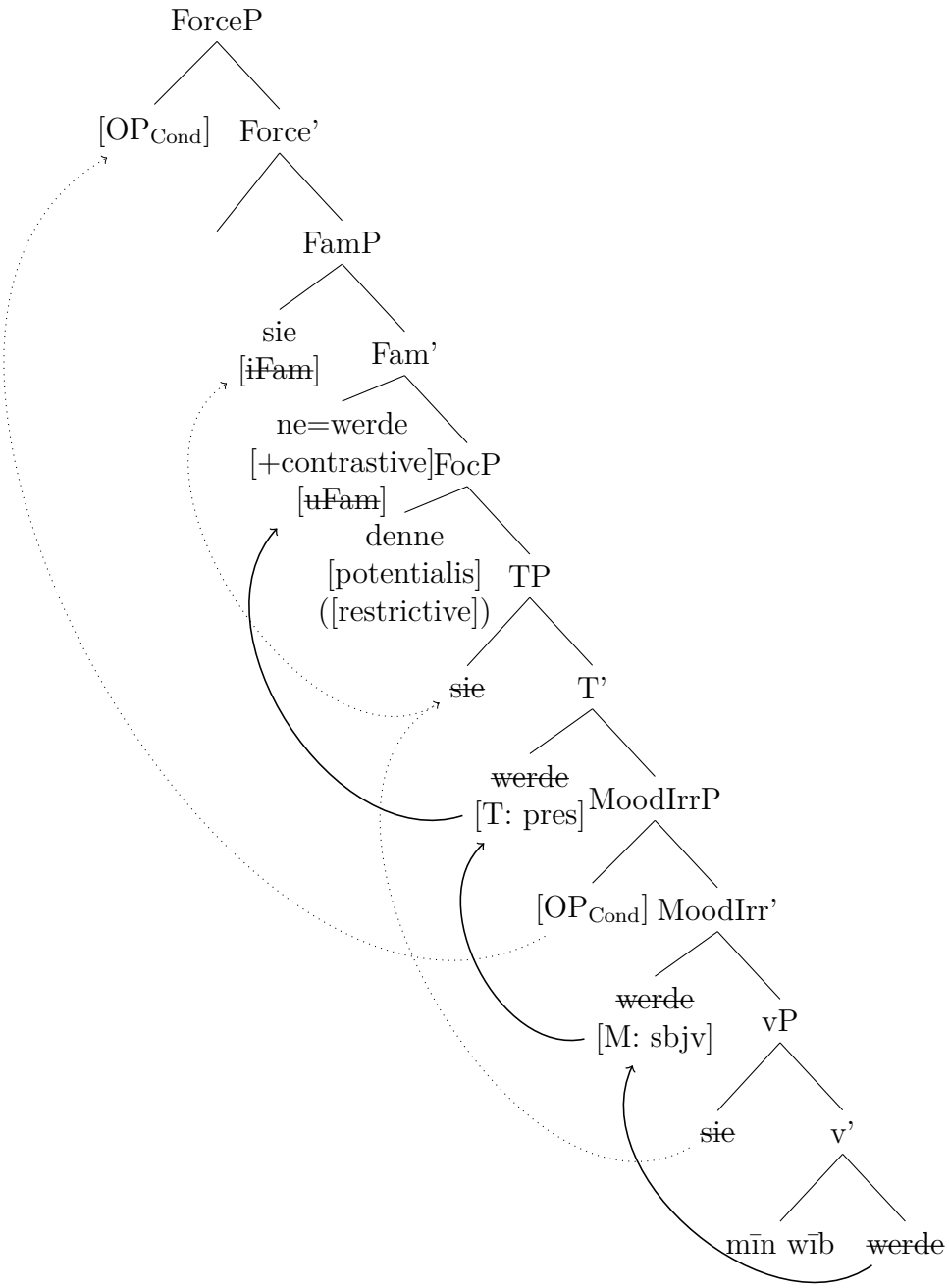
Kommst du denn zur Konferenz?
Come you DENNE to-the conference

Will you attend the conference? (Assuming the addressee might not)

Therefore, it seems reasonable to assume that also in (207) the particle *denne* marks that within the common ground there is an alternative to the fact that we believe it is exclusively God who claims the truth or that there are alternatives to God who also claim the truth. Furthermore, these alternatives can also be argued to result from a conditional flavor of the particle, i.e. that it marks potentialis (Declerck and Reed 2000; Strandberg 2006). Strandberg (2006) points out that a central feature of present-day German exceptive constructions with *es sei denn* is that they express a potential exception.

Another possibility is that *denne* directly derived from a temporal adverbial as proposed in Paul et al. (2007:410). The potentialis reading could result from a reference to a future point in time (Paul et al. 2007:410). I cannot provide sufficient evidence for the temporal adverbial nor the modal particle origin of the exceptive discourse marker *denne* based on the data investigated in this thesis. There might even be a common origin for both temporal adverbial and modal particle *denne*. The only clear conclusion can be that *denne* in exceptive clauses it not likely to derive from a comparative 'Q in any situation other than P', as this origin cannot account for the syntactic position of the particle or the structure of the clause it appears in. I want to argue that from its adverbial/modal particle position in the high middle field, *denne* was reanalyzed as an exceptive discourse marker base-generated in the middle field FocP (Petrova and Hinterhölzl 2010; Coniglio 2011). The tree in (209) shows that in the left periphery, FamP (with or without *ne/en*) establishes a discourse link. I left out FinP again for readability but assume that the verb as well as the constituent moving to SpecFamP move through FinP. The particle *denne* in FocP in the middle field highlights the vP encoding what can make the main clause proposition false.

(209)


ForceP
[OP$_{\text{Cond}}$]
Force'
FamP
sie
[~~iFam~~]
Fam'
ne=werde
[+contrastive]
[~~uFam~~]
FocP
denne
[potentialis]
([restrictive])
TP
~~sie~~
T'
~~werde~~
[T: pres]
MoodIrrP
[OP$_{\text{Cond}}$]
MoodIrr'
~~werde~~
[M: sbjv]
vP
~~sie~~
v'
mīn wīb
~~werde~~

Recall that this structure without *ne/en* can still be found in German until the early 20th century (56), repeated here as (210). The syntactic structure does not appear to be different except for the lack of the particle *ne/en* cliticized to the finite verb. There is a familiar topic (*er* 'he') in initial position followed by the verb in subjunctive mood and the particle *denne*.

(210) Present-day German, August Kopisch: Ein Carnevalsfest auf Ischia (1910)

(Bei großer Strafe darf hier niemand aus und eingehn), er
with great penalty may here nobody our or in-go he
hebe denn diese zierliche Perrücke weg
lift.PBJV.PRES DENNE this graceful wig away

'Nobody is allowed to enter or leave this room under threat of penalty unless he lifts this graceful wig.'

5.4.4 The external syntax of asyndetic V2 adverbial clauses

Walkden (2014:66) states that there is clearly an "asymmetry in verb position between main and subordinate clauses in all the early West Germanic languages but that the verb is not consistently final in subordinate clauses as it is in modern German" (cf. also Axel 2007). Semantically, the clauses with post-cyclical *ne/en* are clearly dependent. In this section, I want to discuss their syntactic integration.

So far, the attachment site of adverbial V2 clauses with post-cyclical *ne/en* has not been specified. There are two possible sites to adjoin/merge the adverbial clause: Central adverbial clauses (CACs) merge on a VP level while peripheral adverbial clauses (PACs), which allow for root phenomena, merge in the left periphery of the clause (Haegeman 2002, 2006; Frey 2012). Already in the earliest descriptions of the construction, it has been noted that the exceptive adverbial clause with post-cyclical *ne/en* is somehow 'separate' from the main clause (Wunderlich 1894:138).[25] We saw that there

[25]It has also been noted for French that exceptives seem to be less subordinate than ordinary conditionals (Lerch 1929).

are clear restrictions to the position of adversative and exceptive adverbial clauses. They occur after the main clause they modify/restrict. It has been noted that there is no clear dichotomy between subordination and coordination in the historical stages of German (Topinke 2012). For MD as well as for MHG it has been stated that dependent clauses are not integrated (Burridge 1993:51). The general assumption based on the investigation of adverbial clauses preceding the main clause is that subordination develops from coordination via correlative structures (Thim-Mabrey 1987; Axel 2002; Breitbarth 2017b). Main clauses with an initial adverbial protasis show resumptive pronouns (211) or adverbials in MHG, MLG and ENHG.

(211) MLG, Oldenburg MS Sachsenspiegel (14th century), cited from Breitbarth (2017b)

Wirt dan en man uan sinen wiue mit rechte scheden se behalt
will then a man from his wife with right divorce she keep
doch ere liftucht de he er geuen heuet [...]
still her annuity tha he her given has

'If a man is legally divorced from his wife, she shall still keep her annuity that he has given to her.'

It is much more difficult to find evidence for the syntactic status of sentence-final adverbial clauses.

There are a few attestations which show the exceptive clause preceding the clause they restrict, such as (212). Here, we do not find resumptive pronouns nor does the exceptive clause appear in the prefield of the main clause (Reis 1997; Frey 2012).[26] This suggests that the exceptive clause is not integrated into the main clause.

(212) Herbort von Fritzlar: 'Liet von Troye' (H), early 14th century (M541H2–16458–61)

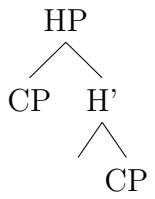
Ez en tu dēne min svnde Ich enwiste noch
it NE do.PRES.SBJV DENNE my sin I NE=knew nor
enkvnde Vō warheite wizzē Waz mir si gewizzē
NE=could from truth know what me be.PRES.SBJV known

[26]This example was not part of my sample.

'Unless my sin did it/if it were not for my sins, I would not know about truthfulness the way I do.'

If we want to maintain the idea that adverbial clauses were generally not integrated, we can either assume adjunction to CP, or a silent discourse head H as proposed in (Cinque 2008), which links the two clauses in a coordinate structure as in (213). Witzenhausen (2019) argues for an analysis which proposes an exceptive operator within this discourse linking head. According to her, the restrictive operator agrees with *ne/en*, but she does not provide a more fine grained structure. The advantage of the account presented here is that the discourse head can remain empty, as proposed by Cinque.

(213)



From this non-integrated status, the adverbial clauses can be reanalyzed as 'more integrated', i.e. reanalyzed as PACs, adjoined to CP, and later CACs. This can be argued to have happened in the 16th century in Dutch (Van der Horst 2008), when the dummy-matrix clause was reanalyzed as a complementizer.

The problem with this approach is that it simply assumes pragmatics to account for the restriction of the matrix event. If the adverbial clauses are in fact PACs, how do we account for the fact they restrict the event in the main clause? CACs are argued to "modify the event" of the matrix clause, while PACs "contribute to discourse structuring" (Haegeman 2004:62).[27] For West Flemish, Haegeman and Greco (2018) propose that unintegrated constituents are located in SpecFrameP (FrameP being a discourse projection which is not part of the narrow syntax of the clause, just like the discourse head proposed by Cinque 2008). They argue that an unintegrated adverbial clause

[27]Another event related adverbial clause which is argued to be unintegrated are German V1 conditionals, as they "do not meet the diagnostic criteria for syntactic embedding but in fact exhibit 'unintegrated' or even paratactic properties" (Axel and Wöllstein 2009:2)

in SpecFrameP can provide a value for a temporal or modal variable in the TP domain of the associated matrix clause if it has a local relation with this value (Haegeman and Greco 2018:38) The local relation is established if the verb of the associated matrix clauses moves to C^0 or $Force^0$. As main clauses in MHG show V-to-C movement (Axel-Tober 2018), this provides an explanation for non-integrated event adverbial clauses maintaining the general dichotomy between PACs and CACs. In section 6, I come back to the external syntax of V2 adverbial clauses with post-cyclical *ne/en* and discuss arguments for syntactic integration analogous to V2 complement clauses.

5.5 Excursus: The syntactic status of *es sei denn*

While Dutch *tenzij* is a subordinator which triggers V-end word order, present-day German *es sei denn* as well as *außer* are referred to as *syntaktische Einzelgänger* 'syntactic lone wolves' (Pasch et al. 2003). They do not show verb-final word order. In the following section, I will show that German exceptives introduced by *es sei denn* can be categorized as integrated central adverbial clauses (CACs) (Haegeman 2002 ff.). Because *es sei denn* does not license verb end clauses (214a) if it does not combine with *dass* (214b), it is called a connector (Pasch et al. 2003), as opposed to subordinators that license V-end clauses, e.g. Dutch *tenzij*.

(214) a. *Ich komme nicht, es sei denn, du bittest mich darum.*
I come NEG, it be.SBJV DENN, you ask me for

b. *Ich komme nicht, es sei denn, dass du mich darum bittest*
I come NEG, it be.SBJV DENN, that you me for ask

'I won't come unless you ask me to.'

Pasch et al. (2003) refer to the main clause as the external connect, the subordinate clause introduced by *es sei denn* is called internal connect. They note that the internal connect has certain syntactic restrictions. Similar to *außer*-clauses, V1 word order (215a), V-end word order (215b), questions (215c) and imperatives (215d) are not possible in the internal connect.

(215) a. * *Ich komme nicht, es sei denn, bittest du mich darum.*
I come NEG it be.SUBJ DENN, ask you me for

b. * *Ich komme nicht, es sei denn, du mich darum bittest.*
I come NEG it be.SUBJ DENN, you me for ask

c. * *Ich komme, es sei denn, wer will das schon?*
I come it be.SUBJ DENN, who want that anyways?

d. * *Ich komme nicht, es sei denn, bitte mich darum.*
I come NEG it be.SUBJ DENN, ask me for

As has been shown above, the subordinator *dass* makes verb final constructions possible. Pasch et al. (2003) argue that – just like in the MHG, MLG and MD examples, the external connect always precedes the internal connect. Sometimes, insertion into the external connect is possible (216).

(216) MK1 Bollnow, Maß, S. 101, taken from Pasch et al. (2003:596)

Andere zu analysieren - es sei denn, um geistig verwirrten
others to categorize - it be.SBJV DENN to mentally confused
Menschen wieder zurecht zu helfen - ist ein unvornehmes
people again right to help - is a dishonorable
Benehmen.
behaviour

'To analyze others - unless it is in order to help mentally ill people - is a dishonorable behaviour.'

It has been pointed out that in order to be fully integrated into a clause, a dependent clause must be able to occupy the prefield of its main clause (König and van der Auwera 1988). Against the description in Pasch et al. (2003), the clause in (217)[28] is grammatical and acceptable, which suggests that the clause is integrated.[29]

(217) *Es sei denn er bittet explizit darum, werde ich ihn nicht*
it be.SBJV DENN he asks explicitly for it will I him NEG
einladen.
invite

[28]I thank an anonymous reviewer for coming up with this example.

[29]Note that (Axel and Wöllstein 2009) show that even though German V1 conditionals can appear in the prefield, they do not meet other criteria for clausal integration, which indicates that the prefield test is not sufficient to determine syntactic integration.

'Unless he explicitly asks, I will not invite him.'

Therefore, present-day German exceptive clauses show the same tendencies with respect to their position, but allow, just as some MHG, MLG and MD cases, for other orders.

In what follows, I argue that even though exceptive clauses have the status of a syntactic lone wolf, they behave as a whole like integrated central conditional clauses in present-day German. The behavior of *es sei denn* with respect to focus particles and coordination are argued to be due to their semantic components.

Focus particles like *nur* 'only' are not feasible with exceptives (218). This can be explained due to the exhaustive semantics which arise due to conditional perfection (cf. section 5.1.1).

(218) *Ich komme nicht ,*(nur) es sei denn, du bittest*
I come NEG, *(only) it be.SBJV.PRES.3SG DENN, you ask
*mich *(nur) darum.*
me *(only) for
'I will not come unless you ask me to.'

That *es sei denn*-clauses are integrated into the main clause can be shown by a pronoun which is bound by a quantifier in the main clause (219).

(219) *Jede$_i$ Mutter ist besorgt, es sei denn, ihr$_i$ Kind ist*
Every mother is worried, es be.SBJV.PRES.3SG DENN, her child is
zu Hause.
at home
'Every mother is worried unless her child is at home.'

In von Wietersheim (2016), the author shows that certain conditions in binding tests are 'better' for testing clausal integration. The quantifier linearly preceding the variable makes peripheral adverbial clauses more acceptable. In (220), the variable precedes the quantifier and the clause is still acceptable, which indicates that *es sei denn*-clauses behave like CACs.

(220) *Es sei denn er$_i$ bittet explizit darum, eingeladen zu werden,*
it be.SBJV DENN he asks explicitly for it invited to be,
wird jeder Freund$_i$ von der Gästeliste gestrichen.
will every friend from the guest list taken
'Unless he explicitly asks to be invited, every friend will be taken from the guestlist.'

Another argument for analyzing present-day German exceptives as CACs is that they do not appear with modal particles. Example (221) shows that the modal particle *ja* (literally 'yes') is not possible in the matrix nor in the complement clause of the biclausal exceptive structure. The particle marks the speaker's opinion that the information is known to the hearer (Thurmair 1989:104) .

(221) *Die Vorbereitungen werden rechtzeitig fertig, es*
The preparations be.FUT on time ready, es
*sei *(ja) denn, wir kommen *(ja) zu spät .*
be.SBJV.PRES.3SG JA DENN, we come JA to late
'The preparations will be finished on time unless we get there too late.'

As CACs do not have an independent illocutionary force, modal particles are incompatible with them. Some relate this behaviour to the fact that CACs are taken to be presupposed (Hooper and Thompson 1973).

Another test for the CAC-status of a clause is whether they allow for argument fronting. Due to the structure being biclausal, argument fronting should be ruled out in the dummy-matrix clause but is already ruled out due to its phraseological character. In the V2 complement clause, topicalization is not completely ruled out. This indicates that the V2 complement clause in present-day German biclausal exceptive clauses behaves like a semi-integrated clause, just like other cases of V2 complement clauses (Reis 1997).

(222) *? Ich möchte sterben, es sei denn, meine Frau*
I want die, es be.SBJV.PRES.3SG DENN, my wife
wird sie
becomes she
'I want to die unless she becomes my wife.

Summing up, *es sei denn* clauses as a whole can be shown to behave like central adverbial clauses in the sense of Haegeman (2002 ff.). The phraseological character of the dummy-matrix clause explains some peculiarities of the structure.

5.6 Interim summary

In this chapter, I showed that exceptive and adverbial discourse relations in the history of German and Dutch have often been expressed by similar lexical items or lexical items that share a common origin. I argued that *ne/en* entered a cline of semantic change from exceptive to adversative/contrastive semantics similar to English *but* or Spanish *fuera* ('outside'). Once used as an exceptive marker in asyncetic V2 structures, the particle was prone to be used in wider non-negative contexts marking contrast. Besides the present-day Flemish examples Breitbarth et al. (forthcoming) in which *ne/en* takes over a contrastive function, I analyzed the occurences of post-cyclical *ne/en* in MHG main clauses as similar to present-day Flemish, as *ne/en* is used to mark that an utterance is unexpected in a given context.

In section 5.2, I argued that V2 clauses with a conditional interpretation are bridging contexts in which *ne/en* was reanalyzed as an exceptive marker. I discussed that V1 conditional clauses are more frequent and hence a more likely bridging context but that the structural change from V1 to V2 clauses poses (theoretical) problems. I proposed that the reanalysis took place in contexts in which the negation in a negative conditional clause could be interpreted as metalinguistic negation (Horn 1985). In these conditional structures, *ni* could be interpreted as negating the apodosis of that statement. I argued that *ne/en* is reanalyzed as the head of FamP, which hosts a familiar topic in its specifier position. I propose that exceptive structures with and without *denne* share the same syntactic structure, but that *ne/en* with its contrastive semantics has the function to link to the previous discourse, and *denne* introduces focus on the one alternative which renders the main clause proposition false. I discussed that a comparative origin of *denne* cannot account for its syntactic distribution and argued that the particle either derived from a temporal adverbial or modal particle. The difference between adversative and exceptive clauses lies in the former appearing in indicative mood and hence being interpreted as statements, and the latter receiving a conditional reading. The conditional interpretation is argued to result from

the subjunctive morphology on the verb and the presence of a conditional operator in ForceP. In the last section, I discussed present-day German *es sei denn*-clauses and showed that they are central adverbial clauses (CACs).

Chapter 6

Post-cyclical *ne/en* in complement clauses

We saw that complement clauses with post-cyclical *ne/en* are generally less frequent than adverbial clauses. In the following sections, I will provide an overview of the approaches to paratactic negation in complement clauses before I discuss whether they can account for the data found in MHG.

6.1 Accounts for paratactic negation

Jespersen (1917) originally defined the term 'paratactic negation' (PN) referring to complement clauses:

> "A negative is placed in a clause dependent on verb of negative import like 'deny, forbid, hinder, doubt.' The clause is treated as an independent sentence, and the negative is expressed as if there had been no main sentence of a particular type."
>
> (Jespersen 1917:75)

The term has been used to describe phenomena in other clause types, such as exceptive and temporal adverbial clauses, in which a negative marker does not truth-conditionally negate a sentence. In section 1.3, I discussed the problem that when used for adverbial clauses, the term paratactic negation does not cover all types of exceptive clauses as they do not only modify

negative main clauses. For this reason, I introduced the term post-cyclical *ne/en* for all uses of *ne/en* not introducing truth-conditional negation.

The central question is whether post-cyclical *ne/en* in complement clauses functions as a discourse marker as it does in adverbial clauses or whether we have to treat these cases as a different phenomenon, e.g. as negative doubling across clause boundaries as suggested by (Van der Wouden 1997). Analyzing *ne/en* in asyndetic V2 clauses with a complement clause reading as negative doubling, i.e. Negative Concord (Giannakidou 2000), one assumes an expletive account. This term was introduced by Yoon (2011:62ff) who differentiates between expletive and non-expletive accounts for paratactic negation, depending on whether the approach treats paratactic negation markers as truly 'expletive' (without any meaning contribution) or ascribes some kind of semantic contribution to the negative marker. I will first address expletive accounts before discussing non-expletive accounts.

6.1.1 Expletive accounts of paratactic negation

Van der Wouden (1997) subdivides paratactic negation into two subtypes: (i) elements with 'negative import' triggering the occurrence of one or more negative morphemes in their complement clause, as in (223), and (ii) elements with 'negative import' selecting a special type of complementizer that may or may not be homophonous to a negation operator, as in (224).

(223) Chaucer, cited from Van der Wouden (1997:196)

Nature [...] *forbedeth that no man make hymself riche*
Nature [...] prohibits that no man makes himself rich

'Nature prohibits that any man make himself rich.'

(224) Latin, cited from Van der Wouden (1997:196)

Timeo ne veniat
Afraid.1SG.PRES that.NEG come.3SG.SBJV

'I am afraid that he may come.'

Van der Wouden (1997:201) rejects accounts for paratactic negation that see it as a type of contamination, as an emotional expression, as caused by an abstract operator or as subcategorization, but analyses the phenomenon as dependent on downward monotonicity (Van der Wouden 1997:200). He demonstrates the downward monotonic character of 'forbid', 'deny' and 'avoid' and defines paratactic negation as "non-local negative doubling, i.e. a negative polarity item licensed by an operator in a higher clause." (Van der Wouden 1997:204).

Espinal (1992, 1997, 2000) discusses empirical problems arising from defining licensing contexts as downward monotonic. There are cases of paratactic negation (e.g. with *until*), that are monotone increasing. In order to avoid this, Espinal (1992, 1997, 2000) assumes nonveridicality/antiveridicality to be the environment licensing paratactic negation. Yoon (2011:67) emphasizes that the main characteristic of nonveridicailty is an "unfixed truth value" and argues that Espinal's approach taking 'falsity' as the context licensing paratactic negation runs into problems explaining complement clause data from Korean and Japanese.

6.1.2 Non-expletive accounts of paratactic negation

In contrast to this, non-expletive approaches claim that paratactic negation does in fact change the truth-condition of a sentence (Krifka 2010) or that paratactic negation marks presuppositions or implicatures (cf. Yoon 2011:70ff for a more detailed discussion of various accounts.)

Yoon (2011) takes her own approach to be in an intermediate position between expletive and non-expletive accounts. On the one hand, she recognizes the context of nonveridicailty as an "unfixed truth value" which also motivates her term 'evaluative negation'. On the other hand, she notes that the systematic distribution across typologically distant languages as well as the existence of paratactic negation per se speaks against analyzing it as vacuous or even an imperfection of language (Yoon 2011:69f). This results in her analysis of 'evaluative negation' (her term for paratactic negation) as a special subcase of subjunctive mood (Yoon 2011:95).

> EN [evaluative negation] encodes nonveridicality on [a] semantic level – because it neither confirms nor denies the truth of proposition, we can understand why EN is unusable in averidical contexts.
>
> (Yoon 2011:126)

. According to her, the evaluative component of evaluative negation can either express the probability or desirability of a proposition. She further notes:

> The difference between NOT(p) and EN(p) would be that the former is true just in case p is false, while the latter is true just in case p is not definitely true. I further argue that this semantics of EN provides a way of directly capturing the intuition about suspension of commitment to truth that characterizes both subjunctive and EN, triggering the evaluative sense.
>
> (Yoon 2011:128)

Salminen (2018) takes a different position with her recent non-expletive approach arguing that paratactic negation in the strict sense appears when a certain interpretation of the complement clause is intended, while she takes what is described as evaluative negation to be a distinct phenomenon. Her proposal only tries to account for complement clauses to certain predicates. Salminen (2018) notes that the unified analysis proposed by Yoon (2011) is intriguing, but that "separate phenomena call for separate analyses" (Salminen 2018:266).

Salminen (2018) analyses complements to the Finnish verb *epäillä* ('to doubt', 'to suspect', 'to suppose'). It has to be emphasized that her approach is functional, i.e. does not assume different underlying features. We will come back to the question whether it is possible to adopt her account within the formal syntactic approach taken on in this thesis. In contrast to Yoon (2011), she assumes two different phenomena: paratactic negation (PN) and evaluative negation (EN). The semantic content of paratactic negation is seen as equivalent to "ordinary" negation (Salminen 2018:266). Based on Jespersen (1917:75) who notes that sentences containing paratactic negation are treated as an independent sentences, she argues that 'parataxis' from which the term 'paratactic' negation derives needs to be viewed more generally as

a lack of subordination. Salminen (2018:267) differentiates two functional roles of complement clauses, namely 'target' and 'content' which are taken to apply cross-linguistically. In her terms, functional roles describe the relation between matrix predicate process and the process which is expressed in the complement clause.[1]

According to Salminen (2018), some verbs allow for both types of complements, such as *epäillä* ('to doubt', 'to suspect', 'to suppose'), which she explains using the matrix and complement clause in (225). While the target of 'doubt' (what is perceived) is expressed by an affirmative clause 'this will succeed.', the content of the inherently negative process receives the negative form 'it will not succeed.'

(225) Finnish, cited from Salminen (2018:268)

Epäilen että tämä ei omnistu
doubt.1SG that this NEG succeed.CNG

'I doubt that this will succeed.'
TARGET: 'This will succeed'.
CONTENT: 'This will not succeed.'

Salminen (2018:260) argues that "the verbalization of an inherently negative process naturally contains negation", which can be shown by paraphrasing the situation beginning with a nominalization of the process 'The doubt is: this will not succeed'. She does not provide a paraphrase, but states that clauses without paratactic negation primarily express a dubious reaction "I doubt the statement: This will succeed". Uses of paratactic negation would therefore express the content of the process denoted by the matrix verb, while cases without paratactic negation can be understood as a target. She notes: "Since a reaction and its expression may be inseparably intertwined, it is completely understandable that one verb may, in different contexts, highlight either one of these aspects." (Salminen 2018:269). There are certain

[1]Verbs of perception usually take a complement which expresses the target of what is perceive, i.e. in *I heard that you have a new job* the target is independent of the perceiver. In contrast to this, verbs of verbal communication, the complement process cannot be separated from the matrix process because it verbalizes the content of this utterance. "In other words, the crucial difference between the target and content configurations is that the process of saying "creates" the proposition of the complement [content], while the process of hearing reacts (more or less actively) to it [target]." (Salminen 2018:267).

problems with Salminen's account. She argues that the inherent negation of the matrix verb and the overt negation in the complement appear "semantically coordinate", i.e. the negation of the matrix clause does not scope over the complement clause (Salminen 2018:269). Later, she notes though that semantically the paratactic negation complement is neither in a coordinate nor a subordinate relation, but that both complement and matrix verb describe the same process, but in more detail (Salminen 2018:70). It is unclear what concept of coordination and subordination underlies her argumentation which makes it difficult to translate her ideas. Nonetheless, assuming different complement interpretations independent of speaker evaluation for clauses with or without paratactic negation can be argued account for some of the clauses found in my MHG sample, which is why I do not reject Salminen's account just yet. Based on the institution in Salminen (2018) but deviating from her content/target distinction, I want to suggest that semantically negative verbs and their complement clauses can generally have two readings. These are (i) understanding the verb as 'positive' taking a negative complement clause and (ii) as semantically negative taking a 'positive' complement clause. In the next section, after discussing the data found in the MHG data set as well as other cases of paratactic negation, I want to discuss these different reading using examples with the verb *zwīveln* ('to doubt') (228).

In the following section, I want to discuss the data found in the MHG ReM sample and discuss how to account for the data.

6.2 Explaining the MHG data with post-cyclical *ne/en* in complement clauses

Table 4.14 repeated here as table 6.1 provides an overview of the matrix predicates taking a V2 complement with *ne/en* in my sample from the ReM corpus (n=12).

Table 6.1: Matrix predicates taking V2 complements with non-negative *ne/en*

matrix predicate	translation	#	Source
vermīten	avoid	1	Graf Rudolf
zwīvel(e)n	doubt	1	St. Pauler Predigten,
nit vermīten	NEG avoid	1	Ulrich von Türheim: Rennewart (B)
niht zwīvelen	NEG doubt	1	Pfaffe Konrad: 'Rolandslied'
niht lazzen	NEG let	2	Straßburger Alexander, Pfaffe Konrad: Rolandslied
niht dor lān	NEG let through	1	Gottfried von Straßburg: Tristan
niht lougenen	NEG deny	1	Nibelungenlied
niht irgān	NEG happen	1	Frauenfelder Flore
niht bewaren	NEG prove	1	Herbort von Fritzlar: Liet von Troye
niht getruwen	NEG believe	1	König Rother
niht utgân	NEG miss out	1	Mittelfränkische Reimbibel

There are both negated (n=10) or semantically negative (n=2) matrix verbs taking a complement with paratactic *ne/en*. Of the negated matrix predicates, four are semantically negative verbs. The complement clauses show subjunctive morphology. This is also the case for most complement clauses after non-negative matrix predicates (Axel-Tober 2012:166ff).

In the data, *ne/en* only appears with V2 word order. A problem to account for is that paratactic negation does not only appear with *ne/en* but that there are complements to *zwîveln* with V-late or V-final word order and paratactic *niht* (Petrova 2017), as in (226). This surely sets the phenomenon apart from post-cyclical *ne/en* in adverbial clauses, as those only appear with *ne/en*.

(226) Nikolaus von Straßburg: Predigten (C), late 14th century (V 3 P_NikP–84vb,09–10)

Er zwiflete ovch daz vinser here (Jesus) (Christus) nit
he doubted too that our Lord Jesus NEG born

geborn wre von einer megde
was.SBJV from a maiden

'He doubted that Jesus was born of a maiden.'

There were no cases of paratactic negation in complement clauses in my samples from the MD corpora, but (Van Helten 1885) provides examples with *niet* from Vondel (17th century).

(227) Vondel, cited from Van Helten (1885:157)

Gordijn, die hindert dat de sterffelijcke meschen niet zien
Curtains, they prevent that the mortal humans not see
hetgeen ik zie
what I see

'Curtains prevent that mortal humans see what I see.'

For MHG, Petrova (2017) argues that verbs with negative import meaning 'deny', 'forbid' or 'doubt' in affirmative matrix clauses license *daz*-clauses ('that' clauses) with V-end order, while overtly negated matrix predicates trigger V2 clauses with preverbal *ne/en*. This seems to be only a tendency, as V2 word order is also found after affirmative clauses (228). Looking for more examples in the ReM corpus, I found instances of other negative markers which can only be interpreted non-negatively, as *nie* ('never'), after the verb *vermīten* ('to avoid') in (229).

(228) St. Pauler Predigten, early 13th century (M409 III 1 P_PrPa–171,07–10)

wer solt nv zwiveln si ne sin alle heilich di mit dem
Who shall now doubt they NE are.SBJV all sacred who with the
plvte des almehtigen gotes werdent besprenget
blood the almighty god.GEN are splashed

'Who shall doubt that they are all holy who were splashed with the blood of the almighty god.'

(229) Albert von Augsburg, Das Leben des Heiligen Ulrich, early 13th century (M503–0860–61)

Ez weaere dir bezzer virmiden . Daz duo ez nie geruort
It were you better avoided that you it never touched
hetes mit den liden
had.SBJV with the limbs

'You had better avoid ever touching it with your limbs.'

Another observation is that not all semantically negative predicates show paratactic negation (neither *ne/en* nor *niht*). Searching for *zwīvelen* ('to doubt') with complement clauses in the ReM corpus, more that two thirds of the clauses appear without a marker of paratactic negation in the complement clause. Therefore, paratactic negation is optional and not very frequent. This observation from a brief corpus query has to be confirmed using a bigger data set searching various corpora exhaustively for semantically negative predicates taking complement clauses.

Based on Salminen's (2018) idea that complement clauses with paratactic negation receive a different reading, one could argue that semantically negative verbs can receive a positive and a negative interpretation, depending on which they take a different complement. I want to argue that these can be thought of as C[uNeg] or a C head without negative features. I want to exemplify this using the verb *zwīveln* ('to doubt'). I argue that 'to doubt that X' can be either understood as (i) 'not believe that X', i.e. a negative interpretation taking a positive complement clause or as (ii) 'believe that not X', i.e. as a 'positive' verb taking a negative [uNeg] complement. Depending on the interpretation of the matrix predicate, paratactic negation markers would be triggered in the complement clause. But there are also two problems with this account. Like it was discussed for paratactic negation as Negative Concord, paratactic *niht* would need to be endowed with a [uNeg] features, which would suggest different lexical items *niht* – the one expressing sentential negation carrying an [iNeg] feature and the paratactic negation marker carrying a [uNeg] feature. Secondly, these two different readings are hard to account for with verbs such as *vermīten* ('to avoid'), as one can hardly think of a reading of 'to avoid' as 'let happen that not X'. These cases also pose a difficulty for Salminen's account, as verbs such as 'to avoid' cannot be interpreted as verbs communication/perception. In this case, it is not reasonable

to assume that the internally negative process of 'avoiding' semantically constructs a joint process with the matrix complement, as Salminen predicts for cases with paratactic negation.

The observations and discussion can be summarized as follows:

- paratactic negation can appear with either *ne/en* or *niht* in MHG and MD – we find other n-indefinites in the MHG data
- there is a strong tendency for negated semantically negative verbs to be followed by V2 complements with *ne/en*
- semantically negative verbs in affirmative clauses can introduce either V-final clauses introduced by *daz* ('that') or V2 clauses with *ne/en*
- paratactic negation in V2 complements with *ne/en* can also be introduced by a negated non-negative verb (i.e. 'NEG believe' or 'NEG happen')
- the appearance of *ne/en* is restricted to V2 clauses, which resemble V2 adverbial clauses with post-cyclical *ne/en*
- different readings cannot be assumed for all matrix predicates taking complement clauses with paratactic negation
- the (semantically) negative matrix predicates constitute non-veridical contexts, in which paratactic negation is licensed cross-linguistically (Yoon 2011)
- similar to the adverbial clauses with post-cyclical *ne/en*, the V2 complement clauses have a non-salient XP, i.e. a pronoun, as their first constituent

Hence, further empirical studies are needed to (i) determine the exact distribution of paratactic negation markers in complement clauses and (ii) propose a theory of paratactic negation markers in complement clauses based on this data. The non-expletive accounts either overgeneralize (Yoon 2011) or are not able to capture all phenomena (Salminen 2018), while arguing for an expletive account taking paratactic negation to be Negative Concord across clause boundaries results in theoretical problems. Note that analyzing *ne/en* in complement clauses as a type of Negative Concord would mean that these

instances do not constitute cases of post-cyclical *ne/en*, as the particle is analyzed as appearing in the context of truth-conditional negation, even though this semantic (with semantically negative verbs) or syntactic (negated matrix predicates) negation appears in a 'higher' clause.

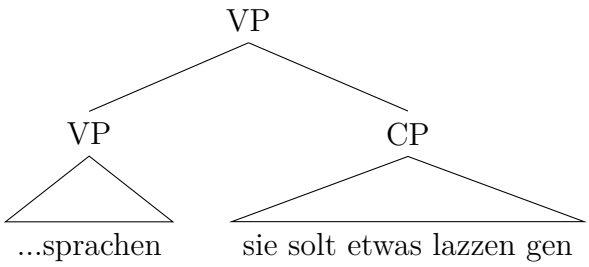
One idea which cannot be left unmentioned is that the negated and semantically negative matrix predicates trigger a contrastive interpretation of their complement proposition. If one takes the single *ne/en* to have developed into a marker of contrast as argued in section 5.1.5, the marker appearing in complement clauses can be understood as a contrastive discourse marker. Just like in adverbial clauses, it would be used to link the content of the clause it appears in to the previous discourse and contribute to the interpretation that there is a negative or restrictive relationship between the main clause and the complement clause. As in V2 adverbial clauses with post-cyclical *ne/en*, structural (FamP) and pragmatic factors can be argued to trigger the complement reading, even when *ne/en* is not present. The relation between complement and matrix predicate is that the complement is part of the argument structure of the (semantically) negative matrix predicate. Therefore, on a very abstract level, there are again two clauses '$\neg Q$' and 'P', which are linked. This idea would in turn leave open the question as to why *niht* appears in complement clauses as well.

6.3 The syntax of complement clauses with post-cyclical *ne/en*

According to Axel-Tober (2012), asyndetic V2 complement clauses in MHG are adjoined to VP, as in (230). This analysis is based on the account by Reis (1997) for the corresponding present-day German structure.[2] The theta role is argued to be assigned non-structurally, i.e. via adjunction to a low VP position. Due to the local relationship between the asyndetic V2 clause and VP, the theta role can be assigned.

[2]I refer to the discussion in Axel-Tober (2012:153) arguing that a lack of counter evidence from the historical corpus data suggests that the structure is similar to the corresponding present-day German construction.

(230)



The resemblance of the complement clauses to V2 adverbial clauses with *ne/en* which express a restriction (adversative/exceptive) but do not contain sentential negation is striking. There is no subordinator but always a non-salient pronoun in first position. Therefore, just like in adverbial clauses, one can assume a discourse linking Familiar Topic projection. The head of FamP can host the restrictive discourse marker *ne/en* but frequently does not do so.

The tree in (232) gives the internal structure for the complement clause in (231).

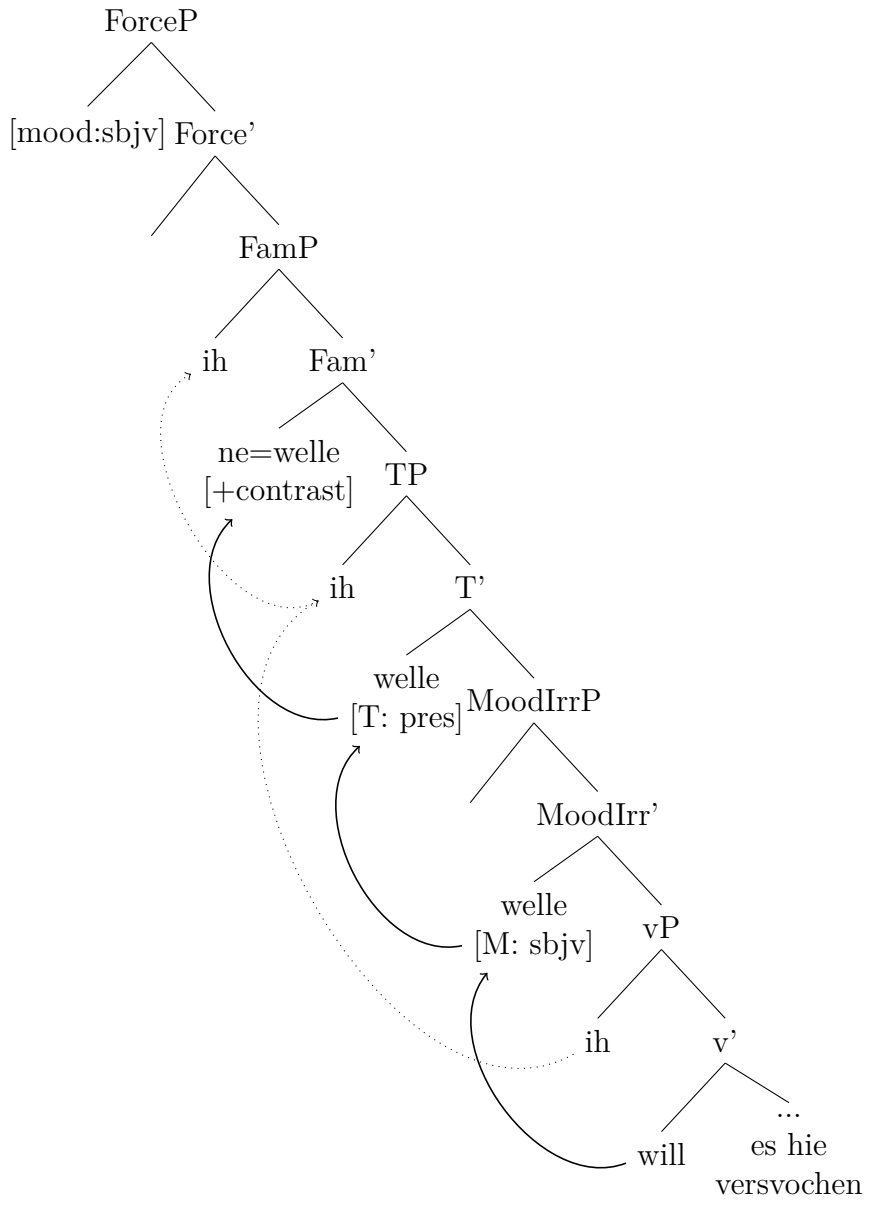
(231) Nibelungenlied, around 1200

Ia ne lovgent iv des niem. sprach Hagene der degen i
Yes NE denies you that.GEN nobody said Hagen the rapier I
ne welle ez hie versvochen
NE want.SBJV it here try

'Hagen the champion spoke: Nobody will deny that I want to try it.'

The structure corresponds to the structure of monoclausal exceptive clauses. Recall that I assumed a conditional operator [OP_{Cond}] in SpecForceP. Even though the complement clauses superficially show exactly the same structure, the conditional operator moving from $SpecMood_{Irr}$ to SpecForceP in exceptive clauses results in the conditional semantics of the clause (Haegeman 2010). While a (negative) matrix predicate with an unassigned theta-role triggers an argument interpretation of the structure, the clause is interpreted as the restriction of an event variable in the matrix clause, i.e. as an exceptive adverbial clause, when the theta-roles of the matrix predicate have been assigned.

(232)



Therefore, we can think of the asyndetic V2 clause with a pronoun in a discourse linking FamP as an under-specified subordinate clause type. According to Reis (1997) and Axel-Tober (2012), the V2 complement clauses

are adjuncts to VP. If one assumes that relative clauses are not adjuncts but complements, the fact that we do not have relative clause readings for clauses with post-cyclical *ne/en* could be argued to be due to the adjunct status of these clauses. In section 5.4, I argued for an unintegrated status of adverbial V2 structures with post-cyclical *ne/en*. In the following sections, I discuss the idea that all V2 clauses with a dependent reading (adverbial and complement clauses) are adjoined to VP.

6.4 A unified account for V2 clauses with post-cyclical *ne/en*

In the previous section, I proposed that the V2 structure should be understood as an under-specified subordinate clause type, namely an adjunct, which can either be interpreted as an adverbial clause or an argument, i.e. complement clause. In the current section, I discuss arguments in favor of the syntactic integration of the asyndetic V2 structure.

Just as for the analysis as non-integrated clauses, there is only sparse direct evidence for syntactic integration. According to Reis (1997), *dass*-clauses ('that'-clauses) in present-day German are integrated clauses ('Gliedsätze'), which should always precede 'less integrated' clauses. Assuming that MHG *daz*-clauses are integrated as well (Axel-Tober 2012), the clause in (233) suggests that the exceptive clause is in fact integrated.[3]

(233) Mainauer Naturlehre, around 1300

Ein meister, heizit Martianus, der wil, ez en sie
a master called Martianus he wants it NE be.PRES.SUBJ
danne exlipsis lune, daz der mane elliu zit volschinic
DENNE eclipse lunar that the moon all time full

'A master called Maritianus wants the moon to be full all the time unless there is a lunar eclipse.'

English conditional clauses following the main clause have also been argued to be constituents of VP (Bhatt and Pancheva 2006). Furthermore, in section 5.5, I showed that even though having some syntactic anomalies, *es sei*

[3]Note that the exceptive clause can also be interpreted as parenthetic.

denn-exceptive clauses in present-day German can be argued to be central adverbial clauses.

Therefore, whether we want to follow the unified account of post-cyclical V2 clauses as VP adjunct depends on which arguments we take to be more valid. One can – as done in section 5.4 – ascribe their interpretation as adverbial clauses or arguments to pragmatical factors together with structural cues such as FamP. VP adjunction could provide an explanation for why the interpretation is restricted, i.e. why relative clauses do not appear with post-cyclical *ne/en*.[4]

The interpretation as either adverbial or argument clauses can be explained due to the local relationship of the clause to V^0 (Ernst 2002:111). The clause can either be assigned a theta-role by the verb in a non-structural manner (Reis 1997), i.e. receive an argument reading, or provide a restrictor/modifier to an event variable introduced by the verb, i.e. receive an adverbial reading.

Present-day German shows non-canonical V2 clauses only in argument function, but the specific behavior of *es sei denn*-clauses not having a full-fledged subordinator triggering V-end word order can be argued to derive from the V2 adverbial structure.

[4]There are relative clauses with V2 order but without single *ne/en* in MHG, but these are introduced by a relative pronoun/demonstrative pronoun (Axel-Tober 2012). The type of clause linking therefore differs from the clauses analysed here.

Chapter 7

Conclusion and discussion

This thesis investigated the post-cyclical development of *ne/en* in MHG, MLG and MD, that is the non-negative contexts in which *ne/en* appeared on its own. I argued that the term 'paratactic negation' cannot cover all instances of non-negative *ne/en*, because per definition paratactic negation depends on some negative element in a matrix clause. This is why I refer to all non-negative instances as 'post-cyclical' *ne/en*. It was shown that post-cyclical *ne/en* assumes different functions depending on the clause type it appears in. In this section, I want to go back to the research questions initially introduced in section 1.2, and discuss which questions I was able to answer and which ones need further investigation.

1. Which post-cyclical, i.e. non-negative, uses of *ne/en* can be determined in MHG, MLG and MD?

2. What are the syntactic and semantic properties of the post-cyclical constructions with *ne/en*?

3. What is the diachronic development of the different post-cyclical constructions?

4. Does the decline of preverbal *ne/en* in the expression of sentential negation relate to the post-cyclical uses of the particle?

5. Is it possible to propose a unified formal analysis of post-cyclical *ne/en*?

Regarding (1), I showed that single *ne/en* continues to appear in exceptive and adversative adverbial clauses as well as complement clauses to

negated or semantically negative main clause predicates. Answering question (2), I showed that post-cyclical *ne/en* only appears in V2 clauses. I argued that the occurrences in adverbial and complement clauses need to be treated separately, as complement clauses also appear with paratactic *niht/niet* and V-end word order. I analyzed the functional change from negative *ni* to post-cyclical *ne/en* in adverbial clauses as an example of exaptation. In these contexts, the particle has to be treated as a discourse marker indicating an exceptive or adversative discourse relation between the adverbial clause and the main clause it restricts/modifies. The change from negation to exception is argued to have occurred in conditional statements in which *ni* had a metalinguistic negation reading and was thereby interpreted as actually negating the apodosis, that is the main clause. This resulted in the exceptive semantics of *ne/en*. My account for the exaptation of *ne/en* as a discourse marker also poses new questions. If it is, in fact, the case that not only V2 but also V1 conditional clauses served as bridging contexts, how do we account for the structural change which restricts post-cyclical *ne/en* to V2 clauses? Furthermore, there are no other cases of clitic discourse markers in the Germanic languages under investigation and reanalysis is often associated with analogy. If there is no model for such discourse markers, are there other (language-internal) factors that trigger the reanalysis? An investigation of the development of the particle after the MD period up to its occurrence in present-day Flemish as well as dialect data from German could provide answers to these questions.

Investigating question (3), I could show that the V2 structure with post-cyclical *ne/en* becomes less frequent towards the end of the MHG, MLG and MD period. The V2 adverbial as well as the complement clause must have disappeared after the time span which is covered in this thesis. Present-day Dutch shows the subordinator *tenzij* and German the coordinator *es sei denn* which both grammaticalized from the dummy-matrix clause of the bi-clausal exceptive structure in MD and MHG. This development is linked to the question of why a clitic discourse marker developed in the first place and what made it disappear in favor of a subordinator/connector in clause-initial position. As has been shown in section 5.1.2, MHG, MLG and MD already had plenty of exceptive and adversative clause-initial elements indicating the clause-type they introduce. Again, an investigation of Dutch and German dialect data after the 15th century can provide a better understanding of the diachronic development of the post-cyclical contexts described for MHG, MLG and MD. I discussed the status of present-day German *es sei denn-*

clauses and showed that they behave like central adverbial clauses. Further research needs to investigate how and when the connector as well as its Dutch counterpart, the subordinator *tenzij*, grammaticalized and when the monoclausal structure was lost. Some steps have already been taken: For Dutch, a recent dissertation by Laperre (2018) sheds light into the grammaticalization process of the dummy-matrix clause in MD towards the exceptive conjunction *tenzij* in Hollandic and Flemish (Laperre 2018:156ff). Furthermore, the new insights into the grammatical status of *ne/en* in MD can be fruitful to the investigation of how the V2 adverbial clauses are related to the so-called *balansschikking* in Dutch (Duinhoven 2002).

To investigate question (4), namely to find out at what point the particle was completely lost in negative as well as non-negative contexts and whether the declines in both contexts are connected, further studies are needed. The data I was able to investigate for this thesis only covered the time span until the 15th century. In order to investigate at what point the languages under investigation lost post-cyclical *ne/en*, one would need data from various dialect regions up until the present. The fact that Upper German dialects are the ones to first show stage III negation, i.e. lose *ne/en* completely, and are the first to have exceptive clauses with *denne* indicates that there is a correlation between the presence of *ne/en* in post-cyclical and negative contexts. There may be a delay between the particle being lost in the expression of sentential negation and appearing as a discourse particle. Again, present-day Flemish data are a promising source for future research to shed light on the issue.

Answering question (5), I showed that the particle in V2 clauses can be analyzed as an exceptive/contrastive discourse marker in the left periphery. Given the data analyzed in this thesis, namely only V2 clauses with *ne/en*, the analysis for post-cyclical *ne/en* in complement clauses to negated or semantically negative main clause predicates remains a proposal. Further research needs to the investigate the distribution of paratactic *niht/niet* and *ne/en* in these contexts. Hence, it could not be determined whether *ne/en* in complement clauses is undoubtedly a post-cyclical context, as it remains an open question whether these occurrences can be analyzed as Negative Doubling across clause boundaries (Van der Wouden 1997), which would be a negative, that is 'cyclical', context.

Furthermore, the investigation poses questions regarding clause linking and syntactic theory of adverbial clauses. It was shown that there is a mismatch between syntactic behavior, i.e. word order, integration, presence of a

complementizer, and the event-related semantics of exceptive clauses. Further research needs to show if there is a connection between the V2 adverbial clauses and V2 relative clauses with paratactic syntax as described in Endriss and Gärtner (2005) and how syntactic theory can account for the fact that there are clauses which allow for this mismatch. From a semantic perspective, the contrastive meaning of *ne/en* as well as present-day Flemish *en* needs further investigation. Understanding the differences between exception and contrast is also interesting from a cartographic perspective. One might be able to show that further (upwards) reanalysis of the particle led to its current syntactic and semantic status in Flemish which could correlate to a different position in the left periphery.

Part IV

Summary

Chapter 8

Summary

This thesis investigated contexts in MHG, MLG and MD in which the former preverbal negative clitic *ni* > *ne/en* appears on its own and does not contribute a sentential negation interpretation. I referred to these contexts as 'post-cyclical', as the term 'paratactic negation' is defined as depending on some negative element in the main clause. The term 'expletive negation' is also not appropriate as it was shown that *ne/en* in clauses with an adverbial meaning does contribute an exceptive or contrastive meaning to the clause. It was the first study to investigate a large amount of data from different MHG, MLG and MD dialects and to show that non-negative instances of *ne/en* are restricted to V2 adverbial and complement clauses. All other instances of single *ne/en* with certain verb forms, adverbials or in other constructions are cases of residual stage I negation. The thesis provided a detailed account of the exaptation process from negation to discourse marker in V2 clauses. The constructions found in MHG, MLG and MD show peculiar properties that pose questions regarding our theory of Germanic syntax and clause linking.

In part I, I introduced the research questions underlying this thesis, explained the terminology used throughout the thesis and discussed formal approaches to Jespersen's cycle as well as its development in MHG, MLG and MD. Part II presented the corpus studies I carried out. After describing the corpora used for this study, I reported the results for MHG, MLG and MD. It has to be noted that the degree of tagging as well as the time-span and texts covered in the different corpora vary. Regarding the use of *ne/en* as stage I negation, a general observation is that charters and law texts are the less conservative genres with regard to the use of negation. In all three languages, charters and law texts almost exclusively do not show stage I

negation anymore. The only cases found occur in special constructions such as ellipsis. In contrast to this, religious and literary texts show singular stage I negation as well as a wider range of post-cyclical uses. It was shown that certain north-western dialects of MHG, and adjacent dialects areas of MLG preserve the particle *ne/en* in stage II as well as post-cyclical contexts longer. The way I searched the MD corpora did not allow me to check which dialect areas preserve the particle in all contexts longer. In the data description, I discussed exceptive clauses separately from other post-cyclical uses of *ne/en*, as exceptive clauses do not always follow a negative main clause.

In part III, I proposed that subdividing post-cyclical uses according to the clause type in which *ne/en* appears allows for a better understanding of the function *ne/en* acquired towards MHG, MLG and MD. In chapter 5, I developed a unified account for the meaning of post-cyclical *ne/en* in adverbial clauses. I discussed the occurrences in complement clauses separately in chapter 6. In adverbial clauses, *ne/en* almost exclusively functions as an exceptive or adversative discourse marker. After showing that both adverbial discourse relations are often expressed using the same lexical items or lexical items which share a common origin in the languages under investigation, I proposed in section 5.1.5 that *ne/en* entered a universal cline of semantic change from exceptive to contrastive meaning. I argued that it was reanalyzed as an exceptive marker in OHG/OS/OD when *ni* in the protasis of a conditional statement was ambiguous between metalinguistic negation (negating the implicatum of the protasis, namely the apodosis) and sentential negation. It was shown that in these conditional statements, the protasis implicates the apodosis which results in this ambiguity. The main proposal of this thesis is that once *ne/en* was reanalyzed as an exceptive discourse marker, *ne/en* was prone to become reanalyzed as an adversative/contrastive marker similar to other discourse marker such as English *but*. This can explain its use in various non-negative contexts in the languages under investigation as well as in present-day Flemish Breitbarth et al. (forthcoming). In MHG and MLG, the particle *denne* appears in exceptive clauses. I showed that the particle is most likely to have derived from a temporal adverbial or modal particle in the transition between the OHG and MHG period. Regarding the internal syntax of asyndetic V2 adverbial clauses with post-cyclical *ne/en*, I argued that a discourse linking FamP hosts the initial XP (mostly a pronoun) in its specifier, while the discourse marker *ne/en* is reanalyzed as the head of FamP. Depending on the sentence mood, the clause receives a conditional (irrealis) or declarative reading and is interpreted as an exceptive

or adversative clause, respectively. With *ne/en* becoming a discourse marker indicating contrast, the few clauses in the data (n=3) where the marker appears in main clauses can be accounted for. In these cases, *ne/en* marks that a proposition is unexpected, similar to present-day Flemish *ne* (Breitbarth and Haegeman 2015).

The picture becomes more complicated when investigating *ne/en* in complement clauses. It was argued that simply adopting a non-veridical/evaluative negation analysis (Yoon 2011) leaves certain questions open, most strikingly, why *ne/en* is only a marker of non-veridicality after negated and semantically negative verbs, most frequently after negated semantically negative verbs. Understanding the marker as evoking a certain kind of reading of the complement clause (Salminen 2018) can account for part of the data, but cannot be applied to all matrix predicates taking a complement with paratactic negation. Cases of non-negative *ne/en* in complement clauses are categorized as post-cyclical uses, but this is not a conclusive account. Further research needs to determine the exact nature of *ne/en* in complement clauses. The presence of paratactic *niht* and other negative markers indicates that the phenomenon could be analyzed as negative doubling across clause boundaries (Van der Wouden 1997), i.e. a Negative Concord phenomenon, which would exclude *ne/en* in complement clauses from the characterization as a 'post-cyclical' context.

Regarding the external syntax of the clauses, no sufficient evidence was found to determine whether the asyndetic V2 structure is integrated into the main clause, loosely adjoined to the left periphery or linked via a discourse head. The clauses can be understood as an under-specified dependent clause that receives an interpretation depending on sentence internal (mood, discourse markers) and sentence external (matrix predicate valency, negation in the main clause) structural cues. The asyndetic V2 clauses show that a strict dichotomy between syntactically subordinated and coordinated clauses cannot be sustained.

Appendix

Appendix 1: Clauses with stage I negation in the CGy not matching the categorization as stage II in Postma (2002)

Ende al onssett uan groten rowe En hadt gedaen lutgart die vrowe Die desen tuist sent nam op hare (Sente Lutgart, ms K, by Willem van Affligem 1265)

dat mensche en es Jn dese werelt die v des Terechte wel berechten sovde (Sente Lutgart, ms K, by Willem van Affligem 1265)

Ghi sijt een vele argher diet. Dan sulke heft derde versuolghen. Wat sonden sijt ghi ne wilter volghen. Diefte. laghe. mordaet. roef. (Rijmbijbel by Maerlant, Jacob van 1285)

Des nachts so ne bleef het niet. Babilone ne bleef verloren (Rijmbijbel by Maerlant, Jacob van 1285)

Dat hi den tempel winnen mochte Want hi ne wonne den tempel mede (Rijmbijbel by Maerlant, Jacob van 1285)

Want hi sere ontsach al dat Beliepene dat hine hadde vermord (Rijmbijbel by Maerlant, Jacob van 1285)

Hi ne wilde of hi was te out. (Rijmbijbel by Maerlant, Jacob van 1285)

Ende sine dod vonden min no mere. Ne daden si an sine been Mar van den ridders een (Rijmbijbel by Maerlant, Jacob van 1285)

Warens wel na te bouen hiere Ne ware die van alexandrie. Die met hare stouter partie. (Rijmbijbel by Maerlant, Jacob van 1285)

Dat die hinne die kiekine doet. Ende du ne wils in dinen moet (Rijmbijbel by Maerlant, Jacob van 1285)

dat pleghet ere manieren want hens die hem ghescaden ne conde (Der Naturen Bloeme, ms. D (Detmold) by Maerlant, Jacob van, 1287)

hie ne leuet diese alle geuisiere so groot so vreselijc na der gesten (Der Naturen Bloeme, ms. M (München) by Maerlant, Jacob van, 1276)

Doe sprac Ihesus aldus En warser tiene die ghesuuert worden (het Luikse Diatessaron, Brabant-West, 1291-1300 by onbekend 1291)

want si andre stat en hadde in der logen (Luikse Diatessaron, Brabant-West, 1291)

Alse langhe alse leuede samuel Doe ne quamen int land van Israhel (Rijmbijbel, Jacob van Maerlant, 1285)

Daer mi vwe ewelike hulde Es an belanc got here mijn En magic dan wel droeue sijn (Sente Lutgart, Willem van Affligem, 1265, ms. K)

Bede lesen moghet ende horen. Om dit word om desen steen. Die papen ende die fariseen. Wilden vaen. ende om tbedieden Mar si ne dursten van den lieden DOe seidi hem echt een bispel (Rijmbijbel by Maerlant, Jacob van 1285)

Appendix 2: List of primary sources from the Referenzkorpus Mittelhochdeutsch (ReM sample)

M538-N0 (Buch) Daniel, early 14th century

M520-N0 Österreichischer Bibelübersetzer: Klosterneuburger Evangelienwerk, early 14th century

M508-N0 Admonter Benediktinerregel, late 13th century

M503-N1 Albert von Augsburg: Leben des heiligen Ulrich, early 13th century

M068-N1 Altdeutsche Exodus, late 12th century

M303-G1 Amtleutebuch von St. Brigida, late 13th century

M011-N1 Andreas, late 12th century

M012-N0 Anegenge, early 13th century

M013O-N1 Annolied (O: Opitz), late 12th century, early 13th century

M136-G1 Arnsteiner Marienlied, late 12th century

M017-N1 Arzneibuch/ Züricher, late 12th century

M301-G1 Athis und Prophilias, early 13th century

M411-G1 Augsburger Stadtbuch, late 13th century

M345-G1 Augsburger Urkunden, early 14th century

M344-G1 Augsburger Urkunden, late 13th century

M024-N1 Ava: Leben Jesu, late 12th century

M028-N1 Balaam/ Vorauer (Bücher Mosis 5), late 12th century

M015-N1 Bamberger Arzneibuch, 12th century

M089-G1 Bamberger Glaube u. Beichte 12/1, late 12th century

M302-G1 Bartholomäus (M1), late 13th century

M401-G1 Baumgarten geistlicher Herzen (L), late 13th century

M030-N1 Benediktbeuer Gebet zum Messopfer, early 13th century

M091-N1 Benediktbeurer Glaube u. Beichte II, around 1200

M092-N1 Benediktbeurer Glaube u. Beichte III, late 12th century, early 13th century

M196-N1 Benediktbeurer Ratschläge u. Gebete, early 13th century

M402-G1 Berliner Evangelistar, early 14th century

M402y-N1 Berliner Evangelistar, early 14th century

M032-N1 Blutsegen/ Abdinghofer, late 12th century

M038-N1 Bote/ Der heimliche, early 13th century

M040-N1 Brieger Psalmenfragmente, late 12th century

M357-G1 Bruder Hermann: Das Leben der Gräfin Yolanda von Vianden (M), early 14th century

M403-G1 Buch der Könige (D1), late 13th century

M403y-N0 Buch der Könige (D1), late 13th century

M524-N0 Caecilia (Verslegende), early 14th century

M537-N0 Christherre-Chronik, early 14th century

M045-N1 Christi Geburt/ Von, early 13th century

M406-G1 Christine Ebner: Engelthaler Schwesternbuch (Von der genaden uberlast) (N2), 14th century

M406y-N0 Christine Ebner: Engelthaler Schwesternbuch (Von der genaden uberlast) (N2), 14th century

M049-N1 Contra malum malannum, late 11th century

M055-N1 Crescentia, late 12th century

M539-N0 Das Buch von guter Speise (A), 14th century

M531-N0 Das Turnier/ Ritterfahrt/ Ritterpreis, early 14th century

M405y-N1 David von Augsburg: Traktate, late 13th century

M405-G1 David von Augsburg/ Traktate, late 13th century

M110-N1 Daz himelreiche, late 12th century

M056-N1 De definitione (Bruchstück einer Logik), 11th century

M103-N1 Der arme Hartmann: Rede vom Glauben, early 13th century

M516-N0 Der Sünden Widerstreit (G), late 13th century

M243-N1 Der Wilde Mann: Dichtungen, late 13th century

M208-N1 Deutsche Rubriken zu lateinischen Gebeten, late 12th century

M527-N0 Deutschordensregeln und -statuten, late 13th century, early 14th century

M061B-G1 Deutung der Meßgebräuche, late 12th century, early 13th century

M306-G1 Die Erlösung (B1), early 14th century

M112-G1 Die Hochzeit, late 12th century, early 13th century

M119-N1 Die Jüngere Judith, late 12th century

M327-G1 Die Lilie (Prosateil), late 13th century

M354-G1 Die Lilie (Versteil), late 13th century

M238-N1 Die Wahrheit, late 12th century

M304-G1 Dietrichs Flucht (R), late 13th century,-early 14th century

M064M-N1 Eilhart von Oberg: Tristrant (M), early 13th century

M064R-N1 Eilhart von Oberg: Tristrant (R), early 13th century

M064S-N1 Eilhart von Oberg: Tristrant (St), early 13th century

M078-N1 Engelberger Gebete, late 12th century

M066-N1 Esau und Jakob; Zehn Gebote, late 13th century

M318-G1 Evangelienbuch des Matthias von Beheim, early 14th century

M069-G1 Ezzo: Hymnus (Ezzolied) (S) 12/1

M546-N1 Flors inde Blanzeflors, late 13th century

M521-N1 Franziskanerregel (Augsburger Drittordensregel), early 14th century

M022-N1 Frau Ava: Antichrist (V), late 12th century

M023-N1 Frau Ava: Jüngstes Gericht (V), late 12th century

M307-G1 Frauenfelder Flore (Bruchstücke), early 13th century

M347-G1 Freiburger Urkunden, early 14th century

M346-G1 Freiburger Urkunden (1284-1298), late 13th century

M517-N0 Freidank: Bescheidenheit (A), late 13th century

M073-N1 Friedberger Christ, early 13th century

M074-N1 Gebet einer Frau, late 12th century

M518-N0 Gebetbuch für Nonnen, early 14th century

M077-G1 Gebete u. Benediktionen von Muri, late 12th century, early 13th century

M145-N1 Gereimtes Messgebet Vater herre/ vater got, late 12th century

M349-G1 Gottfried Hagen: Kölner Urkunden, late 13th century

M529-N1 Gottfried Hagen: Reimchronik der Stadt Köln (D), early 14th century

M341-G1 Gottfried von Straßburg: Tristan (f1/f + m), early 13th century

M100-G1 Graf Rudolf, early 13th century

M147-N1 Grazer Monatsregeln, early 13th century

M510-N0 Gundacker von Judenburg: Christi Hort, late 13th century, early 14th century

M543-N1 Hamburger Beichte, early 13th century

M312-G1 Hartmann von Aue: Iwein (B), early 13th century

M309-G1 Hartwig von dem Hage: Margaretenlegende. Tagzeiten, early 14th century

M311-G1 Heinrich von Freiberg: Tristan (F), early 14th century

M105-N1 Heinrich von Rugge/ Leich, late 12th century

M107G-G1 Heinrich: Litanei (G), late 12th century

M107S-N1 Heinrich: Litanei (S), early 13th century

M106-N1 Heinrich/ Reinhart Fuchs (S), early 13th century

M541B-N Herbort von Fritzlar: Liet von Troye (B), around 1300 century

M541H2-N Herbort von Fritzlar: Liet von Troye (H), 14th century

M541H1-N Herbort von Fritzlar: Liet von Troye (H), 14th century

M541S-N Herbort von Fritzlar: Liet von Troye (S), 14th century

M407y-N0 Hermann von Fritzlar: Heiligenleben, 14th century

M407-G1 Hermann von Fritzlar: Heiligenleben, 14th century

M108M-N1 Herzog Ernst A (M), early 13th century

M108P-N1 Herzog Ernst A (P), early 13th century

M108S-N1 Herzog Ernst A (S), late 13th century

M331-G1 Hessische Reimpredigten, early 14th century

M111-N1 Himmlisches Jerusalem, late 12th century, early 13th century

M165-G1 Hoffmannsche Predigtsammlung, early 13th century

M506-N0 Hohenfurter Benediktinerregel, early 13th century, late 13th century

M006-G1 Höxterer Aegidius, late 12th century

M523-N0 Hugo von Konstanz: Predigten, early 14th century

M317-G1 Hugo von Langenstein: Martina, early 14th century

M513-N0 Hugo von St. Victor: Expositio in regulam S. Augustini/ dt. [Katharinenthaler] Übersetzung) (Zu1), late 13th century

M334-G1 Hugo von Trimberg: Renner (E), early 14th century

M114-N1 Idsteiner Sprüche der Väter, early 13th century, late 13th century

M408-G1 Jenaer Martyrologium, late 13th century

M340-G1 Johannes Tauler: Predigten (W2), late 14th century

M528-N0 Kölner Eidbücher, early 14th century

M547-N Kölner Klosterpredigten, 14th century

M350-G1 Kölner Urkunden, early 14th century

M206-N1 König Rother (H), early 13th century

M121F-N1 Kaiserchronik A (F: Fragmente Fr/ Mz), late 12th century

M121K-N1 Kaiserchronik A (Fragment K) 12/1, late 12th century

M121N-N1 Kaiserchronik A (Fragment N), early 13th century

M121S-N1 Kaiserchronik A (Fragment S), early 13th century

M121V-G1 Kaiserchronik A (Fragment S), early 13th century

M121y1-N Kaiserchronik A - V, late 12th century

M121V-G1 Kaiserchronik A (V) [Ausschnitt], late 12th century

M121W-N1 Kaiserchronik A (Fragment W), early 13th century

M313-G1 Karl und Galie (D), late 13th century

M533-N0 Klagschrift der Gesellschaft der alten Geschlechter zu Mainz gegen die Zweiundzwanzig von der Gemeinde, early 14th century

M148-N1 Kölner Morgensegen, late 13th century

M205M-N1 König Rother (H), early 13th century

M505-N1 Lancelot M, early 14th century

M315-G1 Landgraf Ludwigs Kreuzfahrt, early 14th century

M351-G1 Landshuter Urkunden, early 14th century

M305-G1 Leben der heiligen Elisabeth (A), early 14th century

M167-N1 Leipziger Predigten (Fragment I), early 13th century

M536-N0 Leipziger Predigten (Hs. A), early 14th century

M168-N1 Leysersche Predigten (M/G T 15), early 13th century

M501-N0 Lilienfelder Andachtsbuch, late 12th century, early 13th century

M065-G1 Linzer Entechrist, late 12th century, early 13th century

M159-N1 Londoner Predigt(fragment), early 12th century

M316-G1 Lupold Hornburg: Reden, early 14th century

M320-G1 Mühlhäuser Rechtsbuch (N), early 13th century

M246-N1 Münchener Wundsegen, late 12th century

M352-G1 Mainzer Urkunden, early 14th century

M319-G1 Maria Magdalena, (Verslegende I), early 14th century

M310-G1 Marien Himmelfahrt, late 13th century

M139-N1 Marienmirakel, early 13th century

M140B-N1 Mariensequenz aus Muri (B), late 12th century, early 13th century

M140D-N1 Mariensequenz aus Muri (D), early 13th century

M142-G1 Memento Mori, early 12th century

M143-G1 Merigarto, early 12th century

M509-N0 Mettener Predigtsammlung II [Leipziger Predigten Me], late 13th century

M329-G1 Millstätter Predigtsammlung, 13th century

M221-N1 Millstätter Sündenklage, around 1200

M193-N1 Millstätter Interlinearversion zum Psalter und zu den Hymnen des Römischen Breviers, late 12th century, early 13th century

M156-N1 Millstätter Physiologus, early 13th century

M161-N1 Millstätter Predigtsammlung (M/G T 35), late 13th century

M328-G1 Mitteldeutsche Predigten (Fr/G/H1), late 13th century

M330-G1 Mitteldeutsche Predigten (K), 13th century

M544-N1 Mittelfränkische Urkunden 13. Jh. (Erweiterung von M349), late 13th century

M199A-G1 Mittelfränkische Reimbibel (A) 12th century

M199B-N1 Mittelfränkische Reimbibel (B) 12th century

M199C-N1 Mittelfränkische Reimbibel (C), late 12th century

M540-N0 Nürnberger Stadtbuch, 14th century

M410-G1 Nürnberger Stadtbuch, 14th century

M338-G1 Nürnberger Stadtbuch (Satzungsbuch I/A), early 14th century

M353-G1 Nürnberger Urkunden, early 14th century

M321-G1 Nibelungenlied, late 12th century, early 13th century

M232-G1 Niederrheinischer Tundalus, early 13th century

M322-G1 Nikolaus von Straßburg: Predigten (C), late 14th century

M323-G1 Oberaltaicher Evangelistar, early 14th century

M324-G1 Oxforder Benediktinerregel, early 14th century

M326-G1 Passional (A), early 14th century

M541H1-N Passional (A), early 14th century

M151-N1 Patricius, early 13th century

M205A-N1 Pfaffe Konrad: Rolandslied (A), late 12th century

M205E-N1 Pfaffe Konrad: Rolandslied (E), early 13th century

M205S-N1 Pfaffe Konrad: Rolandslied (S), early 13th century

M205W-N1 Pfaffe Konrad: Rolandslied (W), early 13th century

M226-N1 Pfaffe Lambrecht: Tobias, early 13th century

M155-N1 Physiologus (älterer/Ahd. Physiologus), late 11th century

M158-N1 Pilatus, early 13th century

M172-N1 Prager Predigtentwürfe (M/G T 31), early 13th century

M163B-N1 Predigten/ M/G T 36/ Basler Fragmente, late 12th century

M171-G1 Predigten/ Züricher, late 12th century

M173-N1 Predigtfragment (M/G T 8), late 12th century

M177-G1 Predigtfragmente (M/G T 37c), late 12th century, early 13th century

M178-N1 Predigtfragmente (M/G T 43), early 12th century

M014-N1 Priester Arnold: Loblied a.d. hl. Geist (Von der Siebenzahl), late 12th century

M160H-N1 Priester Konrad: Predigtbuch (Ha), early 13th century

M241I-N1 Priester Wernher: Driu liet von der maget (D: Spruchbänder), early 13th century

M241y-N1 Priester Wernher: Driu liet von der maget (D), early 13th century

M241-G1 Priester Wernher: Driu liet von der maget (D), early 13th century

M185-N1 Psalm 88/ Interlinearversion, early 13th century

M333-G1 Rappoltsteiner Parzifal (Philipp Colin und Claus Wisse: Der Nüwe Parzefal), early 14th century

M404-G1 Rede von den 15 Graden (P), early 14th century

M514-N0 Reinmar von Zweter, late 13th century

M152-G1 Rheinauer Paulus, early 12th century

M530-N1 Rheinischer Merlin (Merlin und Lüthild), early 14th century

M335-G1 Rheinisches Marienlob, early 13th century

M160P-N1 Rothsche Predigtsammlung (P) / Priester Konrad: Predigtbuch (P), early 13th century

M160R-N1 Rothsche Predigtsammlung [Überlieferungskomplex Priester Konrad (R)], early 13th century

M359-G1 Rudolf von Ems: Weltchronik (Z), late 13th century

M410-G1 Ruprecht von Freising: Freisinger Rechtsbuch, early 14th century

M337-G1 Salomons Haus (+ Von den Zeichen der Messe S. 105-138/ Vaterunserauslegung S. 138-148/ Gespräch zwischen Christus und der minnenden Seele S. 148-162), late 13th century

M308-G1 Schlacht bei Göllheim/ Böhmenschlacht/ Minnehof, early 14th century

M187-N1 Schleizer Psalmenfragmente, 12th century

M339-G1 Schwabenspiegel, late 13th century

M332-G1 Schwarzwälder Predigten (Gr), late 13th century

M209-G1 Scoph von dem lone, late 12th century

M507-G1 Sedulius/ Carmen paschale/ dt. Interlinearübersetzung, early 13th century

M522-N1 Sigenot, early 14th century

M194-N1 Sonnenburger Psalmenfragmente, early 13th century

M214-G1 Speculum ecclesiae, late 12th century, early 13th century

M214y-N1 Speculum ecclesiae deutsch, late 12th century

M214W-N1 Speculum ecclesiae W (Fragment M/G T9), early 13th century

M525-N0 Speculum humanae salvationis/ Kremsmünsterer Reimparaphrase, 14th century

M532-N0 St. Galler (mittelrheinisches) Passionsspiel, early 14th century

M218A-N1 St. Galler Schularbeit, 11th century

M409-G1 St. Pauler Predigten, early 13th century

M113y-N1 St. Trudperter Hohelied (A), early 13th century

M113-G1 St. Trudperter Hohes Lied (A), early 13th century

M008-G1 Straßburger Alexander, early 13th century

M224-N1 Summa Theologiae, late 12th century

M225-N1 Tegernseer Prognostica, late 12th century

M228-N1 Tobiassegen U, early 13th century

M188y-N1 Trierer Interlinearversion zum Psalter, 12th century

M188-G1 Trierer Interlinearversion zum Psalter, around 1200

M213-N1 Trierer Silvester, early 13th century

M314-G1 Ulrich von Liechtenstein: Frauendienst (M), late 13th century

M343-G1 Ulrich von Türheim: Rennewart (B), early 14th century

M071U-N1 Uppsalaer Frauengebete, early 13th century

M222-N1 Uppsalaer Sündenklage, early 13th century

M234-N1 Vaterunser, late 12th century, early 13th century

M198-N1 Vom Rechte, early 12th century

M027-N1 Von der Babylonischen Gefangenschaft, late 12th century

M087-N1 Vorauer Genesis (Bücher Mosis 1), late 12th century

M116-N1 Vorauer Joseph (Bücher Mosis 2), late 12th century, early 13th century

M138-N1 Vorauer Marienlob (Bücher Mosis 4), late 12th century

M149-N1 Vorauer Moses (Bücher Mosis 3), early 12th century

M512-N0 Vorauer Novelle, late 13th century

M223-N1 Vorauer Sündenklage, late 12th century

M356-G1 Würzburger Polizeisätze, early 14th century

M239-N1 Wernher v. Niederrhein: Die vier schiven, late 13th century

M240B-N1 Wernher von Elmendorf/ Fragm. B, late 12th century

M182A-N1 Wessobrunner (Ahd.) Predigtsammlung A, around 1100

M182C-N1 Wessobrunner (Ahd.) Predigtsammlung C, around 1100

M088-N1 Wiener Genesis, late 11th century

M242-G1 Wiener Notker, late 11th century

M242Y-N0 Wiener Notker, late 11th century

M189-N1 Wiggertsche Psalmenfragmente, 12th century

M244-G1 Williram von Ebersberg: Hoheliedkommentar (Br/B), late 11th century

M195y-N1 Windberger Psalter, late 12th century

M195-G1 Windberger Psalter, late 12th century

M355-G1 Winsbeke und Winsbekin (I[J]), late 13th century

M325-G1 Wolfram von Eschenbach: Parzival (D), early 13th century

M249-N1 Zehn Gebote, early 13th century

M104-N1 Zürcher Hausbesegnung, 11th century

M358-G1 Zwifaltener Benediktinerregel, early 13th century

M005-G1 Aegidius, Trierer, late 12th century, early 13th century

M013O-N1 Annolied (O: Opitz), late 12th century, early 13th century

M302-G1 Gottfried von Straßburg: Tristan, early 13th century

M165-G1 Hoffmannsche Predigtsammlung, early 13th century

M513-N0 Hugo von St. Victor: Expositio in regulam S. Augustini, dt. [Katharinenthaler] Übersetzung) (Zu1), late 13th century

M121V-G1 Kaiserchronik A (V) [Ausschnitt], late 12th century

M156-N1 Millstätter Physiologus, early 13th century

M163K-N1 Predigten (M/G T 36), Krakauer Fragmente, early 12th century

M336-G1 Rudolf von Ems: Wilhelm von Orlens (M), late 13th century

M358-G1 Zwifaltener Benediktinerregel, early 13th century

M157-G1 Wiener Physiologus (Jüngerer Physiologus), late 12th century

Appendix 3: List of primary sources from the Referenzkorpus Mittelniederdeutsch/Niederrheinisch (ReN subcorpus)

Göttinger Liebesbriefe (Stadtarchiv Göttingen), 1451-1500.

Münster, Johannes Veghe, 3 Urkunden 1483, 1494, Autographe (LA NRW, Abt. WF).

Cronecken der sassen, Druck: Mainz, Peter Schoeffer, 1492 [BC 197].

Duisburg: Chronik Wassenberch, 1518, Hs. (Haus Ruhr bei Senden, nahe Münster).

Freckenhorster Legendar, Hs., spätes 15. Jahrhundert. (BAM, PfA Freckenhorst, Hs. 310).

Griseldis (nebst) Sigismunda und Guiscardus, Druck: Hamburg, [Drucker des Jegher], 1502 [BC 362].

Henselynsboek, Druck: Lübeck, Mohnkopf, um 1498 [BC 305].

Herford, Rechtsbuch, um 1375 (Stadtarchiv Herford) [Faksimile-Edition].

Qvatuor Evangeliorum versio Saxonica, 2. H. 15. Jahrhundert.

Bibel, Druck: Köln (Ku), Heinrich Quentell, um 1478 [BC 26] (Detmold, Lippische Landesbibliothek, Exp. Th 75.2o).

Niederdeutsche Apokalypse, Tf, um 1400 (StadtB. Trier).

Oldenburger Bilderhandschrift des Sachsenspiegels, Kloster Rastede 1336.

Osnabrück, Sühne (= Koldenbeker Urkunde), ca. 1288 (LA NRW, Abt. WF, Grafschaft Ravensberg Urkunden Nr. 11a).

Ravensberger Urkunde, 1292 (LA NRW, Abt. WF, Grafschaft Ravensberg Urkunden Nr. 32).

Reynke de Voss, Druck: Rostock: Ludwig Dietz, 1539 [BC 1312].

Rüthen, Statutarrecht, Hs L, um 1300 (London, British Museum, Add. 21174).

Soest, Schrae im Statutenbuch, ca. 1367.

Spieghel der leyen, Hs., Münster 1444.

Stader Stadtrecht, 1279.

Südwestfälische Psalmen, um 1300.

Urkunde Hermanns von Neheim (= Werler Urkunde), 1294 (LA NRW, Abt. WF, Kloster Himmelpforten Urkunden Nr. 47).

Sächsische Weltchronik, Bremer Hs. der Rezension B (Hs. 16), um 1275.

Appendix 4: List of primary sources from the Corpus Gysseling (CGy sample)

Aiol by onbekend (1220)

Corp.I, 0003, Gent, 1236 (kort na 14 november) by onbekend (1236)

Corp.I, 0009AA, Gent, 17 maart 1253 by onbekend (1253)

Corp.I, 0012, Middelburg, 11 maart 1254 by onbekend (1254)

Corp.I, 0029, Gent, 1263 april of 1 april 1264–18 by onbekend (1263)

Corp.I, 0093, Gent, kort vóór 22 augustus 1270 by onbekend (1270)

Corp.I, 0097, Mechelen, 29 september 1270 by onbekend (1270)

Corp.I, 0198, Oudenburg?, 17 juli 1277 by onbekend (1277)

Corp.I, 0201AA, Brugge, 1 augustus 1277 by onbekend (1277)

Corp.I, 0201AB, Brugge, 1 augustus 1277 by onbekend (1277)

Corp.I, 0236, Brugge, 24 september 1278 by onbekend (1278)

Corp.I, 0347, Brugge, (25 mei 1281) by onbekend (1281)

Corp.I, 0395, Brugge, (kort voor 17 maart 1282) by onbekend (1282)

Corp.I, 0419, Brugge, (1281 september—26 mei 1282) by onbekend (1281)

Corp.I, 0438, Brugge, 1282 (juli-september) by onbekend (1282)

Corp.I, 0531, Gent, 1284 april (24–30) by onbekend (1284)

Corp.I, 0566(ABCDE)$_s$ome$_s$entences$_d$ouble, Brugge, 1284 ± november 1 by onbekend (1284)

Corp.I, 0638, Brugge, 1285 by onbekend (1285)

Corp.I, 0663, Brugge, (24 maart 1285–12 april 1286) by onbekend (1285)

Corp.I, 0778A', Holland, grafelijke kanselarij, 21 maart 1288 by onbekend (1288)

Corp.I, 0803, Gentbrugge, 23 juni 1288 by onbekend (1288)

Corp.I, 0897, Haastrecht?, 30 december 1289 by onbekend (1289)

Corp.I, 0913a, Assenede, 6 april 1290 by onbekend (1290)

Corp.I, 0969a, Holland, grafelijke kanselarij, 30 oktober 1290 by onbekend (1299)

Corp.I, 1067, Gent, 6 september 1291 by onbekend (1291)

Corp.I, 1124, Brugge, 25 februari 1292 by onbekend (1305

Corp.I, 1226, Brabant, hertogelijke kanselarij, 5 april 1292–27 maart 1293 by onbekend (1292)

Corp.I, 1243, Brugge, 9 mei 1293 by onbekend (1293)

Corp.I, 1277, Gent, 13 september 1293 by onbekend (1293)

Corp.I, 1293, Holland, grafelijke kanselarij, 21 december 1293 by onbekend (1293)

Corp.I, 1340, Brugge, 1294 ± juni 7 by onbekend (1294)

Corp.I, 1367, Holland, grafelijke kanselarij, 25 oktober 1294 by onbekend (1294)

Corp.I, 1398, Holland, grafelijke kanselarij, 15 januari 1295 by onbekend (1295)

Corp.I, 1437, Hemiksem, 19 juni 1295 by onbekend (1295)

Corp.I, 1475, Brugge, eind 1295 by onbekend (1295)

Corp.I, 1496d, Holland, grafelijke kanselarij, 1 mei 1296 by onbekend (1299)

Corp.I, 1632A, Holland, grafelijke kanselarij, 30 september 1297 by onbekend (1297)

Corp.I, 1926, Petegem, 4e kwart 13e eeuw by onbekend (1276)

Der Naturen Bloeme, handschrift D (Detmold) by Maerlant, Jacob van (1287)

Der Naturen Bloeme, handschrift M (München) by Maerlant, Jacob van (1276)

het Luikse Diatessaron, Brabant-West, 1291-1300 by onbekend (1291)

Nederbergse geneeskundige geneeskundige recepten by onbekend (1250)

Nederrijns Moraalboek by onbekend (1270)

Nederrijns Moraalboek by onbekend (1270)

Rijmbijbel by Maerlant, Jacob van (1285)

Sente Lutgart, handschrift A (Amsterdam) by Onbekend (1276)

Sente Lutgart, handschrift K (Kopenhagen) by Affligem, Willem van (1265)

Wrake van Ragisel by onbekend (1260)

Appendix 5: List of primary sources from the Corpus van Reenen-Mulder (CRM sample)

C108p37004 1371 Groningen

C608r35501 1355 Groningen

E043p36301 1363 Egmond-Binnen

E192p34101 1341 Utrecht

E192p34101 1341 Utrecht

E192p34101 1341 Utrecht

E192p34101 1341 Utrecht

E192p34101 1344 Utrecht

E563r38101 1381 Limmen of omgeving

E597r33101 1331 Haarlem

F133p38701 1387 Deventer

F590r38501 1385 Kampen

F596r37502 1375 Zwolle of omgeving

F679r39903 1399 Zutphen of omgeving

G574r37501 1378 s-Hertogenbosch

I241p32801 1328 Gent
K016p37601 1376 Stolwijk
K094p35503 1355 Dordrecht
K094p36701 1367 Dordrecht
K094p36701 1367 Dordrecht
K094p36702 1367 Dordrecht
K094p36708 1367 Dordrecht
K094p37401 1375 Dordrecht
K094p38601 1386 Dordrecht
K094p38601 1386 Dordrecht
K094p38601 1387 Dordrecht
K150p37801 1378 s-Hertogenbosch
K150p37801 1378 s-Hertogenbosch
K150p37801 1378 s-Hertogenbosch
K325a39901 1399 Walem
K516r37601 1376 Stolwijk
K538r37701 1377 Cothen
K602r31301 1313 Woudrichem
K602r31301 1313 Woudrichem
K809r31601 1316 Tongerlo
L207p38601 1386 Gemert
L530r36901 1369 Angerlo
L534r34201 1342 Didam
O052p30501 1305 Erpe
O152p36101 1361 Ninove
O228p34803 1345 Geraardsbergen
O228p35301 1353 Geraardsbergen
P051p34401 1344 Lummen

P051p37401 1374 Lummen

P051p37401 1374 Lummen

P065p31401 1314 Brussel

P176p34501 1345 Sint-Truiden

P565r35001 1350 Brussel

Q158a39701 1397 Henis

Q599r38501 1385 Meerssen

Bibliography

Abraham, W. (1979). Außer. In H. Weydt (Ed.), *Die Partikeln der deutschen Sprache*, pp. 239–255. Berlin, Boston: Walter de Gruyter.

Axel, K. (2002). Zur diachronen Entwicklung der syntaktischen Integration linksperipherer Adverbialsätze im Deutschen: Ein Beispiel für syntaktischen Wandel? *Beiträge zur Geschichte der deutschen Sprache und Literatur 124*, 1–43.

Axel, K. (2007). *Studies on Old High German Syntax. Left Sentence Periphery, Verb Placement and Verb Second*. Linguistik Aktuell/Linguistics Today, 112. Amsterdam: John Benjamins.

Axel, K. and H. Weiß (2011). Pro-drop in the history of German from Old High German to the modern dialects. In M. Wratil and P. Gallmann (Eds.), *Null pronouns*, pp. 21–52. Berlin, Boston: Mouton de Gruyter.

Axel, K. and A. Wöllstein (2009). German Verb-First Conditionals as Unintegrated Clauses. A Case Study in Converging Synchronic and Diachronic Evidence. In S. Winkler and S. Featherston (Eds.), *The Fruits of Empirical Linguistics*, pp. 1–35. Berlin, Boston: Mouton de Gruyter.

Axel-Tober, K. (2012). *(Nicht-) kanonische Nebensätze im Deutschen*. Linguistische Arbeiten 542. Berlin, Boston: De Gruyter.

Axel-Tober, K. (2018). Origins of verb-second in Old High German. In G. Ferraresi, A. Jäger, and H. Weiß (Eds.), *Clause Structure and Word Order in the History of German*, Oxford Studies in Diachronic and Historical Linguistics 28, pp. 22–47. Oxford: Oxford University Press.

Behaghel, O. (1918). Die Verneinung in der deutschen Sprache. *Wissenschaftliche Beihefte zur Zeitschrift des Allgemeinen Deutschen Sprachvereins 38/40*, 225–252.

Beheydt, G. (1998). Het gebruik en de vorm van de negatie in het zuidelijke Nederlands in een diachronisch perspectief (15e–20e eeuw). Master's thesis, University of Leuven.

Bhatt, R. and R. Pancheva (2006). Conditionals. In M. Everaert and H. van Riemsdijk (Eds.), *The Blackwell Companion to Syntax*, pp. 338–637. Oxford: Blackwell.

Biberauer, T., A. Holmberg, I. Roberts, and M. Sheehan (2010). Introduction: Parameters in minimalist theory. In *Parametric Variation: Null Subjects in Minimalist Theory*. Cambridge: Cambridge University Press.

Blühdorn, H. (2008). Subordination and Coordination in syntax, semantics and discourse: Evidence from the study of connectives. In C. Fabricius-Hansen and W. Ramm (Eds.), *'Subordination' versus 'Coordination' in Sentence and Text: A cross-linguistic perspective*, Studies in Language Companion Series 98, pp. 59–85.

Breitbarth, A. (2009). A hybrid approach to Jespersen's Cycle in West Germanic. *Journal of Comparative Germanic Linguistics 12*(2), 81–114.

Breitbarth, A. (2013). Negation in the history of Low German and Dutch. In D. Willis, C. Lucas, and A. Breitbarth (Eds.), *The History of Negation in the Languages of Europe and the Mediterranean*, Oxford Studies in Diachronic and Historical Linguistics 5, pp. 190–238. Oxford: Oxford University Press.

Breitbarth, A. (2014a). Dialect contact and the speed of Jespersen's cycle in Middle Low German. *Taal en Tongval 66*(1), 1–20.

Breitbarth, A. (2014b). *The history of Low German negation*. Oxford Studies in Diachronic and Historical Linguistics 13. Oxford: Oxford University Press.

Breitbarth, A. (2015a). Exceptive negation in Middle Low German. In E. Brandner, A. Czypionka, C. Freitag, and A. Trotzke (Eds.), *Charting the Landscape of Linguistics: Webschrift for Josef Bayer*, pp. 11–15.

Breitbarth, A. (2015b). The development of conditional /should/ in English. In C. Gianollo (Ed.), *Language Change at the Syntax-Semantics Interface*, Trends in Linguistics. Studies and Monographs [TiLSM] 278, pp. 293–322. Berlin: Mouton de Gruyter.

Breitbarth, A. (2017a). Jespersen's cycle = minimize structure + feature economy. In E.-M. R. Silvio Cruschina, Katharina Hartmann (Ed.), *Studies on Negation: Syntax, Semantics, and Variation*, Volume 3 of *Wiener Arbeiten zur Linguistik*, pp. 21–47. Wien: University Press.

Breitbarth, A. (2017b, October). V3 and resumptive strategies in Middle Low German conditional constructions. Talk at 'V3 And Resumptive Averbials Workshop' Ghent University.

Breitbarth, A. (2019). The negative cycle and beyond. In *The Oxford Handbook of Negation*. Oxford: Oxford University Press.

Breitbarth, A., M. Farasyn, A.-S. Ghyselen, L. Haegeman, and J. V. Keymeulen (forthcoming). *Ge had dien een keer moeten en zien!* Neue Erkenntnisse zum Gebrauch der Partikel en im Gesproken Corpus van de (Zuidelijk-) Nederlandse Dialecten. In A. Speyer and A.-K. Balo (Eds.), *Syntax aus Saarbrücker Sicht*, Volume 5.

Breitbarth, A. and L. Haegeman (2014). The distribution of preverbal *en* in (West) Flemish: Syntactic and interpretive properties. *Lingua 147*, 69–86.

Breitbarth, A. and L. Haegeman (2015). *'En' en is níet wat we dachten*: a Flemish discourse particle. *MIT Working Papers in Linguistics*, 85–102.

Breitbarth, A. and A. Jäger (2018). History of negation in High and Low German. In H. W. Gisella Ferrarresi, Agnes Jäger (Ed.), *Clause structure and word order in the history of German*, pp. 181–219. Oxford: Oxford University Press.

Breitbarth, A., C. Lucas, and D. Willis (2013). Incipient Jespersen's Cycle: The (non-)grammaticalization of new negative markers. In J. Fleischer and H. Simon (Eds.), *Comparing Diachronies/ Sprachwandelvergleich*, pp. 143–164. Tübingen: Niemeyer.

Bremmer, R. H. (2017). Old English *būtan* / Old Frisian *būta*: From adverb to conjunction. *Amsterdamer Beiträge zur älteren Germanistik 3-4*, 601–615.

Burridge, K. (1993). *Syntactic Change in Germanic: Aspects of Language Change in Germanic, with Particular Reference to Middle Dutch*. Amsterdam Studies in the Theory and History of Linguistic Science 4. Amsterdam: John Benjamins.

Bybee, J. (2003). Mechanisms of change in grammaticization: The role of frequency. In B. D. Joseph and R. D. Janda (Eds.), *The Handbook of Historical Linguistics*, pp. 602–623. Malden: Blackwell.

Cardinaletti, A. (2011). German and Italian modal particles and clause structure. *The Linguistic Review 28*(4), 493–531.

Cardinaletti, A. and M. Starke (1999). The typology of structural deficiency: A case study of the three classes of pronouns. In H. van Riemsdijk (Ed.), *Clitics in the Languages of Europe*, pp. 145–234. Berlin, Boston: Mouton de Gruyter.

Carlson, G. N. (1981). Distribution of free-choice 'any'. In R. Hendrick, C. Masek, and M. F. Miller (Eds.), *Papers from the 17th Regional Meeting of the CLS*, pp. 8–23. Chicago: Chicago Linguistic Society.

Catasso, N. (2015). On Postinitial *Aber* and Other Syntactic Transgressions: Some Considerations on the Nature of V2 in German. *Journal of Germanic Linguistics 27*(4), 317–365.

Chomsky, N. (2005). Three factors in language design. *Linguistic Inquiry 36*, 1–22.

Cinque, G. (1999). *Adverbs and functional heads: A cross-linguistics perspective*. Oxford studies in comparative syntax. New York: Oxford University Press.

Cinque, G. (2008). Two types of non-restrictive relatives. In O. Bonami and P. C. Hofherr (Eds.), *Empirical Issues in Syntax and Semantics*, Volume 7, pp. 99–137. http://www.cssp.cnrs.fr/eiss7/cinque-eiss7.pdf.

Coniglio, M. (2011). *Die Syntax der deutschen Modalpartikeln: ihre Distribution und Lizenzierung in Haupt- und Nebensätzen*. Berlin: Akademie Verlag.

Coniglio, M. and I. Zegrean (2010). Splitting up force, evidence from discourse particles. *University of Venice Working Papers in Linguistics 20*, 7–34.

Dahl, Ö. (1979). Typology of sentence negation. *Linguistics 17*(1-2), 79–106.

Dancygier, B. (2002). Mental space embeddings, counterfactuality, and the use of "unless". *English Language and Linguistics 6*(2), 347–377.

de Boor, H. and R. Wisniewski (1998). *Mittelhochdeutsche Grammatik*. Berlin, New York: De Gruyter.

Declerck, R. and S. Reed (2000). The semantics and pragmatics of "unless". *English Language and Linguistics 2*, 205–241.

Dekeyser, X. (2012). From Old English 'butan' to present-day 'but': A textbook case of grammaticalization. In J. Esquibel and A. Wojtys (Eds.), *Explorations in the English Language: Festschrift for Professor Jerzy Welna on the Occasion of His 70th Birthday*, pp. 297–307. Berlin: Peter Lang.

Delbrück, B. (1912). Beiträge zur germanischen syntax iv: Die stellung des verbums in sätzen mit 'doch' und 'ja'. *Beiträge zur Geschichte der deutschen Sprache und Literatur 37*, 273–278.

Drach, E. (1937). *Grundgedanken der deutschen Satzlehre*. Frankfurt am Main: Diesterweg.

Duinhoven, A. M. (2002). Negaties met *ne, nee, niet* en *of*. *Tijdschrift voor Nederlandse Taal- en Letterkunde 118*, 214–240.

Eckardt, R. (2002). Semantic Change in Grammaticalization. In G. Katz, S. Reinhard, and P. Reuter (Eds.), *Sinn und Bedeutung VI, Proceedings of the Sixth Annual Meeting of the Gesellschaft für Semantik*, pp. 53–67.

Endriss, C. and H.-M. Gärtner (2005). Relativische verbzweitsätze und definitheit. In F. J. d'Avis (Ed.), *Deutsche Syntax: Empirie und Theorie. Symposium Göteborg 13-15 maj 2004*, pp. 195–220. Göteborg: Acta Universitatis Gothoburgensis.

Ernst, T. (2002). *The Syntax of Adjuncts*. Cambridge Studies in Linguistics 96. Cambridge: Cambridge University Press.

Espinal, M. T. (1992). Expletive negation and logical absorption. *Linguistic Review 9*(4), 333–358.

Espinal, M. T. (1997). Non-negative negation and wh-exclamatives. In D. Forget, P. Hirschbühler, F. Martineau, and M. L. Rivero (Eds.), *Negation and polarity. Syntax and semantics*, pp. 75–93. Amsterdam: John Benjamins.

Espinal, M. T. (2000). Expletive negation, negative concord and feature checking. *CatWPL 8*, 47–69.

Ferraresi, G. (2005). *Word Order and Phrase Structure in Gothic. A comparative Study*. Orbis: Supplementa 25. Leuven: Peeters.

Ferraresi, G. (2018). Adverbial connectives. In A. Jäger, G. Ferraresi, and H. Weiß (Eds.), *Clause Structure and Word Order in the History of German*, Oxford Studies in Diachronic and Historical Linguistics 28. Oxford University Press.

Fleischer, J. and O. Schallert (2011). *Historische Syntax des Deutschen. Eine Einführung*. Tübingen: Narr Francke.

Fleischer, J. D. (2004). Zur Typologie der Relativsätze in den Dialekten des Deutschen. In F. Patocka and P. Wiesinger (Eds.), *Morphologie und Syntax deutscher Dialekte und historische Dialektologie des Deutschen*, pp. 60–83. Wien: Edition Praesens.

Frascarelli, M. and R. Hinterhölzl (2007). Types of Topics in German and Italian. In K. Schwabe and S. Winkler (Eds.), *On Information Structure, Meaning and Form*, Linguistik Aktuell 100. Amsterdam: John Benjamins.

Fraser, B. (1999). What are discourse markers? *Journal of Pragmatics 31*, 931–952.

Frey, W. (2012). On two types of adverbial clauses allowing root-phenomena. In L. Aelbrecht, L. Haegeman, and R. Nye (Eds.), *Main Clause Phenomena: New Horizons*, pp. 405–429. Amsterdam: John Benjamins.

Geis, M. (1973). *If* and *unless*. In B. B. Kachru (Ed.), *Issues in Linguistics: Papers in Honor of Henry and Renée Kahane*, pp. 231–253. Urbana: University of Illinois Press.

Giannakidou, A. (2000). Negative ... concord? *Natural Language and Linguistic Theory 18*, 457–523.

Giorgi, A. and F. Pianesi (1997). *Tense and aspect: From semantics to morphosyntax*. Oxford: Oxford University Press.

Greenberg, J. (1963). Some universals of grammar with particular reference to the order of meaningful elements. In J. Greenberg (Ed.), *Universals of Language*. Cambridge, Massachusetts: MIT Press.

Grewendorf, G. (2002). *Minimalistische Syntax*. Suttgart: UTB.

Grice, H. P. (1975). Logic and conversation. *Syntax and Semantics 3*, 41–58.

Grosz, P. G. (2007). German discourse particles are weak sentence adverbs. In C. Picchi and A. Pona (Eds.), *Proceedings of the XXXII Incontro di Grammatica Generativa*, pp. 79–91. Florence: Edizioni dell'Orso.

Haegeman, L. (1996). Verb Second, the split CP and null subjects in early Dutch finite clauses.

Haegeman, L. (2002). Anchoring to speaker, adverbial clauses and the structure of CP. *Georgetown University Working Papers in eoretical Linguistics 2*, 117–180.

Haegeman, L. (2004). The syntax of adverbial clauses and its consequences for topicalisation. *Antwerp Papers in Linguistics* (107), 61–90.

Haegeman, L. (2006). Argument fronting in English, Romance CLLD and the left periphery. In R. Zanuttini, H. Campos, E. Herburger, and P. H. Portner (Eds.), *Cross-linguistic research in syntax and semantics: negation, tense and clausal architecture*, pp. 27–52. Washington, DC: Georgetown University Press.

Haegeman, L. (2010). The movement derivation of conditional clauses. *Linguistic Inquiry 41*, 595–621.

Haegeman, L. and C. Greco (2018). Main clause external constituents and the derivation of subject-initial verb second. *Nederlandse Taalkunde 23*(1), 23 – 55.

Haegeman, L. and R. Zanuttini (1991). Negative heads and the neg criterion. *The Linguistic Review 8*, 233–252.

Haiman, J. (2017). Exaptation. In A. Ledgeway and I. Roberts (Eds.), *The Cambridge Handbook of Historical Syntax*, Cambridge Handbooks in Language and Linguistics, pp. 49–69. Cambridge: Cambridge University Press.

Häussler, J. (2015). Wenn *denn* denn lizenziert ist: The German discourse particle *denn* in conditionals. In E. Brandner, A. Czypionka, C. Freitag, and A. Trotzke (Eds.), *Charting the Landscape of Linguistics: On the scope of Josef Bayer's work*, pp. 11–15.

Held, K. (1903). *Das Verbum ohne pronominales Subjekt in der älteren deutschen Sprache*. Berlin: Mayer und Müller.

Hoeksema, J. (1997). Negation and negativ concord in Middle Dutch. In D. Forget, P. Hirschbühler, F. Martineau, and M. L. Rivero (Eds.), *Negation and Polarity*, pp. 139–156. Amsterdam: John Benjamins.

Hoeksema, J. (2014). The Middle Dutch negative clitic: Status, position and disappearance. *Lingua 147*, 50–68.

Höhle, T. (1986). Der Begriff 'Mittelfeld'. Anmerkungen über die Theorie der topologischen Felder. In W. Weiss, H. E. Wiegand, and M. Reis (Eds.), *Kontroversen, alte und neue. Bd.3. Akten des VII. Internationalen Germanisten-Kongresses, Göttingen 1985*, pp. 329–340. Tübingen: Niemeyer.

Holmberg, M. Å. (1967). *Exzipierend-einschränkende Ausdrucksweisen: untersucht besonders auf Grund hochdeutscher Bibelübersetzungen bis zum Anfang des 16. Jahrhunderts*. Acta Universitatis Upsaliensis. Uppsala: Almqvist and Wiksell.

Hooper, J. and S. Thompson (1973). On the applicability of root transformations. *Linguistic Inquiry 4*, 465–497.

Hooper, J. B. (1975). On assertive predicates. *Syntax and Semantics 4*, 91–124.

Horn, L. R. (1985). Metalinguistic negation and pragmatic ambiguity. *Language 61*(1), 121–174.

Horn, L. R. (2010). *The Expression of Negation*. The Expression of Cognitive Categories (ECC) 4. Berlin, Boston: De Gruyter.

Jackendoff, R. (1972). *Semantic Interpretation in Generative Grammar*. Cambridge, Massachusetts: MIT Press.

Jäger, A. (2008). *History of German Negation*. Amsterdam: John Benjamins.

Jäger, A. (2018). *Vergleichskonstruktionen im Deutschen*. Linguistische Arbeiten 569. Berlin, Boston: De Gruyter.

Jäger, A. and D. Penka (2012). Development of sentential negation in german. In P. Ackema, R. Alcorn, C. Heycock, D. Jaspers, J. V. Craenenbroeck, and G. V. Wyngaerd (Eds.), *Comparative Germanic syntax: The State of the art*, pp. 199–222. Amsterdam: John Benjamins.

Jespersen, O. (1917). *Negation in English and other languages*. Historisk-filologiske meddelelser. København: A.F. Høst.

Kartunnen, L. and S. Peters (1976). What indirect questions conventionally implicate. *Chicago Linguistics Society 12*, 351–368.

Kayne, R. S. (1994). *The Antisymmetry of Syntax*. Cambridge, Massachusetts: MIT Press.

Kempchinsky, P. (2009). What can the subjunctive disjoint reference effect tell us about the subjunctive? *Lingua 119*, 1788–1810.

Klein, T. and S. Dipper (2016). Handbuch zum Referenzkorpus Mittelhochdeutsch. *Bochumer Linguistische Arbeitsberichte 19*.

Klein, T., K.-P. Wegera, S. Dipper, and C. Wich-Reif (2016). Referenzkorpus Mittelhochdeutsch (1050–1350), version 1.0.

Klima, E. S. (1964). Negation in English. In J. A. Fodor and J. J. Katz (Eds.), *The Structure of Language: Readings in the Philosophy of Language*, pp. 246–323. Englewood Cliffs, NJ: Prentice Hall.

Kluge, F. (2011). *Etymologisches Wörterbuch der deutschen Sprache*. Berlin, Boston: De Gruyter.

König, E. and J. van der Auwera (1988). Clause integration in German and Dutch conditionals, concessive conditionals, and concessives. In *Clause Combining in Grammar and Discourse*, pp. 101–134. Amsterdam: John Benjamins.

Kratzer, A. (1986). Conditionals. In A. M. Farley, P. Farley, and K.-E. McCulloug (Eds.), *Papers from the Parasession on Pragmatics and Grammatical Theory.*, pp. 115–135. Chicago Linguistic Society.

Krifka, M. (2010). How to interpret "expletive" negation under 'bevor' in German. In T. Hanneforth and G. Fanselow (Eds.), *Language and logos. Studies in theoretical and computational linguistics*, pp. 214–236. Berlin: Akademie Verlag.

Lang, E. (2000). Adversative connectors on distinct levels of discourse. In E. Couper-Kuhlen and B. Kortmann (Eds.), *Cause Condition Concession Contrast. Cognitive and Discourse perspectives*, Topics in English Linguistics 33. Berlin, Boston: Mouton de Gruyter.

Laperre, E. (2018). *Negation in Historical West Flemish and Hollandic: an Investigation of Resilient Preverbal Markers*. Ph. D. thesis, Queen Mary University of London.

Lass, R. (1990). How to do things with junk: Exaptation in language evolution. *Journal of Linguistics 26*, 79–102.

Lehmann, W. (1978). Changes in the negative sentence patterns in German. In D. Hartmann, H. Linke, and O. Ludwig (Eds.), *Sprache in Gegenwart und Geschichte. Festschrift für Heinrich Matthias Heinrichs*, pp. 94–109. Köln: Böhlau.

Lenker, U. (2010). *Argument and Rheotic – Adverbial Connectors in the History of English*. Topics in English Linguistics 64. Berlin: Mouton de Gruyter.

Lerch, E. (1929). *Historische Französische Syntax. Untergeordnete Sätze und untergeordnete Konjunktionen.*, Volume 2. Paderborn: Salzwasser-Verlag.

Lockwood, W. B. (1968). *Historical German Syntax*. Oxford: Clarendon Press.

Lucas, C. (2007). Jespersen's Cycle in Arabic and Berber. *Transactions of the Philological Society 105*, 398–431.

Mann, W. C. and S. A. Thompson (1988). Rhetorical structure theory: Toward a functional theory of text organization. *Text - Interdisciplinary Journal for the Study of Discourse 8*(3), 243–281.

Maschek, W. (1913). *Zur Syntax der Bedingungssätze im Landrecht des Sachsenspiegels*. Weida in Thüringen: Thomas und Hubert.

Meillet, A. (1921). L'évolution des formes grammaticales. *Scientia 12*, 384–400.

Miestamo, M. (2005). *Standard Negation. The Negation of Declarative Verbal Main Clauses in a Typological Perspective*. Berlin: Mouton de Gruyter.

Molnár, V. and S. Winkler (2010). Edges and gaps: Contrast at the interfaces. *Lingua 120*, 1392–1415.

Munaro, N. (2011). Toward a hierarchy of clause types. In P. Benincà and N. Munaro (Eds.), *Mapping the Left Periphery. The Cartography of Syntactic Structucture. Volume 5*, Oxford studies in comparative syntax. Oxford: Oxford University Press.

Nadathur, P. and D. Lassiter (2015). Unless – an experimental approach. *Proceedings of Sinn und Bedeutung 19*, 426–444.

Narrog, H. and B. Heine (2017). Grammaticalization. In A. Ledgeway and I. Roberts (Eds.), *The Cambridge Handbook of Historical Syntax*, Cambridge Handbooks in Language and Linguistics, pp. 7–27. Cambridge: Cambridge University Press.

Neeleman, A., E. Titov, H. van de Koot, and R. Vermeulen (2009). A syntactic typology of topics, focus and contrast. In J. van Craenenbroeck (Ed.), *Alternatives to Cartography*, Studies in Generative Grammar 100, pp. 15–51. Berlin, Boston: Mouton de Gruyter.

Neuckermans, A. (2008). *Negatie in de Vlaamse dialecten volgens de gegevens van de Syntactische Atlas van de Nederlandse Dialecten (SAND)*. Ph. D. thesis, Universiteit Gent.

Nevalainen, T. (1990). Modelling Functional Differentiation and Functional Loss: The Case of 'but'. In S. Adamson, V. Law, N. Vincent, and S. Wright (Eds.), *Papers from the 5th International Conference on English Historical Linguistics*, pp. 337–355.

Ouhalla, J. (1990). Sentential negation, relativized minimality and the aspectual status of auxiliaries. *Linguistic Review 7*(2), 183–231.

Pasch, R., U. Brauße, E. Breindl, and U. H. Waßner (2003). *Handbuch der deutschen Konnektoren: Linguistische Grundlagen der Beschreibung und syntaktische Merkmale der deutschen Satzverknüpfer*. Berlin, New York: De Gruyter.

Paul, H., T. Klein, H. Solms, and K. Wegera (2007). *Mittelhochdeutsche Grammatik Bd. 1*. Sammlung kurzer Grammatiken germanischer Dialekte: Hauptreihe. Tübingen: Niemeyer.

Payne, J. R. (1985). Negation. In T. Shopen (Ed.), *Language Typology and Syntactic Description. Vol. I. Clause Structure*, pp. 197–242. Cambridge: Cambridge University Press.

Penka, D. (2011). *Negative Indefinites*. Oxford studies in theoretical linguistics 32. Oxford: Oxford University Press.

Petrova, S. (2017, 12-14 July). Zur Diachronie von Argumentsätzen mit Verbzweitstellung im Deutschen. Handout V2-Workshop Wuppertal 12-14 July.

Petrova, S. and R. Hinterhölzl (2010). Evidence for two types of focus positions in Old High German. In G. Ferraresi and R. Lühr (Eds.), *Diachronic Studies on Information Structure. Language Acquisition and Change*, Language, Context and Cognition 10, pp. 189–218. Berlin, Boston: De Gruyter.

Philippa, M., F. Debrabandere, A. Quak, T. Schoonheim, and N. van der Sijs (2004). *Etymologisch woordenboek van het Nederlands*. Amsterdam: Amsterdam University Press.

Pokorny, J. (1989). *Indogermanisches etymologisches Wörterbuch* (2nd ed.). Bern: Francke.

Pollock, J.-Y. (1989). Verb movement, Universal Grammar, and the structure of IP. *Linguistic Inquiry 20*, 365–424.

Postma, G. (2002). De enkelvoudige clitische negatie in het Middelnederlands en de Jespersen-cyclus. *Nederlandse Taalkunde 7-2*, 44–82.

Quine, W. V. O. (1959). *Methods of Logic*. New York: Holt, Rinehart and Winston.

Reinhart, T. (1981). Pragmatics and linguistics: an analysis of sentence topics. *Philosphica 27*, 53–94.

Reis, M. (1997). Zum syntaktischen Status unselbständiger Verbzweit-Sätze. In C. Dürscheid, K.-H. Ramers, and M. Schwarz (Eds.), *Sprache im Fokus. Festschrift für Heinz Vater zum 65. Geburtstag*, pp. 121–144. Niemeyer.

Repp, S. (2008). When the negative goes missing: the role of the information structure in gapping coordinations with *but*. In A. Steube (Ed.), *The Discourse Potential of Underspecified Structures: Event Structure and Information Structure*, pp. 359–388. Berlin, Boston: Walter de Gruyter.

Rizzi, L. (1997). The fine structure of the left periphery. In L. Haegeman (Ed.), *Elements of Grammar: Handbook of Generative Syntax*, pp. 281–337. Kluwer.

Rizzi, L. and G. Bocci (2017). The left periphery of the clause – Primarily Illustrated for Italian. In *The Wiley Blackwell Companion to Syntax, Second Edition*, pp. 1–30. Malden: Blackwell.

Roberts, I. and A. Roussou (1999). A formal minimalist approach to grammaticalization. *Linguistics 37*(6), 1011–1041.

Roberts, I. and A. Roussou (2003). *Syntactic Change: A Minimalist Approach to Grammaticalization*. Cambridge Studies in Linguistics 100. Cambridge: Cambridge University Press.

Roussou, A. (2000). On the left periphery: Modal particles and complementisers. *Journal of Greek Linguistics 1*, 65–94.

Rutten, G., M. van der Wal, J. Nobels, and T. Simons. (2012). Negation in seventeenth- and eighteenth century Dutch. A historical-sociolinguistic perspective. *Neuphilologische Mitteilungen 113*, 323–342.

Salminen, J. (2018). Paratactic negation revisited. *Functions of Language 25*(2), 259–288.

Samo, G. (2018). *A criterial approach to the cartography of V2*. Ph. D. thesis, Université de Genève.

Schiffrin, D. (1987). *Discourse Markers*. Studies in International Sociolinguistics 5. Cambridge: Cambridge University Press.

Schrodt, R. (2004). *Althochdeutsche Grammatik*. Tübingen: Niemeyer.

Schüler, J. (2016). Alte und neue Fragen zur mittelhochdeutschen Negationssyntax. In A. Speyer and P. Rauth (Eds.), *Syntax aus Saarbrücker Sicht 1. Beiträge der SaRDiS-Tagung zur Dialektsyntax*, pp. 91–107. Stuttgart: Franz Steiner.

Schüler, J. (2017). Negationsstrukturen in den Kölner Urkunden des 13. Jahrhunderts im Vergleich. *Rheinische Vierteljahresblätter 81*, 1–23.

Schulze, B. (1885). Die negativ-excipierenden sätze. *Zeitschrift für deutsches Altertum und deutsche Literatur 39*, 327–336.

Stoett, F. A. (1923). *Middelnederlandse Spraakkunst – Syntaxis*. 's-Gravenhage: Martinus Nijhoff.

Strandberg, M. (2006). Exzeptivkonstruktionen mit *es sei denn* und *es wäre denn* im heutigen Deutsch. Master's thesis, Universitetet i Bergen.

Streitberg, W. (1910). *Die gotische Bibel. Zweiter Teil: Gotisch-griechisch-deutsches Wörterbuch*. Heidelberg: Carl Winter's Universitätsbuchhandlung.

Sweetser, E. E. (1990). *From etymology to pragmatics. Metaphorical and cultural aspects of semantic structure.* Cambridge Studies in Linguistics 54. Cambridge: Cambridge University Press.

Thim-Mabrey, C. (1987). Adverbiale + *so*: Distribution und Funktion des Korrelats so im Frühneuhochdeutschen. *Sprachwissenschaft 12*, 180–219.

Thurmair, M. (1989). *Modalpartikeln und ihre Kombinationen*. Linguistische Arbeiten 223. Tübingen: Niemeyer.

Topinke, D. (2012). Syntaktischer Ausbau im Mittelniederdeutschen. Theoretisch-methodische Überlegungen und kursorische Analysen. *Niederdeutsches Wort 52*, 19–46.

Traugott, E. (1007). *Unless* and *but* conditionals: A historical perspective. In A. Athanasiadou and R. Dirven (Eds.), *On conditionals again*, pp. 145–167. Amsterdam: John Benjamins.

Van der Horst, J. (2008). *Geschiedenis van de Nederlandse syntaxis*. Leuven: Universitaire Pers Leuven.

Van der Horst, J. and M. J. Van der Wal (1979). Negatieverschijnselen en woordvolgorde in de geschiedenis van het Nederlands. *Tijdschrift voor Nederlandse Taal- en Letterkunde XCV*, 6–37.

Van der Wouden, T. (1997). *Negative Contexts: Collocation, Polarity and Multiple Negation*. Routledge Studies in Germanic Linguistics 1. London: Routledge.

van Gelderen, E. (2004). Economy, Innovation, and Prescriptivism: From Spec to Head and Head to Head. *Journal of Comparative Germanic Linguistics 7*, 59–98.

van Gelderen, E. (2011). *The Linguistic Cycle. Language Change and the Language Faculty*. Oxford: Oxford University Press.

Van Helten, W. L. (1885). *Vondel's taal. Grammatica van het Nederlandsch der zeventiende eeuw. Syntaxis*. Groningen: J.B.Wolters.

van Kemenade, A. (2000). Jespersen's cycle revisited. Formal properties of grammaticalization. In S. S. Pintzuk, G. Tsoulas, and A. Warner (Eds.), *Diachronic syntax. Models and mechanisms*, pp. 51–74. Oxford: Oxford University Press.

van Kemenade, A. and B. Los (2006). Discourse Adverbs and Clausal Syntax in Old and Middle English. In A. van Kemenade and B. Los (Eds.), *The Handbook of the History of English*, pp. 224–248. Malden: Blackwell.

Vilkuna, M. and E. Vallduví (1998). On theme and contrast. In P. Culicover and L. McNally (Eds.), *The Limits of Syntax. Syntax and Semantics, vol. 29*, pp. 79–108. San Diego: Academic Press.

von Fintel, K. (1993). Exceptive Constructions. *Natural Language Semantics 1(2)*(123–148).

von Wietersheim, S. (2016). Variable binding as evidence for clausal attachment. In I. Reich and A. Speyer (Eds.), *Co- and subordination in German and other languages. Linguistische Berichte, Sonderhefte 21*, pp. 319–345. Hamburg: Buske Verlag.

Vosters, R. and W. Vandenbussche (2012). Bipartite negation in 18th and 19th century southern Dutch. *Neuphilologische Mitteilungen 113*, 343–364.

Vostrikova, E. (2018). On the similarity between *unless* and *only-if not*. In *Proceedings of Sinn und Bedeutung 21(2)*, pp. 1271–1288.

Walkden, G. (2014). *Syntactic reconstruction and Proto-Germanic*. Oxford Studies in Diachronic and Historical Linguistics 12. Oxford: Oxford University Press.

Weiß, H. (2018). The Wackernagel complex and pronoun raising. In A. Jäger, G. Ferraresi, and H. Weiß (Eds.), *Clause Structure and Word Order in the History of German*, Oxford Studies in Diachronic and Historical Linguistics 28, pp. 132–154. Oxford University Press.

Willis, D. (2011). A minimalist approach to Jespersen's cycle in Welsh. In D. Jonas, J. Whitman, and A. Garrett (Eds.), *Grammatical Change: Origins, Natures, Outcomes*, pp. 93–119. Oxford: Oxford University Press.

Witzenhausen, E. (2019). Von Negation zu Domänensubtraktion. *Beiträge zur Geschichte der deutschen Sprache und Literatur 141*(1), 1–30.

Wunderlich, H. (1894). *Unsere Umgangsprache in der Eigenart ihrer Satzfügung*. Weimar: Emil Felber.

Yoon, S. (2011). *'Not' in the mood. The syntax, semantics and pragmatics of evaluative negation*. Ph. D. thesis, The University of Chicago.

Zeijlstra, H. (2004). *Sentential Negation and Negative Concord*. LOT / Netherlands Graduate School of Linguistics 101. Utrecht: LOT.

Zimmermann, K., S. Glauch, M. Miller, and A. Schlechter (2003). *Die Codices Palatini germanici in der Universitätsbibliothek Heidelberg*. Kataloge der Universitätsbibliothek Heidelberg. Wiesbaden: Dr. Ludwig Reichert Verlag.