

Reanalysis of OE *hwæðer* in the Left Periphery

by

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ABSTRACT

Despite the vast research on language carried out by the generative linguistics of Noam Chomsky and his followers since the 1950s, for theoretical reasons (mainly their attention to the mental abstraction of language structure rather than language as a performed product), historical linguistics from the start lay outside their research interest. This study is an attempt to bridge the gap between the formalism and theoretical constructs introduced by generative grammar, whose ultimate goal is to provide not only a description but also an explanation to linguistic phenomena, and historical linguistics, which studies the evolution of language over time. This main objective is met by providing a formal account of the changes *hwæðer* undergoes throughout the Old English (OE) period. This seemingly inconspicuous word presents itself as a case of particular investigative interest in that it reflects the different stages proclaimed by the theoretical assumptions implemented in the study, namely the economy principles responsible for what has become known as the CP cycle: the Head Preference Principle and the Late Merge Principle, whereby pronominal *hwæðer* would raise to the specifier position for topicalization purposes, then after frequent use in that position, it would be base-generated there under Late Merge, until later reanalysis as the head of the Complementizer Phrase (CP) under Head Preference.

Thus, I set out to classify the diverse functions of OE *hwæðer* by identifying and analyzing all instances as recorded in the diachronic part of the Helsinki Corpus. Both quantitative and qualitative analyses of the data have rendered the following results: 1) a

fully satisfactory functional and chronological classification has been obtained by analyzing the data under investigation following a formal theoretical approach; and 2) a step-by-step historical analysis proves to be indispensable for understanding how language works at the abstract level from a historical point of view. This project is part of a growing body of research on language change which attempts to describe and explain the evolution of certain words as these change in form and function.

A mis padres

gracias por vuestro “ánimo, que ya queda menos” y por todo lo demás

And for my best friend, John

thank you for always being there for me. No one like you

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LIST OF ABBREVIATIONS

A	Anglian
ACC	Accusative
AdjP	Adjective Phrase
AGR	Agreement
AGRP	Agreement Phrase
AM	Anglian-Mercian
ANA	Anaphora
A-P	Articulatory-perceptual
Asp	Aspect
ASS	Assertive
ASSP	Aspect Phrase
BCE	Before Common Era
C	Complementizer
CAT	Cataphora
CE	Common Era
C-I	Conceptual-intentional
CMPR	Comparative
COMP	Complementizer
conj.	Conjunction
CORR	Correlative
CP	Complementizer Phrase
D, DET	Determiner

DAT	Dative
DECL	Declined
DEP	Dependent
DISJ	Disjunction
DISTR	Distributive
DP	Determiner Phrase
DS	Deep Structure
E-language	External language
EX	Exclusive
Fin	Finite
FinP	Finite Phrase
FL	Faculty of Language
Foc	Focus
FocP	Focus Phrase
ForceP	Force Phrase
FUT	Future
GB	Government and Binding
GEN	Genitive
H	Head
HC	Helsinki Corpus
HPP	Head Preference Principle
I	Inflection
IE	Indo-European
I-language	Internal language

IMP	Imperative
IN	Inclusive
IN	Inclusive
IND	Indicative
INDECL	Indeclinable
INDEP	Independent
INF	Infinitive
INT	Interrogative
IO	Indirect Object
IP	Inflectional Phrase
LCA	Linear Correspondence Axiom
LF	Logical Form
LMP	Late Merge Principle
M	Mood
ME	Middle English
MP	Minimalist Program, Mood Phrase
n.	Noun
NP	Noun Phrase
o1	Old English Period (-850) (HC)
o2	Old English Period (850-950) (HC)
o3	Old English Period (950-1050) (HC)
o4	Old English Period (1050-1150) (HC)
OE	Old English
OED	Oxford English Dictionary

ON	Old Norse
OPT	Optative
P&P	Principles and Parameters
PART	Particle
PDE	Present-Day English
PF	Phonetic Form
PGmc	Proto-Germanic
PIC	Phase Interpretability Condition
PIE	Proto-Indo-European
PITMH	Predicate-Internal Theta-Marking Hypothesis
PL	Plural
PLD	Primary Linguistic Data
PP	Past Participle
PRESP	Present Perfect
PRET	Preterit
PRS	Present
PS	Phrase Structure
PST	Past Tense
PTC	Participle
PTCL	Particle
QM	Question Marker
REFL	Reflexive
REL	Relative
S	Sentence, Subject

SBJV	Subjunctive
SG	Singular
S-O-V	Subject-Object-Verb word order
Spec	Specifier
SS	Surface Structure
SUBJ	Subjunctive
S-V	Subject-Verb word order
S-V-O	Subject-Verb-Object word order
T	Tense
Top	Topic
TopP	Topic Phrase
TP	Tense Phrase
UG	Universal Grammar
V	Verb
V/2	Verb Second
vP	small v (lexical or affixal light verb) Phrase
VP	Verb Phrase
V-S	Verb-Subject word order
WS	West-Saxon
X' Theory	X-bar Theory

Chapter 1

INTRODUCTION

Generative grammar assumes a clausal structure divided into an outer layer (the Complementizer Phrase, or CP), an inner layer (the Tense Phrase, or TP), and a layer containing the verb (the Verb Phrase, or VP). Argument structure, which refers to the participants in the relevant activity or event, is coded in the thematic layer, the VP; tense, mood and aspect are located in the grammatical layer, the TP; and the CP marks the anchoring to another clause (subordinating conjunctions), and denotes pre-subject position (occupied for example by an inverted auxiliary in sentences such as ‘*Can you help?*’).

1.1 Overview and Contribution Argument

My investigation, which focuses on processes occurring in the CP layer, centers on the evolution of *whether* during the earliest period of the English language. This seemingly inconspicuous word presents itself as an interesting case of renewal within the CP. For example, *whether* starts out in Old English (OE henceforth) as a lexical item (a pronoun meaning 'which of the two'), *hwæðer*, and over time it is reanalyzed into a functional (or grammatical) item, first as a question marker (an OE expression introducing a *yes/no* question, roughly equivalent to '*Yes or no, you comin?*'), and finally as a complementizer (our modern 'I wonder *whether*...').

It is my contention, following van Gelderen (2004 and later work), that these changes were motivated by *principles of feature economy*. These are in turn grounded on Chomsky's (1995 and more recent work) *principles of efficient computation* of his

Minimalist Program (MP), which require that syntactic representations and derivations contain as few constituents and grammatical operations as possible. With some exceptions (Allen, 1980; Ukaji, 1997; van Gelderen, 2004) no comprehensive study of the evolution of *whether* has been attempted. Thus, I intend to undertake a diachronic study that will quantify the different functions and frequencies of OE *hwæðer* as they are recorded in the diachronic part of the Helsinki Corpus.

An effective approach to the present study incorporates the following goals: 1) to describe formally the CP layer as the locus of change (via principles of feature economy); 2) to provide the historical trajectory of *hwæðer* so as to complete what we already know about its cycle of renewal, with an emphasis on its incipience; and 3) to classify the diverse functions *hwæðer* acquires over time. An already established theoretical framework, based on the most recent work on the subject, and access to one of the most comprehensive and useful corpora will ensure feasibility of the project.

1.2 The Project as it Relates to Scholarly Dialogue

Generative grammar comes about in the 1950s with work by Noam Chomsky (in particular, Chomsky 1957), who claims that linguistic knowledge is innate. For theoretical reasons, historical linguistics from the start lay outside the interest of the generative approach, and consequently, grammaticalization (devoted to linguistic changes in diachrony) was not recognized as a valid linguistic process. The most important of these reasons is the claim that historical change lacks *explanatory force*, as Lightfoot (2006) puts it, as it can only *describes* external language (E-language), namely the production of language, rather than the internal process of our mind (I-language) studied

and explained via scientific, Newtonian-style analysis of language change. It is not until the work of Roberts & Roussou (2003) and van Gelderen (2004) that linguistic change is formally *explained* by means of parametric change and structural simplification (using the same technical tools of generativism), and ultimately caused by innate principles. My formal analysis of the *whether* cycle is theoretically grounded on their work, and therefore hopes to continue their effort in bridging the gap between the chomskyan approach to language and historical linguistics, which until very recently was mainly the area of functionalism and typology. But my contribution to the field will furthermore provide a fresh perspective in that it will entail the CP layer.

Few are the studies dedicated to the multiple functionalities of English *whether*. To date only three studies are worth mentioning: Allen (1980) has a very brief article based on the then current Government and Binding (GB) framework, and although some of the conundrums encountered in her study can be elucidated under more recent interpretations, she presents insightful proposals. Ukaji (1997) provides a descriptive account of the evolution of this word in English, and only in passing does he suggest an explanation supported by generativism. Finally, van Gelderen (2009) uses *whether* as an example of an element grammaticalizing into the left periphery of the clause, thus explaining the process using minimalist concepts.

1.3 A Note on Grammaticalization

Grammaticalization is defined by Hopper & Traugott (2003: xv) as “the change [rather than process] whereby lexical items and constructions come in certain contexts to serve grammatical functions and, once grammaticalized, continue to develop new

grammatical functions”. Heine & Kuteva (2002, 2) characterize this phenomenon by means of these four interrelated mechanisms:

(1) Desemanticization: semantic bleaching or loss in meaning content

Extension: context generalization

Decategorialization: loss in morphosyntactic properties

Erosion: phonetic reduction or attrition

Notice that the mechanisms in (1) cover the different aspects of language:

semantics, pragmatics, morpho-syntax, and phonetics respectively. Core to grammaticalization is also the concept of *unidirectionality*, where changes tend to be, as is claimed, from less to more grammatical. Heine & Kuteva (2002) also include *layering* as an important factor, which refers to the persistence of older forms and meanings alongside the newer ones. Some scholars have proposed the inclusion of additional characteristics (sometimes referred to as principles) in the definition of grammaticalization, but they essentially refer to the principle characteristics listed above in (1). For example, Heine, Claudi & Hünnemeyer (1991) include *recategorialization* along with *decategorialization*.

It is tempting to talk about the grammaticalization of *whether* in the present study, but there are two reasons why I decided to talk about the reanalysis, rather than the grammaticalization, or *whether*: 1) Although OE *hwæðer* presumably starts as a lexical item (a pronoun) and in time it becomes a functional one (a complementizer or question mark), some of the definitional characteristics do not occur (no phonetic attrition, for

example) and 2) the concept *grammaticalization* has raised controversy to the point of being negated it completely (see Norde (2009)).

The focus of this dissertation is the reanalysis of OE *hwæðer* in the left periphery, which is a phenomenon easy to recognize in this case, but also central to understanding the CP cycle. It is beyond the scope of this study to support or deny the existence of grammaticalization for OE *hwæðer*.

1.4 Goals and Objectives

To ensure that the goals for the present study are attainable and that methodological rigor is maintained throughout the project, I have likewise established corresponding objectives:

1) My main goal is to shed light upon the linguistic changes that occur in the CP layer, which is the locus of change; to this end, I will apply the idea that language has an innate tendency to keep things simple (economy principles). Thus, over time, OE *hwæðer* as a pronoun, occupies a lower position in the sentence (within the VP), then, as it is preposed (through a process named topicalization), it becomes a part of the CP (base-generated), first as part of a bigger phrase (specifier of the CP), and finally as the head of such phrase.

2) In order to achieve my first goal, I decided to study the evolution of English *whether* during the OE period, which goes through grammatical (functional) transformations within the clausal edge, the CP layer. In addition, the etymological background of *whether* in particular needs to be considered, given that we have knowledge of a Proto-Indo-European (PIE) equivalent, and in turn, a Proto-Germanic (PGmc) equivalent from

which the Germanic cognates evolved (PIE **k^wo-* + **-tero-* > PGmc **Xwaþaraz* (**Xwe*)).

Once the cycle is clearly described, I will hope to find solutions to unanswered questions, such as why this *wh*-word behaves differently from all other *wh*-words (which, where...).

3) One of the few classifications of the different functional types of *whether* is that of Ukaji (1997). A refinement of this classification is imperative in order to determine whether we are dealing with two different types of conjunction or two different elements altogether. Under some functionalist approaches, a word that has different functions depending on the syntactic environment is said to possess polyfunctionality. I defend the idea that *layering* is a common outcome of reanalysis, by which old and new forms are not substituted but coexist with similar meanings. The difference is not just terminological; it has theoretical implications (in layering, separate lexical items are stored in the lexicon rather than a single lexical item with a double function).

1.5 Research Questions

For the purpose of this project, I raise several questions, which I have grouped as follows:

1.5.1 Functional Classification

How can we classify the different functions of OE *hwæðer*? How can we improve past classifications that paired up distinct categories, such as conjunctions and question markers (referred to as *question particles* in the literature)?

1.5.2 Chronology of OE *hwæðer*

Is it possible to establish a chronology of OE *hwæðer* according to the identified functions or categories? Does the complementizer (*conjunction* in the literature) predate

the question marker (question particle), as has been claimed, or the other way round?

How can we justify either position?

1.5.3 Gothic *hvaþar* and its relationship with OE *hwæðer*

What insights can Gothic provide on the nature of OE *hwæðer* at its earliest stage? Can any correlations be drawn between OE *hwæðer* and its Gothic cognate *hvaþar*?

The proposed questions will be addressed in particular in Chapters 4, 5 and 6, which present and explain data for OE *hwæðer* (the first two of these chapters) and Gothic *hvaþar* (the last one).

1.6 Methodology and Data Analysis

The collection of data from corpora plays a central role in the overall plan of the project, since it will be essential to provide a representative image of the significance, context and frequency of the phenomenon under investigation. The corpus used for the identification of tokens from OE is the diachronic part of the *Helsinki Corpus (HC) of English Texts: Diachronic and Dialectal*. This section covers the period between c. 750 and c. 1150 and contains a selection of texts from the *Dictionary of Old English Project* at the University of Toronto.

For the identification of texts, I follow the coding conventions listed in the *Manual to the Diachronic Part of the Helsinki Corpus of English Texts* (Kytö, 1996). I added nonetheless Appendix A with detailed information of not only the name of the text in which each instance of OE *hwæðer* appears (which could be found in the Manual), but also the exact section and line number, so that the reader can easily identify each example

in the corpus. The Appendix is organized alphabetically within each chronologically ordered section.

List (2) below shows the reference code values I kept from the HC, as these contain information that proved relevant to the final analysis of the data:

- (2) <N = Name of Text
- <C = Part of Corpus
- <M = Date of Manuscript
- <D = Dialect
- <V = Verse or Prose
- <G = Relationship to Foreign Original & <F = Foreign Original (which I combined into one)

Finally, the following variables in (3) were taken in consideration for the classification of tokens:

- (3) Sentence Complexity: independent clause; dependent clause; ambiguous
- Sentence Type: interrogative; declarative or assertive; imperative
- Function: conjunction (complementizer); question marker (QM); pronominal (PRN2 'which of two' & PRN+ 'which of more than two')
- Part of Speech: subject; direct object; adverbial
- Declension: declined; indeclinable
- Word order: S-V; V-S (Subject-Verb; Verb-Subject)
- Reference: anaphora; cataphora
- Position in the Sentence: verbal phrase (VP); specifier (Spec); head (H)

Linking Verb: e.g., *cunnian* ‘seek for, know, inquire, examine’; - (no linking verb)

Coordinator or Correlative (CORR): *þe... þe...; swa... swa...*

2nd Disjunction: DISJ2 ‘or not’; - (no disjunction or implicit)

Disjunction Type: inclusive (IN); exclusive (EX)

Mood: indicative (IND); subjunctive (SUBJ)

For the analysis of Gothic *hwapar* I used a corpus containing Wulfila’s Bible, the only surviving text containing the word. The corpus is of free access on the web.

1.7 Organization of this Dissertation

Given the nature of the dissertation, Chapters 4 through 6, dealing with the data, are considerably longer than Chapter 2 and 3, dealing with secondary sources.

Chapter 2 is an introduction to the theoretical framework underlying my study of Old English *hwæðer*. The analysis is grounded in Chomsky’s (1995) Minimalist Program and the economy principles of Universal Grammar proposed in the Program. After introducing some of the key concepts of generative grammar, I discuss the pillars of the Program and describe the structure of split projections, with an emphasis on the complementizer phrase (CP). The chapter finishes with a note on the role of formal theories of linguistics in diachronic studies.

In Chapter 3, I provide an overview of the functional classification of OE *hwæðer* as has been understood in the literature. Several sources were consulted; some of these were encyclopedic, such as the Oxford English Dictionary Online (OED Online), Visser (1963-1973), Mitchell (1985), and Traugott’s (1992) chapter on OE syntax in *The*

Cambridge History of the English Language. The other sources consulted were of an explanatory nature: Allen's (1980) brief commentary on the syntactic interpretation of *whether* in OE, Ukaji's (1997) article on the history of *whether*, and finally van Gelderen's (2004) formal explanation in terms of economy principles. The last section of the chapter offers some concluding remarks.

Chapters 4 and 5 present and analyze the data collected from the OE period in the diachronic part of the *Helsinki Corpus of English Texts: Diachronic and Dialectal*, in itself a selection of texts from the *Dictionary of Old English Project* at the University of Toronto. Chapter 4 offers a qualitative analysis of a representative number of tokens, whereas Chapter 5 is a quantitative analysis of all tokens found in the corpus.

In Chapter 6, I provide some basic information about the Gothic language and the text under investigation, before moving on to discussing the data, which includes not only OE *hwæðer*'s Gothic cognate, but also other particles of interest to the study. The chapter concludes with a final commentary of the observations made throughout the chapter.

Finally, Chapter 7 summarizes the key points of my dissertation and provides a set of conclusions and suggestions for further study.

Chapter 2

THEORETICAL BACKGROUND

This chapter discusses the theoretical assumptions which underlie my study of Old English *hwæðer*. The analysis I propose is grounded in the Minimalist Program (MP) (Chomsky, 1995) and draws upon economy principles of Universal Grammar (UG henceforth), specifically as interpreted by van Gelderen (2004 and later work) in terms of Late Merge and Head Preference. In what follows, I provide the basic concepts of generativist grammar (Language Faculty, Universal Grammar, Principles and Parameters, X-bar Theory, split projections) and the historical context that led to the MP and its economy principles. The chapter closes with a discussion of the apparent theoretical challenge of explaining linguistic phenomena from a formal perspective.

2.1 Introduction: Some Key Concepts

For generativists cognition plays an important role in the study of grammar, and as such the role of the linguist is to determine what speakers know about their language. This knowledge is understood to be tacit, or subconscious, and it is this kind of knowledge, which since the 1960s has been referred to as competence, that has become the focus of grammatical study. In other words, the ultimate goal in studying competence is to describe and explain the internalized linguistic system of the speaker, which Chomsky (1986) termed I-language (where I stands for internalized).

Ultimately, a theory of Universal Grammar would represent a generalization of the grammars of all natural languages, namely their I-languages. UG is thus composed of those aspects of grammar which are universal, and which according to Chomsky are part

of the innate knowledge the speaker is born with. Chomsky (1986) defines UG as "the theory of human I-languages [...] that identifies the I-languages that are humanly accessible under normal conditions" (p. 23).

But a theory of UG must satisfy certain criteria of adequacy, among which descriptive adequacy and explanatory adequacy are fundamental. The former refers to the fact that the grammar of a given human I-language should be universal, that is, capable of describing sets of universal properties of all natural human languages (and narrow enough, or maximally constrained, to describe only human, and not other artificial, languages); the latter should be capable not only to describe but also to explain the relevant properties, that is, to explain why human languages are the way they are.

In terms of economy, a theory of UG should employ the minimal theoretical apparatus required, so that the grammar is as simple as possible, and consequently reducing the complexity of structures and principles typical of previous work. This movement towards simplification led Chomsky to explore the advantages of a minimalist approach, first with his "Minimalist Program for Linguistic Theory" (1993) and then in his seminal work, *The Minimalist Program* (1995), and subsequent work (1998, 2001).

2.2 Preamble to the Minimalist Program

In *The Logical Structure of Linguistic Theory*, Chomsky set forth a research program of generative grammar, whose aim was to develop a theory that would account for how a child, exposed to a limited set of utterances in her language, can produce an indefinite number of new utterances, and is able to discern grammaticality given the limited exposure to language (Chomsky, 1955). It is this logical problem of language

acquisition, commonly known as Plato's problem, that generative grammar attempts to explain.

During the 1980s, the Principles and Parameters (P&P) framework came about as a result of previous generative grammar investigations. Under the P&P model, Chomsky (1981) noted that

What we expect to find [...] is a highly structured theory of UG based on a number of fundamental principles that sharply restrict the class of attainable grammars and narrowly constrain their form, but with parameters that have to be fixed by experience. If these parameters are embedded in a theory of UG that is sufficiently rich in structure, then the languages that are determined by fixing their values one way or another will appear to be quite diverse. (pp. 3-4)

The task for generativist scientists then, Chomsky (1981) continues, is to find those fundamental principles among all possible linguistic phenomena by simplifying the apparent complexity into a system that goes beyond mere empirical description. The search for simpler and more natural theories of UG was thus expressed under the P&P model. This search led Chomsky (1986) to reconsider the interface properties of the faculty of language (FL) and the performance systems, as these are part and parcel of the internal structure of FL. His principle of Full Interpretation reflects their one-to-one correspondence, which states that "every element of PF [Phonetic Form] and LF [Logical Form], taken to be the interface of syntax with systems of language use, must receive an appropriate interpretation" (p. 98).

The principle of Last Resort was also formulated by Chomsky (1986) to reflect the economy of the narrow syntax, which states that "an NP is moved only when this is required" so as to satisfy Full Interpretation. Later on, these two principles, Full Interpretation and Last Resort, would become the economy conditions of UG (Boeckx, 2006).

Generative grammar emphasized the search for an optimal design of language, when Chomsky (1993) proposed the strongest minimalist thesis, where "the linguistic expressions are the optimal realizations of the interface conditions, where 'optimality' is determined by the economy conditions of UG" (p. 171).

2.3 The Minimalist Program

The Minimalist Program (MP) is the most recent instantiation of generative grammar, and it evolves from the Principles and Parameters model. As its name indicates, it is not a theory, but a program that allows for different minimalist models. MP was first outlined in Chomsky's (1993) article "A minimalist program for linguistic theory" and in Chomsky (1995) *The minimalist program*, as well as in later and related work. MP continues to address Plato's problem (how children can acquire grammatical competence despite the impoverished nature of the primary linguistic data (PLD), which is the input to this process), but it succeeds its earlier P&P models (Government & Binding (GB) in particular) in that it rids superfluous constructs, such as unnecessary levels of representation (the internal levels: deep structure (DS) and surface structure (SS)), relations of government, trace theory (no need for new entities), theta structure, construction specific rules for WH movement, raising. Thus, MP highlights the

importance of Economy, reminiscent of Chomsky's earliest work on generalized transformations of 1955.

The four linguistic levels of UG under GB provided systematic information about linguistic expressions: the D-structure was the interface of the lexicon and the computation system; the Phonetic Form (FP) was the level specifying aspects of sound/pronunciation; the Logical Form (LF) was the level specifying aspects of meaning; and finally, the S-Structure was an intermediate level acting as a mediator between the other three levels. Chomsky's (1995, p. 22) derivation containing these four levels is illustrated in Figure 1 below:

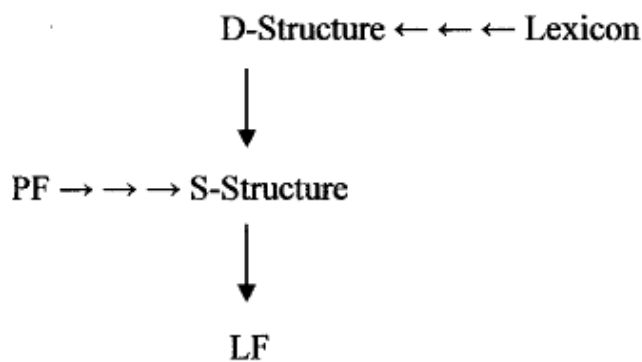


Figure 1. Four Levels of Representation under Government and Binding Theory

Other differences between MP and its predecessor GB include: 1) in GB, *move* applies freely, generating one or more representations for a single sentence, and then it is tested for well-formedness via a combination of filtering effects; *move* applies in MP only when necessary for feature checking, and the elimination of already valued uninterpretable features prevent the derivation from crashing; 2) whereas the parameters

encode properties and descriptive generalizations in GB, these are not separate entities in MP, they are expressed rather as features on functional categories within the lexicon; 3) GB has four levels of representation; MP maintains only the phonological form (FP) and the logical form (LF), which are instead abstract components readable by the articulatory-perceptual (A-P) and the conceptual-intentional (C-I) systems of the mind/brain.

Two main ideas involving Economy were developed under MP, namely Economy of derivation and Economy of representation. The former refers to the fact that movement only occurs in order to match interpretable with uninterpretable features; and the latter, requires that grammatical structures exist for a purpose (no larger or more complex than required).

A minimalist grammar entails the following: the lexicon, or dictionary, which is composed of all the lexical items or words in the languages and their linguistic properties. The speaker selects the relevant words out of this lexicon in order to form phrases and sentences. The combination of these words into larger units is possible thanks to a series of syntactic computations in the syntax. This syntactic component of grammar is only the first step (or narrow syntax); from then on, the syntactic structure is transferred to two other components necessary for the ultimate exteriorization of the sentence. One of them is the semantic component, which maps the syntactic structure into its corresponding semantic representation, and the other one is the phonetic representation, which produces a phonetic Spellout, that is, the actual realization of the sounds. Both semantic and phonetic representations interface with the system of thought and the system of speech

production respectively. The basic model representing the computational system is illustrated in Figure 2:

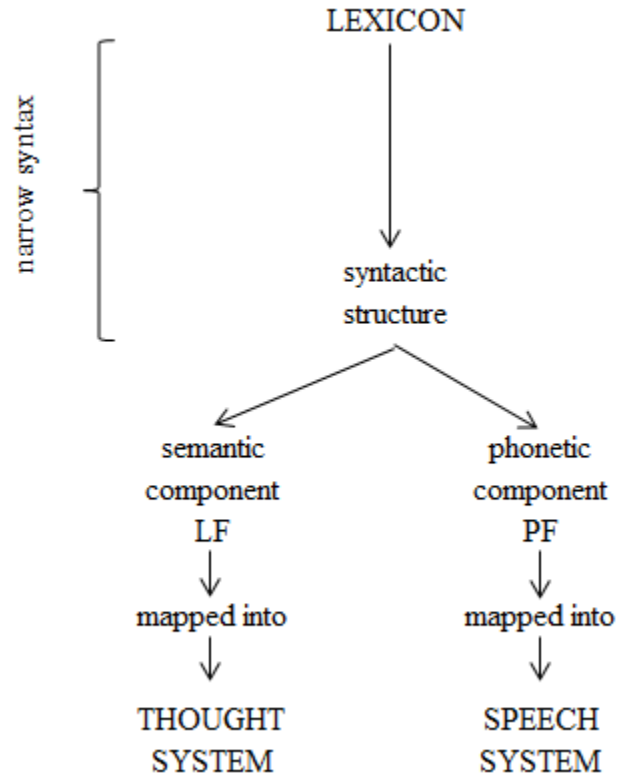


Figure 2. Computational System in the Minimalist Model

Under MP then, the derivation includes the selection of a set of lexical items from the Numeration; the representations are handed over to the interface systems (the thought system and the speech system), and these can only contain elements which are legible by its corresponding interface system so the computation can converge, or conversely, so that the computation does not crash.

Within the narrow syntax, the mapping between the Numeration and the output representations PF and LF entails a series of applications of two core syntactic processes (Merge and Move), which create the configurations in which the features of the lexical items are checked and eliminated. A Probe-Goal system would account for this feature checking. Thus, a probe seeks a goal in order to match features that establish agreement: the uninterpretable features of each get valued by the interpretable features of the other in an operation called Agree. Once valued, the uninterpretable features get deleted via Move. For the features of both Probe and Goal to engage in these two operations, they have to be active, ensuring that the final derivation will converge (will not crash). Spell-out applies once these features have been valued and deleted. Syntactic structures are built up one phase at a time, and the Phase Interpretability Condition (PIC) ensures that the elements within the domain of a phase head are inert or impenetrable to an outside Probe.

2.4 The Language Faculty

A theory of language acquisition deals with the learnability of language and tries to explain the uniformity and rapidity with which a child acquires her native language given limited exposure to language and impoverished input. For the first year and half, the child acquires single words (the single-word stage), and only then does she start displaying her first signs of grammar acquisition. From then on, the child seems to develop her grammatical growth at an accelerated speed. The explanation proposed for such rapid acquisition process is said to be determined by a biologically endowed innate Language Faculty within the brain. Thus the child is genetically programmed to develop

her grammar on the basis of her linguistic experience, albeit impoverished. This view is known as the innateness hypothesis. Figure 3 is a representation of the language acquisition process based on Chomsky's interpretation, where the exposure to language the child receives can be understood as the input of the process and the grammar the child develops as its output:

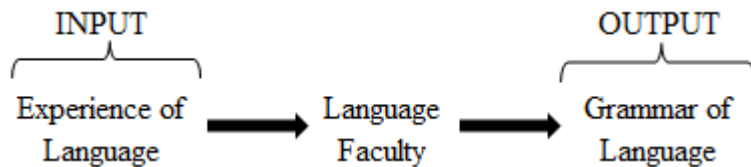


Figure 3. Generative Approach to Language Acquisition Process

The ability to speak and acquire language, argues Chomsky (1972), is unique to humans and "that there are very deep and restrictive principles that determine the nature of human language and are rooted in the specific character of the human mind" (p. 102). In addition, this ability has been proven to be independent from intelligence, as evinced by individuals with certain intellectual pathologies who nonetheless are able to communicate verbally.

The speed with which the child acquires her language, in particular right after the one-word stage of language development, can only be explained by the fact that the child is born with an innate capacity for language or her genetic endowment, "otherwise" Chomsky (1972) claims "it is impossible to explain how children come to construct grammars [...] under the given conditions of time and access to data" (p. 113). This

inborn capacity to acquire grammar though seems to be active only until puberty, approximately until the age of nine or ten, since after that critical period, as has been termed, the child is rarely capable of acquiring language as a native speaker.

2.5 Principles of Universal Grammar

Given that any child can learn any natural language, and if we assume an innate language faculty, then this can be assumed to entail a Universal Grammar, where experience of a given language would provide enough input to trigger UG to start developing a grammar; in other words, beyond the input to be acquired by the child (which is particular of each language), there are certain aspects known without experience, which is part of the genetic information that the child is biologically endowed and therefore universal to all language learners (or language acquirers rather). Thus, in order to determine the nature of the faculty of language, one should try to describe the principles of UG.

2.6 Parameters

UG accounts for certain aspects of grammar, but the child has to learn not only the lexicon particular to her native language, but also some other aspects of grammar not included in UG known as parameters of grammar. The range of parametric variation is determined, for example, by whether the language has covert or overt subject; namely, whether a language can omit the subject of a sentence or not. This parameter is consequently known as the Null-Subject Parameter. Example (1a) shows a sentence in Spanish, where the subject can be omitted, and example (1b) is its English counterpart,

where the subject is obligatory, otherwise we would obtain an ungrammatical sentence, as in (1c):

- (1) (a) (Yo) hablo varias lenguas.
(b) I speak several languages.
(c) *Speak several languages.

Another parameter the child has to learn (so it does not come with her innate UG knowledge) is the so-called Wh-Parameter, which relates to word order. For example, the *wh*-expression moves to the beginning of the sentence in simple *wh*-questions, as in (2), but it stays *in situ*, or at the end of the question, as is the case in example (3a) for a direct question and (3b) for an indirect question from Chinese:

(2) *What car* did you buy?

(3a) Chinese (Haegeman, 1997:9)

Zhangsan yiwei Lisi mai-le shenme?

Zhangsan think Lisi bought what

'What does Zhangsan think Lisi bought?'

(3b) Chinese (Haegeman, 1997:9)

Zhangsan xiang-zhidao Lisi mai-le shenme.

Zhangsan wonder Lisi bought what

'Zhangsan wonders what Lisi bought.'

2.7 X-bar Theory

X' Theory (X-bar Theory) is an attempt to identify syntactic features common to all human languages; according to this theory, for any category X, there is a fixed hierarchy of units. It was proposed by Chomsky in 1970 and further developed by Jackendoff in 1977 in order to eliminate the redundancy of the Aspect model (Chomsky's (1965) *Aspect of the Theory of Syntax*), where the information about possible phrase structures (PS) is coded twice, once in the PS rules and a second time in the lexical entries. X' Theory then gets rid of PS rules and constructs phrase structure instead as the syntactic projection of the argument structure of a lexical item; a head X projects a maximal constituent XP by being optionally combined with a complement, a number of modifiers (adjuncts), and a specifier.

Under X' theory of the 70s, a complementizer merges with an S to form an S' (S-bar constituent). S represented a sentence phrase, so S' would be a projection of the sentence (or S), which clearly fails the Headedness Principle, which requires that a syntactic structure be a projection of a head (H) word. Since the S constituent is not a word, S' (the complementizer) cannot be its projection. An additional problem of this early approach to the hierarchical representation of syntactic structures is that it also violated the Binary Principle (generating, for example, ternary branching).

Since the pioneering work of Stowell's (1981) "Origins of phrase structure" (his MIT dissertation) and that of Chomsky (1986) *Barriers*, the head of a clausal structure introduced by a complementizer is the complementizer itself, allowing thus every syntactic structure to be a projection of a head word. C would merge with the Inflection

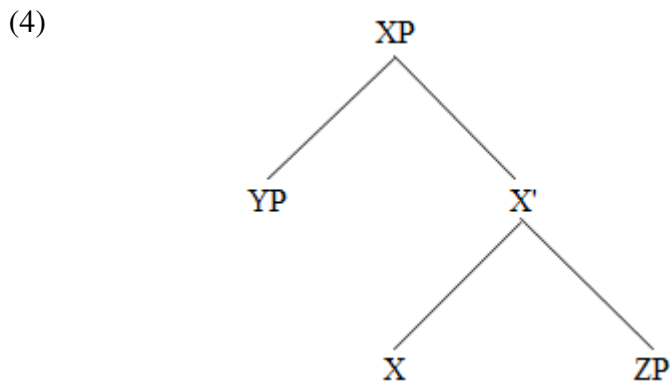
phrase (IP, later TP or Tense Phrase), that is, the projection of I, C becoming the Head of the overall clause. In other words, C takes a projection of Infl (I) as its complement, and I takes VP (Verbal Phrase) as its complement. Clauses introduced by complementizers have thus the status of CP (complementizer phrase), and this generates two implications: 1) phrases, clauses, and sentences are all projections of H words, and 2) phrases and clauses are derived (formed) in a bottom-up fashion (the lower part of the tree is formed before the higher part).

An important development in later Government and Binding (in turn, the first interpretation of the Principles and Parameters framework) is the fact that both I (Inflection) and C (Complementizer) split into several Heads (Topic and Focus for the latter), each projecting a separate phrase. In fact by the 90s, the complementizer system is to be conceived of as a structural zone consisting of different heads and their projections, in the same fashion as the IP and the DP systems. Rizzi (1997), in his "The fine structure of the left periphery," postulates a fixed component within the CP (heads for Force and Finiteness) and an accessory or optional component (heads for Topic and Focus). As for the former component, they can both coalesce into a single Head; and as for the latter, they need to be activated before they are used by means of topicalization or focalization. Later on (2001), he adds an Int(errogative) component, and Top is optional in different positions between Force and Fin: Force (Top*) Int (Top*) Foc (Top*) Fin IP. Moreover, he sees the complementizer system as the interface between a propositional content (IP) and the superordinate structure (a higher clause); thus, Force would consist of elements

looking outside and Fin would have elements looking inside. Top is the constituent for old information and Foc the one for new information.

Cinque (1999) had already explored the expanded CP (he coined it the *cartographic approach*) in his "Adverbs and functional heads" in order to accommodate a wide range of adverb types: speech act (*frankly*), evaluative (*unfortunately*), evidential (*allegedly*), and modal affixes. In my view, Rizzi's model seems to integrate CP elements better for two reasons: in the first place, some combinations within the CP are not possible under Cinque's approach (*that + frankly*), and secondly, Cinque's split seems too stratified, and thus less minimalist than that of Rizzi.

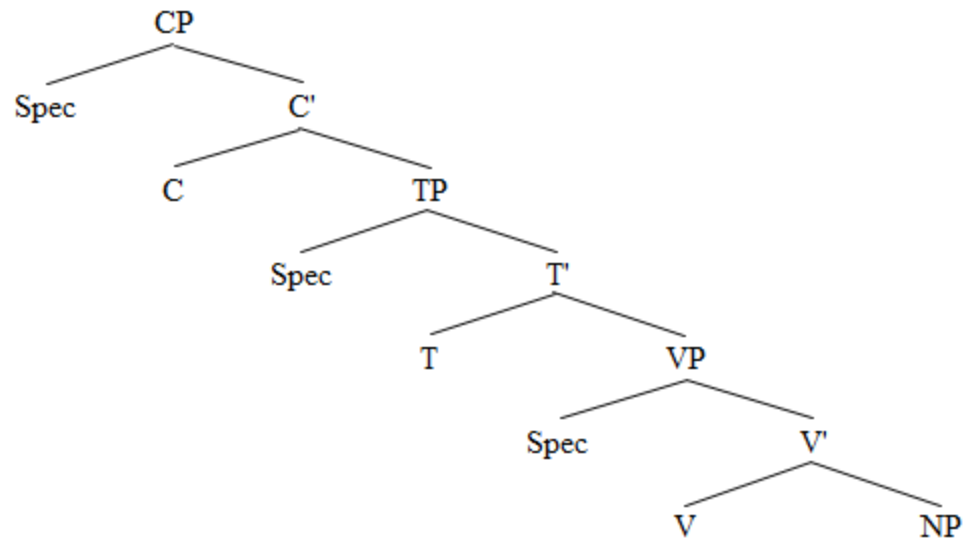
Under current X' Theory, a binary merger operation combines pairs of categories together. Between the head of the phrase X° and its maximal projection XP, there is an additional level of categorial representation, X' or single bar projection. The basic X-bar tree structure is illustrated in (4) below:



YP represents the specifier of X, the head of the phrase, and ZP represents the complement of X. The elements X, Y, and Z stand for any lexical item, either a lexical

category (nouns, adjectives, verbs) or a functional category, such as one occupying Tense (T), Complementizer (C) or Determiner (D). The full tree syntactic representation of the basic structure of a clause, including all three layers (CP, TP, and VP), is shown in (5), where the CP is the discourse layer (where the illocutionary force is located), the TP is the functional layer (carrying information about tense, negation), and the VP is the thematic layer (containing information about who is doing what in the sentence):

(5)



Once the operation Merge applies to two lexical items, say x and y , the set $\{x,y\}$ is produced, and this set can go through other Merge operations in order to expand the structure. A bare structure has been proposed in later interpretations of the Minimalist Program, where there are no labels and no phrase structures, since these are said to contain extra information not accessible to the computational system; instead, the operation Merge combines two bundles of features, and the relations established by the phrase structure automatically ensue. The use of the labeled phrase structure is commonly

used for convenience in the literature, so I have decided in this dissertation to employ labels and X' levels so as to make the representations clearer.

2.8 Kayne's Linear Correspondence Axiom

Derived from the theory of phrase structure, and concerned with the linear PF ordering of phrases and words in natural languages, the Linear Correspondence Axiom (LCA) proposed by Kayne (1993, 1994), establishes a correlation between linear precedence and hierarchical structure, so that the former is derived directly from the latter. Kayne argues that specifier-head-complement is the universal order, and thus languages are universally right-branching and head-initial, the rightward order of terminal elements being determined by asymmetric c-command. In other words, SVO constitutes the universal underlying word order and any diversion from this order comes about as derived structures which have undergone movement. This theory makes two main predictions: first, specifiers precede their heads and second, a head can only have one specifier or adjunct (López, 2009).

Kayne's proposal faced the disagreement of scholars from its incipience (Rohrbacker, 1994) and later on (Kural, 1997), as a series of counterexamples seemed to challenge it. For example, Kural (1997) suggested that, although the SOV order of languages, such as German, may be derived from the proposed underlying SVO order, the order in Turkish must be head-final.

2.9 Split Projections

The basic structure of a clause is assumed to contain, under the theoretical framework used here, three separate domains or layers: a thematic layer or Verbal Phrase

(VP), a functional layer or Tense Phrase (TP, formerly known as Inflectional Phrase or IP), and a discourse layer or Complementizer Phrase (CP), as indicated in (5) above. Split projections provide additional heads within the phrase structure, maintaining thus a binary structure throughout the derivation (avoiding the possibility of multiple-branching).

2.9.1 The expanded/split VP

The VP is the domain where argument structure is encoded and theta-assignment takes place, that is, a lexical verb assigns a thematic role (agent, instrument, cause, experiencer, recipient, theme) to its arguments (the subject and the complement(s)). The thematic role is also referred to as theta role or θ -role (the Greek letter *theta*, which corresponds to *th* in the word *thematic*). Chomsky (1981) points out two thematic properties of arguments, which he claims to be a consequence of a principle of UG commonly known as the θ -criterion, concretized in (6):

(6) θ -criterion

Each argument bears one and only one θ -role, and each θ -role is assigned to one and only one argument (Chomsky, 1981, p. 36)

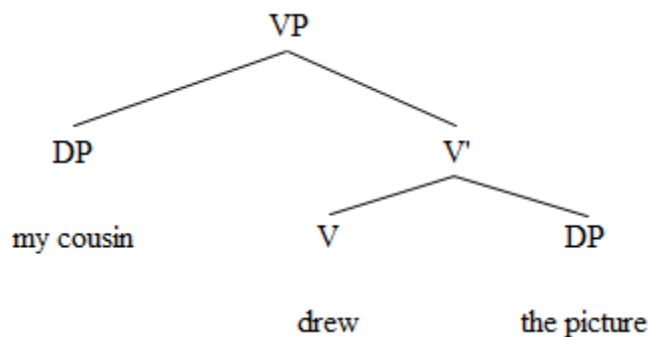
This principle ensures that no two arguments of any predicate carry the same θ -role and that each argument carries one and only one θ -role. The question of how arguments become assigned theta-roles is indicated in the hypothesis (7) below:

(7) Predicate-Internal Theta-Marking Hypothesis or PITMH

An argument is theta-marked via merger with a predicate

The CP is the discourse domain and it is where the illocutionary force of the clause is encoded. This outer layer may contain a topic and information about the speaker; in addition, it marks the anchoring, or linkage, to another clause by means of a complementizer (C). The C establishes a relationship between the clause in which it is contained and both the clause above and below, marking characteristics of both. The derivation of (8) "My cousin drew the picture" will help exemplify PITMH:

(8)



As the verb "drew" merges with its sister Determiner Phrase (DP), "the picture", its direct object complement, the latter is theta-marked via merger with the verb in accordance to PITMH above. Since the verb specifies in this case that its complement has a thematic role of *theme*, the complement is thus assigned such thematic role.

Subsequently, the V' will merge with the subject DP "my cousin" to form the VP, and this argument is assigned the theta-role of *agent*, since this exerts the action over the theme.

The VP was first analyzed as a split projection since work by Larson (1988, 1990) and more recently by that of Chomsky (1995), who argue for a VP shell consisting of two

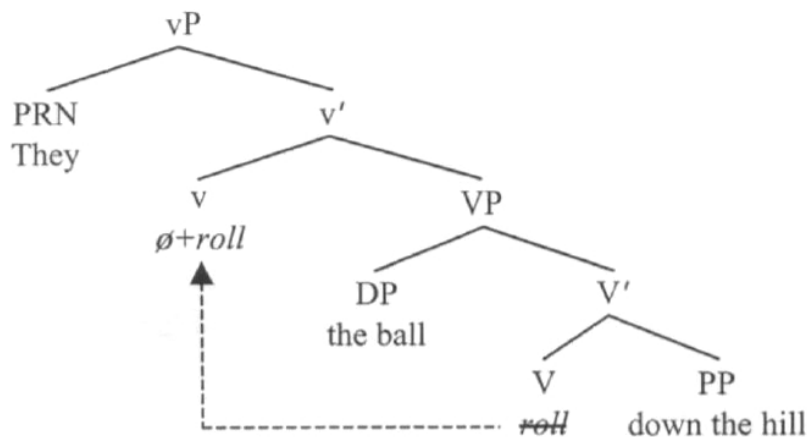
distinct projections: an inner shell, the VP core (spelled with an upper *v*), embedding an outer shell, the *v*P shell (spelled with a lower *v*). The VP is in turn headed by a lexical verb and the *v*P by an affixal light verb. The derivation (10) below can help visualize the function of each verbal shell when applied to such an ergative verb as "roll", which allows a dual use as either three-place or two-place predicate. For example, (9a) is the transitive counterpart of (9b), which contains an intransitive structure:

(9) (a) They will **roll** *the ball* down the hill

(b) The ball will **roll** down the hill

(Radford, 2004, p. 338)

(10)



(Radford, 2004, p. 340)

Note that the *v*P projection in (10) is headed by a small *v* with a causative interpretation and roughly equivalent to make + V, as in (11) below:

(11) They made the ball roll down the hill.

Furthermore, the causative interpretation is assumed even in sentences where the *v* is not overt, and thus the head of the vP projection is occupied by a null verb. In (11), the subject is assigned the *agent* thematic role as the subject of "make" would, and the DP "the ball" is assigned a thematic role of *theme*.

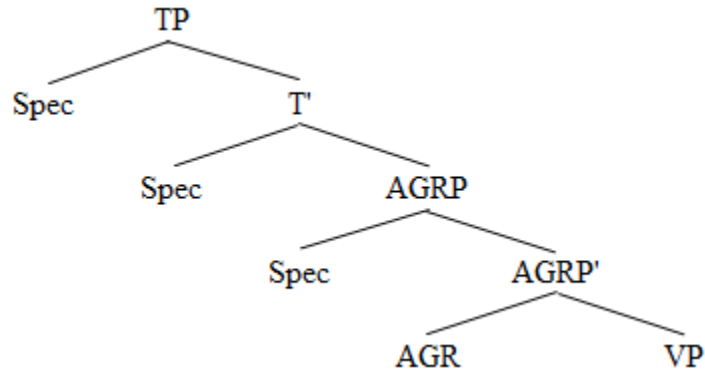
2.9.2 The expanded/split TP

Since Chomsky (1986a), inflections are analyzed as independent heads projecting a larger category rather than a unitary projection. The literature since seems to agree on the division of the larger projection into other embedded lesser projections in order to accommodate certain categories. Likewise, Pollock (1989) provides

empirical arguments in favor of the view that Infl(ection) should not be considered as one constituent with two different sets of features ([± Tense, ± AGR]) and that instead each of these sets of features is the syntactic head of a maximal projection, AGRP and IP (the latter to be called, more perspicuously, T(ense)P). (p.365).

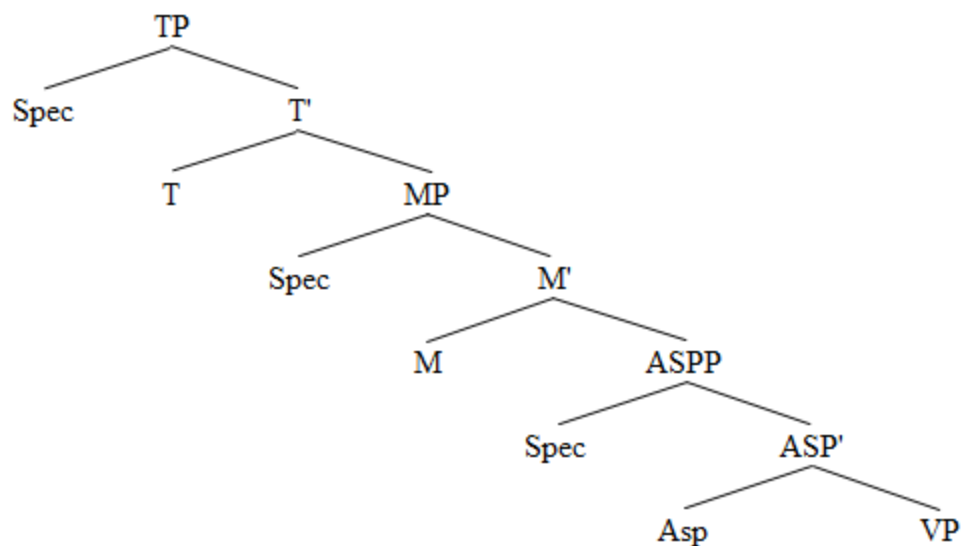
Pollock (1989) argues for two separate heads in finite clauses, one that projects into a TP and the other one into an Agreement Phrase or AGRP. The former indicates tense and the latter agreement for gender, number, and person (as he uses examples from French). In his proposal, TP would appear higher than AGRP, as in (12):

(12)



Chomsky (1993) accepts the two-headed projection, but assumes AGRP is higher than TP. Later on, in his Minimalist Program (1995), Chomsky claims the AGRP is no longer necessary in those clauses where the AGR features are weak. Since the focus of the present study is the CP, I will not delve into further details regarding the split TP other than mentioning the fact that other embedded projections have been proposed, rendering the extended TP projection into an array of three main clusters: TP, MoodP (MP), and ASPP, the last two projections indicating mood and aspect respectively (van Gelderen, 1993, 2004 among others). This extended projection is depicted in (13):

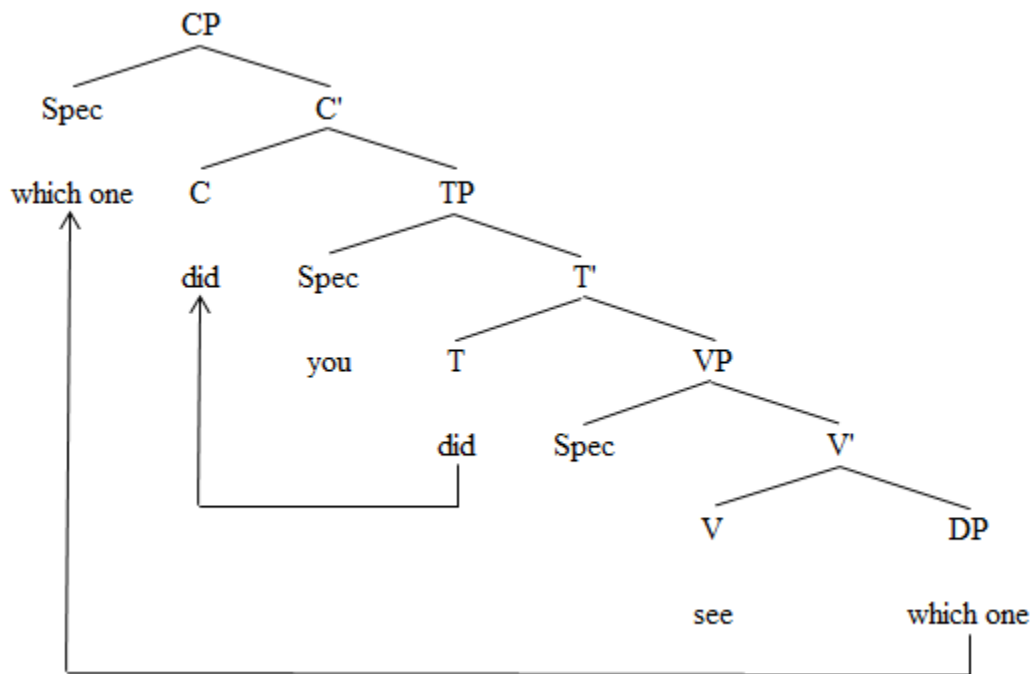
(13)



2.9.3 The expanded/split CP: The fine structure of the left periphery

As mentioned above, it was in the 1970s that the representation of the clause came to be seen as a CP, and later on, in the 1990s, an expanded or split CP was proposed. Thus the former S' representation was substituted by the following simplified structure in (14), where the nodes have been filled by the elements of a sample interrogative sentence such as 'Which one did you see?', corresponding to its underlying assertive 'You did see/saw which one' and where the corresponding movements have been indicated as well:

(14)



In (14) not only can we accommodate the DP in the Spec of the CP to account for *wh*-movement, but the head is also used for the verb (auxiliary) so as to account for the subject-verb (auxiliary) inversion of interrogatives in V2 languages such as English. The

other advantage of a CP, as opposed to the former S' expression, is that the head C projects into a CP as required by the Headedness Principle, which requires that a syntactic structure be a projection of a head word.

The CP provides different functions; on the one hand, it links the clause to its matrix clause, and on the other it contains information about the speaker's attitude. Rizzi (1997, 2001) and Cinque (1999), among others, argue for a split CP where a structure contains topicalized or focused elements; thus, an extended CP can accommodate the following separate projections: Force Phrase (ForceP), Topic Phrase (TopP), Focus Phrase (FocP), and Finite Phrase (FinP). Rizzi claims that certain sentences can have multiple TopPs as in the following example illustrated in (15) and assumes the existence of an interrogative phrase, as indicated in (16):

(15) Italian (Rizzi, 1997, p.295)

*Credo **che** a Gianni, QUESTO, domani, gli dovremmo dire*

C Top Foc Top IP

'I believe that to Gianni, THIS, tomorrow we should say'.

(16) Force (Top*) Int (Top*) Foc (Top*) Fin IP

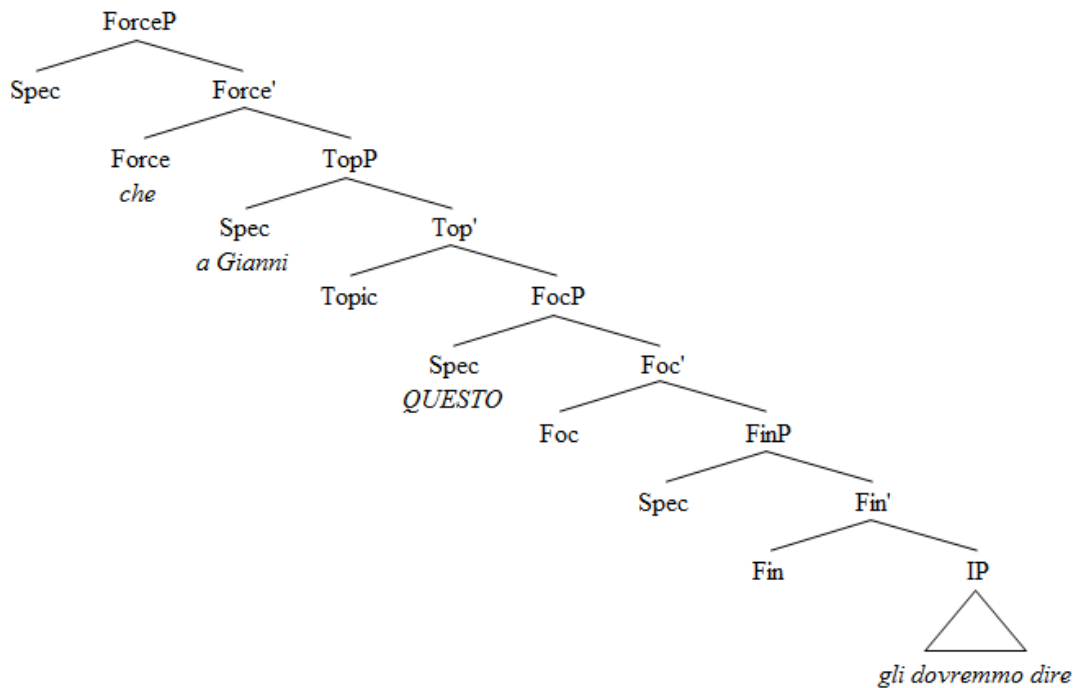
(Rizzi, 2001, p.289)

In (16), Force (ForceP) specifies the clause type (declarative, interrogative, exclamative, imperative, relative, etc.) and connects the clause to its corresponding matrix clause. Fin (FinP) specifies finiteness and connects to the rest of the clause. Therefore, Force looks outside the clause and Fin looks inside the clause to the

propositional content. Topic (TopP) expresses old information, as when the object being referred to has been introduced in the conversation already, and Focus (FocP) expresses new information, as when an element of the clause is given emphasis. Both Topic and Focus are optional and project only when needed (Rizzi, 1997).

The expanded CP, as applied to the sample sentence given in (15) above is illustrated in (17):

(17)



As (17) shows, the Force projection (ForceP) is the highest node in the structure, since its function is to create a link with the clause above. For example, and following Rizzi, the complementizers *that* and *if* would fall under ForceP in English, since they indicate the nature of the clause they introduce, a declarative and an interrogative

respectively. Note that whether certain complementizers occupy one or another position (phrasal node) is relative to what function they play in a particular language. FinP, the Fin projection, instead represents the link to the rest of the propositional content of the clause. In those cases where there is no topicalized or focalized constituents, Rizzi assumes, the CP is realized as a single C head.

Since Cinque (1999), the expanded CP layer acquired a new dimension. Under his cartographic approach, as has been coined, the CP accommodates a whole range of adverbial types: speech act, such as *frankly* and *honestly*; evaluative, such as *fortunately*; evidential, such as *allegedly* and *evidently*; and modal affixes as appear in certain languages (van Gelderen, 2005). Van Gelderen (2005) advocates for a more minimalist approach and favors a less expanded CP. Since the CP is more restricted in English, especially in earlier stages of the languages, the more expanded version of the CP layer will not be at issue in this dissertation, but I do follow van Gelderen in that the periphery of the clause should be only as expanded as required.

To show the restricted nature of the CP in present-day English (PDE), van Gelderen (2005) provides examples from the British National Corpus, where topicalization is not possible with complementizer *whether* in non-finite constructions, as in (18) and (19) derived from (20):

(18) *The Office of Fair Trading considered [these takeovers] whether to refer to the Monopolies and Mergers Commission.

(19) *The Office of Fair Trading considered whether [these takeovers] to refer to the Monopolies and Mergers Commission.

- (20) The Office of Fair Trading considered whether to refer these takeovers to the Monopolies and Mergers Commission.

(BNC ALV 695, from van Gelderen, 2005)

From a diachronic point of view, English at its earliest stage seems to have an impoverished CP and double complementizers do not appear until sometime in the 13th century (van Gelderen, 2005). Van Gelderen identifies first cases of *for that* from the 12th century, as in (21):

- (21) I trowe I loved hym best, for that he was of his love dangerous to me.

(Chaucer, Benson, p.112, from van Gelderen, 2005)

In (21), *for* sits in Force and *that* in Fin, what shows that the CP was already split by this time. Van Gelderen concludes that "by 1400, a split CP is present: double complementizers occur since the 13th century, embedded topics since the late 14th century, and prepositions precede *that*-clauses since the 15th century" and that "[i]f OE is a more paratactic language than its modern counterpart, one expects an independent object with a separate clause". As far as matrix verbs, van Gelderen notices that OE complements of assertive and non-assertive verbs behave similarly in terms of requiring an indicative or a subjunctive, and that it is not until late Middle English (ME) that non-assertives start to permit expressions of the type *for-to*, and until the 19th century of the type *the fact that*.

2.10 The Minimalist Program and Historical Linguistics

Generative grammar in general finds in acquisition the locus of language change, or in other words, the acquisition of a grammar distinct from the output of the preceding generation. In early P&P, language change reflects an abrupt shift, which comes about through the resetting of parameters (pro-drop, headedness, *wh*-movement). For MP, the locus of syntactic change is in the lexicon (Pintzuk, Tsoulas and Warner (2000), and many others); more precisely, change is a consequence of the reorganization of the featural content of the lexical items of the language. Language change is therefore confined to the properties of the lexicon. The new interpretation of minimalist parameters as choices of feature specifications during the (child's) acquisition of a lexicon is encapsulated in "the Borer Chomsky conjecture," as has been coined by Baker (2008). All parameters are lexical and they determine linearization, thus accounting for language variation. The assumption that parametric variation is restricted to the lexicon was formulated first in Chomsky (2001) and then in Chomsky (2004).

A seminal work on change (grammaticalization in particular) within the MP framework is Roberts & Roussou (1999). They look at the diachronic development of lexical Heads into functional Heads driven by the computationally conservative nature of the learner, and stress out the importance of simplicity and economy (structural simplification), which are central to van Gelderen's (2004 and later work) Economy Principles (Late Merge and Head Preference).

Recent work has moved away from a focus on an abrupt parametric change towards an emphasis on the gradual syntactic change as interpreted within the P&P

paradigm. If the empirical data for the study of diachronic change could create a methodological problem to MP, as these data are E-language (External) (historical texts), it is currently accepted by many that aspects of E-language data can be interpreted as the output of an underlying grammar; thus, the analysis of variation in E-language can reveal information about the nature and organization of the grammar.

2.11 Concluding Remarks

This chapter provided the theoretical background to this study, beginning with some key concepts of generative grammar, the pillars to the Minimalist Program, and leading to a discussion on historical linguistics in the context of formal theory. The following chapter presents a review of the literature dealing with OE *hwæðer*, before moving on to two more chapters discussing the data of this study, and one final chapter on Gothic *hwar*, the oldest Germanic cognate of OE *hwæðer* we have a record of.

Chapter 3

FUNCTIONAL CLASSIFICATION OF OE *hwæðer*

3.1 Introduction

Any OE dictionary mostly likely contains an entry for OE *hwæðer*, and the ones consulted divide the entry into two sections: one for its adverbial use and another one for its use as a conjunction. These provide several translations into modern English: ‘however’ if an adverbial, ‘whether’ if a conjunction; and they refer to *hwæðer* as a particle if it introduces a direct question. Finally, they provide a series of examples from primary sources, sometimes indicating their chronology and, if the dictionary or encyclopedia is a specialized one, its etymology. None of these understandably attempt to explain why *hwæðer* is used in such a variety of ways or how this multiplicity of uses came about in the first place.

In this chapter I present a synopsis of some secondary sources dealing with OE *hwæðer*. Although I follow a chronological order by publication date, I start first with those sources that provide information about the word which is more encyclopedic; that is, those which merely classify its functions and meanings. These include: *The Oxford English Dictionary (OED) Online* (which appears with a year of publication of 2013 in the References section of this dissertation, reflecting the frequent editorial revisions but, in this chapter, it appears first, since the dictionary was created more than 150 years ago); Visser’s *An historical syntax of the English language*; Mitchell’s *Old English Syntax*; and Traugott’s chapter on Syntax in *The Cambridge history of the English language*. Next, I summarize the only sources that have attempted to explain the historical nature of OE

hwæðer to different degrees of explanatory success. These include: Allen's short article *Whether* in Old English; Ukaji's A History of *Whether*; and van Gelderen's formal approach to the history of *whether*.

Unless otherwise indicated, the information provided in each of the following subsections is that of the source shown in each corresponding heading, so I avoid making continuous references to the author in question. Page numbers or section numbers (§) are included for direct quotations only, following APA conventions.

3.2 Encyclopedic Sources

3.2.1 The Oxford English Dictionary: OED Online

The OED Online is a widely accepted authoritative dictionary containing the meaning, history, and pronunciation of about a total of about 600,000 words in the English language. The dictionary, in its online version, is of particular interest for the present study for the historical information it provides, including exemplary quotations from different periods and a wide range of genre.

The OED offers two main entries for Present-Day English (PDE) *whether*, one for its function as an adverb, preceded by an obelisk †, or dagger, indicating that the word is considered obsolete, and another entry for it uses as a pronoun, adjective, noun, and conjunction. The former contains the following spelling forms: *hwæp(e)re* for the OE period, and *hweðer(e)*, *queper*, *qwhethir*, *qwhedyr*, and *queder* for the ME period. OE *hwæp(e)re* shows as its etymological form, an adverbial formation that originates from *hwæper*, which constitutes the latter of the entries.

The information contained under the † *whether*, *adv.* entry is outlined in Table 1 below:

Table 1

OED Entry for † whether, adv.

		Meaning	Timeline	Function - Collocation - Form (example)	
1	ADVERB	1.1	nevertheless; however; yet; for all that	c555 - 1425	adverb
		1.2	"	1400 - 1489	in combination: 'though-whether' <i>beh hweðer; þo-queþer</i>
		1.3	(confusion of) nevertheless	1475	<i>neuer þe queder</i>
		1.4	although	1400 - 1450	adversative conjunction

The second entry provides information, which is central to this dissertation, since it defines the word in the categories of pronoun, adjective, noun, and conjunction. The entry starts out by illustrating the wide variety of spellings *whether* has adopted throughout the centuries (see OED Online entry for *whether* under Spelling for a list of all recorded spellings).

Next to *Spelling* is an etymology section, which lists cognates with *whether* in several of related Germanic languages. Note that for the purposes of this dissertation only its Gothic cognate has been considered, but looking at other cognates within the Germanic branch helps illustrate the versatility of this worth. Table 2 illustrates the different forms with their particular meanings:

Table 2
Germanic Cognates with whether based on OED Online (etymology section)

	Middle							Gothic	
	Old Frisian	North Frisian	Old Saxon	Old High German	High German	Old Norse	Swedish		Icelandic
Forms	<i>hwed(d)er</i> <i>h(w)oder</i> <i>ho(e)r</i>		<i>hwēðar</i>	<i>hwedar</i> <i>wedar</i>	<i>weder</i>	<i>weder</i>	<i>hwadarr</i>	<i>hvar</i> <i>hvorr</i>	<i>hvaþar</i>
Meaning		one of two whether	which of two whether	neither	neither	which of two each whether	each	each of two	

The second main entry for *hwæðer* in the OED is divided into two categories: the first one describes and exemplifies its uses as a pronoun and adjective; the second one refers to its uses as a conjunction and noun. The first category is outlined in Table 3 and the second category in Table 4:

Table 3

OED Entry for whether, pron., adj.

	Meaning	Timeline	Function - Collocation - Form (example)
2 PRONOUN & ADJECTIVE	2.1		
	2.1.1	c1000 - 1872	in direct questions pronoun occasionally with GEN (-es, -s) <i>hwæðer; hwæðeres</i>
	2.1.2	1629 - 1671	adjective <i>whether thing</i>
	2.2		in indirect questions or subordinate clauses
	2.2.1	c1000 - 1852	pronoun
	2.2.2	c893 - 1702	adjective <i>hwæðer healf</i>
	2.2.3	1303 - 1828	phrasal <i>wheper ys wheper</i>
	2.3		in generalized OR indefenite sense
	2.3.1	c1275 - 1752	pronoun <i>wep̄er of hom</i> 'them'
	2.3.2	c1380 - 1671	adjective <i>whether waye thou wylt</i>
	2.3.3		<i>whetherever; whetherso; whethersoever; whethersum</i>

Table 4

OED Entry for whether, conj., n.

		Meaning	Timeline	Function - Collocation - Form (example)	
3	CONJUNCTION & NOUN	3.1			
		3.1.1	(mere sign of interrogation)	c1000 - 1822	interrogative particle introducing a direct alternative question, expressing doubt; usu. with CORR 'or'
		3.1.2	"	c1400 - 1608	introducing an alternative statement OR at end of alternative question or phrase with 'or'
		3.2	(mere sign of interrogation)	c1000 - 1588	introducing a simple direct question <i>Hwæþer þe þin eage ...; Hwæþer she sholde be ...</i>
		3.3	whether	c1000 - 1872	introducing an indirect alternative question expressing doubt, choice; usu. with CORR; usu. with subjunctive <i>wæþer est þe west</i>
		3.4	(ordinary sign of indirect interrogation) whether	c1000 - 1872	introducing a simple indirect question by suppression of second alternative <i>cwyst þu hwæðer ic hyt si?</i>
		3.5			
		3.5.1	whether	1250 1857	introducing a disjunctive clause with qualifying or conditional force; in adverbial relation with matrix; sometimes repeated with each alternative
		3.5.2	either	c1275 - 1913	with ellipsis in both alternatives; equivalent to 'either' <i>where false or true</i>
		3.6	whether or not		<i>whether or no(t)</i>
		3.6.1	"	1650 - 1871	conjunctive phrase introducing a subordinate interrogative clause
		3.6.2	"	1665 - 1868	introducing a qualifying clause
		3.6.3	in any case; at all events	1784 - 1904	elliptical as adverbial phrase
		3.7	undecided; uncertain	1672	<i>whether for a penny</i>
		3.8			
		3.8.1	in a state of doubt or uncertainty	1828	noun (singular or plural) phrasal expression <i>at whethers</i>
		3.8.2	"	1827 - 1836	<i>otherwhethers</i>

3.2.2 Visser's An Historical Syntax of the English Language

Although Visser (1963-1973) contains only a few short references explaining the functionality and meaning of *hwæþer*, his volumes represent a great source of examples, taken from a wide chronological variety of texts. The focus is placed though solely on *hwæþer* as a "sign of interrogation" (§854).

Beside those questions formed by inverting the S-V order, there are also questions with no inversion. The second type include those where the interrogative force is indicated by means of a raising intonation or of a tag-phrase, and those including a particle "whose only task is to mark the interrogative character of the utterances" (§1454). The interrogative particles used in Old English are *ac* 'why', *cwystþu* 'say you' (you.SG) and *cweðe ge* 'say you' (you.PL), *hwæt* 'what', *hwæþer*, *hu ne* 'how not', *ah* (*ne*) 'not', and *hwi* 'why'; those in Middle English *hu* 'how', *wheþer*, *wher*, *quhidder* (§1454 & §857). Although the use of the interrogative particle may be due to the influence of Latin, which used *nonne* and *numquid* in the same function, one should also keep in mind that Gothic, another Germanic language, used *niu* and enclitic *-u* similarly, as for example in *skuldu ist kaisaragild giban kaisara* 'is it lawful to give tribute money to Caesar?' and in *niu ussuggwup aiw hwa gatawida Daweid* 'have you not read what David did?' One example including both the interrogative particle *cwystþu* 'say' and *hwæþer* is *Cuiðestu t hueder somnigas of ðornum winberge?*, with a Latin equivalent *numquid colligunt de spinis uvas?* 'Do they collect the grapes from the thorns?'

A small number of instances can be found where the V-S reverse order follows the interrogative particle. In this case, the particle "tends to reach the status of an ordinary

interrogative pronoun, and [this] is later often taken as an interjection and printed with following comma or mark of exclamation (§1454). Although Visser (1963-1973) exemplifies this statement with the later use of *hwi* 'why', it is not clear how he accounts for the example he provides just a few lines below *Cweðe ge is he crist?* 'say you is he Christ?'

In reference to mood of the verb within the interrogative clause introduced by *hwæþer*, and *hwæt*, Visser (1963-1973) indicates that the "modally [sic.] marked form is used in independent questions without inversion of subject and predicate and introduced by *hwæþer* (> *whether*, *wher*) and *hwæt*. The usage was common in Old English and was continued in Middle English with diminished frequency" and points out that these interrogative particles "were no conjunctions, but merely signs of interrogation" (§854). Later on in the same section, he recognizes that "the modally zero form" was also in use, and that both the "modally marked" could also appear in combination with the "zero form", as in this example from c1382 *Wher is nat this the sone of smyth, or carpenter? Wher his modir **be** nat seid Marie?* 'Is this not the son of the smith or the carpenter? Is his mother not the said Mary?' (the mood of the verb is indicated in bold, where the first one is in the indicative and the second in the subjunctive).

3.2.3 Bruce Mitchell's Old English Syntax

Often glossed as 'which of two', Mitchell (1985) indicates, *hwæþer* can be used as such, both independently and dependently (qualifying a noun), as in *hwæþer healf* 'which of the two halves'. It may have had the meaning 'either of the two' as well, as in *on*

hwæðre hand 'on either hand', which has a variant *on gehwæðere hond* appearing in a second version of the same text (§435).

The pronoun *hwæþer* may appear as the grammatical subject of the clause when the verb is a copula (§936). The common word order of alternative questions without *hwæðer* (which Mitchell (1985) names *nexus questions*, following the terminology introduced by Jespersen (1924)) is V-S, unless an auxiliary verb is present, in which case, the word order is v-S-V, where the small *v* stands for auxiliary verb and the big *V* stands for a lexical verb. In both cases, the verb is predominantly in the indicative mood. This word order is by no means specific to this kind of questions, as it sometimes appears in positive statements, and is common in negative statements and imperatives. The reverse word order is true of non-dependent alternative questions (*nexus questions*) introduced by *hwæðer*, where the sequence is *hwæðer*-S-V and the verb is, with few exceptions, in the subjunctive (§1643 & §1652), what led Nusser (1913) and Andrew (1940) (pointed out in Mitchell (1985)) to suggest that this type of questions were originally dependent. Only when *hwæðer* appears with an impersonal verb is the order different from *hwæðer*-S-V, and the indirect object occupies the second place in the clause, that is, *hwæðer*-IO-V.

Latin influence may be at play when non-dependent alternative questions introduced by *hwæðer* carry the present subjunctive, but exceptions do exist, such as *hwæðer þe þin eage manful ys...?* with the verb in the indicative mood, translated from Latin *an oculus tuus nequam est...?* 'is your eye wicked?' also with the verb in the indicative (§1654). Most of the non-dependent alternative questions with the verb in the

subjunctive are rhetorical (§1655) and many can be interpreted as either non-dependent or dependent questions, especially when introduced by *cwyst ðu* 'say'.

In OE, positive *wh*-questions (Mitchell (1985) calls them positive *x*-questions) can be headed by an interrogative pronoun, adjective or adverb. Their word order is normally pronoun-V-S, with the verb typically in the indicative, as in *Hwæt wenst þu bi þære goodan wyrde...?* 'What do you think about these good words...?' The same applies to those *wh*-questions introduced by the pronoun *hwæðer*.

Consequently, Mitchell (1985) admits, non-dependent *wh*-questions (*x*-questions) introduced by the pronoun *hwæþer* 'which (of two)?' "cannot often be confused" with non-dependent alternative (nexus) questions, since they have a different word order (§1662), with the exception of clauses with *hwæþer* as the subject, an indirect object as the logical subject, as indicated above, or for reasons of style or emphasis (§1663).

The general tendency noted by Mitchell (1985) in regard to the descriptive characteristics of *wh*-questions and alternative questions can be summarized in Table 5 below (following his terminology):

Table 5

Classification of hwæðer Questions According to Mitchell (1985)

Type	Function	Meaning	Mood of V	Word Order
x-question (wh-question)	pronoun	which of two	indicative	hwæðer-V-S
nexus-question (alternative)	*'Whether...?' (QM)	-	subjunctive	hwæðer-S-V

Nevertheless, Mitchell (1985) acknowledges there are problems with the approach represented in Table 5. The problem comes about when we encounter questions with an ambiguous interpretation. Should we translate *Hwæðer wæs Iohannes fulluht þe of heofonum þe of mannum?*, which in Latin reads as *baptismum Iohannis unde erat e caelo an ex hominibus*, as a *wh*-question (*x*-question) 'Which of the two was John's baptism from, the heavens or men?' or as an alternative question (nexus-question) 'Is John's baptism from the heavens or men?' If the latter, the word order *hwæðer*-V-S would be unexpected. Remember that the subjunctive mood of non-dependent alternative (nexus) questions is only a tendency, and not a rule, so mood itself does not help to disambiguate (§1874).

Among other forms, *gif* and *hwæðer* introduce dependent alternative (nexus) questions, both alone and in combination (§2059). The mood of preference in dependent alternative questions introduced by *gif* is the subjunctive (§2084). The conjunction *hwæþer* can be found in what Jespersen (1924, p. 304) called 'simple' dependent alternative (nexus) questions; that is, subordinate clauses with the second alternative or disjunctive 'or not' elliptical. These usually carry the subjunctive, as in *hwæðer he anræde sy* 'whether he is resolute' (the verb in the subjunctive is indicated in bold), but can also have a verb in the indicative, as in *hwæðer he is fram Gode* 'whether he is from God' (the verb in the indicative is indicated in bold) (§2085).

Another type of clause *hwæðer* is found in is the dependent disjunctive alternative (nexus) question, where the alternatives are expressed by means of one of several correlatives (CORR): *hwæþer (...) (þe)...* or *hwæþer... oþþe*. The combination *hwæþer...*

hwæþer can also be found, but less frequently. The subjunctive is once more the typical mood in this type of alternative clause (§2086).

Hwæþer can also appear as part of a compound relative *swa hwæþer swa*, similar in meaning to such simple relative pronouns as *se* and *þe*, or other compound relatives, such as *swa hwa swa*, *swa hwæt swa*, and *swa hwelc swa*, which can be translated as 'such as', 'one and the other' (§2363). The combination *swa hwæþer swa* (as well as *swa hwelc swa*) usually appears together, unless is used adjectivally; if the latter case, the noun always appear before the second *swa*. The second *swa* can also be preceded by a partitive genitive, although it follows it more often than not (§2364).

Finally, *hwæðre* (along with *þeah*) can express concessive force and mean something like 'however' or 'although'. Burnham (1911), as pointed out in Mitchell (1985), suggests that *hwæðere* may also have been used as a concessive conjunction with the meaning of 'though', but later on she adds that the two cases she found can also be explained as an adverb (§3430). It is noteworthy to mention that *hweðere* typically represents Latin *tamen* 'yet, however'. Conversely, *þeah* (*þe*) may also mean 'whether' and have the function of introducing dependent alternative (nexus) questions (§3416).

3.2.4 The Cambridge History of the English Language

OE, as PDE, had two types of interrogative clauses: main clauses and subordinate clauses, and these can also be either *yes-no* interrogatives or content questions. *Yes-no* interrogatives ask about the truth of the proposition and content questions ask about the identity of the NP question. According to Traugott (1992), simple *yes-no* interrogatives typically carry a verb in the indicative and have a verb-subject order, as in (1):

(1) *Hæfst þu ænige geferan?*

have you any companion

'Do you have any companion?'

(*ÆColl* 28, Traugott, 1992)

However, when the simple yes-no interrogative is introduced by *hwæðer* 'whether', the order is *hwæþer*-S-V. In this case, the verb is usually in the present subjunctive, although the indicative can also be found, especially in 'impersonal' constructions. The latter type, the non-subjunctive *yes-no* interrogative, may be rhetorical, and it typically conveys doubt by the speaker, who may expect 'No' for an answer, as suggested by the fact that *hwæþer* often translates Latin *num*, which expects a negative answer, as in (2) below:

(2) *Hwæðer ge nu secan gold on treowum?*

whether you now seek gold in trees

'Are you looking for gold in trees?/ Surely you aren't looking for gold in trees'.

(Bo 32.73.24, Traugott, 1992)

OE *hwæþer* introduces interrogative sentential complements when it appears within a complex sentence. It can be the complement of an NP or object, an oblique NP of a verb, or an adjectival predicate. It is not clear whether it ever shows as the subject of the clause, unless it is part of a copula construction. Due to its pronominal origin, *hwæþer*, is cataphoric to correlatives, such as *þe... þe* 'either... or', as in (3):

(3) *Nat ic, cwæð Orosius, hwæðer mare wundor wæs*
 knot-know I said Orosius which-of-two more wonder was
þe þæt he swa mid lytle fultume þone mæstan dæl
 CORR that he so with small help that greater part
þisses middangeardes gegan mehte þe þæt he mid swa
 this.GEN world conquer might CORR that he with so
lytle werode swa micel anginne dorste
 small troop so large attack dared

'I do not know, said Orosius, which was the greater wonder, either that he was able to conquer the greater part of this world with such small help, or that he dared attack so greatly with such a small troop'.

(Or 3 9.124.13, Traugott, 1992)

As a complementizer, *hwæðer*, always follows the main clause, as when, for example, the clause that contains it is the complement of an impersonal verb or an adjectival predicate. In (4), *hwæðer*, is most likely the complement of *micel twynung* 'great doubt', rather than the subject:

(4) *ða wearð micel twynung [...] hwæðer hi ineodon oððe [...]*
 then was great doubt whether they in-went or
 'then there was great doubt [...] whether they should go in or [...]'

(ÆCHom I, 34, 506.17, Traugott, 1992)

I agree with Traugott (1992) that *hwæþer* in (4) should be interpreted as the complement of *micel twynung* and not as the subject of a main sentence for the following reason: whereas light elements (phonologically short) were preferably placed at the beginning of the clause, heavier elements, such as subordinate clauses, were preferred clause-finally, as she herself indicates a few pages further. However, word order can only be regarded as a tendency and not a definitive rule.

As far as content-questions (non *yes-no* interrogatives), most of them carry an indicative verb, although some do appear with a subjunctive verb, sometimes to express surprise or doubt on the part of the speaker, but not always. Content-questions, like *hwæþer*-questions can also be complements of NPs and objects, oblique NPs of verbs, or adjectival predicates.

In general, the indicative mood is used to convey a true proposition and the subjunctive mood to convey doubt, obligation, desire, etc., although there are numerous exceptions. Furthermore, conditional *if*-clauses use the indicative to express doubt whereas the subjunctive is used to express a fact in reported speech.

In prose texts, word order may indicate whether we are dealing with an independent or a subordinate clause: whereas adverbs may head a clause with an Adverb-V-S structure, conjunctions tend to appear in V-final clauses. The particle *þe* is a clear indicator that the clause is subordinate, and therefore the particle is a conjunction. The distinction between conjunction and adverb in OE is in some cases difficult otherwise, because they are in most cases homonymous. However, word order is not always a safe test, since certain adverbials usually appear in V-final clauses. Likewise, punctuation

should not be used as test to determine whether a clause is independent or subordinate, since most OE texts have been subjected to editing, and punctuation is a result of this and thus is not original to the manuscript.

3.3 Explanatory Sources

3.3.1 Cynthia Allen on *Whether*

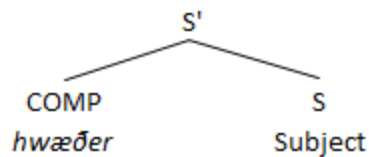
Allen's (1980) short article represents the first attempt to explain the behavior of OE *hwæðer* in relation to its position in the clause from a formal theoretical perspective. Her approach relies on the phrasal rules of early generativism and is therefore somewhat distant from the position I adopt in the present study, which follows a more minimalist proposal based on economy factors, as initially proposed by Roberts & Roussou (2003), who "develop an account of language change which derives the fact that structural simplification is a natural mechanism of change, and [...] categorial reanalysis [...] always involves structural simplification (p. 2-3). Van Gelderen (2004 and later) later on explained structural simplification via her proposed Economy Principles, and these are part and parcel of this dissertation.

Allen's (1980) points out that there is a constraint in many of the Germanic languages, such as the verb must be in second position in a main clause. This is referred to as the *V/2 constrain* in the literature and results in Subject-Verb inversion. This constraint is applicable to OE in *yes-no* questions (alternative questions), and to PDE clauses with topicalized elements (fronted locatives and negatives). This is also the case in questions introduced by a *wh-* expression, such as *who*, *what*, and *which*, and OE *hwæðer* 'whether' when it functions as a pronoun with the meaning 'which of the two', but

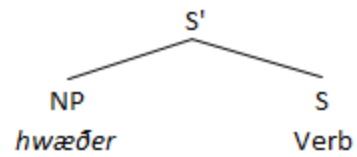
not when it functions as a question word introducing a *yes-no* question, and this presents itself as a “mystery”. The fact that OE *hwæðer* may appear in a clause under the V/2 constraint and in another one with no S-V inversion leads Allen to conclude that the word order specification is not due to a property of OE *hwæðer* itself, but that there ought to be other motivations.

Since there is no S-V inversion in direct (and indirect) questions introduced by *yes-no hwæðer*, this is interpreted to be a question complementizer. Alternatively, the pronoun *hwæðer*, which declines like any other *wh*-pronoun, is an NP requiring V movement. The former scenario is illustrated in (5a), the latter in (5b):

(5a)



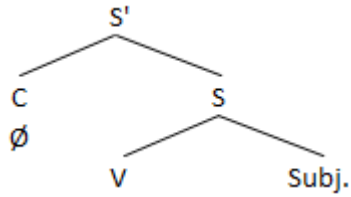
(5b)



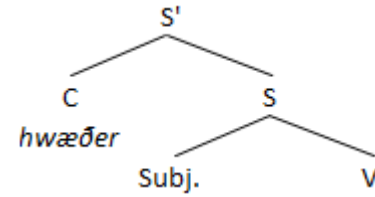
(adapted from Allen, 1980, p. 792)

One of the explanations regarding the dual behavior of *hwæðer* that Allen provides, following Goldsmith (1978), is that the rules that apply to root sentences, which ensure V-S order, don't apply to yes-no questions introduced by *hwæðer*. In particular, the No Complementizer constraint stipulates that V-S applies to root sentences with an empty complementizer, whereas sentences with *hwæðer* sitting in COMP are not affected by the root rule. Tree (6a) illustrates the root rule, and (6b) illustrates how *yes-no hwæðer* prevents this rule from taken effect:

(6a)



(6b)



The second explanation to the puzzle of the word order in simple questions in the presence of *hwæðer* proposes a similar mechanism, this time in terms of a filter that applies in one, but not the other scenario. Since the first proposal serves well to illustrate the mechanisms by which early generativism attempted to explain the *hwæðer* puzzle by means of rules or filters, I will not go into further detail here regarding the second proposal (for further detail, see Maling & Zaenen, 1978).

Allen concludes by admitting that the above proposals still do not explain why these do not apply to all complementizers, if the assumption that all question words are considered such.

3.3.2 Ukaji's History of *Whether*

Ukaji's (1997) study on *whether* describes the different functions of this word through its various stages in its development. He states that OE *hwæðer* had two main uses, one as an interrogative disjunctive pronoun, and another one as an interrogative conjunction, and – although he suggests that its pronominal use seems likely to be the original one based on its etymology – he claims that “[i]t is empirically impossible to determine which of these two uses was the original one in OE” (Ukaji, 1997, p.1236).

3.3.2.1 Pronoun

3.3.2.1.1 *Interrogative Pronoun: Declinable*. In this use, OE *hwæðer* is declined as a strong adjective and it introduces a *wh*-question. The word order is the same as with all other independent *wh*-questions, namely *wh*- V-S. Both the case ending and the common word order can be seen in (7).

- (7) *Gif þu nu deman moste, hwæðerne woldes þu*
If you now judge must which-ACC.SG would you
Deman wites wyrðran,
judge-punishment.GEN worth-CMPR

‘If you are now to judge, which would you judge worthier of punishment?’

(c888 Alfred *Boethius* 38.122-28-29, Ukaji, 1997, p.1237)

3.3.2.1.2 *Interrogative Pronoun: Indeclinable*. The use of *hwæðer* as an indeclinable interrogative pronoun is considered a new development accompanying a series of innovative changes: it begins to acquire an adverbial character and therefore it is not in argument position anymore, and it refers cataphorically to, for example, a prepositional phrase, as shown in (8).

- (8) *Hwæðer wille ge ðæt ic cume to eow, ðe mid*
Which wish you that I come.SBJV to you, DISTR with
gierde ðe mid monnðwære gæste?
rod DISTR with kind spirit

‘In which way do you wish me to come to you, with a rod or with a kind spirit?’

(c897 Alfred *Past. Care* 117.7-8, Ukaji, 1997, p.1238)

3.3.2.1.3 *Interrogative Pronoun: Indefinite*. The meaning of *hwæðer* further develops into an indefinite ‘whichever’, but this time it usually refers to an antecedent anaphorically. The environment in which it is found is restricted to the distributive expression *swa ... swa* ‘so ... so’ and to desiderative verbs, such as *willan* ‘will, wish’.

Example (9) below exemplifies this use:

(9) *Nim ðonne swa wuds swa wurt,*
Take then DISTR tree DISTR plant
swa hwæðer swa þu wille,
DISTR whichever DISTR you will

‘Take therefore tree or plant, whichever you will,’

(c888 Alfred *Boethius* 34.91.19-22, Ukaji, 1997, p.1240)

3.3.2.2 *Conjunction*. When *hwæðer* introduces a question rather than a phrase, it functions as an interrogative marker. It may be the case that it introduces an independent question, in which case Ukaji (1997) warns that “it is not a conjunction in a strict sense of the word, because [*hwæðer*] does not connect [the independent question] to any preceding or following sentence to form a larger sentence unit” (p. 1240). He then goes on to call *hwæðer* in this function an interrogative particle instead.

3.3.2.2.1 *Independent question (particle)*. The difference between the two types of independent question marker indicates whether a second alternative is made explicit or implicit. If the latter, Ukaji calls these *simple yes/no questions* (see 10), if the former, they are *disjunctive* (see 11).

(10) *Hwæðer ge nu secan gold on treowu?*

Q you now seek-SBJV gold on tree

‘Do you seek now gold on trees?’

(c888 Alfred *Boethius* 32.73.25-26, Ukaji, 1997, p.1241)

(11) *Hwæðer ðe ðu hi forseo, and þines*

Q COMP you them despise-SBJV and your

agnes þonces hi forlete buton sare, þe þu

own thought them give-up without sorrow or you

gebide hwonne hi ðe sorgiendne forlæten?

wait-SBJV until they you sorrowing leave

‘Are you to despise them and give them up of your own accord without sorrow, or are you to wait until they leave you sorrowing?’

(c888 Alfred *Boethius* 8.20.30-32, Ukaji, 1997, p.1242)

Notice that the word order varies when *hwæðer* functions as a question particle. There is usually (but not always) a *hwæðer* S-V order in *simple yes/no questions*, where

the verb is conjugated in the subjunctive, and usually (but not always) a *hwæðer* V-S order in disjunctive questions.

3.3.2.2.2 *Dependent Question (Conjunction)*. The use of *hwæðer* as a conjunction is the only one to have survived until the present time. The word order is *hwæðer* S-V, where the verb may appear in either the indicative or the subjunctive. The conjunction is here an alternative to *if* ‘if’.

(12) Simple *yes/no* dependent question:

Pa sende se halga wer swyftne ærendracan to þæs

Then send the holy man swift messenger to the

bioscopes ceastre, þæt he sceolde geaxian hwæðer

Bishop.GEN city that he might learn.by.inquiry COMP

he lifes wære.

he alive were.

‘Then the holy man sent a swift messenger to the bishop’s city, that he might learn by inquiry whether he were alive.’

(c1000 Ælfric *Cath. Hom.* 184.34-186.1, Ukaji, 1997, p.1243)

(13) Disjunctive dependent question:

Deofol mot ælces mannes afandigan, hwæðer he aht sy,

Devil may every man try COMP he aught be

oððe naht

or naught

‘The devil may try every man, whether he be aught or naught.’

(c1000 Ælfric *Cath. Hom.* I.268.11-14, Ukaji, 1997, p.1243)

Ukaji’s (1997: 1251) typology of OE *hwæðer* is summarized in Table 6 below:

Table 6

Ukaji’s Classification of whether According To Function

<u>Function</u>	<u>Clause Type</u>	<u>Clause Sub-Type</u>
Pronoun (interrogative)	Declinable Indeclinable Indefinite	
Conjunction	Independent Question (Particle)	Simple yes-no question Disjunctive question
	Dependent Question (Conjunction)	Simple yes-no question Disjunctive question

3.3.3 Van Gelderen: Economy Principles and CP Renewal

For Roberts & Roussou (2003), grammaticalization is a case of parameter change, but they consider it epiphenomenal. They postulate though that new functional material is created via structural simplification, a fact which van Gelderen (2004: 18, 28) addresses by means of her two *economy principles: Head Preference and Late Merge*.

(14) Head Preference or Spec to Head Principle (HPP):

Be a head, rather than a phrase

(15) Late Merge Principle (LMP):

Merge as late as possible

Head Preference refers to the fact that *incorporation*, that is, checking between two heads, is more economical than checking between a specifier and a head. *Late Merge* is also stated as “merge over move,” where it is less economical to merge early and then move than to wait as long as possible before merging (van Gelderen 2004: 29).

In Figure 4 below, van Gelderen (2009) indicates that *economy principles* are the moving forces of what has been known as the CP cycle. (a) represents the movement of a phrase from the bottom of the structure into the specifier of the CP; in (b) LMP ensures that the phrase be base generated within the CP rather than the VP, thus skipping the *move operation*; (c) indicates the reinterpretation of the phrase in the Spec of the CP into the head of the CP. After these three steps, a new lexical item may be incorporated within the VP in order to reinforce the function of the head of the CP, triggering the whole cycle all over again. It is important to note that the CP cycle may not always reach completion, as it may be interrupted at any point and a new lexical item may never get to replace the initial item affected by the grammaticalization process (p. 152).

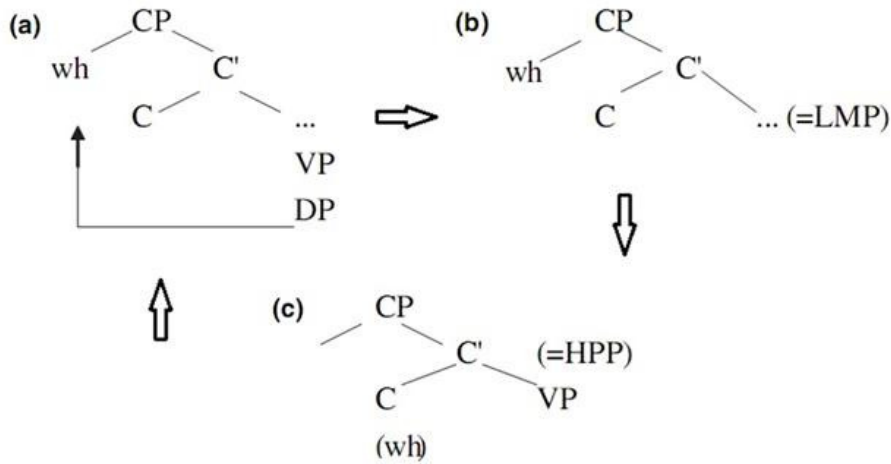


Figure 4. The CP Cycle

The cycle has also been restated in terms of feature reanalysis, where semantic features are in effect in its initial stage, as in (a) above, then there are interpretable features ([i-Q]) as in (b), and finally uninterpretable features ([u-Q]) as in (c). Thus the loss of semantic features is represented formally (van Gelderen, 2009). The cycle of *whether* can be represented as in (16) in terms of semantic features (see van Gelderen 2009: 153):

(16)	whether	>	whether	>	whether
	pronoun		CP specifier		head
	semantic		[i-Q]		[u-Q]

Van Gelderen (2009) examines the cyclical change of complementizers, in particular, how *whether* is reanalyzed over time in English. Originally a pronoun,

whether topicalizes until is reanalyzed into an element base-generated within the CP. In its pronominal function, the accompanying verb follows the V/2 rule as expected (as example (17) below shows), but when it introduces a question, the verb, van Gelderen (2009) observes, is usually found in a non-inverted position, but not always (contra Allen, 1980).

(17) *hwæðer sel mæge æfter wælræse wunder gefygan uncer*
 which better may after deadly-attack wounds survive we.D.GEN
twega
 two.GEN

'Which of us two is better at surviving the wounds of a deadly attack?'

(Beowulf 2530-32, Klaeber edn, van Gelderen, 2009, p. 140)

From the sentences examined, van Gelderen (2009) finds no evidence for a split CP, and it is only during the ME period that a complementizer follows *whether*, indicating that this became a head early on, and the puzzle is then why it is a specifier in PDE. One possible answer, continues van Gelderen, may be found in the phonological weight of the word (two syllables) and the fact that the second disjunctive *or not* remains the speaker's choice as this remains in the meaning of *whether*.

As far as valuation of features, she assumes that question features are checked in CP and that this is done via spec-head agreement. When *whether* is an interrogative pronoun, this has [wh] features, which serve as a probe in order to value the uninterpretable features of the interrogative C.

An alternative interpretation within formal linguistics, van Gelderen points out, is that of Simpson & Wu (2002), for whom the reanalysis of P to C comes about through *lateral grammaticalization*, whereby the original head and the reanalyzed one are, though in different domains, equivalents to each other. Thus, the speaker maintains a dual analysis which comes in effect depending on the syntactic demand of the clause. I follow van Gelderen's approach, because it reflects the historical process of reanalysis in a way that Simpson & Wu's doesn't, even if a period of layering (both structures being accessible to the same speaker) is also possible.

3.4 Concluding Remarks

Several meanings and functions have been recognized for OE *hwæðer*. The most obvious distinction is between its function as an adverbial meaning 'however, yet' and the rest of its functions. In fact, only the OED Online makes this distinction. Other sources focus on its functions according to the type of sentence it appears in and its position in the sentence. And according to these, three main uses of OE *hwæðer* have been recognized: pronoun, particle indicating interrogative, and conjunction. Its use as an adjective (a pronominal qualifying an NP) has also been noted. The use as a noun is much later and therefore out of the scope of this dissertation.

The overall idea is that OE *hwæðer* can appear in either of two types of interrogatives: *yes-no* interrogatives introduced by *hwæðer* (also known as nexus or alternative questions) or *wh-* questions introduced by pronominal *hwæðer* (these are also referred to as *x*-questions). If in the former, then we are dealing with what some refer to as interrogative particle or just a sign of interrogation; if in the latter, then it is a pronoun

meaning ‘which of the two’. In the next chapters, I treat the interrogative as a question marker (QM), following a generative approach.

Another distinction pointed out in the literature is whether *hwæðer* is in an independent clause (of the types just mentioned above) or in a dependent clause. In the latter case, *hwæðer* is said to be a conjunction. Under the theoretical framework employed here, *hwæðer* is rather a complementizer linking the subordinate clause to the main (matrix) clause.

Attention has also been paid to whether the word is declined or not, whether it appears in combination with a second disjunction or not, and to whether the clause it appears in has an S-V or V-S order.

In the next two chapters, I present and discuss the data collected from the *Diachronic Part of the Helsinki Corpus of English Texts* (Kytö, 1996). The first of these chapters provides a qualitative analysis of a series of sentences, which illustrate the range of uses of *hwæðer*. The next chapter is of a quantitative nature, and its purpose is to illustrate the presence of *hwæðer* in its different uses according to a series of variables. After the data analysis, I include one more chapter dealing with its Gothic cognate *hwapar* and its status in the language with the goal of drawing any correlations that may lead to insights as to the evolution of OE *hwæðer*.

Chapter 4

OE *hwæðer* IN THE HELSINKI CORPUS

The basic functional distinctions of *whether* in the history of English have been established in the literature, as pointed out in the previous chapter. One can first indicate whether it appears in a main clause or in a subordinate clause, and whether this is of the *yes-no* type or it is the content that is being asked about (Traugott, 1992), the first of these types referred to by Mitchell (1985) as *nexus* questions and the second of these referred to as *x*-questions. The adverbial use of *whether* with the meaning of ‘however’ has also been pointed out, especially in dictionaries, such as the OED online and glossaries to texts (see Klæber et al., 2008). Both the OED and Ukaji (1997) contain classifications, whose main headings are those of *pronoun* and *conjunction*; the former also points out the use of *whether* as an adjective and as a noun, whereas the latter indicates whether the pronoun is declined or not, and whether conjunction shows up in independent or dependent clauses, both as simple *yes-no* questions or as disjunctive questions, that is, whether the second disjunctive *or not* is explicit in the clause. The present chapter presents a qualitative analysis of a number of representative sentences of the uses and meanings of *whether* taken from the OE period in the diachronic part of the *Helsinki Corpus of English Texts: Diachronic and Dialectal*, in itself a selection of texts from the *Dictionary of Old English* Project at the University of Toronto.

4.1 Introduction

The data presented in this chapter represent the different uses of *whether* in the OE period. The chapter is in turn divided into the following subsections: 1) *hwæðere* as an adverbial meaning ‘however, nonetheless, in whichever way’; 2) *hwæðer* as a pronominal, both by itself (pronoun proper) and accompanied by an NP (attributive use); 3) *hwæðer* as a question marker introducing a *yes-no* question; 4) *hwæðer* complementizer linking a subordinate clause; 5) *hwæðer* in correlative expressions; and 6) *hwæðer* preceded by the suffix *ge-* and *æg-* (the literature does not typically include these variants, but they are equivalent to *hwæðer* in their pronominal, adjectival and adverbial uses, as illustrated below).

4.2 Adverbial *hwæðer*

The adverbial use of *hwæðer* receives a separate heading in the OED and in Klaeber et al. (2008) among other sources with either of two spellings in OE, *hwæðere* or *hwæðre*. In *Beowulf*, for example, the number of instances of *hwæðer* as an adverbial is considerably higher than any other use. It usually appears at the beginning of the clause connecting this with the preceding context, as in (1), but this is by no means its only position in the clause; it can also immediately follow the subject (2), and even follow the verb (3):

- (1) *Ah þonne hwæðere we eow reccað [medmicle] intingan of*
but then whether we you.ACC give humbly business of
miclum megenum toþon þet us genihtsumien þa bisne &
great strength grew that us.DAT sufficed DET example and

þa segene be þam arwyrðan feder.

DET conversation by the.DAT honor father

'But then however we humbly extend to you the affairs grown out of great strength which sufficed us by example and by conversation by the honor of the Father'.

(O2/4 NN BIL CHAD 162)

- (2) *Swa eac swilce wearð Romeburg ymb M wintra &*
So also such became Rome about thousand winters and
C & LX & folneah feower, þætte Alrica hiere
hundred and sixty and almost fewer which Alaric her
ealdormon & Gotona cyning hiere onwaldes hie beniman
elder and Goth.GEN.PL king elder power them deprive
woldon; & heo hwæðere onwealg on hiere onwalde æfter
wanted and they whether safe on their power after
þurhwunade.

survived

'Thus it so happened in Rome in the year of 1160, maybe a little earlier, that they wanted to deprive old Alaric, the older man and king of the Goths, of his power; and however they survived, safe, with power thereafter'.

(O2 NN HIST OROS 62)

- (3) *He wæs ðæs mynstres hlaford ðe be suðan sæ is
 he was the.GEN.SG monastery.GEN.SG lord who by south sea is
 nemned Wurmhol, ond he wæs hwæðere [{}swa{}] [{}eaðmod{}] þæt
 named Wurmhol and he was however so humble that
 he wolde wyrcan æghwylc ðara weorca þe
 he wanted work.INF whichever the.GEN.PL works which
 ðam oðrum broðrum wæs heard ond hefig.
 the.DAT.PL other.DAT.PL brother.DAT.PL was hard and hevy*
 'He was the lord of the monastery by the south sea, which is called Wurmhol,
 however he was so humble that he wanted to do each of the jobs that was hard
 and onerous to the other brethren'.

(O2/3 NN BIL MART 246)

With the meaning of 'however', *hwæð(e)re* can also appear with impersonal verbs, such as *gesælan* 'to happen, come to pass, befall' (Bosworth, 2010):

- (4) *Hwæþere me gesælde þæt ic mid sweorde ofsloh niceras
 however me.DAT happened that I with sword killed monsters
 nigene.
 nine*

'However, it so happened to me that I killed nine monsters with the sword'.

(OX/3 XX XX BEOW 19)

Hwæðere is also used in combination with *ðeah* 'although' with a combined meaning of 'nonetheless' or 'however'. The following examples illustrate how the two words become a compound over time:

- (5) & *he gislode.* & *hine man ðeah hwæðere ofsloh.* &
 and he gave.hostages and him man nonetheless killed and
þurcytel Nafanan sunu mid him.
 kettle Nafanan son with him

'And he gave hostages and someone killed him nonetheless and Nafanan 'The Cauldron', the son, with him'.

(O3/4 NN HIST CHRONE 148)

- (6) *ðeahhwæðere gif hwylc broðor on lytlum gyltum byð*
 nonetheless if such brother on small sins is
onfunden, sy he ascyred fram beodes
 having.experience be.SUBJ he separated from bed.GEN
gemænnesse.
 companion

'Nonetheless, if such brother is experiencing small sins, may he be separated from the companion of the bed'.

(O3 IR RULE BENE DOE 49)

(7) *Ʒeahhwæþere ne spæc nan man openlice be him for þæra*

However not spoke no man openly by him for the

Iudea ege.

Jews fear

'However no one spoke openly for fear of the Jews'.

(O3 XX NEWT WSNEW 68)

Ʒeah hwæðere or *þehhweðere* can on occasion be translated as ‘in whichever way’, a meaning which also develops in *hwæðer*, as we will see further below:

(8) *On þan tenðen dæige, heo gegaderigeð ealle deaddre manna lymen,*

on the tenth day they put.together all dead men limbs

swa Ʒt gyf an mann wære dead on middewearde, & his an hand

so that if one man was dead on earth and his one hand

oððe fot wære on eastdæle, & his oðer lym on westdæle,

or foot was on east and his other limb on west

þehhweðere heo cumeð togædere ælc to his lichame, & ælc

either.way they came together each to his body and each

lichame arist oð his byrigeles brerd.

body rise to his tomb surface

'On the tenth day, they put together all men's limbs so that if one man was dead on earth and one of his hands or feet was on the east and his other limb on the west,

dissertation would also expect *hwæðer* to start as a pronoun inside the VP, before it moves to the front for emphasis purposes. Although its pronominal use is not very frequent in OE, some of the tokens found in the corpus show *hwæðer* within prepositional phrases and declined accordingly: with dative or instrumental in (11) or accompanied by a genitive in (12):

(11) *ða hæfde heo eacswylce ða oðre rode þe ðe sceapæ on*
 then had she likewise the other rod REL the criminal on
ahon[gen] wæs þa smeade heo on hire ðance on hwæðere
 hang was then thought she on her thought on which
cris ahongen wæs.

Christ hanged was

Then she had likewise the other rod from which the criminal was hanged; then she thought to herself (she wondered) from which Christ was hanged'.

(MX/1 NN RELT HROOD 32)

(12) *Saga me on hwæðere Adames sidan nam ure Drihten þæt rib*
 tell me on which Adam.GEN.SG sides took our Lord the rib
þe he þæt wif of geworhte. Ic þe secge, on ðære winstran.
 REL he the woman from created. I you tell on the left

'Tell me on which of Adam's sides did our Lord take the rib from which He created the woman. I tell you, on the left side'.

(O3/4 IR RELT ADRIAN 35)

The prepositional phrase containing *hwæðer* may occur in combination with *swa* in the instrumental case and preceding a NP, thus becoming an adjectival phrase:

- (13) *Nat he Para goda Þæt he me ongean slea, rand*
 know.not he the good.skills that he me again strike shield
geheawe, Þeah ðe he rof sie niþgeweorca; ac wit on niht
 hack although COMP he famous is deadly.tricks but we on night
sculon secge ofersittan, gif [[he[]] gesecean deor wig ofer wæpen,
 must sword forsake if he seek dares war without weapons
ond siþðan witig god on swa hwæþere hond, halig dryhten, mærdō
 and then wise God on so whichever hand holy Lord honor
deme, swa him gemet þince.
 deem as him fitting seems

'He does not know about the good skills, so that he would strike me again, hack me with his shield, although he is famous for his deadly tricks; but we must forsake the sword at night, if he dares to seek war without weapons and then the wise God, the holy Lord, it will so seem to Him, fitting to either side'.

(OX/3 XX XX BEOW 22)

The oblique cases may surface in prepositional phrases, but *hwæðer* can also function as the direct object of the main clause, carrying the accusative case, as in (14). In this case, the pronoun has been fronted, and this is responsible for S-V inversion, as is expected in *wh*- questions:

- (14) *ða cwæð he: Gif þu nu deman moste, hwæðerne woldes þu*
 then said he if you now deem must which would you
deman wites wyrðran, þe ðone þe ðone
 judge punishment.GEN worthier CORR the.ACC CORR the.ACC
unscyldgan witnode, ðe ðone þe þæt wite þolade?
 innocent punished CORR the.ACC CORR REL punishment.ABL suffered
 'Then he said: If you now must judge, which of the two would you judge worthier
 of punishment, (either) the innocent punished (or) the one who suffered with
 punishment?'

(O2 XX PHILO BOETHAL 122)

The pronominal phrase may appear by itself, as pronoun proper, referring anaphorically to a previous noun phrase. Here there is no emphasis, but a mere reference. This, in theory, represents the earliest position of *hwæðer* in the sentence, although the tokens found in the HC show this use is concurrent with other uses from the earliest OE period. (15) and (16) illustrate this use of *hwæðer*:

- (15) *Þa beag þæt land þær eastryhte, oþþe seo sæ in on ðæt*

Then crowns the land there eastwards or the sea in on the
lond, he nysse hwæðer;

land he knows.not which

'Then the land crowns there to the east, or the sea in the land, he does not know which.'

- (16) *Pa sceolde he ðær bidan ryhtnorþanwindes, for ðæm þæt land*
then must he there wait.for north.wind for that the land
beag þær supryhte, oppe seo sæ in on ðæt land, he
gave.way there southwards or the sea in on the land he
nysse hwæþer.
know.not which

'Then did he have to wait for the wind due north because the land gave way to the south over there or the sea onto the land? He did not know which of the two'.

More interestingly, there is evidence that *hwæðer* originates at the end of the clause, either as an argument of the verb or as an adjunct, when this leaves its accompanying noun behind, or stranded, when fronted. Note how *hwæðer uncer twega* 'which of us two' becomes separated into two different nodes when *hwæðer* is moved to the front of the subordinate clause, leaving *uncer twega* in its original position.

- (17) *Gebide ge on beorge byrnum werede, secgas on searwum, hwæðer*
wait you on barrow mail.ABL guarded men in armor which
sel mæge æfter wælraese wunde gedygan uncer twega.
better will after battle wounds dealt us both

'Wait on the mountain protected by your mail, men in armor, to see which of us will fare better at the wounds from the battle'.

(OX/3 XX XX BEOW 78)

A further step in the evolution of *whether* may be a new interpretation of its use as a pronoun, which refers not to the choice between two alternatives, but that among several. In (18), *hwæðer* is probably translated best as 'in whichever way', that is, with a more adverbial sense. Note that, even if the pronoun appears with a new, more general, meaning, this still appears at the end of the clause:

(18) *Forðæm simle bið se modsefa miclum gebunden mid gedrefnesse,*

Because always is the soul greatly bound with troubling

gif hine dreccean mot þissa yfla hwæðer, innan swencan.

if him torment may these evils whichever within cause.trouble

'Because the soul is always greatly restrained with troubling, if these evils may

torment him in whichever way, they will cause trouble from within'.

(O2/3 XX XX MBO 159)

4.4 *Yes-No* Question Marker

A question marker, such as a *hwæðer*, introduces a *yes-no* question. Although it may not carry a clear semantic content, it indicates that what is to follow is being questioned, and that the answer is a disjunctive. The disjunction is sentential, or clausal, and the answer is to be negated or affirmed, but many times this disjunction is

reemphasized by an internal disjunction at the phrasal level, as for example in (19) and (20):

(19) *Hwæðer þu nu ongite forhwy þæt fyr fundige up, & sio eorðe ofdune?*
QM you now see why the fire goes up and the earth
down

'Do you now see why the fire goes up and the earth down?'

(O2 XX PHILO BOETHAL 92)

(20) *ða cwæð he: Hwæðer þu ongite þæt ælc yfelwillende mon & yfelwyrçende sie wites wyrðe?*
then said he QM you see that each evil-wishing man and
evil-doing is.SUBJ punishment.GEN worthy

'Then he said: Do you perceive that each evil-wishing man and evil-doing man is worthy of punishment?'

(O2 XX PHILO BOETHAL 122)

In (19), the *yes-no* disjunction *Hwæðer þu nu ongite forhwy* 'you can now see why' is reinforced by the disjunction between *þæt fyr fundige up* 'the fire go up' and *sio eorðe ofdune* 'the earth go down'. Likewise, in (20), the *yes-no* disjunction *Hwæðer þu ongite þæt* 'you can see that' is reinforced by the disjunction between *ælc yfelwillende mon* 'each evil man' and *ælc yfelwyrçende* 'each evil doing'.

The reinforcement expressing disjunction, or duality between one NP or another NP, is a common phenomenon not only in *yes-no* questions introduced with QM *hwæðer*, but also in its other functions, as we will see further on.

Essential to understanding how *hwæðer* could have developed into a question marker from a complementizer, or linking word, as originally claimed by Nusser (1913) or Andrew (1940), are clauses that could be interpreted ambiguously either as subordinates headed by a complementizer or as *yes-no* questions headed by a question marker. In many cases, punctuation would indicate we are dealing with direct reported speech, where an expression, such as *cwæð he* ‘said he’, would introduce a direct *yes-no* question. Unfortunately, punctuation alone cannot be the determining factor, because very likely this is usually added later on to the original text (which may have not been punctuated at all) by subsequent scribes and later on by editors trying to clarify the structure of the sentences according to their own interpretation. On the other hand, the fact that one sentence can be interpreted in either of two fashions serves as an indication that the speaker may have had a choice at some point and, only in time, one interpretation may have become the preferred one; more concretely, the question marker *hwæðer* may have, in time, become interpreted as a complementizer introducing a subordinate clause, as the language was shifting from more paratactic to more hypotactic (independent clauses becoming dependent). The following are examples of sentences that illustrate a possible ambiguity, depending on the punctuation. For example, (21) contains a question headed by *Cweðe we...?* ‘Said we...?’ followed by a complementizer introducing a

subordinate clause introduced by *hwæðer*, which can be translated as ‘Did we say whether...?’:

(21) & nu he spycþ openlice & hig ne cweðað nan ðing to him.
and now he spoke openly and he not said no thing to him
Cweðe we hwæþer þa ealdras ongyton þæt þis is Crist?
said we whether the elder saw that this is Christ

‘and now he spoke openly and he did not say anything to him; did we say whether the elder see that this is Christ?’

(O3 XX NEWT WSNEW 70)

Alternatively, (21) could be interpreted by the speaker paratactically, as two separate questions: *Cweðe we...?* ‘Did we say it?’ followed by what was actually said, *hwæþer þa ealdras ongyton þæt þis is Crist?* ‘Did the elder see that this is Christ?’ The ambiguity is, in part, due to the fact that the word order of the second question is S-V, whether we are dealing with an indirect interrogative question, subordinate to *Cweðe we...?* or a direct *yes-no* question introduced by QM *hwæðer*.

The ambiguity can also be the result of an impersonal verb, where the real subject of the clause surfaces as an indirect object and the verb directly follows *hwæðer*. In this case, word order cannot be used to determine the type of *hwæðer*. Observe (22):

(22) Þa cwæð he: **Hwæþer** þincð þe þonne þæt þa þincg sien,
then said he QM think you then that the creatures are

ðe ðara soðena gesælda limu, þe sio gesæld self?

REL their true happen limbs REL are happened self

'Then he said: Do you think then that there are creatures whose true limbs grow,
which are created by themselves?'

(O2 XX PHILO BOETHAL 87)

Example (23) below is similar to the ones above in that the *hwæðer* clause is preceded by a verb of *say* introducing a direct reported speech; in this case though, the *hwæðer* clause contains a transitive clause introduced by *forhwy*, another *hw-* word, and it is probably unlikely that the sentence be interpreted as a complex one with two complementizers at this early stage of the language. For this reason, *hwæðer* is more likely a question marker introducing a *yes-no* question.

(23) *ða andsworede se Wisdom & [cwað]: Hwæþer þu nu*

then answered the wisdom and said QM you now

fullice ongite forhwy hit þonne swa sie?

fully perceive why it then so is.SUBJ

'Then Wisdom answered and said: Do you now fully perceive why it is then so?'

(O2 XX PHILO BOETHAL 74)

One could argue that the interpretation of *wheþer* in (24) is clearly a pronoun, because of the word order. The verb in V2 position seems to indicate *wheþer* is

pronominal and thus in the Spec of C, forcing the verb into Head position. In the presence of a QM, the most likely item in second position is a noun.

- (24) *hwæþer is eþre to cweþane sindun forletnae þe synne þe*
 which.one is easier to say.INF are sent.away you.DAT sins or
to gecweþanne aris & ga.
 to say.INF rise.up.IMP and go.IMP

'Which is easier: to say, 'your sins are forgiven', or to say, 'get up and walk'?''

(O3 XX NEWT RUSHW 75)

The verb following a QM does not have to be a main verb. In (25) the verb that takes the third position after the subject is the auxiliary verb *willen*:

- (25) *Hwæðer ge willen on wuda secan gold ðæt reade on*
 QM you.NOM.PL want on wood seek gold that ready on
grenum triowum?
 green.DAT.PL trees.DAT.PL

'Do you want to seek gold in the wood as if it was ready from the green trees?'

(O2/3 XX XX MBO 176)

Question markers can be coordinated by means of two instances of *hwæðer* (the second of these being linked with *opþe* 'or'), as is the case in (26) and (27):

- (26) *Hwæðer þe þæt dust herige, on þære burgene; opþe hwæðer*
 QM COMP the dust praise on the graves or QM

hit cyðe þine rihtwisnesse?

it testify your righteousness

'Do they praise the dust from the graves or does it announce your righteousness?'

(O2/3 XX OLDT PPS 62)

- (27) *ða cwæð he: Hweþer þe þonne þince unweorð & unmærlic*
then said he QM you.DAT then seem valueless and ignoble
sio gegaderunc þara ðrora þinga þonne þa þrio
bis.SUBJ union the.GEN.PL three thing.GEN.PL then the three
bioð to anum gedon, oððe hwæðer hit þe eft þince eallra
are to one done or QM it you.DAT again seem all.GEN.PL
þinga weorþlicosð & mærlīcost?
things.GEN.PL valuable.SUP and magnificent.SUP

'Then he said: Does the union of the three things seems to you again valuable and ignoble when they are made into one, or again, does (the union) of all things seem to you most valuable and magnificent?'

(O2 XX PHILO BOETHAL 75)

Sometimes the QM introduces a short *yes-no* question introducing the main indirect question, which could have been introduced directly by the preceding main question. For example, (28) translates as 'I wanted to ask you: Do you think that [something is the case]?', but this could have been stated as an indirect question

subordinate to the first main clause as ‘I wanted to ask you *whether* [something is the case]’.

- (28) *Ac anes þinges ic þe wolde ærest acsian:*
 but one.GEN.SG thing.GEN.SG I you.ACC wanted before ask
Hwæðer þu wene þæt ænig þing on þisse worulde swa good sie
 QM you think that any thing on this world so good be
þæt hit ðe mæge [[forgifan{]} fulla gesælda?
 that it the kinsman give perfection happened
 'But about this, I wanted to ask you before: do you think that anything in this world is so good that it happened to grant perfection to the kinsman?'

(O2 XX PHILO BOETHAL 82)

Other elements can be found in combination with QM *hwæðer*, such as conditional *gif* ‘if’ in (29), the pronouns (or adjectives used attributively) *ælc* and *ægðer* ‘each’ in (30) and (31), which have “always been possible to use [...] when only two things are referred to” (OED Online, 2013), and finally in combination with *swa... swa* as in (32), which also contributes to the dual distributive sense introduced by the QM (indicated in the examples below by abbreviation CORR, which stands for *correlative*).

- (29) *ða cwæð he: Hwæðer þu hit a sweotolor ongitan mæge gif*
 then said he QM you it ever clearer see can if
ic þe sume bisne get ma secge?
 I you.DAT some example yet more say

'Then he said: Can you see it ever clearer if, for example, I tell you even more?'

(O2 XX PHILO BOETHAL 85)

- (30) *Hu lange sceal ic settan on mine sawle þis sorhfulle*
how long should I set on my soul this full.of.care
geþeaht, and þis sar æt minre heortan; hwæþer ic ælce
counsel and this sore in my heart QM I each
dæge scyle?
day should

'How long should I place this full-of-care counsel in my soul, and this sore in my heart; should I each day?'

(O2/3 XX OLDT PPS 23)

- (31) *Hwæþer we scylen biddan þone godcundan fultum ægðer ge on*
QM we must ask the divine help either CORR on
læssan ge on [maran], swa swa ure uðwita sæde, Plato?
less CORR on more as as our philosopher said Plato
'Must we ask the divine for help, either in the least or the most, such as our philosopher Plato said?'

(O2 XX PHILO BOETHAL 79)

(32) *Hwæþer þu giet ongite þæt ða uncweðendan gesceafta*
 QM you yet perceive that the speechless creatures
wilnodon to bionne on ecnesse swa ilce swa men, gif hi
 wish to proclaim to eternity as each as men if they
meahten?

could.SUBJ

'Do you perceive yet that the speechless creatures wished to proclaim to eternity
 just as each man if they could?'

(O2 XX PHILO BOETHAL 92)

4.5 Complementizer Linking a Subordinate Clause

The use of *hwæðer* as a complementizer introducing a subordinate clause is by far the most common in the data collected, and therefore it makes sense for this type of construction to appear in a wider range of contexts: the complementizer can be complement of a verb, explicit or implicit; the subordinate clause may express doubt, lack of knowledge, wish to know; the complementizer may introduce a disjunction, where the entire truth of the clause may be expressed for its affirmation or negation, or the disjunction may refer between one NP or another within the subordinate clause, depending on the scope of the complementizer; the second disjunction *or not* may be expressed explicitly or implicitly. Let us see some of these scenarios in turn.

As mentioned in the previous chapter, it has been claimed (for example by Traugott, 1992) that *hwæðer*, as a complementizer introducing a subordinate clause, always follows

the main clause. The following example (33) clearly shows that this is not the case. The *hwæðer* clause precedes the main clause it depends on; notice though how *þæt* serves as a recursive relative pronoun referring to the subordinate clause:

(33) *Hwæðer he þæt bi him seolfum cwæde þe bi oðrum men hwelcum,*

Whether he that by him self said or by other men each

þæt us is uncuð.

that to.us is unknown

'Whether he said that by himself or by each other man, that is unknown to us'.

(O2 NN HIST BEDEHE 270)

Although the most common translation of *hwæðer* as a complementizer introducing a subordinate clause is PDE *whether*, it can also have a concessive meaning as in the following example (34), where the more accurate translation would be 'even if' given the context; the complementizer is not complement to an element within the main sentence preceding it, but rather an adjunct.

(34) *þe Drihten, þe is rihtwis dema, and strang and gepyldig,*

the Lord who is righteous ruler and strong and patient

hwæðer he yrsige ælce dæge; Bute ge to him

whether he enrages each day unless you.NOM.PL to him

gecyrran, se deofol cwecð his sweord to eow.

turn the devil moves his sword to you.DAT.PL

'The Lord, he is a righteous ruler, and strong and patient, even if he enrages each day; but if you confront him, the devil will take his sword onto you'.

(O2/3 XX OLDT PPS 12)

The *hwæðer* clause can function as the argument of a transitive verb, and the former then follows the latter, even if they are not immediately adjacent, as in (35). The verb of the main clause may need an implicit 'to see' following it, in order to introduce the subordinate clause (36), or it may be the case that 'see' is actually explicit (37):

- (35) *Nu drihten leof for þinre mycele mildheortnyse swutela me*
now Lord dear for your great mercy reveal.IMP me
hwæðer ðu heom me leng unnon wylle.
whether you them me long grant want.SUBJ

'Now dear Lord, reveal to me by your great mercy whether you want to grant them to me for long'.

(MX/1 NN RELT HROOD 12)

- (36) *Mid ðy ic ða wæs æghwonan mid ðam feondum ymbald*
with this I then was everywhere with the enemies surrounded
& *mid ða [blindnesse] þara ðeostra utan betyned, ða*
and with the.GEN.PL blindness the darkness out enclosed then
ahof ic mine eagan upp & locade hider & geond, hwæðer
raised I my eyes up and looked hither and over whether

me ænig fultum toward wære, ðæt ic gehæled beon meahte.

me any help toward was.SUJ that I saved be could

'With this I was then surrounded by the enemies from everywhere and enclosed by the blindness of darkness out there; then I raised my eyes and looked hither and thither (to see) whether there was any help for me, and whether I could be saved'.

(O2 NN HIST BEDEHE 428)

(37) *quoth Ubbe, 'hwat may þis be? Betere is I go miself and se*

said Ubbe what may this be better is I go myself and see

Hweþer *he sitten nou and wesseylen, Or of ani shotshipe*

whether he sits now and celebrates or of any shepherd

to-deyle þis tid nithes also foles; þan birþe

tend.INF this time night.GEN also mare's.foal than troublesome

men casten hem in poles, or in a grip, or in þe fen

men cast them in poles or in a hand.grip or in the mud

'Ubbe said, 'what could this be? is it better it I go myself and see **whether** he sits

now and celebrates, of the mare's foal is tended by any shepherd during the night

(is it better) than if the troublesome men cast them into poles or in their handgrip

or in the mud?'

(M2 NI ROM HAVEL 58)

Very frequently the subordinate clause containing the complementizer *hwæðer* expresses doubt; this can be stressed by a PP *ðohte ic on minum mode* ‘thought in my mind’ (38); by negating a verb of *knowing*, whether by the prefix *n-* in *nyste* ‘did not know’ (39) or by the presence of a negative NP *nænig mon* ‘no one’ (40); the verb of doubt can also be impersonal, *Ne wæs me cuð* ‘It was not known to me’ (41); finally, the verb can express doubt explicitly, *tweonode him* ‘he doubted’ (42). In general, the indicative mood is used to convey a true proposition and the subjunctive mood to convey doubt, obligation, desire, etc., but observe that only (41) and (42) carry a verb in the subjunctive, and (38), (39), and (40) have the indicative mood.

(38) *Mid þy we þa wel neah stodan þam bearwum & þæm*
with this we then well near stood the barrow and the
godsprecum, þa ðohte ic on minum mode hwæþer ic meahte
oracle then thought I on my mind whether I could
ealne middangeard me on onweald geslean,
all earth me on power strike

‘With this we then stood well near the barrow and the oracle; then I thought to myself whether I could strike all the earth with power’.

(O2/3 NI TRAV ALEX 43)

(39) *oðere menn, him gebyrede ðæt he nyste self hwæðer*
other men he.DAT happened that he knew.not himself whether

he monn wæs.

he man was.IND

'to other men, it happened to him that he did not know himself whether he was a man'.

(O2 IR RELT CP 41)

- (40) *Þær hio wunode þreo gear, þæt nænig mon wiste hwæðer hio*
there she lived three years that no man knew whether she
wæs wer ðe wif, ær ðon ðe heo forðfered wæs.
was man or woman before that.INST PART she departed was
'She lived there for three years so no one knew whether she was a man or a
woman until she was gone'.

(O2/3 NN BIL MART 235)

- (41) *Ne wæs me on mode cuð, hwæðer on þyssum folce*
not was me on soul known whether on these.DAT.PL people
freat ælmihtiges egesa wære, þa ic her ærest com.
free Almighty.GEN.SG fear was.SUBJ then I here first came
'It was not known to me in my soul whether there was fear of the Almighty in
these people when I first came here'.

(OX/3 XX XX GEN 80)

(42) *Ɔa forhtode he & tƱeonode him hƱeðer hit swa*
 then feared he.NOM and doubted he.DAT whether it so
wære, swa him þuhte.
 was.P.SUBJ so he.DAT thought.

'Then he was afraid and doubted whether it was as he had thought'.

(O4 IR RELT LEOFRIC 186)

The second alternative introduced by the disjunction does not necessarily offer a *yes-no* distinction referring to the truth value of the clause; it can also offer an alternative between two NPs (43) or even between two AdjPs (44):

(43) *He hine forbærnð & eft edzung upp ariseð, & næfð he*
 he him burnt and again young up arise and not.have he
nænne zemaca, & nan mann ne wat, hƱeðer hit is þe
 none equal and no man not know whether it is CORR
karlfugel, þe cwenefugel, bute God ane.
 male.bird CORR female.bird but God one

'He burnt him, but it rose up again, and he does not have any equal, and no man knows whether it is a male bird or a female bird but God alone'.

(MX/1 IR HOM VESPD48 148)

(44) *Ɔa he ða ineode on þæt carcern ond hire togenealæhte, þa*
 Then he then in-went on the prison and her approached then

com ðider in (ursa) þæt deor, þæt is on ure geðeode
 came from.there in bear the animal that is on our language
byren, ond awarep hine to eorðan ond locade to þære godes
 ursine and threw him to earth and looked to the good.DAT
fæmnan hwæþer heo sceolde hine cucene þe deadne.
 virgin.DAT whether she must him alive or dead

'Then he went into the cave and approached her, then came in from there a bear,
 the animal, which in our language is ursine, and threw him to the ground and
 looked to the good young woman to see whether she had to [...] him alive or
 dead'.

(O3 NN BIL AELIVES32 9)

The presence of *þe* immediately after *hwæðer* indicates that the former must
 occupy the head position of the CP and the latter is still in the specifier position. Example
 (45) is relatively early, and similar cases abound later on as well all the way into the ME
 period.

(45) *ða onufan ðæt ymban oðer healf gear nat ic hwæðer*

Then upon that about other half year not.know I whether
ðe ymb tua, ða forstæl he ða unlædan oxan æt Funtial,
 COMP about two then stole.away he the poor ox at Funtial
ðe he mid ealle fore forwearð, & draf to Cytlid.
 which he with all journey perished and drove to Cytlid

'Then after that, about another half year, I don't know whether about two, then he stole away the poor ox at Funtial, which he killed during the long journey, and drove to Cytlid'.

(O2 XX DOC HARM18 32)

On occasion, one can find double embeddedness following the main clause; In (46), the main verb *acsige* 'ask' requires a predicate headed by *hwæðer*, which in turn introduces a new embedded clause with the complementizer *þæt* introducing the predicate of the subordinate verb *wene* 'think'.

(46) *Ac ic þe acsige hwæðer þu wene þæt ænig mon sie*
But I you.ACC ask whether you think that any man is.SUBJ
swa andgitfull þæt he mæge ongitan ælcne mon on ryht hwylc
so sensitive that he can see each man on right which
he sie, þæt he nawðer ne sie ne betra ne wýrsa þonne he
he is that he neither not is not better not worse than he
his wene.
his think

'But I ask you whether you think that anyone is so intelligent that he can see another man as an equal, so that he is neither better or worse than he thinks'.

(O2 XX PHILO BOETHAL 131)

The following example (47) shows the different word order found in a direct question introduced by *wh-* word different from *whether*, and subsequently, the word

order for an indirect question introduced by *hwæðer*. The former follows a V2 word order, *hu lange gælst þu* ‘how long will you delay’, whereas in the latter, the verb takes the third position after the subject, *hwæþer þu Crist sy* ‘whether you are Christ’. Note also that the verb in the first type is in the indicative mood, whereas the verb in the second type is in the subjunctive.

(47) *ða bestodon þa Iudeas hýne utan & cwædon to him,*
 then stood the Jews him without and said to him
hu lange gælst þu ure lif; Sege us openlice hwæþer þu
 how long delay you our life tell us openly whether you
Crist sy.

Christ is.SUBJ

‘Then the Jews stood without him and said to him, how long will you delay our life; tell us openly whether you are Christ’.

(O3 XX NEWT WSNEW 70)

Finally, a second, or *resumptive hwæðer*, can also appear when the first *hwæðer* clause seems too long, and the speaker seems to need to ask the same question again in order to introduce the second part of the subordinate clause. In (48), the question asked in the main sentence, *ic wolde þe nu ascian* ‘I wanted to ask you’, is restated further down as *ic wolde witan* ‘I wanted to know’, both follow by their respective complementizer *hwæðer*.

(48) *Ac ic wolde þe nu ascian hu þu þis spell understanden*
 But I wanted you.ACC now ask how you this story understood
hæfdest; hwæþer þu wene þæt þa fif god þe we oft ær
 had whether you think that the five gods that we often before
ymbe spræcan, þæt is anwald & weorðscipe & foremænes &
 about spoken that is one.rule and honor and greatness and
genyht & blis, ic wolde witan hwæðer þu wende þæt þas
 abundance and bliss I wanted know whether you thought that the.PL
good wæren limu þære soþan gesælþe, swa swa monegu limu beoð
 good were limbs the true created as as many limbs are
on anum men, & weorðað þeah ealle to anum lichoman.
 into one men and become however all into one body
 'But I wanted to ask you now how you had understood this story; whether you
 hope that the five gods which we often had spoken about, that is, authority, honor,
 greatness, abundance, and bliss, I wanted to know whether you thought that the
 good limbs were truly created, just as there are many limbs on men and become
 however all into a single body'.

(O2 XX PHILO BOETHAL 86)

4.6 *Hwæðer* in Correlative Expressions

The following section includes examples with *hwæðer* as a distributive particle or correlative CORR, either in combination with another *hwæðer*, *opþe* or *þe* ‘or’, *swa*, other *hw-* expressions (*hu lange* ‘for how long’), or an implicit second disjunctive particle.

Let us start with those sentences whose correlative meaning is expressed by means of *swa* in combination with *hwæðer*. Each of two instances of *swa* may accompany a noun (49) or a full NP (50) and these are followed by complex CP *swa hwæðer swa* introducing a clause with S-V order.

- (49) *Nim ðonne swa wuda swa wurt, swa hwæðer swa þu*
 take then CORR wood.PL CORR plant.PL CORR whichever CORR you
wille, of þære stowe þe his eard & æþelo bið on to
 want from the place REL his land and country is on to
wexanne, & sete on ungecynde stowe him; þonne ne [{{gegrewð}}
 grow and set on unnatural place he.DAT then not grow.FUT
hit þær nauht, ac forsearað.
 it there not but dry.up.FUT

'Take then both the wood and plants, whichever of the two you want, from the place where his home and native land is, so as to grow them and put them in an unnatural place to him; then it will not grow there at all, but will dry up.'

(O2 XX PHILO BOETHAL 91)

(50) *Of eorðan gewurdan ærest geworhte þa ðe we ealle of*
 from earth become first created where PART we all from
coman, & to eorðan we sculan ealle geweorðan & syððan
 come and to earth we must all become and since
habban swa ece wite a butan ende, swa ece
 have so eternal punishment always without end so eternal
blisse, swa hwæðer swa we on life ær gearnedon.
 bliss so whichever so we on life before deserved
 'From the earth we were first created where we all come from and to the earth we
 all must turn and have since eternal punishment without end or eternal bliss,
 whichever we deserved in life'.

(O3 IR HOM WULF13 225)

It is possible for the second part of this construction to appear by itself, as in (51), where the expression *swa hwæðer swa* qualifies the preceding verb *werian* 'protect' and translates as 'in whichever way'. An impersonal verb follows.

(51) *Manig strec man wyle, gyf he mæg & mot, werian his man,*
 many strict man will if he can and may protect his man
swa hwæðer swa him þingð, þæt he hine eað awerian
 as whether as him plead that he him easily defend
mæge,
 may.SUBJ

'Many a strict man will, if he can and is allowed to, protect his man in whichever way it seems to him that he can defend him'.

(O3 STA LAW LAW11C 322)

A more liberal use of *swa hwæðer*, one with a less fixed structure, can be found in (52), where there seems to be a correlation, albeit adversative (*buton* 'without, but'), between a clause introduced by *swa* [...] *hwæðer* and a second clause introduced simply by *hwæðer*. *Hwæðer* may very well refer anaphorically to the two subjects referred to before, *sweordhwita* 'sword-polisher' and *smið* 'smith', as if with the meaning of *each one of them*.

(52) *Gif sweordhwita oðres monnes wæpn to feormunge*
if sword-polisher other.GEN.SG man.GEN.SG weapon for entertainment
onfo, oððe smið monnes andweorc, hie hit gesund
took or smith man.GEN.SG metal-work.GEN.SG they it sound
begen agifan, swa hit hwæðer hiora ær onfenge, buton
both give.back as it whether theirs before took without
hiora hwæðer ær þingode, þæt he hit angylde
theirs whether before reconciled that the it compensation
healdan ne ðorfte.
hold not needed

'If the sword polisher took another man's weapon for entertainment, or the smith took the metal work of someone else's, and they both returned it sound, as if they

had taken theirs, but without asking for permission, so that he did not have to owe any compensation for it'.

(O2 STA LAW ALFLAW 60)

At a later date, the combination *swa hwæðer* begins to appear as a single word, *swahweder*. Example (53) belongs to the end of the OE period. It follows the same fixed pattern of *swa N swa N*, but the complementizer is a single head *swahweder*. Note that the immediately previous phrase contains PP *oððe PP on sunnandæg oððe on nihte* 'on Sunday, during the day or at night'.

(53) *Gif mon bið acennen on sunnandæg oððe on nihte, swa wer*
if someone is born on Sunday or at night, either man
swa wif swahweðer hit þonne bið, nafað he na mycle
or woman whichever it then is not.have he no great
sorge, & he bið gesælig be his gebyrde.
sorrow and he is blessed by his birth

'If someone is born on Sunday, during the day or night, whether a man or a woman, whichever it is, he does not have a great sorrow, and he is blessed by his birth'.

(OX/4 IS HANDA PROCC 297)

The next two examples, (54) and (55), reduplicate the use of *hwæðer* and may be translated into 'either... or' in PDE. The second *hwæðer* seems to sit in the specifier

position, because the head of the CP is filled by *þe*. Note the different verb mood verb in each part of the disjunction in (54), the first one in the subjunctive and the second in the indicative. Also note how (55) is reinforced by the pronoun *hwylcum* ‘each’.

(54) *Gyf hwa wyle his willan don he gecwemð be þære lare*
 if someone wants his will do he satisfies by her teachings
hwæþer heo si of Gode hwæþer þe ic be me sylfum spece.
 whether she is of God whether COMP I by me self speak
 'If someone wants to do his will, he is satisfied by her teaching, whether she is of God or I speak by myself'.

(O3 XX NEWT WSNEW 68)

(55) *ðonne hweðere us þet wunað uncuð hweðer he hit be*
 then however us that live.PL unknown whether he it by
him seolfum segde hweðer þe be oðrum men hwylcum
 him.DAT self said whether COMP by other men each
ac þonne hweðere þet ne meg uncuð beon þet swa swiðe
 but then however that not can unknown be that so very
halig wer segde.
 holy man said

'Then however they live unknown to us, whether he said it to himself (or) whether by each other man, but then. however, that cannot be unknown, as the very holy man said'.

(O2/4 NN BIL CHAD 180)

Hwæðer can also show up in combination with *oððe* 'or'. In the next two examples, (56) and (57), the disjunction is between NPs or adjectives. Note the structure AdjP *hwæðer ðe* AdjP in (56) and *hwæðer ðe* AdjP *ðe* AdjP in (57).

(56) & ða *burga gebette oððe butan weallum*, & ***hwæðer*** ðæt
 and the cities better or without walls and whether the
landfolc sy to gefeohte stranglic oððe untrumlic, feawa
 country-people are.SUBJ for battle strong or weak few
on getele hwæðer ðe fela.
 in number whether or many

'And the better cities or (those) without walls, and whether the country people are strong or weak for battle, whether few or many in number'.

(O3 XX OLD T AELFOLD XIII, 20)

(57) *We magon be þysum tocnawan þæt se mann, þe his gesyhðe*
 we can by these understand that the man who his cohort
næfð, ne sceal he gedyrstlæcan, þæt he mæssige, þonne
 not.have not must he dare that he celebrate.mass then

he ne gesyhð hwæt he offrað Gode, hwæðer þe clæne, þe
 he not seen what he offer God whether PART clean PART
ful.

foul

'We can understand by these that the man, who does not have sight, must not dare celebrate mass, since he does not see what he offers to God, whether clean or foul'.

(O3/4 IR RELT LWSIGE 32)

Typically, the second disjunction is introduced by *or not* if this is explicit, or it is interpreted as such, if implicit. The manifestation of the second disjunction in (58) is particularly interesting, because it is not introduced by *or not*, but it is instead juxtaposed to the first disjunction. We can thus talk about a paratactic second disjunction.

(58) *ða þa he to þære dura com & þær langsumlice swyðe*
 then then he to the doors.GEN.PL came and there loud so
cnucede & georne cunnode, hwæðer he hi on ænige wisan
 knocked and eagerly knocked, whether he them in any way
undon mihte, ne mihte na.
 open could not could not

'Then, after that, he came to the doors of which and knocked there way loud and tried eagerly to see whether he could open them in any way or could not'.

(O4 IR RELT LEOFRIC 182)

Finally, *hwæðer* can also appear in correlation with other *wh*- expressions, such as *hu lange* ‘for how long’. In (59), *hwæðer* can be interpreted as a CORR in combination with *oððe* and translated as ‘either... or’, or as a QM introducing a direct *yes-no* question, followed by a second alternative, introduced by *oððe* and a *wh*- question with *hu lange*. In (60), both the clause introduced by *hu longe* ‘how long’ and that introduced by *hwæðer* are both subordinate to the same main verbal phrase *wolde fandian* ‘wanted to find out’.

(59) *Hu lange wilt þu, Drihten, min forgitan, hwæðer þu oð minne*
 How long will you Lord me neglect whether you until my
ende wylle; oððe hu lange wilt þu ahwyrfan þinne andwlitan
 end will or how long will you turn your look
fram me?
 from me

‘How long will you, Lord, neglect me, or will you neglect me until my end, or how long will you turn your eyes from me?’

(O2/3 XX OLDT PPS 23)

(60) *He sæde þæt he æt sumum cirre wolde fandian hu longe*
 he said that he at same occasion wanted find how long
þæt land norþryhte læge, oþþe hwæðer ænig mon be norðan
 that land due.north lay or whether any mon by north

þæm westenne bude.

the.DAT.SG desert.DAT.SG live.SUBJ

'He said that he wanted to find at once how far the northern land lay, or whether anyone lived the north of the wasteland

(O2 NN HIST OHTHR2 17)

4.7 *Hwæðer* Preceded by the Suffix *ge-* and *æg-*

As Wright & Wright (1908) indicate in their *Old English Grammar*, *ge-hwæðer* displays similar uses to its counterpart *hwæðer*. As a pronoun, it means 'both', 'each (of two)', or 'either', depending on the context; there is also an adjectival form; as an adverbial, it can be translated as 'in each case'. Also adverbially, but in the instrumental case *gehwæðere*, it behaves as *hwæðere*, meaning 'yet, however'. With a genitive ending, it can be translated as 'anywhere, on every side, every way'. Similar to *hwæðer*, *gehwæðer* can also function as a conjunction, as in *Gehweþer ge his agen geweorc ge on his naman gehalgod* 'whether his own work or in his name consecrated' (§471).

Likewise, Mitchell (1985) observes that *gehwæðer* is sometimes interchangeable with *hwæðer*, as in *on hwæðre hand* 'on either hand', which appears as *on gehwæðere hond* in a different version of the same text (§435).

The HC contains a variety of examples with *gehwæðer*. It appears as a pronoun referring both cataphorically to two following NPs (61) and anaphorically to two preceding PPs (62).

(61) *Bið him self **gehwæðer** sunu ond swæs fæder, ond symle eac*
is him self each son and beloved father and always also
eft yrfeward ealdre lafe.

again heir source remnant

'He is himself both the son and our beloved father, and always will be again the original heir of what is left'.

(O2/3 XX XX MBO 159)

(62) *Wæs [*peaw*] hyra þæt hie oft wæron an wig gearwe, ge æt*
was custom their that they often were for war ready CORR at
*ham ge on herge, ge **gehwæper** Para, efne swylce mæla*
home CORR on harrying CORR whichever the.GEN.PL even such action
swylce hira mandryhtne þearf gesælde; wæs seo þeod tilu.

such their sworn.lord need happened was it nation brave

'It was their custom that they often were ready for war either at home or out harrying, whichever of these, even for such occasion as when their sworn lord happened to need them; it was a brave nation'.

(OX/3 XX XX BEOW 39)

Gehwæðer can govern a noun in the genitive (63) or *gehwæðer* itself can carry the genitive case (64). The former is a NP adjacent to the subject of the main sentence, whereas the latter is part of a PP.

- (63) *Breca næfre git æt heaðolace, ne **gehwæþer** incer, swa*
 Breca never yet at war-play not either you.two.GEN as
deorlice dæd gefremede fagum sweordum no ic þæs [{}fela{}] gylpe,
 brave deed performed shining swords not I the much boast
þeah ðu þinum broðrum to banan wurde, heafodmægum; þæs
 although you your brothers to kill became half-relatives thence
þu in helle scealt werhðo dreogan, þeah þin [{}wit{}] [{}duge{}].
 you in hell must curse suffer although your wit avail
 'Breca never performed in battle so brave a deed yet, nor either of you two, with
 shining swords; I did not boast about it much; but you became the killer of your
 brothers, your close relatives; for that you must be damned in hell, even if your
 wit is strong'.

(OX/3 XX XX BEOW 19)

- (64) *Gif he ðurhwund bið, æt **gehwæðerum** muðe XX scillinga.*
 if he wounded is at each.GEN mouth.DAT twenty shilling
 'If he is wounded at each side of the mouth, twenty shilling (ought to be paid)'.

(O2 STA LAW ALFLAW 82)

A reciprocal interpretation is also possible, as in *gehwæper oðrum* ‘to each other’

(65).

(65) *ða þæt onfunde se þe fela æror modes myrðe manna*
then it found he who many before mind.GEN miseries men.GEN
cynne, fyrene gefremede he [{wæs}] fag wið god, þæt him se
kind crimes committed he was hostile against God that him the
lichoma læstan [{nolde}], ac hine se modega mæg
body follow wanted.not but him the keen kinsman
*Hygelaces hæfde be honda; wæs **gehwæper** oðrum lifigende lað.*
Hygelac.GEN had by hand was each other living loathed
‘Then he discovered it, he who before committed by his crimes trouble of soul to
mankind, he who was at feud with God, he discovered that his body would not
last, that Hygelac's kinsman, the proud one, had him by the hands; living (that
they both lived) was to each other hateful’.

(OX/3 XX XX BEOW 26)

The etymologically related *æghwæðer* is considered an indefinite pronoun by Wright & Wright (1908), and as they point out, it is a combined form of *ā* ‘ever’ + *gi* + *hwæðer*, and it also means ‘each of two, both’ (§471). Its later form is *ægðer*, also with the meaning ‘either, each, both’ (§560).

In (66) and (67) below, it seems as if *æghwæðer* occupies the subject position, but an implicit subject, to be found in their immediately previous clause, could lead to an interpretation where *æghwæðer* is undeclined and it governs a noun in the accusative:

- (66) *æghwæðer oðerne earme beþehte, cyston hie ond clypton.*
 each other arm.INST covered kissed they and embraced
 'Each covered the other with the arm (each embraced the other); they kissed and embraced each other'.

(OX/3 XX XX AND 31)

- (67) *Earnulf þa wunode on þæm londe be eastan Rin, & Roþulf þa*
 Earnulf then remained on the land by east Rin and Rothulf then
feng to þæm middelrice, & Oda to þæm westdæle, &
 seized to the middle.kingdom and Oda to the west.part and
Beorngar & Wiþa to Longbeardna londe, & to þæm londum on
 Beorngar and Witha to Longbeardna land and to the land on
þa healfe mutes, & þæt heoldun mid micelre unsibbe, & tu
 the half mountain and the held with great war and two
folc gefeoht gefuhton, & þæt lond oft & gelome forhergodon,
 people fight fought and the land often and often destroyed
& æghwæþer oþerne oftrædlice utdræfde;
 and each other frequently expelled

'Earnulf then remained on the land by East Rin and Rothulf then seized the middle kingdom and Oda the west part and Beorngar and Witha the land of Longbeardna and the land on half the mountain and they held them with great war and the two people fought a battle and the land more often than not got destroyed and each often expelled the other'.

(O2 NN HIST CHRONA2 80)

The subject interpretation in the above examples is not implausible if we consider (68), where *æghwæðer* is the subject of the clause and it takes second position after the fronted verb:

(68) *Biowulfe wearð dryhtmaðma dæl deaðe forgolden;*
 Beowulf.DAT became noble-treasure.GEN.PL part death.INST paid.forth
hæfde [æghwæðer] ende gefered lænan lifes.
 had each end arrived transitory life.GEN.SG

'A share of the noble treasures was paid for Beowulf at his death; each had arrived at the end of their transitory life'.

(OX/3 XX XX BEOW 88)

The oblique case is also found, as in (69) *æghwæðerum þissa biscopa* 'to each of the bishops', which may refer to two bishops or a few. The indefinite meaning is clearer in (70), where for *ahwæðer* 'for each' refers to men in general.

(69) *Ond se cyning æghwæðerum þissa biscopa his gyfe sealde*
 and the king each.GEN.PL these.GEN bishops.GEN his gift gave
 & boclond & ahte, him to brucanne mid
 and charter-land and possessions them.DAT.PL to enjoy with
heora geferum.

their companions

'And the king gave a gift to each of his bishops and charter land and possessions
 for them to enjoy with their companions'.

(O2 NN HIST BEDEHE 104)

(70) *Ic wealdend god wordum herige, and on god swylce georne*
 I Almighty God words.DAT praise and in God so zealously
gelyfe, þæt minre spræce sped folgie æghwæs ealne dæg;
 believe that my words success follow each all day
eac ic swylce on god drihten gearewe gewene; nis me ege
 also I so in God Lord eagerly confide is.not me.ACC fear
mannes for ahwæðer.

man.GEN for each

'I praise the Almighty God with words, and believe so zealously in God that the
 success of my words follow each day; also, I confide in God the Lord so eagerly;
 that there is no fear of men in me for each of these reasons'.

(O2/3 XX XX MPS 7)

4.8 Concluding Remarks

In this chapter, I presented a wide range of sentences from the diachronic part of the HC containing OE *hwæðer* in its different functions. The examples used represented the following uses of *hwæðer*: adverbial, pronominal, QM in *yes-no* disjunctive questions, complementizer introducing a subordinate clause, and finally correlative. These are the basic functional distinctions of OE *hwæðer* already pointed out in the literature. To this list I added the variants *gehwæðer* and *æghwæðer*, which the literature only mentions in passing.

Throughout the chapter, I made a series of observations which refer to the relevant *hwæðer*-sentences. Here are some of these observations summarized in the order they were presented:

- 1) Adverbial: *hwæð(e)re* always appears by itself and not attributively, qualifying a noun; it usually appears clause-initially, but other word orders have been found; it can occur in combination with *þeah* with the meaning ‘nonetheless, however’, first as two separate words *þeah hwæðere* and later on, as a single word *þeahhwæðere*.
- 2) Pronominal: *hwæðer* shows up both declined and indeclinable; it is adjectival when it qualifies an NP; V/2 is always the word order; a split NP, where *hwæðer* is clause initial and its NP is left behind within the VP seems to suggest the VP is its original position in the clause and it raises to the front for emphasis (topicalization); etymologically, *hwæðer* means ‘which of the two’, but its meaning evolves into ‘which of more than two’ and eventually ‘which of any’.

3) *Yes-no* QM: the common word order of this type of sentence is *hwæðer*-S-V, except with impersonal verbs; it may appear with an explicit second disjunction; some sentences lend themselves to ambiguity, and *hwæðer* can be interpreted as a QM introducing an independent interrogative or as a complementizer (conjunction) linking an indirect interrogative to the main sentence it depends on; early on (o2), we find *hwæðer* with *þæt* as a complementizer, and this indicates *hwæðer* was interpreted as a specifier at least in this type of sentence.

4) Complementizer: this is *hwæðer*'s most common function, and so it appears in a variety of contexts; the *hwæðer*-clause depends on a main sentence, but it is not always governed by a verb (whether explicit or implicit); contra Traugott (1992), the subordinate clause introduced by *hwæðer* can precede the main sentence; the verb of the *hwæðer*-clause appears both in the indicative and subjunctive; the word order is typically *hwæðer*-S-V; *hwæðer* can also appear as a specifier when accompanied by *þe*.

5) Correlative: *hwæðer* can also appear as a correlative to such particles as *opþe*, *þe*, *swa*, *hwæðer* or even other *hw*-expressions; its function is pronominal and can be translated as 'whichever'; when in combination with *swa*, *hwæðer* can appear compounded as *swahwæðer*, which is a later variant.

6) *gehwæðer* and *æghwæðer* variants: their function is pronominal and they can be translated as 'both, each (of two), either'; they can also appear attributively with an NP or an oblique noun; as adverbials, with an *-e* ending, they can be translated as 'in each case, yet, however', in a similar fashion to *hwæðer*; they can also function as complementizers

introducing a subordinate clause (sometimes they are specifiers if accompanied by a complementizer, such as *ge*).

In the next chapter, a quantitative analysis of the data will be presented. The data include all the instances of *hwæðer* found in the diachronic part of the *Helsinki Corpus of English Texts: Diachronic and Dialectal*.

Chapter 5

DISTRIBUTION OF OE *hwæðer* IN THE HELSINKI CORPUS

5.1 Introduction

The quantitative section of the data analysis illustrates the status of *hwæðer* in OE as it appears in the selection of sentences compiled exclusively from the OE period of the in the diachronic part of the *Helsinki Corpus of English Texts: Diachronic and Dialectal*. The present chapter contains a series of charts showing instances of occurrence of *hwæðer* according to several variables; these are followed by observations based on the charts and the number of tokens accounted for. The chapter is divided into three major sections: 1) number of tokens according to the corpus subdivisions: time periods; prose vs. verse; dialectal variation; original work vs. translation; 2) distribution of *hwæðer* according to sentence type; 3) position and function of *hwæðer* within the sentence; 4) relationship to matrix sentence via linking verb and relationship to second disjunction.

5.2 *Hwæðer* and the HC subdivisions

The diachronic part of the HC includes a selection of texts from three different periods of the English language: Old, Middle, and Early Modern (British) English. In addition, the HC contains a supplement with regional varieties. I have focused this study exclusively on the Old English section of the corpus, which contains a total of 413,300 words. A total of 179 tokens were found in almost as many sentences (some sentences contain two or more tokens, although most contain only one instance of *hwæðer*). Table 7 below illustrates how the OE period is divided in the HC into four subdivisions and how many words each subdivision consists of.

Table 7

OE Subdivisions According to the Helsinki Corpus Diachronic Part, with Total Number of Words and Percentages

	Old English Sub-period	Words	%
I	-850	2,190	1%
II	850-950	92,050	22%
III	950-1050	251,630	61%
IV	1050-1150	67,380	16%
	TOTAL	413,250	100%

The HC refers to the different periods either by means of Roman numerals, as in Table 7, or a combination of the letter *o* and an Arabic numeral; so, the earliest period in OE is referred to as *I* or *o1* (-850); the following period as *II* or *o2* (850-950); the next period as *III* or *o3* (950-1050); and the last period as *IV* or *o4* (1050-1150). Other sources used here may use other systems, clear enough to understand. In this dissertation, I use Roman numerals or the *o* + Arabic numeral combination when dealing directly with the data collected from the corpus or whatever other system is used in the source I am referring to.

The tokens found in the OE part of the corpus include several variants of *hwæðer*: *hwæðer* proper, in its different functions (question marker (QM), conjunction, pronoun, and adverbial), and two prefixed variants, *æghwæðer* and *gehwæader*. The first ones may also appear with different spellings, but I use *hwæðer* as the default spelling, since

spelling seems to have no bearing on the function of the word over time. Table 8 shows the number of tokens per period and their percentages.

Table 8

Instances of hwæðer (and Variants) in the Helsinki Corpus during the OE Period

	Old English Sub-period	Tokens	%
I	-850	3	2%
II	850-950	109	61%
III	950-1050	60	34%
IV	1050-1150	7	4%
	TOTAL	179	100%

The Manual to the Diachronic Part of the Helsinki Corpus of English Texts (Kytö, 1996) provides a general sense of what kinds of texts the corpus contains. The goal of the HC compilers was to offer a series of texts and text extracts that would be as representative and comprehensive of the extant literature as possible, and an effort was made to include texts as varied as possible as well. Thus, the texts were selected based on certain textual parameters that would represent both prose and verse, original and translated, different dialects, and so forth. The Manual does not provide exact numbers indicating the proportion of total number of words against these variables. These numbers can be found sometimes in other sources, such as Kahlas-Tarkka, Kilpiö & Österman (1996), who indicate the distribution of prose and verse in the OE section of the HC, shown here in Table 9.

Table 9

The Old English Period in the Helsinki Corpus. Distribution of Words in Prose vs. Verse

Subperiod		Words	%	Prose	Verse
OE1	-850	2,190	0.5%	1,960	230
OE2	850 - 950	92,050	22.3%	91,680	370
OE3	950 - 1050	251,630	60.9%	174,010	77,620
OE4	1050 -1150	67,380	16.3%	67,380	-
		413,250	100%	335,030 81.10%	78,220 18.90%

(Kahlas-Tarkka, Kilpiö & Österman, 1996, p.21)

According to Table 9 above, the total percentage of words in prose in the OE section of the HC is 81%, and that of words in verse 19%. The numbers are coincidentally very similar to those produced by the tokens under consideration (*hwæðer* and variants) in the present study, 82% of tokens were found in prose texts, 18% in verse. The exact number of words, and their percentages, according to dialect is not given by the Manual, but Kytö (1996) indicates that the number of texts of West Saxon origin supersedes that of other dialects quite considerably, particularly in the OE period. This is also the case in the distribution of tokens, as Figure 5 illustrates.

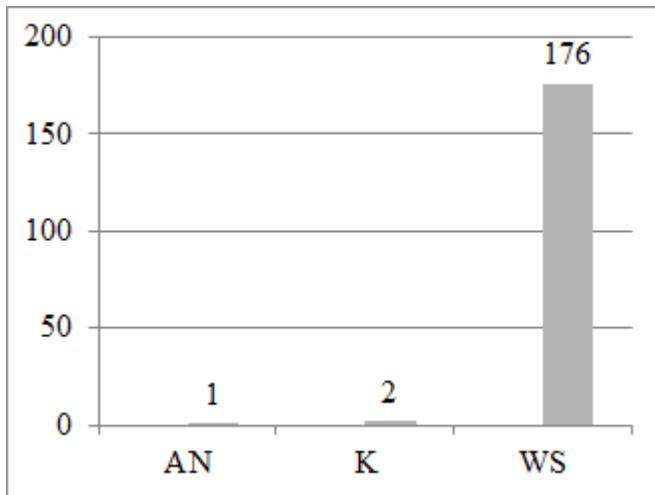


Figure 5. Number of Tokens According to Dialect during the OE Period of HC

As Figure 5 indicates, there is only one token from an Anglian text, and two from a Kentish text; the rest of the tokens were all found in West-Saxon (WS) texts. The last group consists of those texts the HC assumes to be of West-Saxon origin, but also of those with two possible origins, of which one is West-Saxon and the other one may be from Anglian (A), Anglian-Mercian (AM), or of unknown origin. I have decided to group all these together into a single West-Saxon group in order to show the disproportion of tokens in one dialect as opposed to those of the other two dialects encountered. An important consideration to make here is that there is not enough textual evidence to defend or refute the external influence of Old Norse (ON) in the northern OE dialects, since these are scant. This is the reason why the ON cognate of OE *hwæðer* has not been considered in this dissertation.

The HC contains numerous OE texts with some relationship to Latin originals. This relationship is indicated in the corpus by the text parameter < G (relationship to

foreign original), which allows for three different values: GLOSS, TRANSL, and X (irrelevant or unknown) (Kahlas-Tarkka, Kilpiö & Österman, 1996, p.29). A possible influence from Latin on the OE texts would be difficult to determine, given that all instances of OE *hwæðer* are fairly evenly distributed between original texts and those translated from Latin texts and the behavior of OE *hwæðer* is comparable in both textual environments. Observe Figure 6 below, which shows an even distribution between the number of tokens found in original OE texts (indicated here by *OE*) and those in translations (indicated by the term *gloss/Latin*):

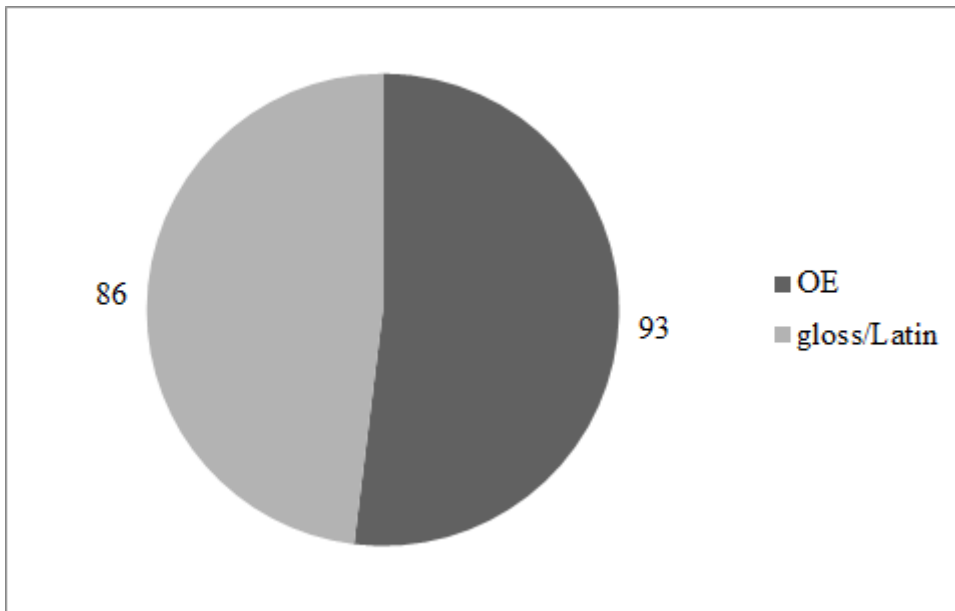


Figure 6. Distribution of Tokens in OE Original vs. Translated Text during the OE Period of HC

5.3 Distribution of *hwæðer* according to sentence type

The available literature on the history of *whether* points out its different functions according to whether it appears in an independent sentence or in a subordinate clause on

the one hand, and the force of the sentence in which it appears, on the other. Figures 7 and 8 illustrate the presence of OE *hwæðer* in the HC by sentence complexity (independent (INDEP) vs. dependent (DEP)) and by sentence type (assertive (ASS), interrogative (INT), or imperative (IMP)) respectively.

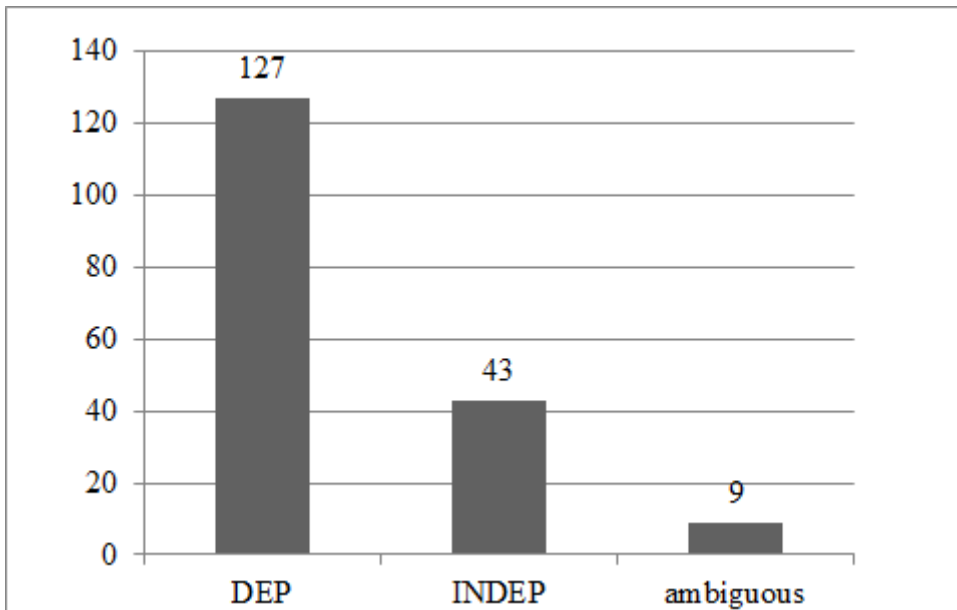


Figure 7. Presence of *hwæðer* during the OE Period of HC according to Sentence Complexity

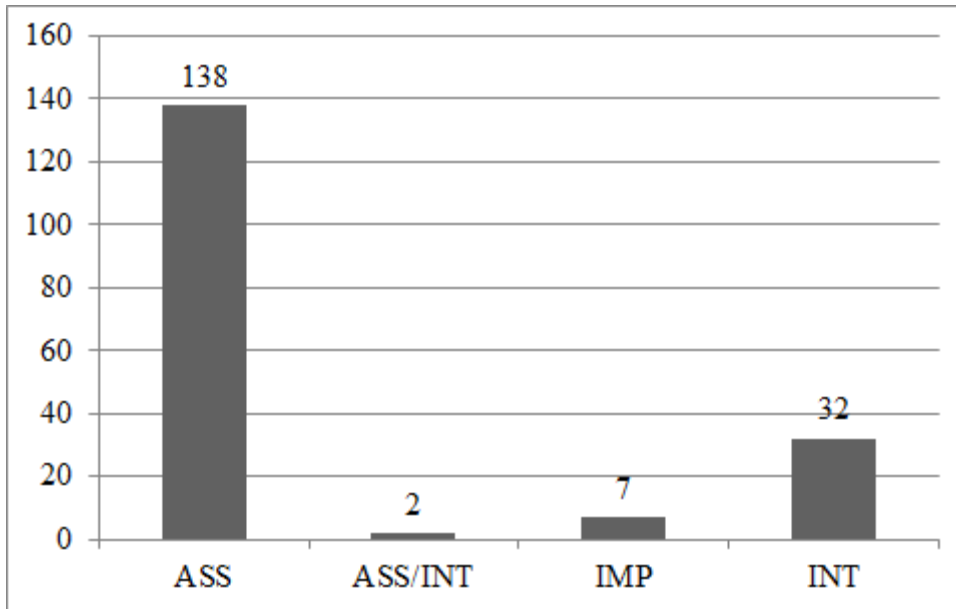


Figure 8. Presence of *hwæðer* during the OE Period of HC according to Sentence Type

It is clear from Figure 8 that OE *hwæðer* is predominant in dependent clauses; it appears 3 times as often in dependent clauses as in independent ones. A small number of sentences could be interpreted either way, and each interpretation would assume a different function. Likewise, Figure X shows how OE *hwæðer* is conspicuous in assertive sentences and infrequent in other types of sentences. Observing both Figures 7 and 8 separately, it is easy to see that *hwæðer* in OE is most common in assertive dependent clauses. This type of clause accounts for two main functions: conjunction and adverbial.

Combining the sentence complexity level (dependent (DEP) vs. independent (INDEP)) with the sentence type (assertive (ASS), interrogative (INT), or imperative (IMPERATIVE)) may give us a clearer picture of what kinds of *hwæðer*-sentences are most common overall. Below Figures (7 and 8) are combined into one (Figure 9):

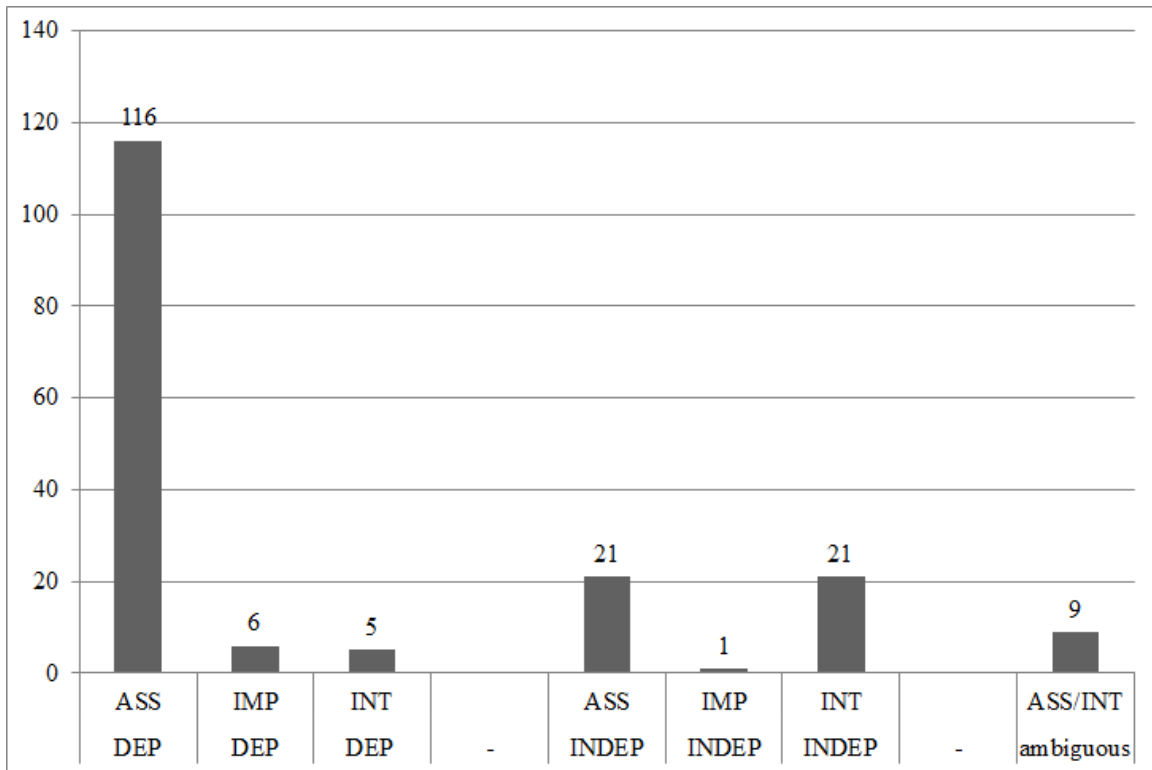


Figure 9. Presence of *hwæðer* during the OE Period of HC according to Sentence Complexity and Type

It is noticeable from Figure 10 that *hwæðer* in OE was present in all types of sentences, and thus, it can be assumed that the versatility of *hwæðer* among speakers was already evident from the earliest period in English language history. More interestingly, Figure 10 illustrates the distribution of tokens according to their function both in main and dependent clauses. The adverbial use in dependent clauses accounts for *hwæðer* ‘however’ and the adverbial use in independent clauses accounts instead for *hwæðer* ‘in whichever way’.

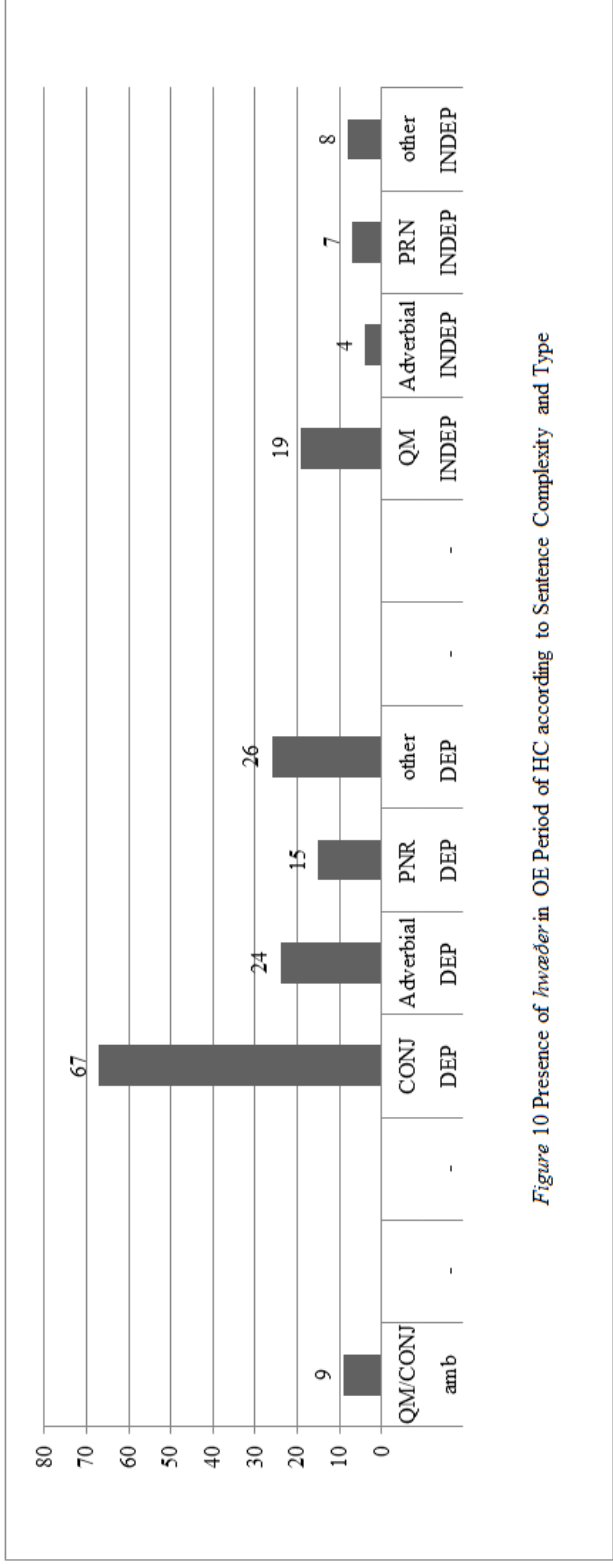


Figure 10 Presence of *Inverøder* in OE Period of HC according to Sentence Complexity and Type

In addition to the indication of instances of OE *hwæðer* in the corpus, Figure 10 above visually synthesizes the classification according to function presented by Mitchell (1985), represented in Tables 5 in Chapter 3, and that of Ukaji (1997) in Table 6, and the one by the OED Online in Tables 1, 3 and 4. The main categories, the pronoun and the conjunction, are present in Figure 10, and so is the distinction between *x*-questions (*wh*-questions headed typically by an interrogative pronoun) and nexus questions (alternative questions introduced by a pronoun). The main difference between Figure 10 and the aforementioned classifications in the literature is the addition of a new category, question markers (QM), which are identified as a separate category in its own right. Also, the adverbial and pronominal categories are clearly specified.

5.4 Position and function of *hwæðer* within the sentence

Under X' Theory, OE *hwæðer* takes different positions: it can appear as a prepositional phrase (PP) inside or outside the verbal phrase (VP), but it can also be a noun phrase (NP) adjunct, sister to the VP. Part of the PP, or the full PP, can raise to the specifier (Spec) position, if topicalized, or it can be base-generated *in situ* under van Gelderen's (2004) Late Merge Principle (LMP). Finally, it can end up in the head (H) of the complementizer phrase (CP) under van Gelderen's (2004) Head Preference Principle (HPP). Figure 11 shows the number of times *hwæðer* occurs in the corpus according to its position in the sentence, following the representation proposed under X' Theory.

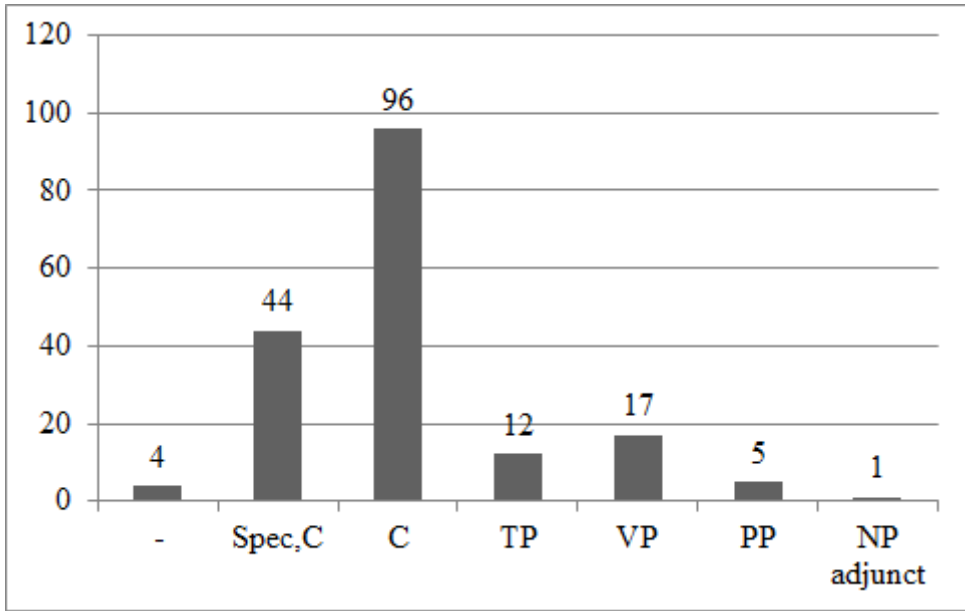


Figure 11. Distribution of OE *hwæðer* according to its Position in the Sentence under X' Theory

Note the columns in Figure 11 are in an order mirroring the structure of the sentence syntactic representation of the basic structure of a clause, including all three layers (CP, TP, and VP), as in (1) below (repeated here from (5) in chapter 2 for convenience):

(1)

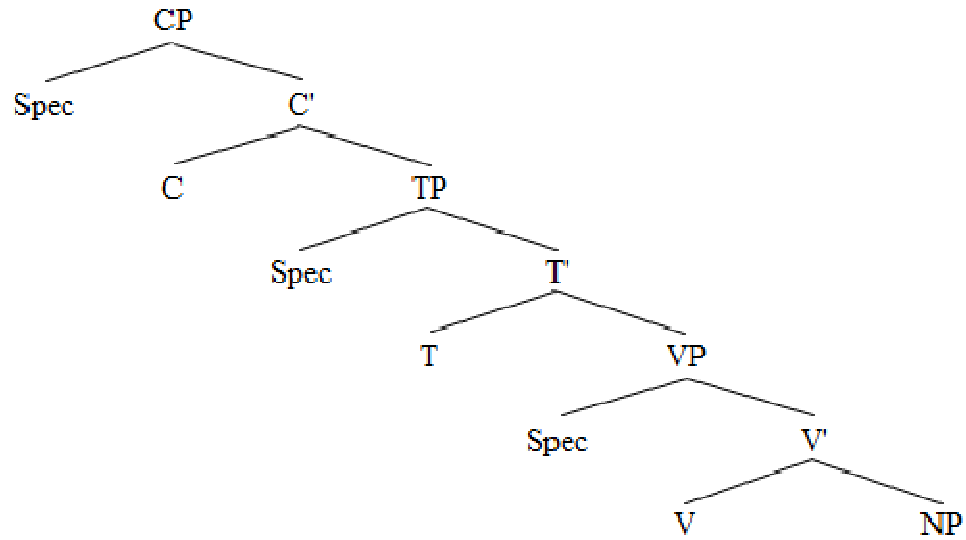


Figure 11 above clearly shows *hwæðer* appears in the OE period predominantly as a complementizer, whether this is introducing a subordinate clause (conjunction) or a *yes-no* question, or it is merely an adverbial in that position. The head position is at least twice as likely as the specifier to be the landing site of *hwæðer*. Any other position within the sentence (TP, VP, or a PP inside or outside the phrase) is considerably less frequent.

Next, the presence of all variants of *hwæðer*, as they appear in the OE period of the in the diachronic part of the HC, are illustrated in Figure 12. The variants are also listed in Table 10, which also shows the total number of tokens and their possible translations into PDE.

Table 10

Distribution of all Variants of OE hwæðer and their Meanings

Variants of <i>hwæðer</i>	Tokens
-	2
CO (either... or...)	1
PNR+ (which of <i>more than two</i>)	6
PRN2 (which of <i>two</i>)	16
CONJ (whether)	74
QM	24
æghwæðer (which, each)	8
gehwæðer (which, each)	10
swahweder (each)	2
hwæðere (however)	26
hwæðere (in whichever way)	4
þæhwæðere (however)	6

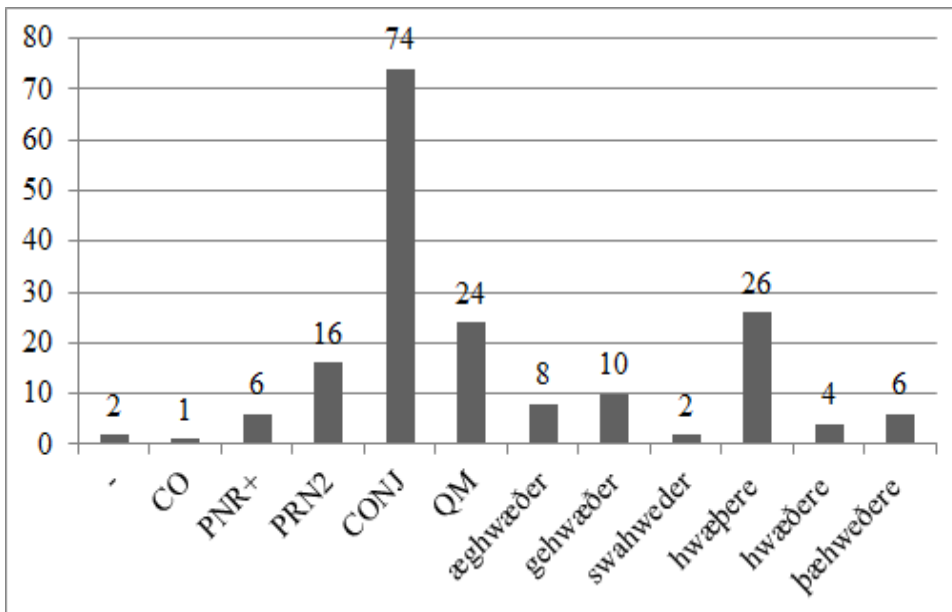


Figure 12.

Distribution of all Variants of OE *hwæðer* during the OE Period of HC

Finally, one of the variants of *hwæðer* depends on whether this is declined or not. This is not as straightforward as it seems initially. The adverbial *hwæðere* or *hwæðre* ‘however, in whichever way’ probably carries a former dative or instrumental case, which became relexified over time; in other words, the case would have originally an active dative or instrumental meaning and, over time, its meaning became specialized into an adverbial meaning ‘however’ and, yet later on, it would develop a further meaning ‘in whichever way’. This semantic trajectory, along with the phonetic reduction it experienced through the apocopation of its unstressed vowel from *hwæðere* to *hwæðre*, is expected under the phenomenon of grammaticalization.

In addition, *hwæðer* was declined in OE as a strong adjective when it was used as a pronoun, which was presumably its original function. It soon began to lose its endings, and case syncretism ensued even before the loss of endings started to become the norm from the early ME period. It is sometimes difficult to determine whether *hwæðer* is declined in a particular sentence, given the fact that the nominative form is not distinguishable from its undeclined form.

The presence of declined OE *hwæðer* in the corpus is illustrated in Figure 13, where it is clear that the indiclinable form is 5 times as frequent. Next, Figure 14 illustrates the number of declined and indiclinable tokens by period. Interestingly, the declined forms become less frequent as time progresses, and the reverse is true for the

undeclined form, which is scarce at the earliest sub-period (up to 850 CE or o1) and increasingly prominent later on.

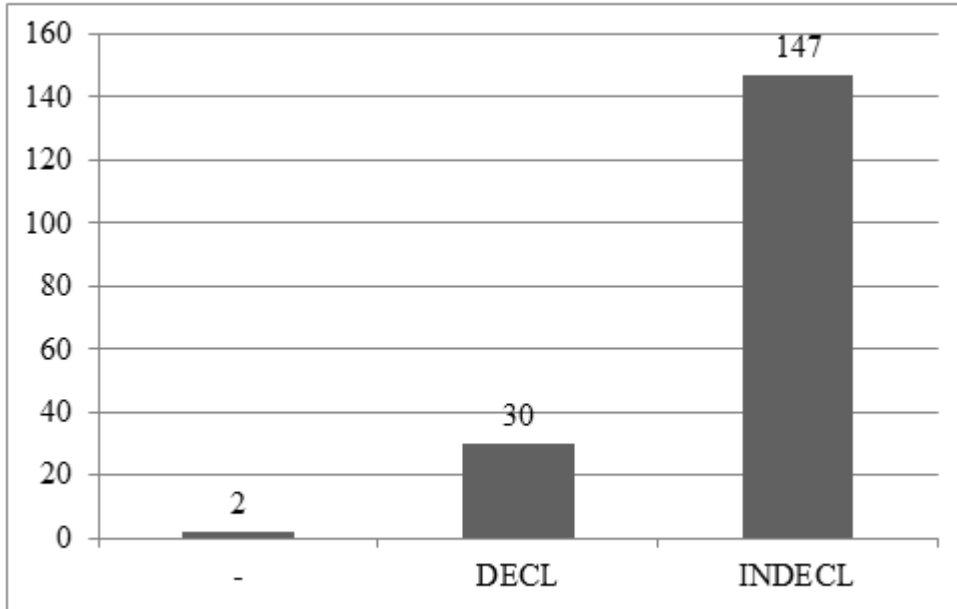


Figure 13. Presence of *hwæðer* during the OE Period of HC according to whether the Token is Declined or Indeclinable

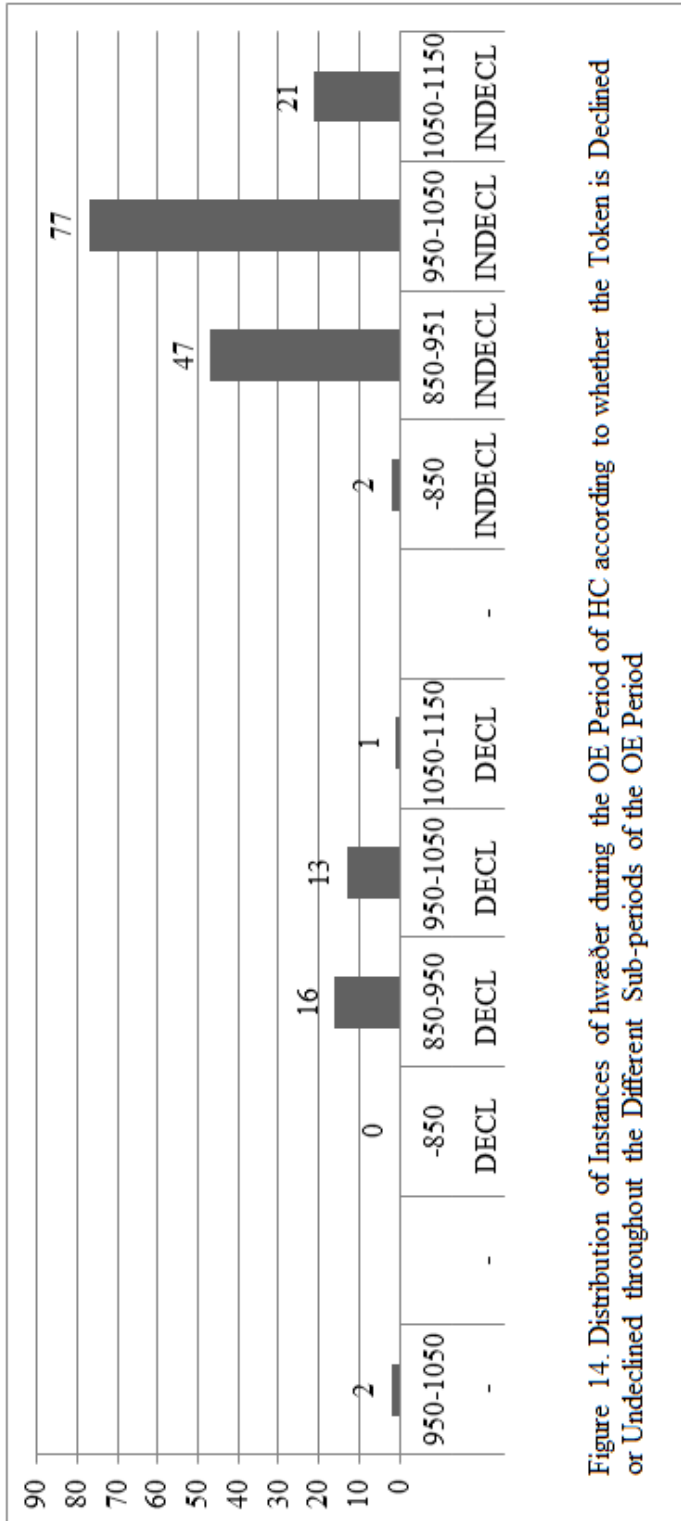


Figure 14. Distribution of Instances of hwæðer during the OE Period of HC according to whether the Token is Declined or Undeclined throughout the Different Sub-periods of the OE Period

As a pronoun, *hwæðer*, can refer anaphorically or cataphorically to its referent. In the former case, *hwæðer* makes reference to a preceding NP (or NPs) or clause (or clauses); in the latter case, *hwæðer* makes a reference to a following NP (or NPs) or clause (or clauses).

In sentence (15) from the previous chapter, repeated here as (2) for convenience, *hwæðer*, in *he nysse hwæðer* ‘he does not know which’, is an anaphor referring to two preceding clauses linked by *oþþe* ‘or’; the first of these options is *beag þæt land þær eastryhte* ‘the land crowns there to the east’, and the second option is *seo sæ in on ðæt lond* ‘the sea is in the land’.

(2) *þa beag þæt land þær eastryhte, oþþe seo sæ in on ðæt*

Then crowns the land there eastwards or the sea in on the
lond, he nysse hwæðer;

land he knows.not which

'Then the land crowns there to the east, or the sea in the land, he does not know which'.

(O2 NN HIST OHTHR2 17)

Similarly, sentence (61), repeated here as (3) for convenience, contains *gehwæðer*, in *Bið him self gehwæðer* ‘He is himself both’, which is a cataphora referring to two following NPs linked by *ond* ‘and; the first of these options is *sunu* ‘the son’, and the second option is *swæs fæder* ‘beloved father’.

(3) *Bið him self **g**hwæðer sunu ond swæs fæder, ond symle eac*
 is him self each son and beloved father and always also
eft yrfeward ealdre lafe.

again heir source remnant

'He is himself both the son and our beloved father, and always will be again the original heir of what is left'.

(O2/3 XX XX MBO 159)

The presence of *hwæðer* as cataphora or anaphora in the OE Period of HC is illustrated in Figure 15. Notice that 80% of all tokens are not pronouns, and that the distribution of pronouns is fairly even between cataphoras and anaphoras.

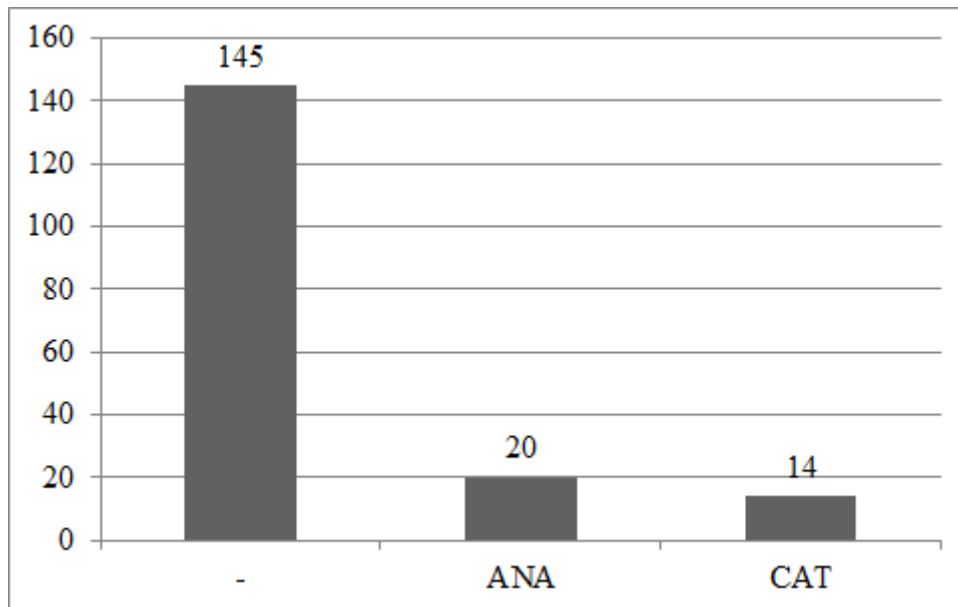


Figure 15. Presence of *hwæðer* as Cataphora or Anaphora during the OE Period of HC

5.5 Linking verbs and relationship to second disjunctions

Little has been said in the literature about the verb linking the main sentence to a *hwæðer*-clause other than the assumption that the subordinate clause typically expresses doubt over the statement being made or questions the truth of such statement.

A close observation of all *hwæðer*-clauses in the OE Period of the HC revealed the following: out of a total of 179 tokens, 63% (113 tokens) of them appeared in clauses without a linking verb in the main clause; the remaining 37% (66 tokens) were linked to a transitive verb governing the *hwæðer*-clause. In the first case, the *hwæðer*-clause appeared in either of two contexts: 1) an independent clause, either as a QM or as an adverbial, or 2) in a dependent clause with no linking verb, either juxtaposed (in a paratactic relationship) to the main sentence or possibly linked by an implicit verb meaning ‘to see’, as in (4) below (example (36) in the previous chapter):

- (4) *Mid ðy ic ða wæs æghwonan mid ðam feondum ymbald*
with this I then was everywhere with the enemies surrounded
& *mid ða [blindnesse] Para ðeostra utan betyned, ða*
and with the.GEN.PL blindness the darkness out enclosed then
ahof ic mine eagan upp & locade hider & geond, hwæðer
raised I my eyes up and looked hither and over whether
me ænig fultum toward wære, ðæt ic gehæled beon meahte.
me any help toward was. SBJV that I saved be could
‘With this I was then surrounded by the enemies from everywhere and enclosed
by the blindness of darkness out there; then I raised my eyes and **looked** hither

and thither (**to see**) **whether** there was any help for me, and whether I could be saved'.

(O2 NN HIST BEDEHE 428)

Figure 16 illustrates the frequency of use of each type of linking verb. The column representing those clauses without a linking verb has been omitted in order to provide a clearer frequency relationship among all linking verbs.

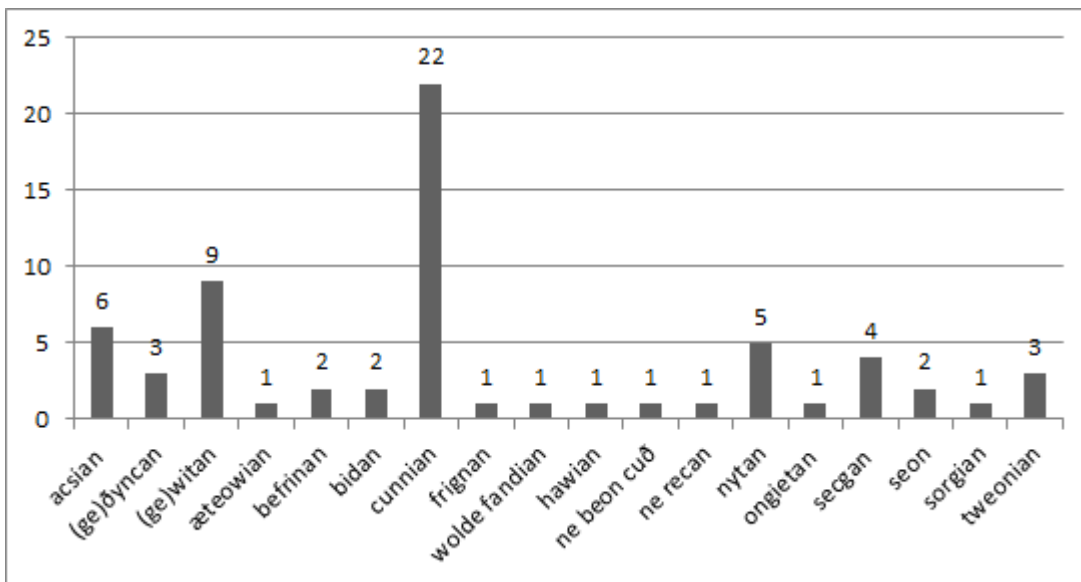


Figure 16. Distribution of linking verbs during the OE Period of HC

Table 11 lists the range of linking verbs found in the corpus in decreasing order, starting with the number of clauses without a linking verb.

Table 11

List of Linking Verbs and Their Frequency as They Appear during the OE Period of HC

Linking Verb	Instances
-	113
<i>cunnian</i> 'seek for, know, inquire, examine'	22
<i>(ge)witan</i> 'know, observe, understand'	9
<i>acsian</i> 'ask'	6
<i>nytan</i> = <i>ne witan</i> 'not know'	5
<i>secgan</i> 'say, declare'	4
<i>(ge)ðyncan</i> 'appear, seem'	3
<i>tweonian</i> 'doubt, hesitate'	3
<i>befrinan</i> 'ask'	2
<i>bidan</i> 'expect, abide, remain'	2
<i>seon</i> 'see, observe, perceive, understand'	2
<i>æteowian</i> 'declare, manifest'	1
<i>frignan</i> 'ask, inquire'	1
<i>wolde fandian</i> 'wanted to find out'	1
<i>hawian</i> 'observe, notice'	1
<i>ne beon cuð</i> 'is not known'	1
<i>ne recan</i> 'convey'	1
<i>ongietan</i> 'perceive'	1
<i>sorgian</i> 'be sorry for'	1
Total	179

Table 11 above clearly shows that the most common linking verb is *cunnian* 'seek, know inquire, examine' with a total of 22 instances, followed by *(ge)witan* 'know, observe, understand' with 9 instances, and *acsian* 'ask' with 6 instances. At first glance, it seems that the most common linking verbs do not express doubt *per se*, but solicit information or understanding. A classification of linking verbs by semantic type reveals

that verbs of inquiry and search for information represent almost half of all linking verbs and that verbs of doubt and not knowing represent only 14% of all linking verbs. See Table 12 for further details.

Table 12

Classification of Linking Verbs by Semantic Type during the OE Period of HC

type	verb	instances	%
inquiry & search for information	<i>acsian, frignan, befrinan, willan fandian, cunnian</i>	32	48%
perception & understanding	<i>ongietan, seon, (ge)ðyncan, hawian, (ge)witan</i>	16	24%
doubt & not knowing	<i>tweonian, nytan, ne beon cuð</i>	9	14%
statement & declaration	<i>ne recan, secgan, æteowian</i>	6	9%
other	<i>bidan, sorgian</i>	3	5%
TOTAL		66	100%

The last observation in this section deals with *hwæðer*-clauses which contain a second alternative or disjunction. According to Ukaji (1997), *hwæðer* as a conjunction (note that he includes QMs under this category) appears in two types of questions (including both independent and dependent questions) depending on whether the second

disjunction is implicit or explicit: 1) simple *yes-no* questions (implicit) and 2) disjunctive questions (explicit). The first type is in current use until the end of the 16th c., whereas the second type outlives the first by over two centuries. Ukaji continues to affirm that the correlative disjunctive particle introducing the second disjunct is usually *þe* or *oððe* ‘or’. The range of disjunctive particles I found in the corpus under investigation in this dissertation is considerably wider, as Figure 17 shows.

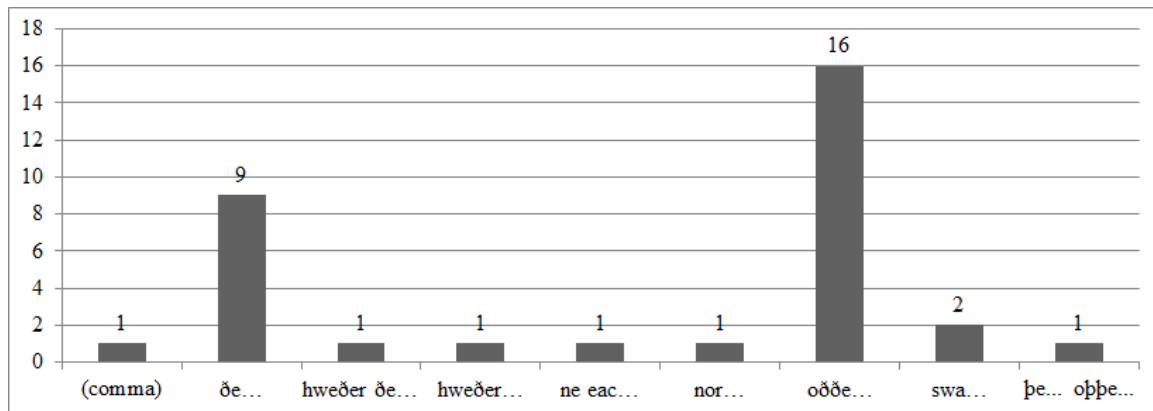


Figure 17. Distribution of Disjunctive Particles during the OE Period of HC

The total number of clauses with an explicit disjunctive particle amounts to only 18% of all clauses in the corpus, yet the variety of particles is evident from Figure 17. The column with clauses without an explicit disjunctive marker has not been included so as to make the distribution of disjunctive particles clearer.

The disjunctive particle does not always offer an option between A and B, where one of them excludes the other. In fact, Figure 18 below shows that different scenarios are possible: 1) one excludes the other; 2) both propositions are inclusive; 3) the inclusivity of both propositions is negated (neither option is possible); either exclusivity

or inclusivity is possible or undetermined. I have included in the EX (clauses with exclusivity) column questions introduced by QM *hwæðer*, since these imply exclusivity between affirmation and negation (unless the answer is expected to be negative as in certain rhetorical questions).

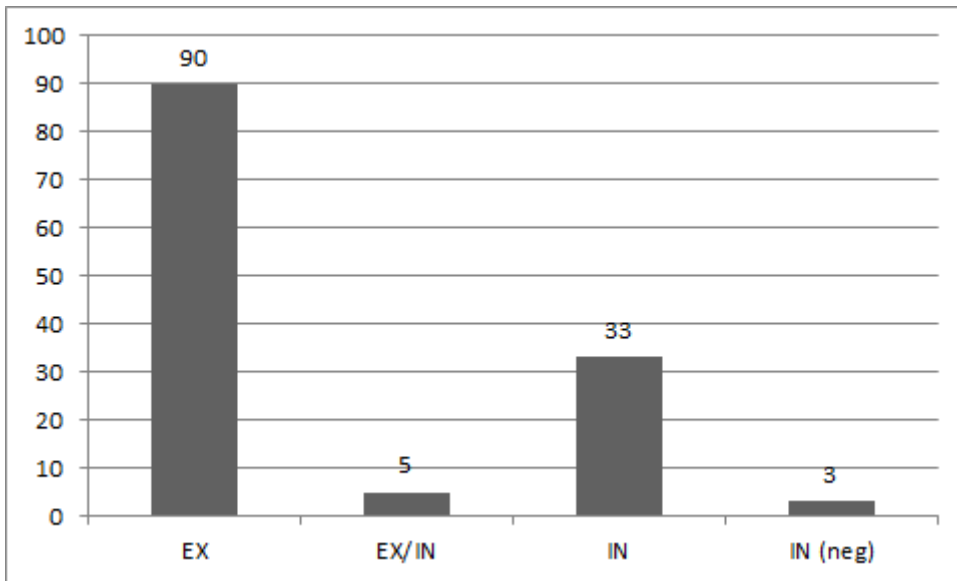


Figure 18. Exclusivity vs. Inclusivity Manifested in Disjunctive Particles and Interrogative Clauses Introduced by a QM during the OE Period of HC

With regard to why disjunctive questions with an explicit disjunctive particle was in use for about two centuries longer than yes-no questions without it, i.e. with an implicit disjunctive particle, Ukaji (1997) proposes that the former outlived the latter “probably” because “as an inherently disjunctive conjunction, *whether* was useful in signaling clearly and anticipatorily that the following question was disjunctive” (p. 1248). Although the focus of this dissertation is OE, and the phenomenon Ukaji describes does not take place

until the modern English period, I believe the motivation is to be found much earlier in the OE period.

I agree with Ukaji that, once the V-S order became common in simple *yes-no* questions introduced by *hwæðer* (the QM), this was rendered unnecessary to mark the force of the clause as interrogative. As far as disjunctive questions, it is not clear to me though what he means by saying that the disjunctive *hwæðer* “useful [...] but not essential”. It is my contention that *hwæðer* in this type of sentence behaved as the first of two correlatives (or coordinators), in the same fashion several other correlatives, and it was able to survive in the language for as long as correlatives were in use until about the beginning of the 19th c. Table 13 below illustrates the variety of correlatives that were in use in the corpus under investigation, which I believe lends evidence to my proposal.

Table 13

Range of Correlatives Found during the OE Period in the HC

Correlative (CO) Type	Correlative	# per each	# total
-			144
(comma)	,	1	1
ðe	<i>ðe... ðe...</i>	3	
	<i>þe... þe... ðe... þe þæt...</i>	1	4
þæt	<i>þæt... þæt...</i>	1	1
þonne	<i>þonne... þonne...</i>	1	
	<i>þonne hwæðer... þonne hwæðer...</i>	1	2
ge	<i>ge... ge...</i>	1	
	<i>ge... ge... ge gehwæðer...</i>	1	2
swa	<i>swa swa...</i>	1	
	<i>swa... swa...</i>	7	
	<i>swa... swa..., swa hwæðer...</i>	1	
	<i>swa... swa... Swahwæðer...</i>	1	
	<i>swa... swa... hwæðer swa...</i>	1	
	<i>swa hwæðer swa...</i>	1	12
hwæþer	<i>hwæþer... hwæþer...</i>	4	
	<i>hwæðer... oððe hwæðer...</i>	2	
	<i>hwæðer... þe...</i>	1	7
ne	<i>nohwæðer ne... ne... ne eac...</i>	1	
	<i>næfre... ne gehwæþer incer</i> <i>(nawðer)</i>	1	
		1	3
(other)	<i>ægðer ge... ge...</i>	1	
	<i>hu longe... oþþe hwæðer...</i>	1	
	<i>þeah... hwæþere...</i>	1	3

5.6 Concluding Remarks

In this chapter, I discussed the distribution of tokens, or instances of *hwæðer* and variants, as they were found in the diachronic part of the *Helsinki Corpus of English Texts: Diachronic and Dialectal*. The analysis I presented here is quantitative in nature in that it accounts for the total number of tokens according to different variables.

The chapter opened with an introduction describing relevant elements of the corpus used; in particular, some of the information provided identified the sub-periods into which the corpus is divided, the number of words per period, and the distribution of words according to whether they are found in prose or verse texts. Some of the conventions used in the corpus were also described.

Next, the number of tokens was illustrated by means of charts, and commented upon. These are some of the findings summarized by variable:

- 1) Dialect of the manuscript: the predominant dialect in which the manuscripts were written (or copied) is West-Saxon (WS). Only 1 token was found of an Anglian origin.
- 2) Status of the manuscript according to whether this was original or a translation from Latin: the distribution is virtually half and half.
- 3) Type of the sentence: the most common type of sentence in which a token was found is dependent and assertive over all, and among independent sentences, both assertive and interrogative sentences. This distribution makes sense, given that *hwæðer* appear as a complementizer twice as often than as a specifier.

4) Declension of *hwæðer*: the great majority of tokens are not declined. This is expected, since *hwæðer*'s pronominal use is significantly less frequent than its use as a complementizer (which is always indeclinable).

5) Linking verb: the most common verb introducing a *hwæðer*-clause is *cunnian* 'seek for, know, inquire, examine' and therefore the most common type of verb is the one indicating inquiry and search for information. Verbs of doubt and not knowing took only third place.

6) Second disjunction: a variety of particles introducing the second disjunction was accounted for. Most disjunctions were exclusive (either one or the other, but not both).

Next, chapter 6 examines the behavior of Gothic *waþar*, a Germanic cognate of OE *hwæðer* that predates it by more than two centuries.

Chapter 6

GOTHIC *hwapar*

6.1 Introduction

Having examined the behavior of *hwæðer* in Old English, we now turn to its Gothic cognate *hwapar*. To talk about the influence that Gothic could have had on OE would be an anachronism, since the extant texts in the former language predate those of the latter by a few centuries. But for this very reason, Gothic is an important language to the study of the history of English. They are both Germanic languages, and although they are not as closely related to each other as for example OE and Old Frisian are, they still share many grammatical similarities, and analyzing the linguistic context in which Gothic *hwapar* was used may render interesting insights about the linguistic context of OE *hwæðer* prior to the extant literature we have of that period.

6.2 The Gothic Language

From the Indo-European major family of languages, Gothic is an extinct Germanic language once spoken by the Goths, who according to the Gothic historian Jordanes himself (551 CE), originated in Scandinavia and the northern German lowlands, and then migrated over the last two centuries BCE first through the Baltic islands and eventually south into a region near the Black Sea, or the land of Scythia (Bennett 1980; Heather 1998). The language was in decline by the sixth century in central Europe, but remained as a church language in the Iberian Peninsula until the Islamic invasion of 711 and possibly as late as the eighth century in the lower Danube and mountainous regions of Crimea.

Gothic is the most archaic representative of the Germanic group, containing language characteristics not present in its related North-West Germanic varieties; this reason alone led Rauch (2003) to conclude, not unlike Jacob Grim in his comparative study of sound change two centuries before him, that Gothic can be considered the prototype language within the Germanic group in a comparative study.

The other principal value of Gothic is its literary records, dating from the fourth century, and thus predating those of any other Germanic language by four to nine centuries (Strazny 2005). None of its East Germanic sister languages (Burgundian, Vandalic) have left any written records, and thus the significance of conducting an analysis of extant texts in Gothic so as to establish a historical-comparative study between OE *hwæðer* and its Gothic cognate *hwaþar*.

6.3 Gothic Texts: Wulfila's Bible and Other Documents

Most of what has been preserved of the Gothic language is a fragmentary translation of the Bible carried out in the fourth century by the Visigoth archbishop Wulfila (also referred to as Ulfila or Ulphilas in some texts). According to Greek and Latin sources, Wulfila was of a mixed background. His mother was Cappadocian (in central Anatolia) and his father a Visigoth. He spoke his native language, Gothic, and was well versed in both Latin and Greek.

Wulfila took on the enterprise of not only translating the Bible, but also devising an alphabet for a language that lacked a written literary tradition. He mainly used Greek uncial characters, but several Latin letters were also included (q, h, r, f, s) in order to reflect all Gothic sounds onto a single orthography, and created one of his own, the

labiovelar omicron with a circumscribed dot \textcircled{O} (the dot being a representation of a phonetic friction) (Bennett 1980). The Wulfilian *bōka*, or alphabet letters, contain a numerical meaning in the same Greek fashion, and since the first philological studies, a corresponding transcription and designated name following the Salzburg-Vienna Alcuin manuscript (Rauch 2003). Thus, for example, the initial symbol in the word *hwaPar* 'whether' is represented as in (1)

(1) \textcircled{O} 700 hu uuaer

The manuscripts containing Wulfila's translations consist of approximately three fourths of the New Testament, namely the Gospels and the Epistles, and fragments of three chapters (5 through 7) of Nehemiah, from the Old Testament. The extant manuscripts are not contemporary of Wulfila, but copies from the 5th and 6th centuries transcribed by the hands of Ostrogoth scribes from northern Italy (Ferraresi 2005). These manuscripts have been preserved as separate codices: the *Codex Argenteus* (Sig. DG1), the *Codex Gissensis* (formerly Sig. Ms. Nr. 651/20), the *Codex Carolinus* (Sig. 4148), and the *Codices Ambrosiani* A (Sig. S36 parte superiore), B (Sig. S45 parte superiore), C (Sig. J61 parte superiore), and D (Sig. G82 parte superiore).

Wulfila is believed to have used a Greek version of the Bible, possibly the Antioch-Byzantine edition of Lucian the Martyr for the Old Testament, and another one of common use at the time in Constantinople for the New Testament (Ferraresi 2005; Rauch 2003).

Beside the biblical texts, there exists an anonymous commentary now called the *Skeireins aīwaggēōPaírĥ Iōhannēn* 'Explication of the Gospel according to John',

fragments of a festival calendar, and several short legal documents, such as the Ravenna Deed, and some inscriptions.

6.4 Key Aspects to Wulfila's Bible

6.4.1 Source

As has been customary to do in studies of Gothic syntax, scholars have followed Streitberg's (1928) reconstructed version of the Greek text to determine the original source Wulfila would have used for his Bible translation; Ferraresi (2005) points out though that the question of the degree to which the Greek original may have influenced the lexicon and syntax of the Gothic Bible is still under debate. At one end of the debate, a literal translation has been claimed (Friedrichsen 1929), whereas substantial differences have been noticed by some scholars (Mourek 1883; Egge 1886).

6.4.2 Word Order

Ferraresi (2005) further observes that word order in Wulfila's text, although not entirely free, seems to be quite flexible, and that emphasis is expressed by moving the lexical item sentence-initially or into final position as is common to other Old Germanic languages. Except for the differences that have been identified, the Gothic translation of the New Testament seems to be quite close (Krause & Slocum 2011) and drawing any conclusions as to what the word order of Gothic continues to be subject to speculation. The unemphatic word order of the earliest Germanic documents was generally S-O-V, and Krause & Slocum (2011) assume the same would have been true for Gothic, as in the subordinate clause in (2):

- (2) *frah ina ga-u-hwa-sehwi*
 ask.PST he.ACC PFV-QM-something-see.PST
 asked him whether he saw anything

(Mark 8.23; Codex Argenteus [from Krause & Slocum (2011)])

where the object precedes the root verb even when it is placed within the larger verbal structure. Nonetheless, the word order in Wulfila's text frequently follows the Greek, namely S-V-O, especially in declarative sentences, such as (3):

- (3) *qapub~þan: manne sums aihta twans sununs.*
 say.PST-then man.GEN.PL certain.NOM have.PRS two.ACC sons.ACC
 He then said: a certain man (lit. one of the men) had two sons.

(Luke 15.11; Codex Argenteus [from Krause & Slocum (2011)])

6.5 -u(-) Disjunctive Question Marker

Notice the interrogative enclitic particle *-u-* in (2) above. The main function of this particle is to mark that the statement is a *yes/no* question, in a similar fashion to Latin *-ne*, and it appears cliticized to the first word of the interrogative clause, as in *niu?* 'not?', *skuldu ist?* 'is it lawful?', *abu thus silbin?* 'of yourself?' or attached to the prefix of a verb in compound verbs, as in (2) above (Wright 1966, §349). This question marker was unstressed (Bennett 1980), and so a case of grammaticalization could be entertained, having gone through phonetic attrition, morphological reduction, and syntactic reanalysis; Jones (1958) though refutes suggested attempts to find a relationship between

QM -u- and Gothic optative -au or to interpret it as a deictic particle, and thus a reconstruction of an original word from which enclitic -u may have evolved seems a difficult task, to say the least.

In addition, -u could appeared coordinated with *thau* 'or' of the second disjunct, as in (4):

(4) *abu þus silbin þu þata qiþis þau anþarai*
 from.QM you.DAT you.REFL you.NOM this say.PST or others.NOM
þus qeþun bi mik?
 you.DAT say.PST about me

'Do you say this of yourself or did others say it to you about me?'

(John 18:34, Codex Argenteus)

Clitic -u is one of the three particles appearing in first position, or clause-initial, according to Ferraresi (2005), the other two being *iba(i)* and *an*. The constituents to which the particle -u can cliticize are varied: a finite verb (most common), an adjective, a preposition, or an adverb; and, syntactically, it marks *yes/no* and *wh-* questions, whether direct or indirect. For example, (5) contains -u cliticized to a verb in a direct *yes/no* question, (6) internally cliticized to a *wh-* word also in a direct question, and (7) cliticized to a finite verb introducing an embedded clause:

(5) *magutsu driggkan?*
 can-u drink?

'Can you drink?' (Mark 10:38, Codex Argenteus [from Ferraresi (2005)])

(6) *hauḫpan habais ḫatei ni namt?*
what-u-uh-ḫan have that not receive

'What do you have that you did not receive?'

(Corinthians I 4:7, Codex Ambrosianus A [from Ferraresi (2005)])

(7) *let ei saiḫam, qimaiu Helias*
let that see comes-u Elias

'let us see whether Elias will come'

(Matthew 27:49, Codex Argenteus [from Ferraresi (2005)])

Ferraresi (2005, 149) further claims "that the presence of *-u* adds an emotive flavour _which can be surprise or disappointment", but in my view there is not enough empirical evidence to demonstrate such pragmatic value judging from the examples she provides.

6.6 *niu* Negative Counterpart to *-u(-)* Disjunctive Question Marker

Direct questions are marked, according to Lambdin (2006), by means of interrogative pronouns, adjectives, or adverbs, or by means of an interrogative particle, either enclitic *-u* or sentence initial *ibai*. The negative counterpart of enclitic *-u*, *niu*, is very frequent (a total of 68 cases), and introduces a negative question expecting a positive answer, as in (8) or (9):

(8) *niu wissedup ḫatei in ḫaim attins meinis*
not-u know.PRET that in the.DET.DAT father.GEN my

skulda wisan?

have-to.PP know.INF

'Did you not know that I must know of my father's business?'

(Luke 2:49, Codex Argenteus [from Lambdin (2006)])

- (9) *Niu im apaustaulus? niu im freis? niu Iesu*
not-u am apostle.NOM.SG not-u am free.NOM.SG not-u Jesus
Xristau fraujan unsarana sahu? niu waurstw meinata
Christ Lord.ACC.SG our see.PRET not-u work.NOM.SG mine
jus sijuþ in frauþin?
you.NOM.PL are in Lord.DAT.SG

'Am I not an apostle? am I not free? Did I not see Jesus Christ our Lord? are you not my work in the Lord?' (Corinthians I 9:1, Codex Ambrosianus)

Likewise, indirect questions can be formed by adding the interrogative suffix *-u*, requiring a verb in the subjunctive if an element of surprise or doubt is conveyed or if the verb itself indicates this feeling, although there are exceptions (Lambdin 2006) (see example (7) above).

Krause & Slocum (2011) include the following as interrogative particles: *an* 'then', *ibai* 'lest' or 'that... not', *jau* 'whether', *niu* 'not', *nuh* 'then'. The appendix glossary in Wright's (1966) grammar, *jau* is likewise defined as a question particle meaning

'whether', but the author indicates that, when it is used in indirect questions, it should be translated as 'if so' or 'so then'.

6.7 The Particle *iba(i)*

Iba(i) is found in initial position and it can appear in interrogative sentences before a finite verb or other heads, such as pronouns or adverbs, or introducing a subordinate clause following a verb of fear. The latter use is only found in the Epistles, and thus, Ferraresi (2005) claims that, as such, *iba(i)* may be a newer, developed form. As an interrogative particle, the question requires a negative answer, and therefore it can be interpreted as a rhetorical question. Example (10) shows *iba(i)* as a question particle, and example (11) as a complementizer introducing a subordinate clause:

- (10) *sumaih qepun: po waurda ni sind unhulpon habandins;*
others-uh say.PRET these words not are demon have.PRESP
ibai mag unhulpo blindaim augona uslukan?
QM can demon blind.DAT.PL eye.ACC.PL open.INF

'Others said: These are not the words of someone with evil; can a devil open the eyes of the blind?'

(John 10:21, Codex Argenteus [from Ferraresi (2005)])

- (11) *og izwis, ibai sware arbaididedjau in izwis.*
fear you.DAT PTCL in-vain work.OPT.PRET for you.DAT

'I fear you, lest I have worked in vain for you.'

(Galatians 4:11, Codex Ambrosianus A)

Out of a total of 77 instances of *iba(i)*, only two appear in the form of *iba*, and 74 of *ibai*; there is one more case that is unclear to discern between each form in the original manuscript. Conversely, the negative counterpart is represented more frequently in the shortened form, namely 39 cases of *niba*, and only 13 cases of *nibai*; additionally, two more sentences have a form difficult to determine either.

6.8 The Particle *an*

There are only five instances of the interrogative particle *an*. It always appears at the beginning of an interrogative clause, preceding a *wh*- element or another particle. The former is exemplified in (12), the latter in (13):

(12) *qepun þan þai gahausjandans: an has mag ganisan?*

say.PRET then those hear.PRESP PTCL who can save.PP

'Then those hearing said: who can be saved?'

(Luke 18:26, Codex Argenteus [from Ferraresi (2005)])

(13) *þaruh qaþ imma Peilatus: an nuh þiudans is þu?*

then say.PRET he.DAT Pilatus PTCL then king.NOM are you.NOM

'then Pilate said to him: are you then a king?'

(John 18:37, Codex Argenteus [from Ferraresi (2005)])

Ferraresi (2005) claims that the particle expresses an emotional effect of surprise, similar to Greek ἄρα, although the Greek original in the purported Greek manuscript is represented by οὐν, οὐκοῦν, and καί, never ἄρα.

6.9 Interrogative Pronouns: *hwapar* and Derivatives

Gothic *hwapar* and OE *hwæðer* are Germanic cognates, and as such they both evolved from a reconstructed PGmc **XwaParaz* (**Xwe-*), which in turn is assumed to be the descendant form of PIE **k^wo-* + **-tero-*. As mentioned above, this etymon consists of the root **k^wo* 'what' plus the comparative suffix **-tero-*. Notice though that the comparative suffix in *hwapar* is not productive anymore, as it was replaced by *-iza* or *-oza*. The comparative assumes weak adjectival endings, regardless of the context, and so does *hwapar*, which only appears in the nominative masculine and neuter, and in the dative masculine singular, *hwarparamma*. Likewise, ordinal numeral *anþar* 'other, second' contains the same non-productive comparative suffix.

Both the stem **kwo-* and **kwi-* appear in all IE languages for their interrogative and relative functions, although it is probably impossible to determine which one is historically the oldest form. The indefinite function is usually marked by means of a prefix or suffix, as in Latin *aliquis*, *quisque*, *quicumque* or as in Greek ὅστις 'somebody' (Prokosch 1938, 278).

Proto-Germanic *h* [χ] became *hw*[χ^w], represented orthographically by *Ɔ* in Wulfila's manuscript (or rather its copy) and by *hw* or *hw* in modern texts (Wright 1966, Bennett 1980). That the letter represents a single sound can be deduced by the following facts: 1) Wulfila always represented [χ^w] by single letter, namely *Ɔ*; 2) adjoined *h* and *w*,

as in compound words, are spelled as separate letters, namely *hw*; 3) verbs such as *saihan* 'to see' conjugate the same way as other strong verbs which end in a singular consonant; and 4) *h* reduplicates as a single consonant, such as *hwaíhwōp* 'he boasted' from the infinitive form *hwōpan* (Wright 1966).

The inventory of interrogative pronouns in Gothic is shown in Table 14; only the singular forms are shown, since the only plural form that survived is *hvanzuh*:

Table 14

Interrogative Pronouns in Gothic

	<u>Masculine</u>	<u>Feminine</u>	<u>Neuter</u>
NOM	<i>hwas</i>	<i>hwo</i>	<i>hwa</i>
ACC	<i>hwana</i>	<i>hwo</i>	<i>hwa</i>
GEN	<i>hvis</i>	<i>hwizos</i>	<i>hvis</i>
DAT	<i>hwamma</i>	<i>hwizai</i>	<i>hwamma</i>
INST	<i>hve</i>	<i>hve</i>	<i>hve</i>

Along with *hwapar*, Gothic uses the derivative *hwarjis* 'which', which is a pronoun roughly meaning 'which of more than two'. Thus, the main difference between the former and the latter is the number of referents, two for the former, more than two for the latter. Also, and unlike its dual counterpart, *hwarjis* follows the strong declension. Two more derivatives of the interrogative/relative pronoun are *hwileiks* 'what sort of, which' and *hwelaud* 'how great a, how much'.

There are 7 instances of *hwapar* in Wulfila's Bible, the corpus used in this study; these are shown in the following glossed sentences (14 through 19). The first two, (14) and (15), are variations of the same sentence found in two different gospels, Matthew 9:5

and Luke 5:23, both from the *Codex Argenteus*. Note that in both sentences *hwapar* occupies the first position of a direct question, and its function is a pronoun that translates into ‘which of the two’, which is in turn correlative with *pau* ‘or’. The verb, a copula, directly follows the pronoun *hwapar*, rendering an S-V order, since pronoun is the subject of the sentence.

- (14) *hwapar* *ist raihtis azetizo qipan: aflatanda* *pus*
 which.of.the.two is indeed easier say.INF forgive.PASS.IND you.DAT
frawaurhteis pau qipan: urreis jah gagg?
 sins or say.INF arise.IMP and go.IMP

'Which of the two is indeed easier to say: 'your sins are forgiven' or to say 'arise and walk'?

'Is it indeed easier to say 'your sins are forgiven' than to say 'arise and walk'?

(Matthew 9:5, Codex Argenteus)

- (15) same but without *raihtis*

(Luke 5:23, Codex Argenteus)

The following sentence (16) contains *hwapar*, which is a pronoun also functioning as the subject of a direct question. This time the verb is not a copula, but the verb *frijod* ‘love’. This time the word order is S-...-V. The pronoun *hwapar* occupies the specifier position, since it is a constituent within a larger phrase *hwapar pize* ‘which of these two’. The pronoun is qualified by the demonstrative of proximity *pize* ‘these’.

(16) *ni habandam þan <im> hvaþro usgebeina,*
 not have.PRS.PTCP PTV them.DAT from.where pay.OPT.PRET
baim fragaf. hvaþar nu þize,
 both forgive.PRET which.of.the.two now these.GEN
qib, mais ina frijod?
 say.IMP more he.ACC love.FUT

'Not having from where to pay them, he forgave them. Which of the two, tell me, will love him more?'

(Luke 7:42, Codex Argenteus)

Once more, *hvaþar* 'which of the two' is the subject of a copula verb in an interrogative sentence (17). The second disjunction is introduced by *þau* 'or'. I provided two translations: the first one treats *hvaþar* as a pronoun; in the alternative translation, *hvaþar* is interpreted as a question marker. The difference between the two interpretations is their scope. In the first one, *hvaþar* is a pronoun referring cataphorically to each of two possible clauses *aflightanda þus frawaurhteis þeinós* 'your sins are forgiven' and *urreis jah nim þata badi þeinata jah gag* 'arise and take your bed and go'. The second interpretation assumes QM *hvaþar* questions whether the entire question being asked is a true fact or not; it requires a *yes* or *no* answer to the question *ist azetizo du qipan þamma uslipin* 'Is it easier to say to the palsy?' Then, the second question would assume *þau hvaþar ist azetizo du qipan þamma uslipin* 'Or is it easier to say to the palsy?'

I offer the second alternative translation in order to illustrate how a change in scope could lead one interpretation to the other, and that this is possible when there is ambiguity. Most probably, the first of the proposed interpretations is the more appropriate one for (17) after all, because all other instances of *hwapar* in the corpus are pronouns with the meaning ‘which of the two’, but this type of sentence would have been the precursor of a *yes-no* question introduced by QM *hwapar*.

(17) *hwapar* *ist azetizo du qipan pamma uslipin:*
 which.of.the.two is easier to say.INF the.DAT.SG palsy
afletanda bus frawaurhteis peinos, pau qipan:
 forgive. PASS.IND you.DAT sins the or say.INF
urreis jah nim bata badi peinata jah gagg?
 arise.IMP and take.IMP the bed your and go.IMP

'Which of the two is easier to say to the palsy: 'your sins are forgiven' or to say 'arise and take your bed and go'?

'Is it easier to say to the palsy 'your sins are forgiven' than to say 'arise and take your bed and go'?

(Mark 2:9, Codex Argenteus)

Example (18) contains a pronoun *hwapar* ‘which of the two’, which has been fronted in a non-interrogative sentence for emphasis. The pronoun is the direct object of the verb *waljiau* ‘choose’, which is in turn governed by another verb in the negative *ni*

kann ‘not know’. Before internal merge operations would have taken place in the narrow syntax, the underlying structure of (18) would be *ni kann waljiau hvaɓar* ‘not know to choose which of the two’. The direct object, the NP *hvaɓar*, would have moved up the tree through the specifier positions of each terminal node until the specifier of the highest CP.

(18) *iɓ jabai liban in leika, ɓata mis akran waurstwis*
 But if live.INF in bodies this me.DAT fruit work.GEN.PL
*ist, jah **hvaɓar** waljiau ni kann.*
 is and which.of.the.two choose.OPT not know

‘But if I live in the bodies, this is the fruit of my work, I do not even know which (of the two) to choose’.

(Philippians 1:22, Codex Ambrosianus B)

In (19), *hvaɓar* is a pronoun functioning as the subject of the subordinate clause *skuldedi maize* ‘must [be] more’, which functions as the direct object of the transitive verb *kunnandans* ‘knowing’ preceding it. The word order of the *hvaɓar*-clause is S-v-V.

(19) *akei faur ɓata, at bajɔpum daupjandam jah*
 but before this of both.DAT.PL baptize.PRS.PTCP and
ainhvaɓarammeh seina anafilhandam daupein, miɓ sis
 each-of-them.DAT.SG PRO.F.SG transfer ablution.ACC with self.DAT

misso sik undrunnun sumai, ni kunnandans,
 each.other self.ACC dispute.PRET any not know. PRS.PTCP
hvapar skuldedi maiza.
 which-of-the-two must.INF more

'But before that, both baptizing and administering ablution to each of them,
 they disputed with one another, not knowing which of the two must be more.'

(Skeireins 3:3, Codex Vaticanus Latinus 5750)

The following four sentences, (20) through (23), contain the particle *jau*, which can also mean 'whether', as in the subordinate clause in (20). This particle is probably more accurately seen as a correlative presenting two or more options. There seems to be in sentence (20) a correlation between the two subordinate clauses, one introduced by *jau* and the other by *ei*, and they could both be translated as '(to see) whether/if'.

(20) *witaidedunuh þan þai bokarjos jah Fareisaieis, jau*
 watch.PRET then the scribe.NOM.PL and Pharisee.NOM.PL whether
in sabbato daga leikinodedi, ei bigeteina til
 in sabbath.DAT day.DAT heal.OPT.PRET so-that find.OPT.PRET convenient
du wrohjan ina.
 to accuse him

'Then the scribes and the Pharisees watched him, to see whether he would heal on
 the Sabbath day, so that they would find convenient to accuse him.'

(Luke 6:7, Codex Argenteus)

The interpretation of *jau* in (21) is not as straightforward, but it may have a consecutive meaning ‘therefore, so that’.

(21) *awiliudo guda pairh Iesu Xristu, fraujan unsarana; jau*
 thank.OPT.PRS God through Jesus Christ Lord our therefore
nu silba ik skalkino gahugdai witoda gudis, ip
 now myself I serve.OPT.PRS mind.DAT.SG law.DAT.SG God.G.SG but
leika witoda frawaurhtais.
 flesh.DAT.SG law sin.GEN.SG

'I thank God through Jesus Christ our Lord, so now I myself may serve in mind the law of God, but in flesh the law of sin.'

(Roman 7:25, Codex Ambrosianus A)

The next sentence (22) is a good example of *jau* as a correlative connecting five separate concessive subordinate clauses following the matrix. In all of the subordinate clauses, the verb is clause-final, following a direct object in the accusative or oblique case.

(22) *in waurstwam godaim weitwodipa habandei, jau*
 in work.DAT.PL good testimony.ACC.SG have. PRS.PTC whether
barna fodidedi, jau gastins andnemi,
 child.ACC.PL raise.OPT.PRET whether stranger.ACC.PL receive.OPT.PRET

jau *weihaim* *footuns* *pwohi,* *jau* *aglons*
 whether holy foot.ACC.PL wash.OPT.PRET whether tribulation.ACC.PL
winnandam *andbahtidedi,* *jau* *allamma* *waurstwe*
 suffer.PRS.PTC serve.OPT.PRET whether every.DAT.SG work.GEN.PL
godaize *afarlaistidedi.*
 good.GEN.PL follow.OPT.PRET

'In good works having testimony, whether she would raise children, or receive strangers, or wash the holy man's feet, or serve the one suffering tribulations, or follow all the good works.'

(Timothy I 5:10, Codex Ambrosianus B)

(jah, Codex Ambrosianus B)

Finally, sentence (23) contains two particles of interest. The first one is the QM *ibai*, introducing a *yes-no* direct question with an S-...V order. The second particle, *jau*, introduces a conditional subordinate clause with an S-V word order.

(23) «*ibai* *jah* *jus* <af>*airzidai* *siup?* *Sai,* *jau* *ainshun*
 QM even you.NOM.PL confuse.PP are behold if no-one
pize *reike* *galaubidedi* *imma* *aiϕpau*
 these.GEN.PL ruler.GEN.PL believe.OPT.PRET he.DAT.SG or
pize *Fareisaie,* *alja* *so* *managei,* *paiei* *ni*
 these.GEN.PL Pharisee.GEN.PL other the quantity.N.SG the.NOM.PL not

kunnun witoþ, fraqiþanai sind.»

know.PRS law.ACC.SG invalidate.PP are

'And are you confused? Behold! if none of these rulers or the Pharisees, the other people, believe in him, they do not know the law, and they are cursed.'

(Skeireins 8:5)

6.10 Distributive Pronouns

The above interrogative pronouns (Table 14) can also function as distributive pronouns by the addition of the *-uh* suffix. Thus, *hwaparuh* carries the meaning 'each of the two', although it only occurs in its Dative masculine form *hwaparammeh* 'to each of the two'. The pronoun can also be preceded by the prefix *ain-* 'one', rendering *ainhwaparammeh* 'to each one of the two'. Quite frequently, *has* is used as an indefinite pronoun, meaning 'any one' or 'any'; it also accepts the *-uh* suffix, although only the plural form of the masculine accusative survives, *hazuh* with a concomitant voicing of the alveolar fricative. Finally, *harjis* can also take *-uh*, as in *harjizuh* (also with voicing) 'each, every', and a combination of prefix *ain-* and suffix *-uh*, as in *ainharjizuh* 'every one'. Other combinations with indefinite *has* are also possible: *ni hwa* 'nothing' (cf. OE *ne wiht, nowiht* > *nought, not*), *ei has* 'that any one', *jabai has* 'if any one, whosoever'. Additionally, Gothic makes use of *ba-* as a distributive prefix meaning 'both' and the cardinal numeral *tweihnai* 'two each'.

Certain nouns or pronouns, preceded by the negative *ni* and followed by the suffix *-hun*, produce negative pronouns, such as: *ni hwashun* 'nothing', *ni mannahun* 'no one', *ni ainshun* 'none, no one'.

Skeat (1882) lists the following as possible interrogative particles: *an* 'then', *ibai* 'lest, that... not' (requiring a negative answer), *jau* 'whether', *niu* 'not', *nuh* 'then', *thau* 'or'. Likewise, and using terminology from traditional grammar, he includes a series of conjunctions, which I have organized in Table 15:

Table 15

Conjunctions in Gothic (following Skeat (1882))

Type	Gothic Conjunction	Meaning
Copulative	nih... ak jah...	'not only... but also...'
	nih Ðatainei... ak jah...	'not only... but also...'
	ni/nih... ni/nih...	'neither... nor...'
Disjunctive	jabai... (aiÐ)Ðau	'either... or...'
	andizuh... aiÐÐau	'either... or...'
	jaÐÐe... jaÐÐe...	'whether... or...'
Coordinators	swe... jah...	'as... so...'
	swe... swah...	'as... so...'
	swaswe... swa...	'as... so...'
Concession	Ðauhjabai	'though'
	jah jabai	'even if'
	sweÐauÐ	'however'
Opposition	Ðan	'but'
	'but'	'but'
	aÐÐan	'but'
	ak	'but'
	akei	'but'
Conditional	niba(i)	'if not, except'
	jabai	'if'

The disjunctive conjunctions in Table 15 above are of particular interest in this dissertation. They introduce a disjunction between two alternatives, the second one being introduced by *(aiþ)þau* or *jaþþe* 'or'. Coincidentally, as previously stated, *jabai* can also function as a QM introducing a *yes-no* question.

6.11 Concluding Remarks

The literature on Gothic lists a series of particles that mark direct questions, and *hwapar* is but one of them. Let us review them briefly one at a time:

The particle *-u-* marks a *yes-no* question, whether direct or indirect, and it appears cliticized to the first word of the interrogative clause, even when this is a compound verb. It may carry an emotive sense of surprise or disappointment. Clitic *-u-* is one of three question particles appearing in first position, or clause-initial; the other two being *ba(i)* and *an*. The negative counterpart of enclitic *-u-* is *niu*; it introduces a negative question expecting a positive answer. It appears very frequently in Wulfila's Bible.

Iba(i) can appear in interrogative sentences before a finite verb or other heads, such as pronouns or adverbs, or introducing a subordinate clause following a verb of fear. As an interrogative particle, the question requires a negative answer, and therefore it can be interpreted as a rhetorical question. The negative counterpart of *iba(i)* is *niba(i)*.

The third of the clause-initial question particles is *an*. It precedes a *wh-* element or another particle. It may express an emotional effect of surprise.

Gothic *hwapar* is an interrogative pronoun that declines like a weak adjective (although it only appears in the nominative masculine and neuter, and the dative masculine singular) and can be translated as 'which of the two'. It was probably never used as an interrogative marker introducing a *yes-no* question of the *-u-lib(i)/an* type, but one instance of *hwapar* lends itself to some degree of ambiguity between a disjunctive pronoun conveying the meaning 'which of the two' (of two phrases contained in the same clause) or a QM introducing a *yes-no* question. Closely related to *hwapar* is *hwarjis*, which

can be translated as ‘which (of more than two)’, not unlike its Sanskrit cognate ending in a superlative suffix with a possible interpretation of ‘which of many’ (Maurer, 1995, p.434).

Other than the clause-initial interrogative particles marking a *yes-no* question (*-u-*, *ib(i)*, *an*) and *hvaþar*, Krause & Slocum (2011) include other interrogative particles: *an* ‘then’, *ibai* ‘lest’ or ‘that... not’, *jau* ‘whether’, *niu* ‘not’, *nuh* ‘then’ (Skeat (1882) also includes *thau* ‘or’). Some distributive pronouns, such as *-uh* ‘each of two’, *ain-* ‘one’, *ba-* ‘both’, may have contributed to the already varied range of ways in which a question with a disjunction sense could be marked.

Given the variety of QMs already in place in this period in Gothic, it is plausible to conclude that there was no need for *hvaþar* to undergo reanalysis (as later on its OE counterpart *hwæðer* did) so as to become a QM and eventually, possibly, a complementizer introducing an indirect interrogative. In all the examples provided above, (14) through (19), *hvaþar* is a pronoun meaning ‘which of the two’. In (14), (15), and (17), it is the subject of a direct question agreeing with a copula verb, and the word order of the sentence is S-V. (16) is similar in that it also conforms to an S-V order, although the verb is final and not adjacent to its agreeing subject. Sentence (19) is another example of clause with *hvaþar* as the subject of the clause preceding the verb it agrees with, but this time the clause is subordinate and functions as the direct object of the matrix verb. Finally, (18) contains the pronoun *hvaþar*, which functions as the direct object of the clause, and what seems interesting in this example is that the pronoun has been raised from its original position in the VP, down the tree, all the way to the specifier of the CP

in order to mark emphasis. The pronoun is thus topicalized, but there is no evidence that it was base-generated in the CP under van Gelderen's (2004 and thereafter) Late Merge Principle, which would require this to merge as late as possible; rather, the pronoun has been raised merely for topicalization.

Gothic *hwapar* is presumably at the first stage of a cycle, where it could in principle go through the same reanalysis steps its OE counterpart seems to have gone through. It is possible that this reanalysis never took place due to the fact that other particles were already marking *yes-no* questions, but there is no extant texts to date that would lend evidence for what happens later on in the history of Gothic in regard to *hwapar*. What can be asserted though is that *hwapar* was only used as a pronoun during Wulfila's time, since it was declined as a weak adjective.

The unique use of Gothic *hwapar* as a declinable pronoun provides enough evidence at least to hypothesize that Old English may have displayed a similar scenario at an early stage, prior to the earliest existing texts we have. It is then a plausible, and very likely, assumption that OE *hwæðer* started as a pronoun meaning 'which of the two' and, over time, it went through a process of reanalysis whereby new functions were developed: QM in direct *yes-no* questions and complementizer introducing a disjunctive direct or indirect interrogative.

Chapter 7

CONCLUSIONS

7.1 Introduction

The goal of this study was to evaluate a representative number of instances of *hwæðer* during the OE period and analyze its behavior within sentence. The corpus used for this analysis is the diachronic part of the *Helsinki Corpus of English Texts: Diachronic and Dialectal*. The ultimate purpose of the study was to answer the research questions posed in Chapter 1 and to contribute to the current dialogue concerning the application of formal theories of linguistics in the context of diachronic change.

7.2 Chapter Summaries

In Chapter 1, I introduced the structure of the sentence assumed in generative grammar so as to explain the phenomenon of reanalysis responsible for the changes in *hwæðer* during the OE period. I claimed that the motivation behind these changes is to be found in van Gelderen's (2004 and later work) *economy principles* (Late Merge and Head Preference). Next, I explained my goals and objectives, and concluded with a description of the methodology employed.

The theoretical assumptions which underlie my study of Old English *hwæðer* were explained in Chapter 2. I established that the analysis would be grounded in the Minimalist Program (MP) (Chomsky, 1995) and would draw upon economy principles of Universal Grammar, specifically third factor principles. After presenting some key concepts, such as Language Faculty and X' Theory, I provided further detail about the

structure of the sentence (split projections). I conclude the chapter postulating that there is a place for historical linguistics within a formal theory of language.

In Chapter 3, I explore past attempts to elucidate the problems regarding the evolution of OE *hwæðer* into different functions, such as its chronology of evolution and its motivation for change. More specific details, such as word order, correlatives, and second disjunctions are also discussed. Lastly, I described van Gelderen's cyclical change of complementizers, since this is crucial to the study.

In Chapter 4 and 5, I presented data from the HC so as to illustrate the different functions of OE *hwæðer* and the types of sentences in which this appears. The first of these chapters offered a qualitative analysis of the data, whereas the second one offers a quantitative analysis. Both chapters ended with summaries of observations.

Finally, OE *hwæðer*'s oldest Germanic cognate which is still preserved in written texts, Gothic *hwaþar*, was dealt with in Chapter 6. The data analyzed from Wulfila's Bible, the corpus used for the study, offered interesting insights regarding the most likely first stage of OE *hwæðer*.

7.3 General Conclusions

The basic functions of OE *hwæðer* have already been established in the literature. Its adverbial form *hwæð(e)re* 'however' has been recognized as associated with *hwæðer*, even if this particular function was out of the scope of some scholars interested in the evolution of *whether*. Those who have classified the functions of *whether* typically distinguish between two main categories: pronoun and conjunction. Its adjectival use can be included under the pronominal category, since *hwæðer* is still making a reference to

the NP it governs (which of the two + NP). The main problem with most classifications in the literature is to include what has been referred to a question particle under the category of conjunction. It is clear from the data that the question marker (QM) introducing a *yes-no* interrogative constitutes a category of itself. Not only is its behavior in the sentence quite different from that of the conjunction (the former introduces an independent sentence, whereas the latter introduces a subordinate clause), but their life spans are also different (the former died out at the beginning of the 16th c., whereas the latter is still in use).

A distinction has been made between the interrogative particle *hwæðer* introducing a simple *yes-no* question (Ukaji's (1997) terms) and the one introducing a disjunctive *yes-no* question. The difference between them is that the first type of question appears without a second disjunction, whereas in the second type the disjunction is explicit. Also, the disjunctive type outlives the simple type for about two centuries. I agree with Ukaji (1997) that once V/2 became common in simple *yes-no* questions, the interrogative particle was no longer necessary to signal interrogation and, consequently, it came out of use. Ukaji notices that *hwæðer* remains in disjunctive questions to anticipate the second disjunction, but this does not provide a sound explanation as to why this should be the case, especially when the second disjunction can be said to be present in both, implicit in simple *yes-no* questions and explicit in disjunctive questions. I claim that these are two different types of sentences altogether. The first type carries a QM marking the interrogative force of the proposition, and this becomes redundant when the new V-S word order is the new indicator of interrogation. The second type carries instead a

correlative (CORR), or distributive, indicating the first of two clause-internal disjunctions (usually the disjunction between two NPs) and it can appear both in interrogatives and declarative statements. Incidentally, *hwæðer* is only one of several correlatives used in this way, as was illustrated in Chapter 5.

As far as the evolution of *hwæðer* during the OE period, the consensus is that its pronominal use is the original one. Ukaji (1997) points out that this use is closest to its etymological reference (PIE **k^wo-* + **-tero-* > PGmc **XwaParaz* (**Xwe-*)), that is, a pronoun and a comparative suffix that can be translated as ‘which of the two’. The data corroborate at least that a pronominal *hwæðer* which is declined is older than its non-declinable counterpart. More convincing evidence can be found in its Gothic cognate *hwapar*. The only instances of *hwapar* that were found in the corpus, Wulfila’s Bible, were pronominal phrases equivalent to ‘which of the two’. I proposed an explanation as to why should be the case. As is clear from the data provided in Chapter 6, Gothic had a series of QMs already in place, and I claim that the economy principles responsible for the reanalysis of OE *hwæðer* were inactive on Gothic *hwapar*, since there was no need for one more QM to take on the functions already covered by such QMs as *-u(-)*, *niu*, *iba(i)*, *niba(i)*, and *an*. The first one, *-u(-)*, is a disjunctive QM, which appears both in direct and indirect interrogatives, and in correlation with *thau* ‘or’; its negative variant *niu* appear in negative questions that expect a positive answer (rhetorical questions); next, *iba(i)*, can function as a QM, but it is also a complementizer introducing a subordinate clause following a verb of fear; *niba(i)* is *iba(i)*’s negative variant; finally, *an* appear in interrogatives expressing an emotional effect of surprise. In addition to these QMs,

Gothic had *jau*, a complementizer introducing subordinate clauses with the meaning ‘whether, if’, which could also function as a correlative.

Finally, another unresolved issue central to the question of the evolution of OE *hwæðer* is whether its use as a conjunction (complementizer introducing a subordinate clause) predates its use as a question particle (QM), as was claimed early on by Nusser (1913) and Andrew (1940), or the QM precedes the complementizer chronologically, as I claim. The first of these hypotheses came about from the assumption that, originally, a clause of the type ‘I want to know’ would introduce the subordinate clause headed by *hwæðer*, and this would explain the S-V order of the subordinate clause. As appealing as this proposition may seem, I contend the following: assuming a change from complementizer to QM would entail a shift from hypotactic to paratactic, but we know the syntactic shift was exactly the opposite, and a change from QM in an independent sentence to a complementizer heading a subordinate clause would comply with such shift. My hypothesis is that pronominal *hwæðer* started functioning adverbially as its original meaning ‘which of two’ developed into ‘which of any’ and ‘in whichever way’; as such, it would appear as an adverbial heading a main sentence, but juxtaposed to it (similar to a clause-initial tag). At this point, a pronoun meaning ‘which of two’ would take the same position in anticipation of a direct *yes-no* question, the interrogative force being marked by means of a raising intonation (see Visser, 1963-1973, § 1454). This would explain the S-V order. Frequent topicalization of this clause-initial tag would allow the speaker to incorporate *hwæðer* as a specifier of the CP, finally inside the periphery of the sentence, with an already established S-V order. Later on, expressions

such as *cwyb bu* ‘tell (you)’ preceding this type of sentence could be interpreted as two separate main sentences (paratactically) and eventually as a main sentence governing a subordinate *hwæðer*-clause (hypotactically). This hypothesis is sound from the chronological and theoretical point of view.

7.4 Implications for Current Theory

I will start by quoting Meyer (2002), who in turn tells how

W. Nelson Francis (1992: 28) tells the story of a leading generative grammarian of the time characterizing the creation of the Brown Corpus as “useless and foolhardy enterprise” because “the only legitimate source of grammatical knowledge” about a language was the intuitions of the native speaker, which could not be obtained from a corpus. Although some linguists still hold to this belief, linguists of all persuasions are now far more open to the idea of using linguistic corpora for both descriptive and theoretical studies of language.

(p.1)

This dissertation hopes to contribute to the already existing effort by scholars of formal theories of language study to integrate not only the use of corpora in the analysis of language change, but language change itself in the agenda of formal linguistics.

Written texts, whether compiled in corpora or not, is not only an acceptable type of evidence for the diachronic study of language, but essential. Written evidence is a path into the mind and intuition of speakers of the past. The texts of the past allow us to hypothesize about the underlying nature of the language through observation and analysis.

This dissertation, in particular, has attempted to utilize written data of the past in order to hypothesize about the evolution of OE *hwæðer* and to elucidate the different stages it went through. Through the application of a formal approach based on economy principles, central to the Minimalist Program, the evolution of OE *hwæðer* presents itself as a case of renewal of the left periphery.

7.5 Future Research

This project focused on the evolution of *hwæðer* during the OE period. Other variants of *hwæðer* were also considered, such as *gehwaðer*, *aghwaðer*, and *swahwaðer*. Future research would include such a derivative as *hwæðer*'s negative counterpart, *nohwaðer*, and the unrelated complementizer OE *gif* 'if', which shares with *hwæðer* certain properties in certain environments. One more interrogative pronoun of interest is OE *hwelc*, *hwilc*, *hwylc* 'which', which shares with *hwæðer* its Indo-European root **q^wo-* or **q^wi-* 'who', but with the addition of suffix IE Indo-European) **līko* 'body, form' and translatable into 'what kind of'. The history of *which* seems to have more in common with all other *wh*-words than with *whether* though.

It would be desirable to expand the analysis into the Middle English period and try to explain why *whether* becomes again the specifier of the CP (when *C þe* starts becoming the norm) after it had already acquired the category of Head under the Head Preference Principle.

Finally, it would be similarly interesting to study the same phenomenon of reanalysis within the CP in other languages, in particular, those that are 'genetically' unrelated to English. Present-Day Indonesian *apa*, for example, displays different

functions: it is a question marker introducing a single *yes-no* question (in a similar fashion than OE *hwæðer*); it functions as a correlative meaning ‘or’; and it is an interrogative pronoun meaning ‘what’.

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APPENDIX A

REFERENCES TO PRIMARY SOURCES AND RELEVANT CODE VALUES FOR
ALL SAMPLE SENTENCES COLLECTED FROM THE OLD ENGLISH SECTION
OF THE *HELSINKI CORPUS OF ENGLISH TEXTS: DIACHRONIC AND DIALECTAL*

(O2 IR RELT CP 41)

[^TEXT: ALFRED'S CURA PASTORALIS.
KING ALFRED'S WEST-SAXON VERSION
OF GREGORY'S PASTORAL CARE, PARTS I-II.
EARLY ENGLISH TEXT SOCIETY, O.S. 45, 50.
ED. H. SWEET.
LONDON, 1958 (1871).
PP. 23.9 - 53.2 (SAMPLE 1)

<B COCURA>
<Q O2 IR RELT CP>
<N CURA PASTORALIS>
<A ALFRED>
<C O2>

<P 41> p.130
<R 4.39.24>

(O2 NN HIST BEDEHE 104)

[^TEXT: BEDE'S ECCLESIASTICAL HISTORY.
THE OLD ENGLISH VERSION OF
'BEDE'S ECCLESIASTICAL HISTORY
OF THE ENGLISH PEOPLE', PARTS I,1; I,2.
EARLY ENGLISH TEXT SOCIETY, O.S. 95, 96.
ED. T. MILLER.
LONDON, 1959 (1890; 1891).
PP. 104.12 - 124.24 (SAMPLE 1)

<B COBEDE>
<Q O2 NN HIST BEDEHE>
<N BEDE>
<A X>
<C O2>

<P 104>
[}III.}]
<R 3.104.27> p.225

(O2 NN HIST BEDEHE 270)

[^TEXT: BEDE'S ECCLESIASTICAL HISTORY.
THE OLD ENGLISH VERSION OF
'BEDE'S ECCLESIASTICAL HISTORY
OF THE ENGLISH PEOPLE', PARTS I,1; I,2.
EARLY ENGLISH TEXT SOCIETY, O.S. 95, 96.
ED. T. MILLER.
LONDON, 1959 (1890; 1891).
PP. 104.12 - 124.24 (SAMPLE 1)

<B COBEDE>
<Q O2 NN HIST BEDEHE>
<N BEDE>
<A X>
<C O2>

<P 270>
[}III.}]
<R 3.270.26> p.245

(O2 NN HIST BEDEHE 428)

[^TEXT: BEDE'S ECCLESIASTICAL HISTORY.
THE OLD ENGLISH VERSION OF
'BEDE'S ECCLESIASTICAL HISTORY
OF THE ENGLISH PEOPLE', PARTS I,1; I,2.
EARLY ENGLISH TEXT SOCIETY, O.S. 95, 96.
ED. T. MILLER.
LONDON, 1959 (1890; 1891).
PP. 104.12 - 124.24 (SAMPLE 1)

<B COBEDE>
<Q O2 NN HIST BEDEHE>
<N BEDE>
<A X>
<C O2>

<P 428>
[}XIII.}]
<R 13.428.15> p.251

(O2 NN HIST CHRONA2 80)

[^TEXT: CHRONICLE MS A EARLY (O2).
TWO OF THE SAXON CHRONICLES PARALLEL,
VOL. I.
ED. C. PLUMMER.
OXFORD: THE CLARENDON PRESS, 1965 (1892).
PP. 2.1 - 112.5^]

[^THE TEXT BELOW CONTAINS LATER INTERPOLATIONS
GIVEN IN ITALICS OR SMALL PRINT IN THE EDITION.^]

<B COCHROA2>
<Q O2 NN HIST CHRONA2>
<N CHRON A EARLY>
<A X>
<C O2>

<P 80>
<R 887.10> p.208

(O2 NN HIST OHTHR2 17)

[^TEXT: OHTHERE AND WULFSTAN (MS L).
KING ALFRED'S OROSIUS, PART I.
EARLY ENGLISH TEXT SOCIETY, O.S. 79.
ED. H. SWEET.
LONDON, 1959 (1883).
PP. 17.1 - 18.2^]

<B COOHTWU2>
<Q O2 NN HIST OHTHR2>
<N OHTHERE 2>
<A X>
<C O2>

<P 17>
<R 1.17.17> p.257

(O2 NN HIST OHTHR2 17)

[^TEXT: OHTHERE AND WULFSTAN (MS L).

KING ALFRED'S OROSIUS, PART I.
EARLY ENGLISH TEXT SOCIETY, O.S. 79.
ED. H. SWEET.
LONDON, 1959 (1883).
PP. 17.1 - 18.2^]
[^B9.2.2^]

<B COOHTWU2>
<Q O2 NN HIST OHTHR2>
<N OHTHERE 2>
<A X>
<C O2>

<P 17>
<R 1.17.7> p.256

(O2 NN HIST OHTHR2 17)

[^TEXT: OHTHERE AND WULFSTAN (MS L).
KING ALFRED'S OROSIUS, PART I.
EARLY ENGLISH TEXT SOCIETY, O.S. 79.
ED. H. SWEET.
LONDON, 1959 (1883).
PP. 17.1 - 18.2^]
[^B9.2.2^]

<B COOHTWU2>
<Q O2 NN HIST OHTHR2>
<N OHTHERE 2>
<A X>
<C O2>

<P 17>
<R 1.17.13> p. 256

(O2 NN HIST OROS 62)

[^TEXT: ALFRED'S OROSIUS.
KING ALFRED'S OROSIUS, PART I.
EARLY ENGLISH TEXT SOCIETY, O.S. 79.
ED. H. SWEET.
LONDON, 1959 (1883).
PP. 58.13 - 78.30 (SAMPLE 1)

<B COOROSIU>
<Q O2 NN HIST OROS>
<N OROSIUS>
<A X>
<C O2>

<P 62>
<R 1.62.19> p. 260

(O2 STA LAW ALFLAW 60)

<Q O2 STA LAW ALFLAW>
<N LAW ALFRED>
<A X>
<C O2>
[^B14.4.4^]

<P 60>
<R 19.3> p.25

(O2 STA LAW ALFLAW 82)

[^TEXT: ALFRED'S INTRODUCTION TO LAWS.
DIE GESETZE DER ANGELSACHSEN, VOL. I.
ED. F. LIEBERMANN.
HALLE: MAX NIEMEYER, 1903.
PP. 26.17 - 46.23 (SAMPLE 1)

<Q O2 STA LAW ALFLAW>
<N LAW ALFRED>
<A X>
<C O2>

<P 82>
<R 61.1> p.31

(O2 XX DOC HARM18 32)

<Q O2 XX DOC HARM18>
<N DOC HARM 18>
<A X>

<C O2>

<P 32> p.51

<R 49>

(O2 XX PHILO BOETHAL 122)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 74.15 - 79.7 (XXXIII) (SAMPLE 1)
PP. 82.18 - 89.3 (XXXIV) (SAMPLE 2)
PP. 89.24 - 94.13 (SAMPLE 3)
PP. 117.1 - 124.1 (XXXVIII) (SAMPLE 4)
PP. 126.28 - 135.21 (XXXIX) (SAMPLE 5)^]

<S SAMPLE 4>

<B COBOETH>

<Q O2 XX PHILO BOETHAL>

<N BOETH ALFRED>

<A ALFRED>

<C O2>

<P 122>

<R 38.122.28> p.112

(O2 XX PHILO BOETHAL 122)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 74.15 - 79.7 (XXXIII) (SAMPLE 1)
PP. 82.18 - 89.3 (XXXIV) (SAMPLE 2)
PP. 89.24 - 94.13 (SAMPLE 3)
PP. 117.1 - 124.1 (XXXVIII) (SAMPLE 4)
PP. 126.28 - 135.21 (XXXIX) (SAMPLE 5)^]
<S SAMPLE 4>

<B COBOETH>

<Q O2 XX PHILO BOETHAL>
<N BOETH ALFRED>
<A ALFRED>
<C O2>

<P 122>
<R 38.122.21> p.111

(O2 XX PHILO BOETHAL 131)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 74.15 - 79.7 (XXXIII) (SAMPLE 1)
PP. 82.18 - 89.3 (XXXIV) (SAMPLE 2)
PP. 89.24 - 94.13 (SAMPLE 3)
PP. 117.1 - 124.1 (XXXVIII) (SAMPLE 4)
PP. 126.28 - 135.21 (XXXIX) (SAMPLE 5)^]
<S SAMPLE 5>

<B COBOETH>
<Q O2 XX PHILO BOETHAL>
<N BOETH ALFRED>
<A ALFRED>
<C O2>

<P 131>
<R 39.131.28> p.118

(O2 XX PHILO BOETHAL 74)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 74.15 - 79.7 (XXXIII) (SAMPLE 1)

<B COBOETH>
<Q O2 XX PHILO BOETHAL>
<N BOETH ALFRED>

<A ALFRED>

<C O2>

<P 74>

<R 33.74.25> p.89

(O2 XX PHILO BOETHAL 75)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 74.15 - 79.7 (XXXIII) (SAMPLE 1)
PP. 82.18 - 89.3 (XXXIV) (SAMPLE 2)
PP. 89.24 - 94.13 (SAMPLE 3)
PP. 117.1 - 124.1 (XXXVIII) (SAMPLE 4)
PP. 126.28 - 135.21 (XXXIX) (SAMPLE 5)^]
<S SAMPLE 1>
[^B9.3.2^]

<B COBOETH>

<Q O2 XX PHILO BOETHAL>

<N BOETH ALFRED>

<A ALFRED>

<C O2>

<P 75>

<R 33.75.18> p.90

(O2 XX PHILO BOETHAL 79)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 74.15 - 79.7 (XXXIII) (SAMPLE 1)

<B COBOETH>

<Q O2 XX PHILO BOETHAL>

<N BOETH ALFRED>

<A ALFRED>

<C O2>

<P 79>

<R 33.79.2> p.94

(O2 XX PHILO BOETHAL 82)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 74.15 - 79.7 (XXXIII) (SAMPLE 1)
PP. 82.18 - 89.3 (XXXIV) (SAMPLE 2)
PP. 89.24 - 94.13 (SAMPLE 3)
PP. 117.1 - 124.1 (XXXVIII) (SAMPLE 4)
PP. 126.28 - 135.21 (XXXIX) (SAMPLE 5)^]
<S SAMPLE 2>

<B COBOETH>

<Q O2 XX PHILO BOETHAL>

<N BOETH ALFRED>

<A ALFRED>

<C O2>

<P 82>

<R 34.82.22> p.94

(O2 XX PHILO BOETHAL 85)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 74.15 - 79.7 (XXXIII) (SAMPLE 1)
PP. 82.18 - 89.3 (XXXIV) (SAMPLE 2)
PP. 89.24 - 94.13 (SAMPLE 3)
PP. 117.1 - 124.1 (XXXVIII) (SAMPLE 4)
PP. 126.28 - 135.21 (XXXIX) (SAMPLE 5)^]
<S SAMPLE 2>
<B COBOETH>

<Q O2 XX PHILO BOETHAL>
<N BOETH ALFRED>
<A ALFRED>
<C O2>

<P 85>
<R 34.85.11> p.97

(O2 XX PHILO BOETHAL 86)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 82.18 - 89.3 (XXXIV) (SAMPLE 2)

<B COBOETH>
<Q O2 XX PHILO BOETHAL>
<N BOETH ALFRED>
<A ALFRED>
<C O2>
<P 86>
<R 34.86.22> p.98

(O2 XX PHILO BOETHAL 87)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 82.18 - 89.3 (XXXIV) (SAMPLE 2)

<B COBOETH>
<Q O2 XX PHILO BOETHAL>
<N BOETH ALFRED>
<A ALFRED>
<C O2>

<P 87>
<R 34.87.17> p.99

(O2 XX PHILO BOETHAL 91)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 74.15 - 79.7 (XXXIII) (SAMPLE 1)
PP. 82.18 - 89.3 (XXXIV) (SAMPLE 2)
PP. 89.24 - 94.13 (SAMPLE 3)
PP. 117.1 - 124.1 (XXXVIII) (SAMPLE 4)
PP. 126.28 - 135.21 (XXXIX) (SAMPLE 5)^]

<S SAMPLE 3>
<B COBOETH>
<Q O2 XX PHILO BOETHAL>
<N BOETH ALFRED>
<A ALFRED>
<C O2>

<P 91>
<R 34.91.19> p.103

(O2 XX PHILO BOETHAL 92)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 74.15 - 79.7 (XXXIII) (SAMPLE 1)
PP. 82.18 - 89.3 (XXXIV) (SAMPLE 2)
PP. 89.24 - 94.13 (SAMPLE 3)
PP. 117.1 - 124.1 (XXXVIII) (SAMPLE 4)
PP. 126.28 - 135.21 (XXXIX) (SAMPLE 5)^]

<S SAMPLE 3>
<B COBOETH>
<Q O2 XX PHILO BOETHAL>
<N BOETH ALFRED>
<A ALFRED>

<C O2>

<P 92>

<R 34.92.18> p.104

(O2 XX PHILO BOETHAL 92)

[^ALFRED'S BOETHIUS.
KING ALFRED'S OLD ENGLISH VERSION OF
BOETHIUS DE CONSOLATIONE PHILOSOPHIAE.
ED. W. J. SEDGEFIELD.
OXFORD: THE CLARENDON PRESS, 1899.
PP. 89.24 - 94.13 (SAMPLE 3)

<B COBOETH>

<Q O2 XX PHILO BOETHAL>

<N BOETH ALFRED>

<A ALFRED>

<C O2>

<P 92>

(O2/3 NI TRAV ALEX 43)

[^TEXT: ALEXANDER'S LETTER.
THREE OLD ENGLISH PROSE TEXTS
IN MS. COTTON VITELLIUS A XV.
EARLY ENGLISH TEXT SOCIETY, 161.
ED. S. RYPINS.
NEW YORK: KRAUS REPRINT CO., 1971 (1924).
PP. 1.1 - 50.6^]

<B COALEX>

<Q O2/3 NI TRAV ALEX>

<N ALEXANDER LETTER>

<A X>

<C O2/3>

<P 43>

<R 853> p.719

(O2/3 NN BIL MART 235)

[^TEXT: MARTYROLOGY.
DAS ALTENGLISCHE MARTYROLOGIUM, VOL. II.
BAYERISCHE AKADEMIE DER WISSENSCHAFTEN,
PHILOSOPHISCH-HISTORISCHE KLASSE.
ABHANDLUNGEN, NEUE FOLGE, HEFT 88/2.
ED. G. KOTZOR.
MUENCHEN: VERLAG DER BAYERISCHEN AKADEMIE
DER WISSENSCHAFTEN, 1981.
PP. 208.1 - 249.16 (SAMPLE 2)^]

<B COMARTYR>
<Q O2/3 NN BIL MART>
<N MARTYROLOGY>
<A X>
<C O2/3>

<P 235>
<R 2294> p.797

(O2/3 NN BIL MART 246)

[^TEXT: MARTYROLOGY.
DAS ALTENGLISCHE MARTYROLOGIUM, VOL. II.
BAYERISCHE AKADEMIE DER WISSENSCHAFTEN,
PHILOSOPHISCH-HISTORISCHE KLASSE.
ABHANDLUNGEN, NEUE FOLGE, HEFT 88/2.
ED. G. KOTZOR.
MUENCHEN: VERLAG DER BAYERISCHEN AKADEMIE
DER WISSENSCHAFTEN, 1981.
PP. 208.1 - 249.16 (SAMPLE 2)^]

<B COMARTYR>
<Q O2/3 NN BIL MART>
<N MARTYROLOGY>
<A X>
<C O2/3>

<P 246>
<R 2412> p.802

(O2/3 XX OLDT PPS 12)

[^TEXT: THE PARIS PSALTER.
LIBER PSALMORUM. THE WEST-SAXON PSALMS
BEING THE PROSE PORTION, OR THE 'FIRST FIFTY,'
OF THE SO-CALLED PARIS PSALTER.
THE BELLES-LETTRES SERIES.
ED. J. W. BRIGHT AND R. L. RAMSAY.
BOSTON, U.S.A. AND LONDON: D. C. HEATH
AND CO., 1907.
PSALMS I.1 - XXX.28, PP. 1.4 - 66.24^]

<B COPARIPS>
<Q O2/3 XX OLDT PPS>
<N PARIS PSALTER>
<A X>
<C O2/3>

<P 12>
<R 7.12> p.866

(O2/3 XX OLDT PPS 23)

[^TEXT: THE PARIS PSALTER.
LIBER PSALMORUM. THE WEST-SAXON PSALMS
BEING THE PROSE PORTION, OR THE 'FIRST FIFTY,'
OF THE SO-CALLED PARIS PSALTER.
THE BELLES-LETTRES SERIES.
ED. J. W. BRIGHT AND R. L. RAMSAY.
BOSTON, U.S.A. AND LONDON: D. C. HEATH
AND CO., 1907.
PSALMS I.1 - XXX.28, PP. 1.4 - 66.24^]

<B COPARIPS>
<Q O2/3 XX OLDT PPS>
<N PARIS PSALTER>
<A X>
<C O2/3>

<P 23>
<R 12.2> p.871

(O2/3 XX OLDT PPS 23)

[^TEXT: THE PARIS PSALTER.
LIBER PSALMORUM. THE WEST-SAXON PSALMS
BEING THE PROSE PORTION, OR THE 'FIRST FIFTY,'
OF THE SO-CALLED PARIS PSALTER.
THE BELLES-LETTRES SERIES.
ED. J. W. BRIGHT AND R. L. RAMSAY.
BOSTON, U.S.A. AND LONDON: D. C. HEATH
AND CO., 1907.
PSALMS I.1 - XXX.28, PP. 1.4 - 66.24^]

<B COPARIPS>
<Q O2/3 XX OLDT PPS>
<N PARIS PSALTER>
<A X>
<C O2/3>

<P 23>
<R 12.1> p.871

(O2/3 XX OLDT PPS 62)

[^TEXT: THE PARIS PSALTER.
LIBER PSALMORUM. THE WEST-SAXON PSALMS
BEING THE PROSE PORTION, OR THE 'FIRST FIFTY,'
OF THE SO-CALLED PARIS PSALTER.
THE BELLES-LETTRES SERIES.
ED. J. W. BRIGHT AND R. L. RAMSAY.
BOSTON, U.S.A. AND LONDON: D. C. HEATH
AND CO., 1907.
PSALMS I.1 - XXX.28, PP. 1.4 - 66.24^]

<B COPARIPS>
<Q O2/3 XX OLDT PPS>
<N PARIS PSALTER>
<A X>
<C O2/3>

<P 62>
<R 29.9> p.888

(O2/3 XX XX MBO 159)

[^TEXT: THE METERS OF BOETHIUS.
THE PARIS PSALTER AND THE METERS OF BOETHIUS.
THE ANGLO-SAXON POETIC RECORDS, V.
ED. G. P. KRAPP.
LONDON: GEORGE ROUTLEDGE & SONS, LIMITED
AND NEW YORK: COLUMBIA UNIVERSITY PRESS, 1933.
PP. 158.1 - 159.46 (5)

<B COMETBOE>
<Q O2/3 XX XX MBO>
<N METERS OF BOETHIUS>
<A ALFRED>
<C O2/3>

<P 159>
<R 5.38> p.1314

(O2/3 XX XX MBO 176)

[^TEXT: THE METERS OF BOETHIUS.
THE PARIS PSALTER AND THE METERS OF BOETHIUS.
THE ANGLO-SAXON POETIC RECORDS, V.
ED. G. P. KRAPP.
LONDON: GEORGE ROUTLEDGE & SONS, LIMITED
AND NEW YORK: COLUMBIA UNIVERSITY PRESS, 1933.
PP. 158.1 - 159.46 (5)

<B COMETBOE>
<Q O2/3 XX XX MBO>
<N METERS OF BOETHIUS>
<A ALFRED>
<C O2/3>

<P 176>
<R 19.5> p.1323

(O2/3 XX XX MPS 7)

[^TEXT: THE METRICAL PSALMS OF
THE PARIS PSALTER.

THE PARIS PSALTER AND THE METERS OF BOETHIUS.
THE ANGLO-SAXON POETIC RECORDS, V.
ED. G. P. KRAPP.
LONDON: GEORGE ROUTLEDGE & SONS, LIMITED
AND NEW YORK: COLUMBIA UNIVERSITY PRESS, 1933.
PP. 3.1 - 13.24 (PSALMS 51-59)

<B COMETRPS>
<Q O2/3 XX XX MPS>
<N METRICAL PSALMS>
<A X>
<C O2/3>

<P 7>
<R 55.4> p.1278

(O2/4 NN BIL CHAD 162)

[^TEXT: CHAD.
THE LIFE OF ST. CHAD. AN OLD ENGLISH HOMILY.
ED. R. VLEESKRUYER.
AMSTERDAM: NORTH-HOLLAND PUBLISHING
COMPANY, 1953.
PP. 162.1 - 184.245^]

<B COCHAD>
<Q O2/4 NN BIL CHAD>
<N CHAD>
<A X>
<C O2/4>

<P 162>
<R 7> p.1531

(O2/4 NN BIL CHAD 180)

[^TEXT: CHAD.
THE LIFE OF ST. CHAD. AN OLD ENGLISH HOMILY.
ED. R. VLEESKRUYER.
AMSTERDAM: NORTH-HOLLAND PUBLISHING
COMPANY, 1953.
PP. 162.1 - 184.245^]

<B COCHAD>
<Q O2/4 NN BIL CHAD>
<N CHAD>
<A X>
<C O2/4>

<P 180>
<R 200> p.1537

(O3 EX SCIA TEMP 12)

[^AELFRIC'S DE TEMPORIBUS ANNI.
EARLY ENGLISH TEXT SOCIETY, 213.
ED. H. HENEL.
LONDON, 1942.
PP. 2.1 - 82.16^]

<B COTEMPO>
<Q O3 EX SCIA TEMP>
<N DE TEMPORIBUS ANNI>
<A AELFRIC>
<C O3>

<P 12>
<R 1.27> p.446

(O3 IR HOM WULF13 225)

[^B2.3.1^]
<P 225>
[] (SERMO AD POPULUM)]]

<Q O3 IR HOM WULF13>
<N WHOM 13>
<A WULFSTAN>
<C O3>

(O3 IR RULE BENEDOE 49)

[^TEXT: THE BENEDICTINE RULE.
DIE ANGELSAECHSISCHEN PROSABEARBEITUNGEN
DER BENEDIKTINERREGEL.
BIBLIOTHEK DER ANGELSAECHSISCHEN PROSA, II.
ED. A. SCHROEER.
DARMSTADT: WISSENSCHAFTLICHE
BUCHGESELLSCHAFT, 1964 (1885-1888).
PP. 9.2 - 57.13 (SAMPLE 2)^]

<B COBENRUL>
<Q O3 IR RULE BENEDOE>
<N BEN RULE OE>
<A AETHELWOLD>
<C O3>

<P 49>
<R 24.4> p.567

<R 6> p.476

(O3 NN BIL AELIVES32 9)

(XII KAL DECEMBRES, PASSIO SANCTI EADMVNDI REGIS ET
MARTYRIS\).

<Q O3 NN BIL AELIVES32>
<N LIVES STS 32>
<A AELFRIC>
<C O3>

<P 9>
[] [31 DECEMBER: ST. COLUMBA\]]
<R 2>

(O3 STA LAW LAW11C 322)

[^TEXT: LAWS (ELEVENTH CENTURY).
DIE GESETZE DER ANGELSACHSEN, VOL. I.
ED. F. LIEBERMANN.
HALLE: MAX NIEMEYER, 1903.

PP. 308.1 - 326.12 (II CNUT)

<B COLAW3>
<Q O3 STA LAW LAW11C>
<N LAW 11 CENT>
<A X>
<C O3>

<P 322>
<R 20.1> p.361

(O3 XX NEWT RUSHW 75)

[^TEXT: RUSHWORTH GOSPELS.
THE HOLY GOSPELS IN ANGLO-SAXON,
NORTHUMBRIAN, AND OLD MERCIAN VERSIONS.
ED. W. W. SKEAT.
CAMBRIDGE: CAMBRIDGE UNIVERSITY PRESS,
1871-1887.
MATTHEW I.1 - XVI.28, PP. 25.4 - 139.35^]

<B CORUSHW>
<Q O3 XX NEWT RUSHW>
<N NEW TEST RUSHW>
<A FARMAN>
<C O3>

<P 75>
<R 9.5> p.996

(O3 XX NEWT WSNEW 68)

[^TEXT: WEST-SAXON GOSPELS.
THE HOLY GOSPELS IN ANGLO-SAXON,
NORTHUMBRIAN, AND OLD MERCIAN VERSIONS.
ED. W. W. SKEAT.
CAMBRIDGE: CAMBRIDGE UNIVERSITY PRESS,
1871-1887.
JOHN I.1 - XI.57, PP. 12.4 - 112.30^]

<B COWSGOSP>
<Q O3 XX NEWT WSNEW>

<N NEW TEST WS>
<A X>
<C O3>

<P 68>
<R 7.17> p.909

(O3 XX NEWT WSNEW 68)

[^TEXT: WEST-SAXON GOSPELS.
THE HOLY GOSPELS IN ANGLO-SAXON,
NORTHUMBRIAN, AND OLD MERCIAN VERSIONS.
ED. W. W. SKEAT.
CAMBRIDGE: CAMBRIDGE UNIVERSITY PRESS,
1871-1887.
JOHN I.1 - XI.57, PP. 12.4 - 112.30^]

<B COWSGOSP>
<Q O3 XX NEWT WSNEW>
<N NEW TEST WS>
<A X>
<C O3>

<P 68>
<R 7.13> p.909

(O3 XX NEWT WSNEW 70)

[^TEXT: WEST-SAXON GOSPELS.
THE HOLY GOSPELS IN ANGLO-SAXON,
NORTHUMBRIAN, AND OLD MERCIAN VERSIONS.
ED. W. W. SKEAT.
CAMBRIDGE: CAMBRIDGE UNIVERSITY PRESS,
1871-1887.
JOHN I.1 - XI.57, PP. 12.4 - 112.30^]

<B COWSGOSP>
<Q O3 XX NEWT WSNEW>
<N NEW TEST WS>
<A X>
<C O3>

<P 70>
<R 7.13> p.909

(O3 XX NEWT WSNEW 70)

[^TEXT: WEST-SAXON GOSPELS.
THE HOLY GOSPELS IN ANGLO-SAXON,
NORTHUMBRIAN, AND OLD MERCIAN VERSIONS.
ED. W. W. SKEAT.
CAMBRIDGE: CAMBRIDGE UNIVERSITY PRESS,
1871-1887.
JOHN I.1 - XI.57, PP. 12.4 - 112.30^]

<B COWSGOSP>
<Q O3 XX NEWT WSNEW>
<N NEW TEST WS>
<A X>
<C O3>

<P 70>
<P 100>

(O3 XX OLDT AELFOLD XIII, 20)

[^TEXT: THE OLD TESTAMENT.
THE OLD ENGLISH VERSION OF THE HEPTATEUCH.
AELFRIC'S TREATISE ON THE OLD AND NEW
TESTAMENT AND HIS PREFACE TO GENESIS.
EARLY ENGLISH TEXT SOCIETY, 160.
ED. S. J. CRAWFORD.
LONDON, 1969 (1922).
NUMBERS XIII.1 - XIV.45 (SAMPLE 5)

<B COOTEST>
<Q O3 XX OLDT AELFOLD>
<N OLD TEST AELFRIC>
<A AELFRIC>
<C O3>

<R 13.19>
<P XIII,20>

(O3/4 IR RELT ADRIAN 35)

[^TEXT: ADRIAN AND RITHEUS.
THE 'PROSE SOLOMON AND SATURN'
AND 'ADRIAN AND RITHEUS'.
MCMASTER OLD ENGLISH STUDIES AND TEXTS, I.
ED. J. E. CROSS AND T. D. HILL.
TORONTO, BUFFALO AND LONDON:
UNIVERSITY OF TORONTO PRESS, 1982.
PP. 35.1 - 40.13

THE VERSION GIVEN IN THE TORONTO CORPUS WAS BASED ON
A WORKING VERSION BY CROSS AND HILL. THE TEXT BELOW
IS BASED ON THE FINAL EDITION.^]

[^B5.2^]

<B COADRIAN>
<Q O3/4 IR RELT ADRIAN>
<N ADRIAN AND RITHEUS>
<A X>
<C O3/4>

<P 35>
<R 3> p.1455

(O3/4 IR RELT ADRIAN 35)

[^AN OLD ENGLISH VISION OF LEOFRIC,
EARL OF MERCIA.
ED. A. S. NAPIER.
TRANSACTIONS OF THE PHILOLOGICAL
SOCIETY, 1907-1910.
LONDON, 1908.
PP. 182.1 - 186.19^]

[^B4.2^]

<B COLEOFRI>
<Q O4 IR RELT LEOFRIC>
<N VISION LEOFRIC>
<A X>
<C O4>

<P 182>

<R 29> p.1468

(O3/4 IR RELT LWSIGE 32)

<Q O3/4 IR RELT LWSIGE>

<N LET WULFSIGE>

<A AELFRIC>

<C O3/4>

<P 32>

<R 148> p.1453

(O3/4 NN HIST CHRONE 148)

[^TEXT: CHRONICLE MS E (O3/4).
TWO OF THE SAXON CHRONICLES PARALLEL,
VOL. I.
ED. C. PLUMMER.
OXFORD: THE CLARENDON PRESS, 1965 (1892).
PP. 119.1 - 177.5 (SAMPLE 1)

<B COCHROE4>

<Q O3/4 NN HIST CHRONE>

<N CHRON E EARLY>

<A X>

<C O3/4>

<P 148>

<R 1016.27> p.1490

(O4 IR RELT LEOFRIC 186)

[^AN OLD ENGLISH VISION OF LEOFRIC,
EARL OF MERCIA.
ED. A. S. NAPIER.
TRANSACTIONS OF THE PHILOLOGICAL
SOCIETY, 1907-1910.
LONDON, 1908.
PP. 182.1 - 186.19^]

<B COLEOFRI>

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<N VISION LEOFRIC>
<A X>
<C O4>

<P 186>
<R 80> p.1470

(OX/3 XX XX AND 31)

[^TEXT: ANDREAS.
THE VERCELLI BOOK.
THE ANGLO-SAXON POETIC RECORDS, II.
ED. G. P. KRAPP.
NEW YORK: COLUMBIA UNIVERSITY PRESS, 1932.
PP. 3.1 - 12.348 (SAMPLE 1)
PP. 29.950 - 37.1252 (SAMPLE 2)
PP. 44.1478 - 51.1722 (SAMPLE 3)^]

<B COANDREA>
<Q OX/3 XX XX AND>
<N ANDREAS>
<A X>
<C OX/3>

<P 31>
<R 1015> p.1142

(OX/3 XX XX BEOW 19)

[^TEXT: BEOWULF.
BEOWULF AND JUDITH.
THE ANGLO-SAXON POETIC RECORDS, IV.
ED. E. V. K. DOBBIE.
NEW YORK: COLUMBIA UNIVERSITY PRESS, 1953.
PP. 3.1 - 98.3182^]

<B COBEOWUL>
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<A X>
<C OX/3>

<P 19>
<R 574> p.1201

(OX/3 XX XX BEOW 19)

[^TEXT: BEOWULF.
BEOWULF AND JUDITH.
THE ANGLO-SAXON POETIC RECORDS, IV.
ED. E. V. K. DOBBIE.
NEW YORK: COLUMBIA UNIVERSITY PRESS, 1953.
PP. 3.1 - 98.3182^]

<B COBEOWUL>
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<A X>
<C OX/3>

<P 19>
<R 583> p.1201

(OX/3 XX XX BEOW 22)

[^TEXT: BEOWULF.
BEOWULF AND JUDITH.
THE ANGLO-SAXON POETIC RECORDS, IV.
ED. E. V. K. DOBBIE.
NEW YORK: COLUMBIA UNIVERSITY PRESS, 1953.
PP. 3.1 - 98.3182^]

<B COBEOWUL>
<Q OX/3 XX XX BEOW>
<N BEOWULF>
<A X>
<C OX/3>

<P 22>
<R 681> p.1203

(OX/3 XX XX BEOU 26)

[^TEXT: BEOWULF.
BEOWULF AND JUDITH.
THE ANGLO-SAXON POETIC RECORDS, IV.
ED. E. V. K. DOBBIE.
NEW YORK: COLUMBIA UNIVERSITY PRESS, 1953.
PP. 3.1 - 98.3182^]

<B COBEOWUL>
<Q OX/3 XX XX BEOU>
<N BEOWULF>
<A X>
<C OX/3>

<P 26>
<R 809> p.1206

(OX/3 XX XX BEOU 31)

[^TEXT: BEOWULF.
BEOWULF AND JUDITH.
THE ANGLO-SAXON POETIC RECORDS, IV.
ED. E. V. K. DOBBIE.
NEW YORK: COLUMBIA UNIVERSITY PRESS, 1953.
PP. 3.1 - 98.3182^]

<B COBEOWUL>
<Q OX/3 XX XX BEOU>
<N BEOWULF>
<A X>
<C OX/3>

<P 31>
<R 970> p.1209

(OX/3 XX XX BEOU 39)

[^TEXT: BEOWULF.
BEOWULF AND JUDITH.
THE ANGLO-SAXON POETIC RECORDS, IV.
ED. E. V. K. DOBBIE.

NEW YORK: COLUMBIA UNIVERSITY PRESS, 1953.
PP. 3.1 - 98.3182^]

<B COBEOWUL>
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<N BEOWULF>
<A X>
<C OX/3>

<P 39>
<R 1246> p.1214

(OX/3 XX XX BEOW 78)

[^TEXT: BEOWULF.
BEOWULF AND JUDITH.
THE ANGLO-SAXON POETIC RECORDS, IV.
ED. E. V. K. DOBBIE.
NEW YORK: COLUMBIA UNIVERSITY PRESS, 1953.
PP. 3.1 - 98.3182^]

<B COBEOWUL>
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<N BEOWULF>
<A X>
<C OX/3>

<P 78>
<R 2529> p.1240

(OX/3 XX XX BEOW 88)

[^TEXT: BEOWULF.
BEOWULF AND JUDITH.
THE ANGLO-SAXON POETIC RECORDS, IV.
ED. E. V. K. DOBBIE.
NEW YORK: COLUMBIA UNIVERSITY PRESS, 1953.
PP. 3.1 - 98.3182^]

<B COBEOWUL>
<Q OX/3 XX XX BEOW>
<N BEOWULF>

<A X>
<C OX/3>

<P 88>
<R 2842> p.1246

(OX/3 XX XX GEN 80)

[^TEXT: GENESIS.
THE JUNIUS MANUSCRIPT.
THE ANGLO-SAXON POETIC RECORDS, I.
ED. G. P. KRAPP.
LONDON: GEORGE ROUTLEDGE & SONS, LTD.
AND NEW YORK: COLUMBIA UNIVERSITY PRESS, 1931.
PP. 72.2419 - 82.2759 (SAMPLE 3)^]

<B COGENESI>
<Q OX/3 XX XX GEN>
<N GENESIS>
<A X>
<C OX/3>

<P 80>
<R 2710> p.1091

(OX/3 XX XX PHOEN 104)

[^TEXT: PHOENIX.
THE EXETER BOOK.
THE ANGLO-SAXON POETIC RECORDS, III.
ED. G. P. KRAPP AND E. V. K. DOBBIE.
NEW YORK: COLUMBIA UNIVERSITY PRESS, 1936.
PP. 94.1 - 113.677^]

<B COPHOENI>
<Q OX/3 XX XX PHOEN>
<N PHOENIX>
<A X>
<C OX/3>

<P 104>
<R 374> p.1307

(OX/4 IS HANDA PROCC 297)

[^TEXT: PROGNOSTICATIONS.
ED. M. FOERSTER.

1) 'BEITRAEGE ZUR MITTELALTERLICHEN
VOLKSKUNDE I', ARCHIV FUER DAS STUDIUM
DER NEUEREN SPRACHEN UND LITERATUREN
120 (1908); VI, 128 (1912); VII, 128 (1912);
VIII, 129 (1912); IX, 134 (1916).

2) 'DIE ALTENGLISCHEN TRAUMLUNARE',
ENGLISCHE STUDIEN, 60: 58-93, 1925-1926.

<B COPROGNO>

<Q OX/4 IS HANDA PROCC>

<N PROGN CCCC>

<A X>

<C OX/4>

SAMPLE 1 (PROCC):

PP. 297.32 - 300.12 (A 128) (C.C.C.C. 391)

[^B23.3.1.3^] p.1351

<P 297>

<R 1>

(MX/1 IR HOM VESPD33 90)

[] [SIGNS OF THE LAST JUDGEMENT.\]]]

<P 90> p.1642

<Q MX/1 IR HOM VESPD33>

<N VSPD HOM 33>

<A X>

<C MX/1>

<P 90> p.1642

(MX/1 IR HOM VESPD48 148)

[] [THE PHOENIX HOMILY.\]]]

<Q MX/1 IR HOM VESPD48>
<N VSPD HOM 48>
<A X>
<C MX/1>

<P 148> p.1652

(MX/1 NN RELT HROOD 12)

[^HISTORY OF THE HOLY ROOD-TREE.
EARLY ENGLISH TEXT SOCIETY, O.S. 103.
ED. A. S. NAPIER.
LONDON, 1894.
PP. 2.1 - 34.33^]

<B CMROOD>
<Q MX/1 NN RELT HROOD>
<N HROOD>
<A X>
<C MX/1>

<P 12>
p.1722

(MX/1 NN RELT HROOD 32)

[^HISTORY OF THE HOLY ROOD-TREE.
EARLY ENGLISH TEXT SOCIETY, O.S. 103.
ED. A. S. NAPIER.
LONDON, 1894.
PP. 2.1 - 34.33^]

<B CMROOD>
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<N HROOD>
<A X>
<C MX/1>

<P 32>
p.1734

(M2 NI ROM HAVEL 58)

[^HAVELOK.

ED. G. V. SMITHERS.

OXFORD: CLARENDON PRESS, 1987.

PP. 19.545 - 31.949 (SAMPLE 1)

PP. 35.1118 - 41.1353 (SAMPLE 2)

PP. 46.1715 - 58.2120 (SAMPLE 3)

PP. 63.2291 - 78.2856 (SAMPLE 4)^]

<B CMHAVELO>

<Q M2 NI ROM HAVEL>

<N HAVELOK>

<C M2>

<A X

<P 58> p.2089