

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

**A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600**

**Historical Syntax of the English Articles
in Relation to the Count/Non-count Distinction**

by

Nancy M. Ackles

**A dissertation submitted in partial fulfillment
of the requirements for the degree**

Doctor of Philosophy

University of Washington

1997

Approved by 
Chairperson of Supervisory Committee

Program Authorized
to Offer Degree

Linguistics

Date

January 22, 1997

UMI Number: 9730033

**Copyright 1997 by
Ackles, Nancy McCornack**

All rights reserved.

**UMI Microform 9730033
Copyright 1997, by UMI Company. All rights reserved.**

**This microform edition is protected against unauthorized
copying under Title 17, United States Code.**

UMI
300 North Zeeb Road
Ann Arbor, MI 48103

© Copyright 1997

Nancy M. Ackles

Doctoral Dissertation

In presenting this dissertation in partial fulfillment of the requirements for the Doctoral degree at the University of Washington, I agree that the Library shall make its copies freely available for inspection. I further agree that extensive copying of this dissertation is allowable only for scholarly purposes, consistent with "fair use" as prescribed in the U.S. Copyright Law. Requests for copying or reproduction of this dissertation may be referred to University Microfilms, 1490 Eisenhower Place, P.O. Box 975, Ann Arbor, MI 48106, to whom the author has granted "the right to reproduce and sell (a) copies of the manuscript in microform and/or (b) printed copies of the manuscript made from microform."

Signature Nancy M Ackles

Date January 23, 1997

University of Washington

Abstract

**HISTORICAL SYNTAX OF THE ENGLISH ARTICLES IN RELATION TO THE
COUNT/NON-COUNT DISTINCTION**

by Nancy M. Ackles

Chairperson of the Supervisory Committee: Professor Heles Contreras
Department of Linguistics

This dissertation focuses on functional nodes within the structure of the English noun phrase. The count/non-count distinction affects multiple aspects of the syntax of noun phrases, but the syntactic basis for that distinction has not previously been defined. I propose that the syntactic difference between count and non-count nouns is that count nouns, and only count nouns, are lexically marked to project a required Number Phrase. I further argue that the leftmost node of a Noun Phrase must be identifiable and that *a/an* as the minimal marker of a Number Phrase serves to make identifiable the presence of Number Phrase in a Noun Phrase headed by a singular count noun when that Number Phrase is the leftmost node. Evidence corroborating this analysis is found in the history of the English noun phrase, in that the indefinite article arose concurrently with other changes in English which are evidence of the rise of a count/non-count distinction. I argue that the count/non-count distinction was not encoded in the syntax of Old English but arose in the transition to Middle English. Similarly, the

definite article is the minimal marker of the presence of a definite Determiner Phrase as the leftmost node of a noun phrase. Its rise in the transition from Old to Middle English is the surface manifestation of an underlying change in the defining feature of the Determiner Phrase from deictic to definite.

TABLE OF CONTENTS

LIST OF TABLES.....	iii
LIST OF ABBREVIATIONS.....	iv
INTRODUCTION	1
CHAPTER 1: THEORETICAL FOUNDATIONS.....	4
1.0 INTRODUCTION.....	4
1.1 DEFINITIONS OF TERMS AND OUTLINE OF THEORY	4
1.2 RATIONALE FOR DOING HISTORICAL SYNTAX.....	10
CHAPTER 2: HISTORY.....	22
2.0 INTRODUCTION.....	22
2.1 A SUMMARY OF CERTAIN CHANGES IN THE ENGLISH LANGUAGE	22
2.2 PREVIOUS APPROACHES TO THE DATA.....	32
CHAPTER 3: THE ENGLISH INDEFINITE ARTICLE AND NOUN PHRASE STRUCTURE	46
3.0 INTRODUCTION.....	46
3.1 FUNCTIONAL NODES WITHIN THE NOUN PHRASE.....	47
3.2 COUNT NOUNS AND NUMBER PHRASE	57
3.3 LEFTMOST NODES.....	58
3.4 THE INDEFINITE ARTICLE AS AN ELEMENT OF NUMP	63
3.5 CORRELATION WITH OTHER RESEARCH.....	66
3.6 SUMMARY	75
CHAPTER 4: EVIDENCE OF CHANGES IN NOUN PHRASE STRUCTURE ...	77
4.0 INTRODUCTION.....	77
4.1 CHANGES IN THE RELATIONSHIP OF NUMERAL AND NOUN.....	78

4.2 THE EMERGENCE OF THE INDEFINITE ARTICLE	83
4.3 THE EMERGENCE OF THE COUNT/NON-COUNT DISTINCTION	91
4.4 A/VAN IN GENERIC USE	99
4.5 THE SIGNIFICANCE OF THESE CHANGES	101
CHAPTER 5: THE DEFINITE ARTICLE	103
5.0 INTRODUCTION	103
5.1 THE FUNCTION OF THE DEFINITE ARTICLE	104
5.2 THE RISE OF THE DEFINITE ARTICLE	106
5.3 THE CATEGORY DP IN OLD ENGLISH	107
5.4 CORRELATIONS WITH OTHER RESEARCH	118
5.4 CONCLUSION	125
BIBLIOGRAPHY	127

LIST OF TABLES

1. Old English Demonstratives	28
2. Old English <i>An</i> 'one'	30
3. Old English Demonstrative and Adjective Declensions	113

LIST OF ABBREVIATIONS

Æ Coll. *Ælfric Colloquy*

ÆC Hom. *Homilies of Ælfric*

ASChron. *Anglo Saxon Chronicle*

Beo. *Beowulf*

BIHom. *Blickling Homilies*

Bo. *Boethius*

GD. *Bischof Wærferth*

Gen. *Genesis*

Hept. *Heptateuchus*

Jn. *John*

LS PurifMary. *Purification of Mary the Virgin*

Mk. *Mark*

Mt. *Matthew*

Or. *Orosius*

WSGosp. *West Saxon Gospels*

ACKNOWLEDGMENTS

The author wishes to express great appreciation to the members of the supervisory committee, who are kind gentlemen and excellent scholars. I am very grateful to Heles Contreras, Robert Stevick, and Joe Voyles for the patience, encouragement, and quality teaching they gave me. David Corina's flexibility and willingness to serve as graduate faculty representative made completion of this dissertation possible. I am also indebted to Perry Atterberry and to the Linguistic Ladies of UW/Microsoft: Alice Taff, Siri Tuttle, Lorna Rozelle, Maria Galvao, Kristin Denham, and Candace McKenna. I'm not sure I could have brought this project to completion without their encouragement and help.

DEDICATION

The author wishes to dedicate this dissertation to Will, Emily, and Jennifer.

INTRODUCTION

Establishing an adequate analysis of the structure of noun phrases is a challenging task. Much of the work done in the past few years in generative linguistics has focused attention on the structure of the verb phrase, but currently there is increased interest in learning about the noun phrase. This paper is a study of certain aspects of the structure of English noun phrases considered from both a synchronic and a diachronic perspective. The task is to provide an adequate theoretical description of the role of the indefinite and indefinite articles within the syntactic structure of the English noun phrase and to demonstrate that the description is compatible with what is known of the history of the English articles and the English noun phrase. This paper will not attempt to provide an account of the discourse role of the definite and indefinite articles or a description of their logical/semantic function.

The first sections of this paper provide background. Chapter one defines terms which will be used in the paper, states the theoretical framework for the syntactic analysis which will be presented, presents a defense of Historical syntax as an appropriate and useful field of endeavor, and describes one of the areas of debate in the field. I give my reasons for choosing the "dual base" approach in the debate between the "dual base" and the "structuralist" approaches.

Chapter two first gives a brief historical overview of the English noun phrase and of changes which occurred in the English noun phrase between Old and Middle English, with a particular focus on changes in the determiner system. I then summarize previous accounts of the rise of definite and indefinite articles in languages, within various theoretical frameworks.

After this background discussion in chapters one and two, I turn in chapter three to a proposed analysis of the role of the indefinite article in the syntax of the Modern English noun phrase. The core proposal I make is that the syntactic difference between count and non-count nouns in English is the result of a difference in the functional node structure of noun phrases headed by a count noun as opposed to a non-count noun. Count nouns are lexically marked to project a Number Phrase; non-count nouns never project a Number Phrase. I present evidence that the leftmost node of a phrase must be identifiable, and argue that *a/an* functions as the minimal marker of the presence of a Number Phrase within the structure of a noun phrase headed by a count noun when that Number Phrase is the leftmost node of the noun phrase.

In chapter four I then argue that this analysis is corroborated by the history of the indefinite article in English, as the indefinite article arose at the same time that other syntactic indications of the presence of a lexically encoded count/non-count distinction arose. This additional evidence of the rise of the

count/non-count is found in changes in case marking between numeral and noun and in changes in the collocation rules for nouns with words of quantity.

In chapter five I turn to the definite article and argue that its syntactic function is analogous to that of the indefinite in that it is the minimal marker of the presence of a functional node when that node is the leftmost node of a noun phrase. The definite article is the minimal marker of a Determiner Phrase, and the rise of the definite article is a surface manifestation of an underlying change in the structure of the noun phrase. While accepting two options, that its rise is the surface manifestation of the introduction of a DP node into English or that its rise is the surface manifestation of a change in the defining characteristic of the DP node, I conclude that the evidence for the later position is stronger.

CHAPTER 1: THEORETICAL FOUNDATIONS

1.0 INTRODUCTION

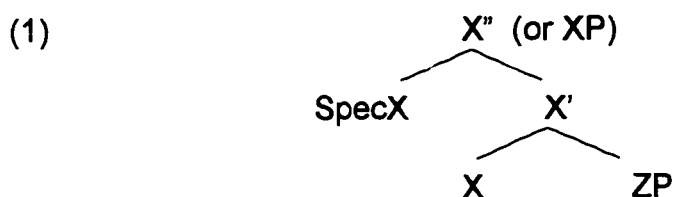
This chapter first summarizes the linguistic theory and assumptions upon which this dissertation is based, usually called Principles and Parameters, and then discusses some of the issues involved in studying historical changes in syntax. These issues include in particular the question whether historical syntax studies are relevant to full understanding of the human linguistic faculty, and the question whether individuals can acquire competing structures or analyses as part of their internalized grammar.

1.1 DEFINITIONS OF TERMS AND OUTLINE OF THEORY

This study follows the theoretical approach labeled Principles and Parameters. This approach argues that the rules of language are not language specific. Rather, there are principles, part of the language faculty of the human brain, which are followed in the language of all human beings and these principles place limitations on the differences which can occur between the languages of any two persons, even if those languages appear to be as different from each other as German and Japanese. The limited differences found between the core systems of languages are posited to be a matter of different

settings for a small number of parameters. Because any one principle will affect the system in multiple ways, and because principles interact, a changed setting in any one parameter could potentially result in many differences in the language then produced.

One of the principles which, it has been suggested, could be universal is that of X-bar structure. X-bar theory was developed in Stowell (1981) from concepts found in Chomsky (1970) and Jackendoff (1977) and has since been widely adopted. The X-bar approach argues that language is analyzable into hierarchical phrases of a consistent pattern, usually written:



X is the head element of the phrase. ZP is called the *complement*, is optional, and is another phrase of the XP form. A possible parameter of language is the directionality of the head/complement relationship. Some languages may be head initial and some head final. SpecX, also optional, stands for *specifier of X*. The places where a line branches are called nodes, so the node joining X and ZP is the X' node and the node joining X' and SpecX is the X'' node. X is said to project X', and both X' and X'' are projections of X. Phrases are, therefore, endocentric. There is debate over how many projections and how much iteration is possible within a phrase. I will assume for this paper

that X' nodes can iterate (indefinitely) and that X'' is the highest possible projection of X , closing off the projection. A head is labeled an X^0 and an X'' is labeled an X^{\max} or *maximal projection*.

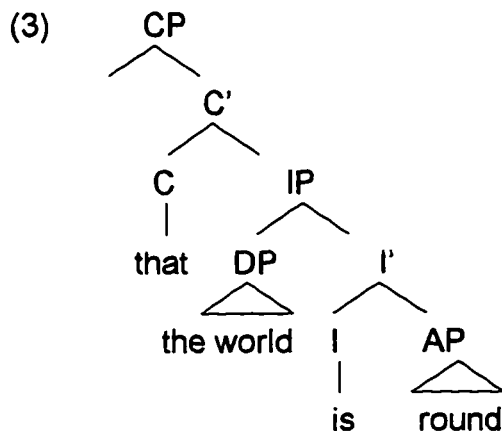
Phrases may be headed by either lexical elements or functional elements. From Chomsky (1970) the lexical categories available in Universal Grammar are taken to be noun, verb, adjective and preposition. The number and nature of the functional categories is a matter of current debate. This paper will make use of the widely accepted functional category Determiner proposed by Abney (1987). As is explained in chapter five, Abney argues that noun phrases should be analyzed as Determiner Phrases (DP's) which take Noun Phrases (NP's) as their complements. Elements frequently analyzed as determiners include demonstratives such as *this* or *these* and the definite article *the*. Other functional categories within the noun phrase have been suggested (e.g. Quantifier, Number) and will be discussed later in this paper. Within this paper, *noun phrase* will be used for pre-theoretical references to those phrases which have traditionally been called noun phrases in the study of language, and Noun Phrase (NP) and Determiner Phrase (DP) will be used for technical claims about the structure of noun phrases.

Other functional elements to which there is some reference in this paper include I (Inflection or Infl) and C (Complementizer or Comp). Infl is usually considered the head of a clause and takes a VP (Verb Phrase) as its

complement and the subject of the clause as its specifier. Comp is a position frequently occupied in English by the word *that*, as in the following examples:

- (2) a. That_{Comp} the world is round was not obvious to early sailors.
 b. We know that_{Comp} the world is round.

Using the convention that a triangle indicates that not all of the internal structure of a constituent has been drawn in, the noun clause subject of example (2a) can be drawn as follows

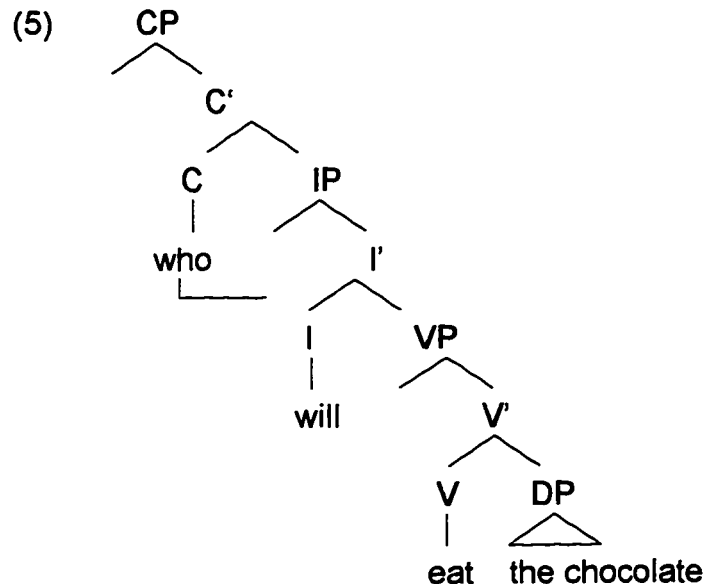


Comp takes a clause as its complement. It also provides the location for question words, called +Wh elements, which have been dislocated from the position in which they must be interpreted.

- (4) a. The cat ate a bird.
 b. The cat ate *what*?
 c. What did the cat eat?
 d. We know what the cat ate.

These +Wh elements are usually analyzed as being moved to the Specifier of Comp position. When the +Wh element is a subject element, a movement to Comp produces “string vacuous” movement, movement not overtly marked in the

phonetic form of the sentence. The sentence *Who will eat the chocolate?* can then be drawn as follows.



A recent research direction within the Principles and Parameters approach is a set of hypotheses usually labeled the Minimalist Program (Chomsky 1993, 1995). This program seeks to discover whether or not a theoretical approach which severely constrains the possibility of variation between languages can account for the observed data with both descriptive and explanatory adequacy. In particular, those using the minimalist approach are researching whether or not the known data can be accounted for while positing that there is only one computational system for deriving expressions from elements found in (selected from) the lexicon and that there are strong limitations on the kind of variation possible within the lexicon. This variation may

be limited to functional elements and to general properties of classes of lexical items (Chomsky, 1995).

In earlier approaches to generative theory, a four-level, Y-shaped model is postulated. Elements from the lexicon are viewed as first forming an internal level of representation, called D-structure, on the basis of certain lexical properties (specifically theta role assignment). The application of movement rules produces S-structure. S-structure feeds into two interpretive levels, PF, or phonological form, and LF, or logical form. The Minimalist Program is attempting to discover whether these levels of representation can be reduced to two, seemingly irreducible levels of representation, an abstract level PF which represents sound and interfaces with the articulatory-perceptual/ system and an abstract level LF which represents meaning and interfaces with the conceptual-intentional system. The computational system by which elements from the lexicon are combined into linguistic representations is posited to consist of two rules: Merge, which connects two lexical items into one, more complex, item; and Move, which takes an item from within such an already formed combination and connects it again with the larger unit. Movement is triggered by a requirement that uninterpretable abstract features be "checked off" at some point before reaching the LF and PF interpretation levels. At some point in the computation, a rule of Spell Out will apply, sending the structure formed at that point to PF while the computational process continues covertly to LF. Variation between

languages will show itself in features of lexical items which specify whether or not these items must be moved (checked off) before Spell Out in order to produce a fully interpretable representation at PF. As Epstein, Thráinsson and Zwart say, “The surprising aspect. . . is that the class of illegitimate objects at PF is not universalized but rather varies cross-linguistically. If there were universality, overt syntax would be largely, perhaps completely identical in all languages (Epstein, Thráinsson and Zwart 1996 p.22). The hope is that progress within the Minimalist Program may lead to description of a universal syntax.

Most of the work to be presented in this paper is compatible with the assumptions of both the narrower Minimalist program and the earlier, less constrained, forms of Principles and Parameters. In those instances where the predictions made by the Minimalist assumptions differ from those made by other forms of Principles and Parameters, I will discuss any conflict that arises.

1.2 RATIONALE FOR DOING HISTORICAL SYNTAX

Much of the linguistic study done in the nineteenth century was historical linguistics as researchers used the comparative method to trace relationships in the Indo-European family of languages. This research concentrated so frequently on sound changes, and historical linguistics became so strongly associated with the history of phonological change, that the two have sometimes

been assumed to be two names for one field of study. Morphological change has also been studied, but syntax has been much less a subject for historical investigation, for several reasons, some of which are summarized here.

First, several writers (Weinreich, Labov and Herzog, Kroch, Fontana) trace the decline of interest in diachronic study to the influence of Saussure, even though Saussure spent much of his life in diachronic work. When Saussure noted that a synchronic study of language structure is prerequisite to a diachronic study, that one cannot simply study changes without studying what systems the changes occur in or lead to, the emphasis in linguistic studies moved from diachronic to synchronic study. Most of the important linguistic work of this century has been concentrated on understanding the set of rules, shared by a community, that constitute a language (under one definition of language, at least).

Secondly, within generative approaches to grammar, two influences have been at work to reduce the attractiveness of diachronic study. One is the importance placed upon native speaker judgments, and particularly upon judgments that a construction is marginal or unacceptable. There are no native speakers of ancient idiom available to tell a researcher whether or not a particular sentence sounds "OK," "questionable," or "unacceptable" to the native ear. Although there may be no extant examples of a particular construction, the lack may be simply an accident of the historical record. Deprived of this basic

tool of the trade, many researchers have not wanted to venture into diachronic studies.

An additional influence against diachronic study within the generative approach is the idealization within which Chomsky chooses to work, "an ideal speaker-listener, in a completely homogenous speech community."

Linguistic theory is concerned primarily with an ideal speaker-listener, in a completely homogenous speech-community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance. (Chomsky, 1965, p.3)

This idealized construct has many advantages for synchronic study, omitting as it does the confusing array of registers, dialects, conversational strategies, code switchings, performance errors, and innovative practices that make it hard to systematize the full speech production of any individual. The idealization allows analysis of the rules of a single grammar of a language and has proved useful in synchronic study, allowing the researcher to study competence rather than performance. However, when it comes to language change, this idealization, which is not a statement of the way any actual person uses a language, may well have idealized away the very factors which are most important to the process.

Language change occurs within a speech community and is, therefore, not independent of actual speakers, and "a completely homogenous speech community" cannot contain innovative individuals. As a result, scholars working within the idealized construct are unlikely to consider the process of change or, when they do, come up with explanations adequate to the historical records.

In addition, this construct factors out a very significant part of a speaker's competence. Part of what differentiates the human language capacity from other systems, such as most computer programs, is that humans do not require perfect accuracy in the signal. Humans understand different accents, and neither syntactic error nor syntactic difference is necessarily a barrier to successful communication. An idealization which excludes this part of normal human linguistic competence is useful for important aspects of research, but cannot be the basis for a complete linguistic theory.

Recently there has been a return to interest in diachronic research, in part because the principles and parameters approach to syntactic study has created a larger role for comparative study. One of the basic motivating principles for linguistic research within the generative tradition has been the drive to account for language acquisition in children. Given the "poverty of the stimulus" and the intricate complexity of the language acquired in such short order by all normal children, some form of bio-preprogramming has been posited as making it possible for the child to learn all that the child learns as quickly as the child

learns it. Historical information about a language was not seen, at first, to have much usefulness in determining the nature of the language faculty because a child has no access to historical information. The Principles and Parameters approach has changed this because, if Universal Grammar includes principles which are true in all human languages, and if the possible parameters of language are discovered by noting the ways in which languages can differ, then comparative study is an extremely important avenue for analyzing the human linguistic faculty. Diachronic study is a form of cross-linguistic study, and the study of language change could be particularly fruitful in determining the possible parametric changes in language.

The study of language change in relation to language acquisition in particular has had great inherent interest to scholars working within the Principles and Parameters approach. Although various scholars throughout the centuries have pointed to issues of child language learning in language change, these issues have become central to the theories of generative grammarians doing diachronic work. Among them, Santorini (1989) has identified two different points of view which she labels the structuralist approach and the variationist approach.

The structuralist approach, developed well in the work of Lightfoot (1990, 1991) among others, sees change as occurring when a child, in response to differences in the triggering experiences, acquires a grammar different in some

particular way from that of his or her parents. Change moves through a linguistic community as more and more individuals acquire this new parameter setting. So while historically it may appear that the language gradually changes, there is no gradual change within the grammar of the individual. For expressive purposes (such as achieving a certain style or effect), speakers may over time use some structures available within their grammar more frequently than others, and this change in frequency may affect the triggering experiences of learners, as they encounter a linguistic environment richer with certain structures than the environment in which their parents learned the language. However, according to this point of view, "the spread of a new parameter setting through a speech community is typically manifested by categorically different usage on the part of different authors rather than by variation within the usage of individuals. . . ." (Lightfoot, 1991, p.162).

Linguists working within this structuralist approach often postulate adaptive rules to account for variation in the output of individuals. Disterheft states the position clearly:

When speakers finish the period of rule testing, they still produce output which they later recognize as defective in some way. They then apply Adaptive Rules to mask such output, making it acceptable according to local norms. Thus during Old English, the presence of Adaptive Rules in speakers' grammars would have

masked evidence of word order change at first. However, the increasing variation is due to the gradual lessening of Adaptive Rules. (Disterheft, 1993, p.95)

In the variationist approach, on the other hand, researchers (Kroch is a leading articulator), while not rejecting the possibility of the kind of reanalysis propounded by the structuralists, accept the double base hypothesis. They argue that rather than necessarily having categorically different usage, individual speakers are able to acquire two grammars and that these two grammars may remain in competition over time. The forms which are in competition within the language of a single individual may reflect differences which are quite abstract and rule governed, not simple lexical items. For example, Fontana (1993), in his analysis of Old Spanish clitics, argues that for a long time in the history of Spanish, patterns which belong to a "verb-second" grammar and patterns which are clearly not verb-second can be found in the output of single individuals. Kroch (1989a) argues that the differences between generations are much more in how often speakers use particular forms than in whether or not each generation's grammar allows its members to produce those forms

I will be following the variationist rather than the structuralist approach, on the judgment that it is a better description of the human language capability. Lightfoot himself has come to recognize "a kind of internal diglossia", although he maintains that the "the limits to this capacity are not understood" (Lightfoot,

1991, p.138). While the limits to this capacity may still be undefined, clearly they must extend at least to what is labeled bilingualism. Given an appropriate form of input, children can grow up bilingual. The distinction between dialect and language is not a sharp and easily defined one, and thus the same capacity that allows a child to be bilingual allows a child to be bi-dialectal. We cannot appeal to special circumstances to explain these capabilities within individuals, for while it may be true that only under particular circumstances do children grow up bilingual, there is no research to indicate that only certain children respond to those circumstances. The phenomena which have led to the terms parallel bilingualism, sequential bilingualism, receptive and dormant bilingualism, code-mixing, code switching, style variation, register differences, bi-dialectalism and diglossia are all indications that the human linguistic capacity includes the possibility of operating with more than one grammatical system. The more difficult task would be to prove that there exist individuals who speak only one register of one dialect of one language.

Another reason for accepting the variationist approach is that it accounts more naturally for certain types of obsolescence than does the structuralist approach. In the structuralist approach, obsolescence is a side effect of some underlying change in the grammar children acquire, based on the positive evidence in their experience. For example, Lightfoot 1991 uses obsolescence

as a diagnostic of underlying structural change, arguing that obsolescence cannot be the result of nongrammatical changes in a society:

A novel form may be introduced for expressive reasons, to focus attention on some part of the expression by virtue of the novelty of the form, but a form can hardly drop out of the language for expressive reasons or because of the influence of another language. At least that cannot be the direct cause. On the contrary, obsolescence must be due to a structural “knock-on” effect, a by-product of something else which was itself triggered by the kind of positive data that are generally available to children.

(Lightfoot, 1991 p.168)

However, if intraspeaker variation is a robust phenomenon of language, obsolescence will occur as a result of changes outside the grammar of the individual. Fundamentally what occurs is that speakers who have acquired two rules enter into a situation in which, for social reasons, they use only one. A child raised by such speakers acquires only the one rule, and the obsolescence is properly attributed to nongrammatical changes in the society. Lightfoot is wrong when he says that “a form can hardly drop out of the language for expressive reasons.” Many people have stopped using certain forms when accused of sounding stuffy, old-fashioned, or pedantic. Obsolescence in such cases occurs not as a by-product of some structural change in the language, but

simply as the result of adults' not passing on to the children one of the variations in the language which is part of the adults' competence.¹

Bell's (1984) work in audience design provides some additional support for this position. Bell argues that speakers match their style to their audience and that differences within the production of a single speaker can often be accounted for as the result of the influence of a particular audience to whom the utterance was directed. As Bell points out, this process is particularly obvious in cases of language death. As the circle of speakers becomes smaller and smaller, the forms used in interaction with strangers become rarer and rarer. Speakers eventually find themselves using only the style appropriate for intimates.

This process of "acquiring two styles and using only one" is not limited to situations of language death, however. Any number of social changes may make it probable that a speaker will stop using structures associated with

¹ I have experienced this in a small way within my own family. I acquired second person singular pronouns and verb forms and certain other structures, not from my own parents but from the Sunday School teachers who became part of my experience at a very young age and from use of the King James Bible from the time I learned to read until I married. I have available native speaker judgments on some areas of Early Modern English, and forms such as *Knowest thou not?* are as much a part of my linguistic competence as *Don't you know?*. However, because of a purely non-grammatical change in environment (a change of church denomination), my daughters have rarely heard me use the forms and were raised using contemporary translations of the Bible. They do not have control of the forms (and complained about it when introduced to Shakespeare).

speech to one type of audience. It is easy to imagine that egalitarian trends or a full revolution might make honorific structures obsolete or that a change in religion might make obsolete not only particular lexical items but whole styles associated with religious ceremonies or religious speech. A child raised by speakers in these changing circumstances learns only the variations in use at the time the child is acquiring the language.

Of particular interest may be the cultures which have “men’s speech” and “women’s speech.” In such societies, each individual clearly has a passive acquisition of both styles (men and women having no difficulty understanding each other), but uses only one style, the one appropriate to the speaker’s gender. Clearly, a non-linguistic event in the community, the rise of feminism for example, could lead speakers to stop using one variety of the language, resulting in obsolescence of forms for social reasons.

In each case, of course, it will be necessary to analyze the nature of the structures lost. The gradual obsolescence of a lexical item is not as interesting as the obsolescence of a rule governed structure, but there is no reason to assume that obsolescence is any more or less diagnostic of an underlying grammatical change than is innovation, and both can easily be accounted for within a variationist approach, positing as it does adults with multiple competencies.

An analysis of historical change, under the approach I follow in this dissertation, does not require the development of a single set of rules capable of accounting for the full production of a single individual. It is to be expected that at least some individuals will be simultaneously capable of producing structures compatible only with the "old" set of rules and structures compatible only with the "new" set of rules. The choice between the two structures may be based on social factors, rhetorical requirements, personal idiosyncrasies or any of a number of factors outside the scope of syntax. The role of syntactic study is to discover the underlying change in rules which makes possible the production of both the "old" form and the "new."

CHAPTER 2: HISTORY

2.0 INTRODUCTION

This chapter presents history of two types. First, in section 2.1, is a summary of a set of changes in English syntax, focusing in particular on changes within the noun phrase. Second, in section 2.2, is a history of a segment of English historical syntax, in particular a history of explanations of the rise of the definite and indefinite articles.

2.1 A SUMMARY OF CERTAIN CHANGES IN THE ENGLISH LANGUAGE

In most instances the drawing of a line between "old" and "middle" or "middle" and "modern" periods of a language is fairly arbitrary. Languages are at all times changing, and the accumulation of such changes eventually produces enough difference that modern speakers of a language read earlier versions of their language with the sense that they are reading a difficult to understand dialect or even "another language." (Anyone who has ever taught Shakespeare to high school students knows the problem.) In the case of English, however, there is a logical place to draw the line between Old and Middle English. The date usually chosen is 1100 AD because that date is at the center of both a gap in the manuscript evidence of the history of English and an interval during which English underwent dramatic changes.

The earliest texts we have in Old English begin at about 700 AD, although there are a few runic inscriptions from about the period of 450-480. When Alfred became king of Wessex, in 871, he encouraged the development of a literary tradition, a policy which resulted in a rather rich collection of texts still in existence. That tradition continued through the time of Ælfric (1000) whose work also resulted in a rich collection of manuscripts, and up until nearly 1100. The Battle of Hastings had a definitely negative impact on English literary pursuits. From then on, there is a dearth of vernacular English manuscripts up until about 1300, and although some writing from the 1200's survives, such as Layamon's *Brut* and the *Ormulum*, written records of the language during this period are quite limited. The date 1100 marks the beginning of this manuscript gap and is a logical place to draw the line between Old and Middle English.

It is not only the gap in the manuscript evidence which makes 1100 the logical dividing point, however. The English language recorded before this gap in the manuscript record is quite different from the English recorded after it, and these changes in the language are the true reason for making a distinction between Old and Middle English. A speaker of Modern English will find even late Middle English, the language of Chaucer, challenging to interpret and full of new vocabulary, but will not find that the reading of Middle English requires the learning of many new syntax rules, verb conjugations, or other paradigms; learning to read Old English does. Speakers of Modern English definitely feel

that they are looking at a "foreign language" when they look at Old English, and they require courses in reading Old English before they can decipher the texts. Taken together, the changes in the language which occurred between Old and Middle English (summarized below) create a great difference in the accessibility of the syntax to the modern reader.

Some scholars have drawn the line at 1154, the last entry in the Peterborough Chronicle, the longest running of the Anglo-Saxon Chronicles. There is evidence, however, that the last writer in the Peterborough Chronicle spoke a changed variety of English. Clark (1958) points to evidence of unstressed vowels being reduced to *ə* and of significant changes in morphology. The new marker of the plural of nouns, *-s*, is used nearly uniformly, and the innovative *-s* genitive marker for nouns of any (former) grammatical gender or class appears in many instances. The distinction between accusative and dative morphology has collapsed in most environments. These are all features of Middle rather than Old English. Clark also notes that there is evidence that the final scribe of the Chronicle may have been making a conscious attempt to correct some of his own usage to the standards of Old West Saxon English. He regularly uses *se* rather than *þe* for the nominative singular demonstrative, a conservative use. However, he also sometimes uses *se* for what would be in Old English unstressed *þa* or *þam*, suggesting that he is being hypercorrect, substituting *se* for what has become in his dialect the undifferentiated use of *þe*.

These and other variations in word forms suggest that the classic Old English word forms were not this scribe's day to day language, and as a result, many scholars draw the line between Old and Middle English fifty years earlier, at 1100. Choosing 1100 or 1150 is not a matter of real consequence; both dates are "in the gap."

The contrast between the language recorded in manuscripts from the end of the Old English period and that recorded in the early years of the Middle English period is quite unmistakable, but presumably the language itself did not change as suddenly and dramatically as the written records did. The manuscripts written before 1100 are for the most part in West Saxon while the records of Middle English center farther to the north. It is a little as if the records closed on people speaking English in Texas and opened again on people speaking English in Maine; if we could compare writings of people from the same region, we might find some of the changes less dramatic than they seem in the texts we now have. And as written language tends to be more formal and more conservative than colloquial language, changes may have begun earlier than is reflected in the manuscripts. Nonetheless, there is a clear and substantial difference between Old English and Middle English, and that change occurred in a relatively and unusually short time. [Stevick (p.c.) describes it as from predecessor of grandparent to successor of grandchild, or in the space of three to five generations.]

Some of the major changes between Old and Middle English were in the verb phrase and in the underlying order of the sentence elements. It is changes within the noun phrase, however, that are important to the analysis presented in this dissertation, and these changes within the noun phrase from Old to Middle English can be summarized as follows.

First, Old English nouns had morphological gender and case marking. Nouns, pronouns, demonstratives, interrogatives, and adjectives were inflected for nominative, genitive, dative and accusative case, with some remnants of an earlier instrumental case still remaining in the demonstratives. Pronouns, demonstratives, and adjectives were marked for number (singular and plural, with a third category, dual, in the pronoun system) and for what is traditionally called gender (masculine, feminine and neuter). The questions words (+Wh elements) had two genders (masculine/feminine vs. neuter). Adjectives had two sets of inflections for case, gender and number, usually labeled strong and weak, with masculine, feminine, and neuter singular and plural forms in both the strong and weak sets. As a general principle, the weak forms were used after determiners and before nouns. Except for some continued case, number, and gender distinctions in the pronouns, these systems all quickly disappeared with the end of Old English..

Furthermore, Old English adjectives could be used substantively, so that in Old English it was possible to say "I saw poor standing there" with the

meaning 'I saw a poor person standing there,' a use of adjectives which also disappeared in early Middle English.

- (1) a. *twegen landes menn and an ælpeodig* (ÆCHom II 26:20)
two men of the land and one foreign
- b. *Hi læddon him ænne deafne ond dumbne ond hine bædon þæt he*
his hand him on sette (Mk WS Gosp. 7.32)
They brought to him a certain deaf and dumb (person) and urged
him that he set his hand on him
- c. *þa sæton twegen blinde wip ðone weg* (Mt WS Gosp. 20.30)
there sat two blind (men) on the way

While Old English had genitive case, it did not have the possessive *s* (spelled 's), an element which arose in Middle English from the (masculine and neuter) genitive singular ending *-es*. Nor did Old English have the Middle or Modern English possessive pronouns or possessive adjectives. Old English did have genitive inflections for the personal pronouns, and the first and second person forms—*min*, *þin* (singular), *uncer*, *incer* (dual), *ure*, *eower* (plural)—and the rare third person *sin* were sometimes in turn inflected for other cases. The third person forms *his* (masc), *hire* (fem), *hira* (plural), were not.

In addition, in the issue key to this dissertation, the entire system for the expression of definiteness/indefiniteness differed from Old English to Middle English. Old English contained elements to which the Middle and Modern English definite and indefinite articles can be traced, at least phonologically, but the Old English elements did not function as definite and indefinite articles.

Old English contained two complete paradigms of demonstratives, the *se* paradigm and the *þes* paradigm. As can be seen in the following table, these paradigms, while containing some ambiguous elements, show morphological inflection for case, gender, and number.

Table 1. Old English Demonstratives

	masculine	feminine	neuter	plural
Nominative	se	seo	þæt	þa
Genitive	þæs	þære	þæs	þara
Dative	þæm	þære	þæm	þæm
Accusative	þone	þa	þæt	þa
Instrumental	þy	þære	þy	þæs
Nominative	þes	þeos	þis	þas
Genitive	þisses	þisse(re)	þisses	þissa
Dative	þissum	þisse(re)	þissum	þissum
Accusative	þisne	þas	þis	þas
Instrumental	þys	þisse(re)	þys	þissum

In demonstrative use, the *se* and *þes* paradigms are sometimes parallel to *that* and *this*, though their use in discourse follows style rules different from those of Modern English and the *þes* paradigm is used far less frequently than the *se* forms. While the *þes* paradigm was solely demonstrative, the *se* paradigm had, in addition, multiple functions, making its analysis particularly interesting and difficult. Its members sometimes served as relative pronouns, and *þæt*, a member of the paradigm, is at least phonologically identical with a complementizer *þæt*. Both uses are illustrated below.

- (2) Ac we cweðað þærtogeanes þæt God is Ælmihtig and mæg eal þæt
 he wile (ÆCHom I 236.8)
 But we say in reply that God is almighty and able to do anything that
 he wills

With some frequency, it is possible to translate members of the *se* paradigm with *the*; however, this is a comment upon the nature of Modern English, not upon the syntax of Old English. As Quirk (1957) put it, “The existence of a ‘definite article’ in OE is a vexed question, but it seems to be one which has been raised largely by our desire to impose upon OE a terminology familiar in and suitable for Mod.E.” (Quirk 1957, p.70). The *se* and *þes* paradigms, whatever they may be, are not definite articles.

Just as the *se* and *þes* paradigms are not equivalents of *the*, Old English *an* is not equivalent to the indefinite article *a/an*. Old English *an* is the word for the numeral ‘one’ and its use will be outlined in some detail in section 4.2. The forms of *an* are shown in the following table.

Table 2. Old English *An* 'one'

"Strong"				
singular				
	masculine	feminine	neuter	
Nominative	an	an	an	
Genitive	anes	anre	anes	
Dative	anum	anre	anum	
Accusative	anne	ane	an	
plural				
Nominative	ane	ane, ana	an, ane	
Genitive	anra	anra	anra	
Dative	anum	anum	anum	
Accusative	ane	ane, ana	an, ane	
"Weak"				
singular				
	masculine	feminine	neuter	
Nominative	ana	ane	ane	
Genitive	anan	anan	anan	
Dative	anan	anan	anan	
Accusative	anan	anan	ane	
plural				
Nominative	anan	anan	anan	
Genitive	anra, anena	anra, anena	anra, anena	
Dative	anum	anum	anum	
Accusative	anan	anan	anan	

Nouns in Old English very often appear with a determiner-like or article-like element of one form or another, but can, and very frequently do, appear "bare" in places where Middle or Modern English would require a determiner or the indefinite article. At other times, Old English adds a demonstrative when it would not be used in Modern English. The following examples demonstrate the point.

- (3) a. Wel wat gehwa þæt cyning hæfð maran mihte (ÆC Hom I, 128.19)
Everyone well knows that a king has more might
- b. On frymde wæs word and þæt word wæs mid Gode and God wæs þæt
word (Jn WS Gosp. 1.1)
In the beginning was the word and the word was with God and the
word was God
- c. Weorod eall aras (Beo 3030)
The band all arose
- d. God geswefode ðone Adam (ÆC Hom I, 1 14.19)
God caused Adam to sleep
- e. Drihten on rode mid deape wæs geswefod (ÆC Hom II, 14.1)
the Lord was put to sleep by death on the (a) cross

While Old English did not have *the* or *a/an*, these forms appear, nearly completely full-blown, in the opening years of Middle English. There are some examples of *tho* as a lingering plural form for *the* in the Middle English period, and the forms for *a/an* have some continued connection to the word *one*, but by the evolutionary standards of language change, this change is as sudden and complete a change as one is likely to find. Before 1100, English used sets of inflected forms marked for gender and number, forms sometimes appearing in places which in Modern English translations require a definite or indefinite article. These elements themselves are not, however, equivalent to definite and indefinite articles. After 1100, records show speakers using *the* and *a/an*, and using them in ways consistent with modern usage.

Again, some of the apparent suddenness of the change may be an artifact of the texts, and it is true that some dialects preserved various elements of the Old English forms much longer than others. But however it is considered,

changes between Old and Middle English in the way English expressed definite/indefinite were both swift and substantial.

2.2 PREVIOUS APPROACHES TO THE DATA

Within the generative linguistic paradigm, historical studies have not received the emphasis that other forms of study have. Even so, there has been, as Campbell (1993a) documents, significant interest in syntactic change throughout the history of linguistics. He outlines several approaches to diachronic studies which have been, and are being, pursued. Some explanation of the development of definite and indefinite articles has been given in nearly all of these approaches.

Some approaches work from the premise that grammatical structures exist for communicative purposes and, therefore, develop to meet communicative needs. This principle has been used to explain the rise of the definite and indefinite articles in English. Hewson (1972) argues that articles meet a “practical need” in the evolution of languages “for a morpheme to counteract the drift, within the system of the noun, towards a greater generalization.” He argues that this drift is shown in the history of Indo-European languages when cases and declensions are lost “concomitant with the development of a greater range of abstract expressions” (Hewson, 1972, p.14). Accepting this explanation, however, does require accepting the assumption that languages differ in their capacity for abstract expression, an assumption that not all,

including this author, are willing to make. There are, after all, languages such as Japanese which have no article system at all, yet which seem to allow a full range of abstract expression.

Others approach historical change in language by looking first at external factors, including borrowing and second language learning. Again, Campbell notes that as early as 1761 Adam Smith suggested that morphological case markings are lost through language contact, on the grounds that adult second language learners have trouble mastering case forms. Many linguists have resisted the notion of syntactic borrowing, but substantial cases have been documented. (See Campbell 1993b for a listing of examples.)

Indeed, borrowing has been proposed as the source of the definite articles in at least some languages. Levin (1992) posits that Greek borrowed the definite article from Egyptian and that Romance acquired it under the influence of Germanic. Levin does not, however, provide specific data to substantiate his claim, even though the general resistance to claims of syntactic borrowing would seem to make such evidence necessary. A search of the literature has not produced any record of claims that the definite and indefinite articles entered English through borrowing.

In discussions of the influence of external factors, the question of what, other than borrowing, constitutes an "external" factor depends, of course, on what one defines as the internal core of a language. To some, only those

aspects of language which are internal to the grammar, being governed by a genetically determined language faculty, are internal factors. Others define most aspects of a particular language as internal, including discourse strategies and social norms, and define as external only elements such as language contact. Among these is Romaine, who argues for a socio-historical approach. She argues that there are times when "norms of speaking associated with different groups in the same community are crucial in providing an account of differentiation and change in the system" (1984, p.268) and that:

historical studies which do not take into account stylistic factors (or indeed any extralinguistic dimension which is observed to condition the rate of application of linguistic rules or the variable occurrence of linguistic features) run the risk of imputing dynamic qualities to situations, which . . . may well have exhibited stable variation over centuries. (Romaine, 1984, p.116)

Romaine's point is well taken. Changes which gave rise to the indefinite article in English may well have been conditioned by stylistic factors, and while we can be fairly sure that the presence or absence of articles is not a case of variation remaining stable over centuries, we do not know what social factors, such as the prestige of individual speakers or economic changes in the community, favored the adoption of these particular innovations. Historical syntax may be able to answer the questions of how best to analyze an

innovation syntactically and how to relate changes to principles of Universal Grammar or to principles of what Keller (1994) calls “phenomena of the third kind,” but such explanations are not a complete account of the historical process.

The most fully developed explanations of the rise of definite and indefinite articles have been done by scholars working within the framework of grammaticalization theory. While the term is generally held to have been first introduced in 1912 by Meillet, the concept was widely applied during the early years of historical linguistic research and continues to be the basis for the work of many current scholars, (e.g. Traugott, Givon, Heine, and Hopper). Meillet declared that there were only two sources for new grammatical forms; analogy, and the attribution of a grammatical character to a formerly autonomous word (Meillet, 1926, p.131). It is this second process which has been labeled grammaticalization.

Grammaticalization theory studies changes in the meaning and use of morphemes. From the history of such changes within languages and comparative data in the developmental paths taken by various morphemes, scholars working within this framework have inferred that there is a universal process by which grammatical morphemes develop from lexical morphemes. This process is often referred to as ‘bleaching,’ though other terms are also used. Characteristic to the process is phonological reduction concurrent with a

loss of some components of meaning and a generalization of contexts in which the morpheme is used (Bybee, Perkins and Pagliuca, 1994, p.6). The processes involved in change are seen as quite orderly. For example, they are nearly always unidirectional. Lexical morphemes become grammatical morphemes but rarely vice versa, and phonological elements deleted are not later re-added. Also, the lexical morphemes which enter into grammaticalization are not arbitrary, but rather predictable. Words for parts of the body, such as face or back, generalize to become words for spatial relationships; articles develop from distal demonstratives. This apparent predictability leads grammaticalization scholars to speak of “universal paths” (Bybee, Perkins, Pagliuca 1994) and “universal lexicalization processes” (Ferguson 1978).

Specific application of the grammaticalization approach to the definite article appears in Greenberg’s 1978 work on gender in nouns. Greenberg includes in gender all the systems usually called noun class systems and concludes that such systems grow out of the use of definite articles. The definite article, in turn, usually grows out of the use of a demonstrative.

The full cycle, as Greenberg sees it, involves three stages. A definite article arises from a demonstrative which is “bleached” over time of deixis. A deictic element becomes a definite article when it ceases to point to something in the location of utterance and comes to indicate simply that a noun is “identified,” in the discourse or otherwise. This definite article then may coexist

with the demonstrative as an unstressed form, or may be phonologically distinct but related to the demonstrative. Over time, in what Greenberg labels the Stage II article, the use of the definite article spreads to include use not only with definite nouns but also with nouns which are non-definite but specific.² In this stage, nouns will in most instances appear with the definite article, but there will be at least one construction in which they do not. The use or non-use of the article will generally be predictable by syntactic construction, rather than depend on a semantic contrast of definite/indefinite. In the final stage, Stage III articles, the contrast between use of a noun with and without an article is lost. Usually the use of the article is maintained in all contexts, and the element which was once an article becomes a nominal marker. In some cases the reverse happens, and the article disappears altogether.

According to Greenberg's theory, if the original deictic element (demonstrative) which eventually becomes a definite article is a classifying element, the resultant nominal element will be a gender marker on the noun. If, on the other hand, the original demonstrative is non-classifying, the resultant marker will be a simple nominative marker, and, Greenberg asserts, "Given the existence of classifying demonstratives, the whole process will unfold with

² In English, a *man* is specific in the sentence *The police are searching for a man* on the assumption that there is a particular man for whom the police are searching, but not specific in the sentence *She's looking for a man to marry*, again with the assumption that she does not have a particular individual yet in mind.

something close to inevitability” (Greenberg, 1978, p.78). The demonstratives themselves undergo a process of replacement, and the whole cycle can continue.

A similar interpretation of the rise of the indefinite article is developed by Givon (1981) in discussing what he asserts is “the seemingly universal process by which the numeral ‘one’ becomes a marker for singular-indefinite nouns” (p.35). According to his analysis, ‘one’ is a quantifier and as such labels a new element in a discourse as referential/existing. In addition, ‘one’ can be used contrastively and as such implies ‘one out of a group.’ Such use, therefore, introduces a new element as a member of a type. Givon argues that these two functions together are the requirements for introducing a referential/indefinite element into discourse, and as a result, many languages throughout the language families of the world show the development of a referential/indefinite marker from the word ‘one.’ He also argues that there is an implicational hierarchical scale through which the marker spreads to become eventually simply an indefinite marker, for elements both referential and nonreferential. Though Givon stated that more research was needed to “firm up” the scale, he suggested that points for the scale of indefinite article use go from object in modal or negative scope and indefinite objects, through generic subjects, to predicate nouns and objects in future scope.

Others too have discussed the development of the indefinite article within a grammaticalization perspective. Hopper and Martin (1987) treat the rise of the indefinite article as a change in discourse function. They see the history of *a/an* as a continuous movement from an element used as a referential presentative marker, overlapping in use with *sum*, to an element which has much less of a referential or presentative function. They see the Modern English *a/an* as an element whose meaning is largely textually dependent. Traugott, working within the same general approach, sees the history of *a/an* as a change in function, from numeral (“to designate an object as single”) to indefinite article (“to introduce fresh material to the hearer’s consciousness”) (Traugott, 1982, p.250).

These explanations of the rise of the definite and indefinite articles provide insight into the historical changes, but grammaticalization theory alone does not provide a complete explanation of the historical process. There are data which are not accounted for, and there are questions, coming from other theoretical points of view, which remain to be answered.

First, there are clearly points of applicability between the theories of grammaticalization and the history of the definite and indefinite articles in English. The definite article is traditionally said to have come from the demonstratives. At the very minimum, there is a phonological and positional connection between *the* and the historical demonstrative *se* and *þes* paradigms, and *a/an* is clearly connected to the Old English word *an*, ‘one’. The results of

these grammaticalization analyses of the history of the definite and indefinite articles confirm Thompson's (1992) comment that a major contribution of functionalism has been to demonstrate that language changes are not nearly as arbitrary as they might have seemed in a strictly formalist approach. Some of the claims made, however, do not seem to be borne out by the history of the English language.

First, if a process by which demonstratives become gender markers moves with something "close to" inevitability, English is one of the languages that demonstrates the process is not truly inevitable. Although Old English demonstratives did classify by gender, they have not, and will not, become gender markers on nouns; instead, gender disappeared from the language.

Turning to the indefinite article, Fischer (1992) notes that while, as Givón predicts, Old English uses of 'one' can be interpreted as referential and the Modern English *a/an* interpreted as a nonreferential indefinite article, the Middle English data do not at a first study show a consistent adherence to the hierarchical scale Givón proposes. It is reasonable to question the analysis because of this inconsistency with the historical data. The hierarchical scale which Givón proposes is arrived at by using data from Modern Street Hebrew for one end of the scale, data from Modern English for the other, and data from Modern Italian and Spanish for the mid sections. Unless one already believes that an historical path of grammaticalization exists, this evidence of evolution is

not thoroughly convincing. In addition, the suddenness of the rise of the indefinite article in English suggests that the process was not a long, evolutionary process.

In addition, while these grammaticalization explanations give an account of the uses of the indefinite article, they do not attempt to explain the ways in which the indefinite article is NOT used. Ignored in the discussions is the question of why only singular count nouns use an indefinite article. Mass nouns and plural count nouns must be introduced into discourse and can as easily as singular count nouns represent material fresh to the hearer. Plural nouns are surely just as often referential, and occur in negative scope, etc. as often, as singular nouns. Some accounting needs to be given of the fundamental principle of the indefinite article: it occurs only with singular count nouns. In chapter three I will present an analysis which gives provides such an account.

Grammaticalization does not address the question of what is occurring in the underlying grammar of individuals who use new patterns and in that of older speakers who do not. Such questions are central to the research of linguists in the generativist program while those working within the grammaticalization approach do not consider providing a description for any underlying change in a speaker's grammar related to the rise of the articles one of their goals. This represents a fundamental difference in assumptions and goals between a grammaticalization approach to historical syntax and the principles and

parameters approach upon which this paper is based. Bybee et al. can say “we regard ‘system’ or ‘structure’ to be epiphenomenal rather than basic to the nature of grammatical substance and exponence” and “rather than studying the ‘structure’ of grammatical expressions in a language, we advocate study of the way that grammatical meaning and expression are attained across languages as a way of understanding the inherent properties of natural language” (Bybee, Perkins and Pagliuca, 1994, p.22). This is quite different from Chomsky’s statement, “We should, so it appears, think of knowledge of language as a certain state of the mind/brain....furthermore, as a state of some distinguishable faculty of the mind--the language faculty--with its specific properties, structure, and organization, one ‘module’ of the mind” (Chomsky, 1986, p.12-13).

At times, the differences between a generativist and a grammaticalization approach to linguistics seem to be differences about priorities in the allocation of resources. Both types of study develop answers to interesting questions, but there is disagreement about what are the most important and most revealing questions. Keller, arguing that generative theory has limited itself too narrowly, says the limitation is “quite harmless, as long as the generativists do not have the majority in the scholars’ realm” (Keller, 1994, p.129). The differences are not just about priorities, however; they are also about defining what it is that is the legitimate focus of linguistic research.

If language is the genetically determined language faculty of the brain as it is developed in an individual in response to (early) life experiences (Chomsky's I-language), study of communication, discourse, and socio-historical change is of little importance. If instead, language is defined as an unplanned but structured system which arises as humans use their biological endowment to interact with one another (an invisible hand definition), study which tries to identify the nature of the biological endowment cannot be central. Scholars from each approach label the work of the other a study of epiphenomena, as in the statement from Bybee et. al. above or in Chomsky's statements, "There is something in your brain that corresponds to the grammar. . . . But there is nothing in the real world corresponding to language. . . . If you are talking about languages you are always talking about an epiphenomenon" (Chomsky 1982, p. 107-108).

As is so often true, however, it is possible that the discoveries made by scholars committed to these different types of definitions may eventually prove to be complementary. One researcher who has attempted to unify the insights gained through the two approaches is Roberts (1993). Roberts proposes that the grammaticalization process of "bleaching" can be interpreted within a generativist framework as a diachronic reanalysis. He argues that grammaticalization derives from diachronic reanalysis in a process in which lexical elements are reanalyzed as functional elements by children, who apply

the Least Effort Strategy while acquiring their first language. The Least Effort Strategy leads children, under certain circumstances, to analyze elements which in the parents' grammar are moved elements as base generated elements in their own grammars. A reanalysis may be part of the trigger for a change in a parameter setting, or it may itself be triggered by a parameter change.

Roberts' work is based on data from verb structures only and cannot be directly transferred to the data of grammaticalization in noun phrases. It is not immediately clear, for example, that reanalyzing a demonstrative as an article could involve a reduction in the number of links in a movement chain, the principle applied in the Least Effort Strategy. However, Roberts' work demonstrates that it is possible to interpret the data observed throughout the historical process and labeled grammaticalization by using the type of analysis developed in the generativist framework.

There is a great deal of work left to be done in integrating two bodies of linguistic research; one, the evidence of the nature of historical change in language systems and the other, the discoveries about the human language faculty developed within the generative linguistic research program. It may be that the two types of research need to continue along parallel tracks for some time into the future, but there is an increasing possibility that the two can support each other. Historical research, including grammaticalization research, provides evidence of the possible (parametric) differences in languages. Generative

linguistics provides a schema for analyzing the way changes in a community's language system become encoded in the human brain.

CHAPTER 3: THE ENGLISH INDEFINITE ARTICLE AND NOUN PHRASE STRUCTURE

3.0 INTRODUCTION

Achieving an adequate analysis of the structure of Modern English noun phrases has proven to be a challenging task. Among the many problems have been the difficulties of analyzing the relationships between the items traditionally labeled demonstratives, definite and indefinite articles, possessive adjectives, possessive pronouns, quantifiers, numerals and simple adjectives. The co-occurrence restrictions and ordering rules of these items are complex and filled with many idiosyncrasies.

Even the problems of determining which items are of a single category can be quite difficult. One of these problems, one which will be taken up in this dissertation, is determining whether or not there is a single category of "article." The prime reason for labeling *a/an* and *the* as items of a single category is that though either can occur directly before a noun, they cannot co-occur, suggesting that they are items of a single class which are in complementary distribution. However, as Perlmutter (1970) pointed out, *a/an* has the same kind of co-occurrence restrictions with, and semantic equivalences to, an unstressed form of *one*. *The* and *one* are not of the same category and can freely co-occur. In

which position does *a/an* occur? Or does it occupy some position uniquely its own, perhaps as some kind of quantifier? Answering these questions requires an analysis of the structure of the entire noun phrase. In this chapter I will present evidence that although *a/an* is not an unstressed form of the numeral *one*, it occupies the same node as the numeral. I will argue that the indefinite article and the numerals are generated as head elements of a functional node, *Number*, which is separate from *Determiner* and from *Quantifier*. In section 3.1, I survey several proposed analyses of functional nodes within the noun. In section 3.2, I present my own proposal: that the difference between a count and a non-count noun is that a count noun is lexically marked to project a *Number Phrase* and a non-count noun is not. In section 3.3, I argue that the leftmost node of a noun phrase must be identifiable. In section 3.4, I argue that the function of the indefinite article *a/an* is to make identifiable the *Number Phrase* projected by a count noun when that *Number Phrase* is the leftmost node. Finally, in section 3.5, I discuss some of the correlations between my proposal and research by other scholars.

3.1 FUNCTIONAL NODES WITHIN THE NOUN PHRASE

Within the conventions of X-bar syntax, numerous proposed structural descriptions of the noun phrase have been presented. Many of the complexities of the problem were laid out in Jackendoff 1977, using an early form of x-bar analysis which allowed a head Noun to project to the N⁰ level. Later work by

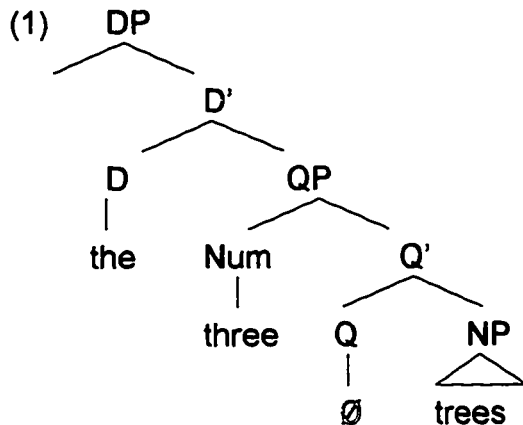
Brame (1982), Fukui and Speas (1986), and Abney (1987) led to the DP Hypothesis, the hypothesis that noun phrases are constructed of projections of at least two elements, a lexical item (a noun) and a functional item (a determiner). Under this hypothesis, Noun Phrases (NP's) are lexical complements of functional Determiner Phrases (DP's) just as Verb Phrases (VP's) are lexical complements of functional Inflection Phrases (IP's).

Within the DP Hypothesis, the number and nature of functional nodes inside a noun phrase has been the subject of substantial debate. Many analyses of the noun phrase have posited that all noun phrases are contained within a Determiner Phrase (e.g. Abney 1987, Ritter 1991), while others argue that some noun phrases are not (e.g. Lobeck 1995, Corver 1989). In addition, other functional nodes within the noun phrase have been proposed. These will be discussed in the following section.

3.1.1 LÖBEL'S ANALYSIS

Löbel's (1989) work on pseudopartitive constructions (e.g. three liters of wine) argues for two functional nodes within noun phrases. Working with German and English, she argues that all noun phrases are DP's and that there is always a second functional category Q. This Q is defined as a node which functions "to make the NP combinable with 'quantificational' expressions" (Löbel, 1989, p.147). By Löbel's analysis, a number is not a Q element; rather, Q exists as a node which makes it possible to combine a number with a noun. In an

expression such as *the three trees*, Q is empty morphologically and is made visible by the plural *s* on the noun. The tree looks like this:



Q is present in all noun phrases, and the rules are that a) it must be lexically filled (i.e., with a measure noun) when a non-count noun is combined with a numeral; b) it must be empty when a non-count noun is not combined with a numeral; c) it is allowed to be empty when a count noun with a plural marker is combined with a numeral, but this filled Q is licensed semantically, not syntactically required; and e) in the singular, the numeral *one* may be omitted before a Q because *one* is trivially identical to the singular.

Löbel's analysis may have some particularly relevant possibilities for interpreting German pseudopartitives, but there are reasons for suspecting that it is not the simplest and most productive analysis of the English noun phrase. The rules given are stipulative and rather complex. Numerals occupy a specifier of Q position, which means that in simple count expressions there is always a base generated specifier and an empty head. This analysis is able to account

for the English *of* in *three liters of wine* only by saying that it exists because the expression is on the border between partitive and simple count expressions.

The *of* comes from the similarity to *three liters of the wine* and *the* is omitted because of the similarity to simple count expressions such as *three apples*. In a formal, node-based analysis, there is no category “on the border between.”

Inserting and deleting elements on the basis of analogy, and without stating which position they occupy, should be avoided if possible.

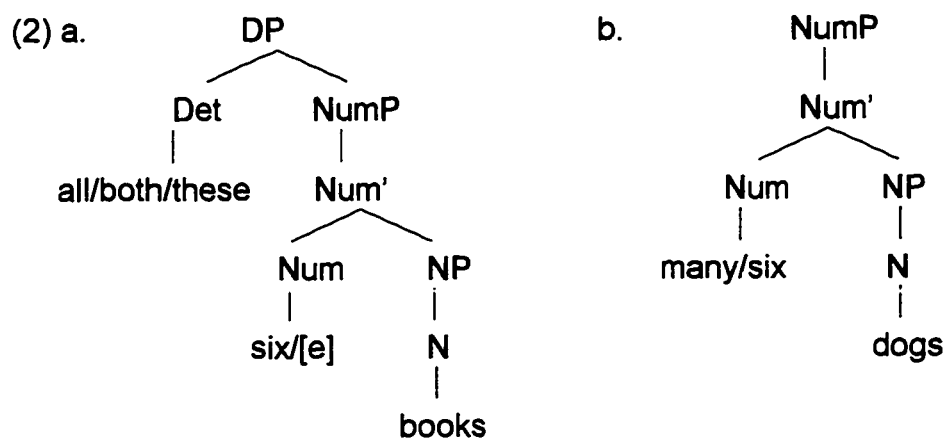
3.1.2 LOBECK'S ANALYSIS

Another proposal for the structure of noun phrases has been developed by Ritter (1991 and 1992) for Hebrew noun phrases and extended to English by Lobeck (1995).

Working within the DP Hypothesis and drawing on evidence from genitive constructions, Ritter argues that noun phrases in Modern Hebrew are contained within DP's. Differing from other analyses, however, Ritter's analysis claims that determiner heads do not select NP as their complement. Rather she argues that there is an intermediate phrase, labeled Number Phrase (NumP), between the DP and the NP in every Hebrew noun phrase. The head of this NumP carries the specification of the noun phrase for singular or plural, and the head of NP, the noun, carries the specification for gender.

Operating on the assumption that the rules of Universal Grammar should make structures found in one language at least potentially available in any

language, Lobeck (1995) attempts to extend Ritter's analysis of Modern Hebrew noun phrases to Modern English. Lobeck proposes that, in Modern English, D is the location for all definite elements and Num is the location for all indefinites. By her analysis, all definite noun phrases are DP's and contain a NumP. Indefinite noun phrases, on the other hand, are NumP's and are not contained within a DP. The structures look as follows:



Presumably because Lobeck is not discussing the role of quantifiers, there is no mention of structures such as *all the books* or *both the books* in which there is both a quantifier and a definite determiner, and it is not clear how such phrases are accounted for by this structure.

Lobeck uses this structure to argue that ellipsis within noun phrases (as within clauses and verb phrases) produces empty categories which should be analyzed as non-arbitrary, non-NP pronominals licensed and identified under government of a functional head specified for certain strong features. In section 5.4.2 I will return to this part of Lobeck's analysis; the proposals I develop in

sections 3.3 and 3.4 allow the possibility of some simplification of Lobeck's analysis.

3.1.3 GIUSTI'S ANALYSIS

Giusti (1991) too argues that there are two functional nodes in noun phrases. However, she argues that the structure of a noun phrase is [Q D N] rather than [D Q N] or [D Num N]. According to her analysis, the initial element of a noun phrase is a functional head *Quantifier* (Q) which selects either a DP or an NP as its complement, and it is the semantic properties of each quantifier which determine whether it will select a DP or an NP. Structures such as *all the boys* are generated because the quantifier *all* in this case selects a DP, a definite nominal. Structures such as *many boys* are generated because the quantifier *many* selects an NP, an indefinite nominal. This leaves unaccounted for structures such as *the many boys*.

To account for structures such as *the many boys*, Giusti proposes that some quantifiers --specifically *many*, *few*, and the numerals-- can also function as adjectives. According to her analysis, in the phrase *the many boys*, *many* is functioning not as a quantifier, but as an adjective. Her evidence for the adjectival nature of these elements comes from predication, bare quantifier structures, partitive prepositional phrases, ne-cliticization in Italian, and null determiners in Italian. I believe her evidence is sufficient to show that the words *many* and *few* and the numerals are generated as functional elements in a class

separate from quantifiers, but not sufficient to show that they are adjectives.

Giusti, by presenting evidence that *many* and *few* pattern with numerals which usually, but not always, pattern with adjectives, is presenting evidence that *many* and *few* could be analyzed as elements of the category Number, although she did not make use of Number as a possible functional category in her analysis.

Particularly useful evidence comes in her examples listed under the category “bare quantifiers” (Giusti 1991 p.444).

- (3)
- a. *I had already met the many you introduced me to last night
 - b. *I had already met the nice you introduced me to last night.
 - c. I have already met many.
 - d. *I have already met nice.

Giusti argues that the parallelism between (a) and (b) shows that *many* acts as an adjective when preceded by *the*, and that the contrast between (c) and (d) shows that *many* acts as a quantifier when not so preceded, under the assumption that in English a quantifier, but not an adjective, can license an empty complement. However, a numeral patterns with the same level of acceptability as *many*. The pattern suggests *many* may be better analyzed as a Num element.

- (4) I have already met two.

In a footnote, Giusti states that “It is not clear to me what it is that rules out *the many/ few/ three/ etc. ones* as opposed to *the nice ones*” (Giusti, 1991, 9.452), and drawing on a suggestion from Richard Kayne, suggests it may be because quantifiers can be used only as non-descriptive adjectives. An

alternate suggestion is that *many* and *few* pattern with numerals because they are elements of the same category, Num. Adding the functional category Number to the analysis of the noun phrase would account for Giusti's evidence that numerals, *many* and *few* pattern in ways similar to adjectives without necessitating the complication of having these elements analyzed sometimes as adjectives, sometimes as quantifiers.

3.1.4 KAWASHIMA'S ANALYSIS

As might be expected, there have now also arisen proposals which include all three functional nodes, Q, D and Num. Kawashima (1993) argues that the distribution of quantifiers and numeral classifiers in Japanese indicates that the maximal noun phrase is [Q D Num N]. He first argues that quantifiers and numeral classifiers in Japanese show different syntactic patterns and that the differences can be accounted for by interpreting numeral classifiers as elements of a separate category. Yielding to the nomenclature established by Ritter, he calls this separate category Num rather than NC (nominal classifier), noting that classifiers and numerals are inseparable in Japanese. Because a Japanese noun phrase may contain both a numeral classifier and a quantifier and because in such cases the noun classifier must come between the quantifier and the noun, Kawashima argues that the maximal structure of the noun phrase is [Q D Num N]. He further states that a QP always requires its complement to be definite. The English language data used for this claim are not clear, and in a

footnote Kawashima indicates that he is unwilling yet to make claims about such English structures as *all students*. Implicit in his analysis are the assumptions that the maximal structure of a noun phrase is specified by UG and, therefore, the same in all languages and that all quantifiers select the same syntactic category for their complement. This second assumption, at least, is one which may reasonably be questioned.

3.1.5 ANALYSIS ADOPTED FOR THIS PAPER

There are very many elements which may affect the collocational patterns of quantifiers, as each quantifier has multiple semantic properties which may govern aspects of its distribution. The present paper is addressed to the function and position of the indefinite article, rather than quantifiers, and so will not attempt to solve the many problems of quantifier distribution. However, some working position on the structure of the complete noun phrase must be adopted in order to discuss the role of the definite and indefinite articles.

While it is tempting to adopt the Lobeck position that definite quantifiers are generated in D and the indefinite quantifiers in Num, thus reducing the number of functional nodes within the noun phrase to two, there is evidence to suggest that a node for indefinite quantifiers separate from that for numerals is required. In English there are at least a few structures which combine both an indefinite quantifier and a numeral; for example:

- (5) The petition was signed by some forty people.
- (6) Choose any three books you like.

It could be argued that *some* is here used not as a quantifier but as an adjective meaning *approximately*, but it is less easy to dismiss the use of *any*. There is also evidence to suggest that quantifiers occupy a node separate from determiners, as in phrases such as:

- (7) all the books
- (8) all his many friends

The greatest difficulties come in determining the order of the D and Q nodes. The basic arguments for ordering Q before D are the existence of the constructions *all the books* and *both the books* and the evidence of floating quantifiers. Sportiche 1988 argues that constructions of the type *the boys have all left* arise because *the boys* moves to the left leaving the quantifier in its initial, base generated, position. Such an analysis is possible only if those quantifiers which “float” are generated in a position outside of DP. There is much further research necessary before the matter can be declared settled, particularly as the rules which determine which quantifiers appear before determiners or are allowed to float may be semantic as well as syntactic. (Carlson 1978 provides evidence of historical changes in the patterns.)

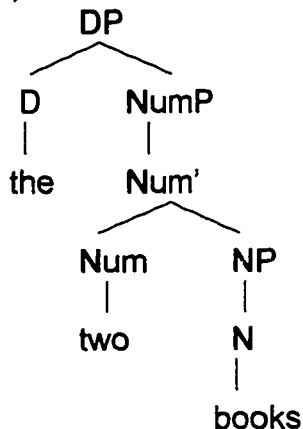
The best solution may be to adopt the position of Giusti that quantifiers are phrase initial and select different complements, based on their semantic

properties, and I shall proceed on that assumption. Although Giusti discusses only DP and NP as possible complements, I will argue in the following sections that this is too limited a choice. Adding the category NumP, under the proposal I present for analyzing count nouns, will better account for selectional restrictions among quantifiers.

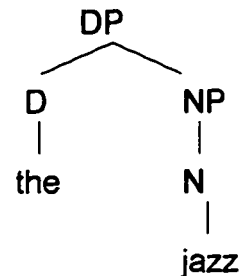
3.2 COUNT NOUNS AND NUMBER PHRASE

Neither Ritter nor Lobeck's work attempts to discuss any distinction between count and non-count nouns. However, using the assumptions of Ritter and Lobeck makes possible a simple and straightforward proposal for accounting for the syntactic differences between Modern English count and non-count nouns which I make here. The suggestion is that count nouns obligatorily project a NumP while non-count nouns do not. Structures are as follows:

(9) a.



b.



One immediate result of this proposal is that if in Modern English there is no NumP projected by a non-count noun, we have a simple and straightforward

syntactic description of why non-count nouns never appear with numerals, but count nouns do. There is no Number projection in a noun phrase headed by a non-count noun.

3.3 LEFTMOST NODES

Accepting this analysis of the structure of count nouns also points in the direction of an analysis of the syntactic role of the indefinite article *a/an*, but before presenting that analysis it will be necessary to first explore some evidence about rules applying to leftmost nodes in English. By the proposal presented here, every count noun will project an obligatory NumP. If we operate within the proposal that simple indefinite noun phrases are not enclosed in a DP, that NumP will be the leftmost node of the noun phrase. There is evidence that at least in English, the leftmost node must be filled. Several different types of arguments have been made, each leading to the same conclusion.

3.3.1 SUZUKI'S ANALYSIS

Within the Principles and Parameters approach, most common interpretations of the DP hypothesis have the leftmost node of a noun phrase always a DP. Earlier research has argued that when this DP is +definite, it must contain a +definite element; it cannot be empty. This was proposed by Suzuki (1988) and presented as the Definiteness Principle, defined as follows.

(10) The Definiteness Principle

- a. Definiteness Filter: a [+Definite] Determiner Phrase must have one [+Definite] element at S-structure.
- b. Definiteness-raising: every [+Definite] phrase must be raised to [+Definite]DP at LF.

Suzuki's analysis allows for the possibility that possessive elements are not generated as determiners, but rather raise to the Spec of D in order to satisfy the Definiteness Filter. The effect of the Definiteness Principle is that +definite DP's cannot be empty.

Suzuki noted parallels between Complementizer Phrase (CP), which is the position for raised WH elements, and DP. He noted that a +WH CP, like a +Definite DP, cannot be empty.

- (11) Both CP[+WH] and DP[+Definite] require one and only one overt [+WH] and [+Definite] element at S-structure respectively. In the case of [+WH], this condition is satisfied by a [+WH] complementizer like *if* and *whether*. If no [+WH] complementizer is present, an appropriate [+WH] element must be moved to the specifier position of the CP [+WH].

(Suzuki, 1988, p.95)

Accepting that there is string-vacuous movement in sentences such as

- (12) I know who won the prize.

Suzuki labeled the filter requiring a [+WH] element in a CP[+WH] the "WH-Filter" and looked for generalizations in movement rules which would capture the parallelism between CP and DP, leading to his more general statement:

(13) Conditions on A-bar Movement

- a. Γ -filter: a [+ γ]XP must have one [+ γ] element at S-structure, where γ is either WH or Definite, and X either C or D.
- b. Γ -raising: every [+ γ] phrase must be raised to [+ γ] XP at LF.

(Suzuki, 1988, p.98)

Condition (a) unites the WH-filter and the Definiteness filter of the Definiteness Principle into one filter.

Filters are not a totally satisfying mechanism of analysis, however, because while they may make an accurate descriptive generalization, they are not a statement of underlying principle. It would be helpful to find a principle that unites DP and CP, explaining why they, when marked positively for a defining feature, must contain an overt element. One shared characteristic is that these two phrasal nodes are, at least in most instances, the leftmost phrasal node of the noun phrase or clause in English.

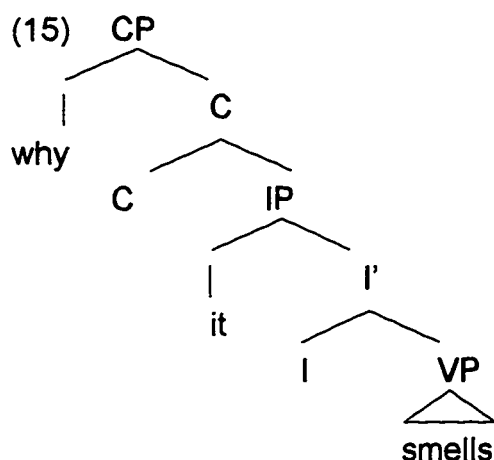
3.3.2 HAIDER'S ANALYSIS

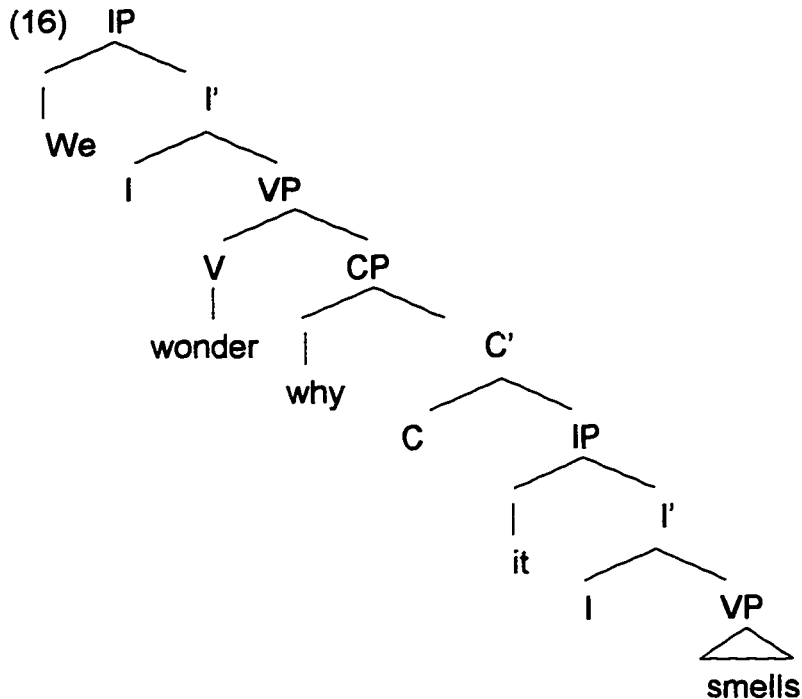
While Suzuki pursued the implications of a requirement for positive marking of a defining characteristic, other research suggests that the node may not be licensed at all if it is both empty and leftmost. Haider (1994) presents

evidence that certain leftmost head nodes cannot be empty. He extends Rizzi's (1986) proposal for the empty category known as *pro* to all 'base generated' empty categories (meaning that they are not chain links) with the following principle (p.190):

(14) A basic empty category must be formally licensed and identified.

In order to be formally licensed, an empty head must be in a projection selected by a governing head. In effect, this means that a functional head cannot be empty when it is the leftmost head of a non-embedded clause because an empty functional head can only be licensed by a governing head to its left. In the following trees, an empty head is allowed in the embedded clause but not in the non-embedded because there is no governing head to the left of the non-embedded clause to license the empty head.





Haider's examples and analysis are drawn only from clausal structures, but the principle as he states it would apply to noun phrases also

3.3.3 A MINIMALIST ANALYSIS

Another, currently very influential, theoretical approach emerging from within the Principles and Parameters model is the Minimalist Program. Based on current Chomsky proposals (1993, 1995), the Minimalist Program allows for the presence of positions filled by an empty category, a phonologically null feature or collection of features, but makes no allowance for an empty position (Marantz 1995 p.25). Unnecessary structure is never generated, and any position which is projected must be filled in some way. This theoretical approach obviously

leads to the conclusion that a leftmost node must be filled, though it does leave open the possibility that the node may be filled by a phonetically null element.

In summary, there may be different ways of coming to the conclusion that a leftmost phrase node cannot be empty, and there may be different types of evidence or argument used to reach that conclusion, but it is reasonable to think that allowing a vacuous leftmost phrasal node would produce a highly questionable analysis of a noun phrase.

3.4 THE INDEFINITE ARTICLE AS AN ELEMENT OF NUMP

Under the structure proposed in this paper, that count nouns obligatorily project a NumP and that DP is present only in definite noun phrases, the NumP will regularly be the leftmost node in indefinite noun phrases whose lexical head is a count noun. If the principle is that "the leftmost node must contain an overt element," what fills the NumP in an indefinite count noun?

There are three possibilities. First, a numeral will certainly fulfill the function and will also make clear the count noun status of the head noun. There is no question that the nouns in *eight books* or *twenty-nine papers* are count.

The second case is that of bare plurals, which present a more complicated picture. For bare plurals the tentative formulation of the principle "the left-most projection must contain an overt element" is inadequate. Plural count nouns are grammatical without an overt element in Num. For example:

(17) We saw elephants at the zoo.

(18) Diamonds are a girl's best friend.

The straightforward explanation is that this is an example of Emonds' Invisible Category Principle:

(19) Invisible Category Principle:

An obligatory closed category B (such as SP(X) or P) with a feature C may remain empty throughout a derivation if C is morphologically transparent in a phrasal sister of B. (Emonds 1985 p.227)

The tentative hypothesis can be revised from "the left-most projection must be overtly filled" to "the left-most projection must be identifiable." The morphological plural marking on count nouns in English allows NumP to remain empty because the presence of NumP is not invisible; it is morphologically transparent in a phrasal sister. The Invisible Category Principle allows elements which morphologically realize agreement to identify an obligatory closed category, and the assertion here is that NumP is an obligatory closed category projected by count nouns. The plural 's' marker makes it visible.

The third case is that of singular count nouns. Here the paradigm presents some interesting features.

- (20) a. I bought one book.
 b. I bought a book.
 c. *I bought book.

d. *I bought green book.

Singular count nouns cannot go “bare” and even an adjective is not enough clothing. This fact can be accounted for if count nouns project a NumP and if this node must be identifiable. The elements *one* or *a/an* fill the node and make it identifiable. The count feature of the head noun is not morphologically transparent in the singular form of the noun and cannot make identifiable the NumP. It is only the presence of *a/an* which makes the count noun status of the second sentence below visible.

(21) a. I bought coffee.

b. I bought a coffee.

We come now to my second proposal. The first was that count nouns are lexically marked to project a NumP. The second is that when there is no number (one) in the NumP position of a singular count noun, and that when NumP is the leftmost node of the noun phrase, *a/an* must be inserted as the minimal marker of the presence of the NumP, the leftmost node. Without this element, the noun phrase is deviant in structure because a count noun requires a NumP and a leftmost node must be marked.

If, however, the singular count noun is definite, it is contained within a DP and the DP is to the left of NumP. The leftmost node is the one that must be identifiable, and the rule requiring the marker *a/an* is not applicable. Because the presence of the NumP is not marked, the noun will not be identified as count

or non-count and ambiguity arises, as the following examples show. The indefinite noun phrases are unambiguous as to count/non-count meaning, but the definite noun phrase *the paper* is ambiguous.

(22) a. Indefinite

I need papers. count

I need a paper count

I need paper non-count

b. Definite

I need the papers. count

I need the paper. ambiguous, count or non-count

The function, then, of the indefinite article is to mark the presence of a NumP on a count noun, but it is required only when the NumP is the leftmost node of the noun phrase.

3.5 CORRELATION WITH OTHER RESEARCH

The proposals made in this dissertation, that count nouns are lexically marked to project a NumP and that the indefinite article is an element of NumP, correlates well with a number of research proposals previously presented in the literature. Specifically, it is compatible with suggestions which have been made about the specifier position of noun phrases, the relationship of the indefinite article to the word *one*, and the function of the indefinite article as a quantifier. These will be discussed in the following sections.

3.5.1 THE INDEFINITE ARTICLE AND NOUN SPECIFIER

The proposal presented here, that count nouns obligatorily project a NumP, is in fundamental agreement with the analysis proposed by Emonds (1987). There he says that in English count nouns require a Specifier (p.616). I am suggesting that the required closed category is not a specifier of the noun, but rather a Number Phrase. As well as making use of more recent understanding of the possibility of functional nodes within a noun phrase, this proposal is somewhat less stipulative than Emonds' original in that the requirement for a NumP is specifically related to an analysis of the syntactic structure of count noun phrases, not an arbitrary, idiosyncratic feature of the same.

3.5.2 THE INDEFINITE ARTICLE AND THE WORD *ONE*

A positive consequence of this interpretation of the indefinite article *a/an* is that it preserves the insights found in Perlmutter (1970) about the connections between *one* and *a*, while avoiding the problems raised by Perlmutter's suggestion that *a* is simply a phonologically reduced form of *one*.

Perlmutter's position was that *a/an* is not of the same category as the definite article *the*, but rather is solely an unstressed form of the word *one* and that Modern English includes a rule which obligatorily reduces *one* to *a/an* in unstressed positions and a rule which deletes *a/an* after the definite article. His support for his position includes the data that *a/an* cannot co-occur with *one* or

the, and the evidence of structures such as the following paradigm in which an unstressed *one* is unacceptable.

- (23) a. There are only two boys in the room, not five.
 b. There are only two boys in the room, not any girls.
 c. There is only one boy in the room, not five.
 d. *There is only one boy in the room, not any girls.
 e. There is only a boy in the room, not any girls.

Perlmutter's analysis fails to account for all the data, however. Thorne (1987) demonstrates that not all sentences with *a/an* are synonymous with sentences with *one*. In the following two sentences, the first causes the reader /listener to assume that there were other professors present, while the second does not (Thorne 1987, p.480).

- (24) a. One professor went to the lecture.
 (25) b. A professor went to the lecture.

Thorne argues that *one* denotes a class with one member and *a/an* denotes a member of a class. *One* is the marked form, and this information must be stated in two, separate, entries in the lexicon.

Additionally, Seppänen 1982, by providing counter examples to many of Perlmutter's examples, presents evidence that the distribution of *one* and *a/an* are not identical, and that syntactic differences between the two make it impossible to claim that they are, even at an underlying level, one element.

If *a/an*, as asserted here, marks the existence of a Number Phrase in the structure of the noun phrase, it will always be in the same position as the numeral *one*, but the two will never be simultaneously generated within a phrase. This accounts for Perlmutter's evidence that *one* and *a/an* always occupy the same node in a noun phrase and cannot co-occur. Furthermore, because *one* and *a* are not simply phonological (stressed and unstressed) variants of one element, it is not surprising that they behave differently in terms of syntactic distribution and semantic implicatures.

An explanation of the lack of co-occurrence of *a/an* and *one* which preserves the co-occurrence of *the* and *one* will be achieved in slightly different ways depending on the theoretical principles one chooses to adopt. One approach, the one I prefer, is to say that *a/an* is inserted to mark the presence of the NumP as a kind of dummy element, just as *of* has been inserted to mark the genitive relation within a noun phrase such as *the book of Kells*. In minimalist terms, this would mean that the phrase construction process has access to the lexicon, and that the element *a/an* is inserted (before spell out) into the NumP when it is the leftmost node and empty. If one rejects the possibility of dummy elements or access to the lexicon, one must say that the failure of *a/an* and *the* to co-occur exists not because they are never both generated, but because there is a semantic clash between them: *the* marks definite and *a/an* marks indefinite. Rather than generating an element and then deleting it, as Perlmutter proposed,

the syntax does not generate the element or does not tolerate the semantic clash.

3.5.3 NUMP AND EXTENDED PROJECTIONS

In addition, the structural analysis of count noun phrases proposed here is compatible with the concept of Extended Projections developed in Grimshaw 1991, though some small adjustments in the theory will be needed.

In Extended Projections, Grimshaw makes use of the functional/lexical distinction in providing a theoretical mechanism by which a DP is both a projection of a head D and a projection of a head N. Determiner and Noun are identified as having the same categorial features (which are [-V, +N] in the feature system of Chomsky 1970 just as Verb and Inflection have the same categorial features [+V, -N], and those items which have the same categorial features form extended projections. N is an extended head of DP. In addition, heads have F values which serve to differentiate their lexical and functional status. Lexical elements are level F^0 and functional elements are F^1 , F^2 , etc. The ordering of elements within an extended projection is achieved by the requirement that F levels differ by no more than one. For example, if DP is level F^1 , it will take as its complement only an F^0 phrase, and because DP has the categorial features [-V, +N], that F^0 phrase will have to be an NP.

One implication of Grimshaw's extended projection proposal is that features of the extended head determine features of the entire extended

projection. If the extended head is a noun, the entire extended projection is +N. Only those functional categories which are also +N (or perhaps in some cases unspecified for N) are allowable. The nature of the lexical head determines which functional heads are allowed within the extended projection. The proposal that count nouns are lexically marked to project a NumP is quite consistent with this approach. It is a feature of the lexical head which determines the nature of the functional heads within the extended projection.

The question which must next be taken up is the matter of ordering among the functional nodes. One of the most appealing features of the theory of extended projections is that it eliminates the need to cite selection as the basic process by which functional heads are matched with complements. As Grimshaw notes, selection is not a statement of principle; rather, it is way of describing any pairing that occurs. D selects NP, C selects IP, and I selects VP, but there is no principle requiring that such be the case. Within the theory of extended projections, there is a reason why C is not paired with NP. They do not share the appropriate features. There is also a theory based reason why C is ordered above I which is ordered above V (and Grimshaw notes that this ordering is stable both intra- and cross- linguistically). Each head has an F value and the F values can differ by no more than one. If C is F^2 and I is F^1 and V is F^0 , they must always be ordered [CIV].

Difficulties arise, however, when attention turns to the possibility of optional functional heads. How do such heads find their place within the system of F-levels? The one optional head discussed by Grimshaw is Negative Phrase (NegP). She offers two solutions. One is that the Neg position is always present but is sometimes empty or filled with some silent element [such as Aff (Laka 1990)]. The other solution is to say that Neg has particular properties which make it invisible to higher heads, as higher heads are never sensitive to its presence.

Positing the existence of a NumP in the structure of count noun phrases requires a different solution. Among projections which share the feature +N, there will be some which also share the feature +count, and only these projections contain a functional node, NumP. This node cannot be labeled optional, but neither is it required in all projections which are +N. Additionally, this node cannot be truly "invisible," as some quantifiers are sensitive to the count/non-count distinction. This is a possibility which Grimshaw's discussion of extended projections does not take up.

The problem is that if NumP has an F-value one higher than the F value of NP, there will arise violations of the requirement that F-values differ by no more than one. In the phrase *the three books*, *book*, in NP, has an F value of 0, *three*, in NumP, has an F value of 1 and *the*, in DP, has an F value of 2. In the phrase *the jazz*, however, *jazz*, in NP, again has an F value of 0 but *the* in DP

has an F value of 2, a clear violation of the “differ by no more than one” requirement. The system needs some way of making both NP and NumP available to D.

The solution can be found in the mechanics of the numbering system need not be absolute, but rather relative. The fundamental hypothesis of extended projections, after all, is that “a functional category is a relational entity” (Grimshaw, 1991, p.3). If the lowest possible structure is labeled *base*, or *minimum*, and each succeeding level *base+1*, *base +2*, etc., the ordering of elements remains the same; this system, however, allows for the possibility of differences in the structure which constitutes *base*. The base structure of a non-count noun is an NP, and the base structure of a count-noun is NumP+NP. Such differences in what constitutes *base* must not be admitted ad hoc, of course, and there needs to be a principled method of determining what constitutes *base*. The principle is that the minimum syntactic structure required by the head lexical element is the *base*.

The theory of extended projections also makes possible a way of stating exactly what is meant by the “leftmost node” in the earlier discussion of the requirement that the leftmost node be identifiable. A “leftmost node” is the leftmost node of an extended projection, either nominal or verbal.

In extended projection theory, the F levels allow lower projections to occur without higher ones, but require the presence of all intermediate projections

between the highest one present and the lowest. This analysis gives rise to the speculation that the requirement that the leftmost node be identifiable may be a processing requirement; a requirement that there be some signal of where the projection begins, while the presence of the intermediate nodes can be deduced from the structure of the tree.

3.5.4 THE INDEFINITE ARTICLE AND SEMANTIC INTERPRETATION

The syntactic analysis of *a/an* presented here is also compatible with at least some theories of semantic interpretation. Heim (1982, 1983) has argued that *a/an* is not a quantifier, in the approach she labels file change semantics and suggests that *a/an* is semantically vacuous in at least many contexts. If *a/an* is simply a marker of the count noun nature of the head noun, it is not surprising that it may not add anything to the semantic interpretation of the noun phrase. Within a minimalist interpretation, *a/an*, as a dummy element, would be very similar to expletive *there* in clauses. Within the Minimalist Program expletive *there* is analyzed as a pure expletive, having no semantic features and only one formal feature, its category. The one formal feature of *there* (its category, D) is checked before spell-out, and *there* is, as a result, invisible at Logical Form (Chomsky, 1995). *A/an* too could be seen as an element with only one feature (it's category, *+count*). If Heim is correct and *a/an* plays no role in logical interpretation at LF, *a/an* too is checked before LF.

3.6 SUMMARY

There are many puzzles to be worked out before we have a complete and satisfactory analysis of the structure of the English noun phrase. One important step in achieving such an analysis is providing an account of the difference between count and non-count nouns. That distinction is crucial in accounting for many facts about English noun phrases, including the observations that only count nouns may be pluralized, that some quantifiers select only count nouns, others only non-count, that only plural count nouns can take a plural verb, and that only count nouns can be paired with numerals. The important syntactic differences between the count and non-count noun classes can be made explicit by positing that count nouns, and only count nouns, project a NumP. The differences between the two classes are the result of a difference in the functional nodes within the noun phrase structure.

There is evidence, within many theoretical frameworks, that the leftmost node of a phrase cannot be empty. The presence of the indefinite article before indefinite singular count nouns in English can be accounted for by an analysis which posits that *a/an* is the minimal marker of the presence of a NumP when NumP is the leftmost node of a noun phrase. When the noun is a plural count noun, the presence of the NumP is marked, following Emonds Invisible Category Principle, by the morphologically visible plural. When the noun is non-count, there is no NumP present, so there is of course, no sign of the presence of a

NumP. When a noun phrase is definite, DP, not NumP, is the leftmost node, and the indefinite article *a/an* will not occur

CHAPTER 4: EVIDENCE OF CHANGES IN NOUN PHRASE STRUCTURE

4.0 INTRODUCTION

Historically, the structure of the English noun phrase has undergone change. It is the purpose of this chapter to show that a collection of changes in the English noun phrase (including the emergence of the indefinite article) which occurred in the transition period from Old to Middle English can be accounted for by positing that speakers at that time began to utilize a rule by which nouns are necessarily classified as count (projecting a NumP) or non-count (not projecting a NumP).

The evidence of the emergence of this rule is of three types. First there is evidence that the syntactic relationship of numeral and noun changed in the transition from Old to Middle English. This change can be accounted for by positing that numerals came to be analyzed as elements of a functional category, Number. Second, there is the evidence of a change in the use of *an*. If the function of the indefinite article in English is to mark the presence of a NumP on count nouns, then we should find the indefinite article emerging at the same time as the changed relationship of numeral to noun emerges. We should not find the indefinite article in Old English, and we don't.. Third, there is other evidence of the emergence of the count/non-count distinction, in particular as it

is marked by changes in collocation rules. In section 4.1, I discuss changes in the relationship of numeral and noun. In section 4.2, I discuss the emergence of the indefinite article. In section 4.3, I discuss other evidence of the emergence of the count/non-count distinction. In section 4.4, I discuss, and reject, an argument for treating the rise of *a/an* as merely a spread in function of Old English *an*.

4.1 CHANGES IN THE RELATIONSHIP OF NUMERAL AND NOUN

One of the significant changes in the syntax of English between the Old and Middle periods is in the relationship between numeral and noun. Old English syntax marked the relationship between a numeral and a noun differently from the way the relationship is marked in Modern English. In Old English, case morphology makes clear that there were two possible relationships between a numeral and a noun. First, a number might modify the noun. In this case, the inflection on the number agrees with the noun, both noun and number bearing the case that is required by the role of the noun phrase in the clause. This is the less frequent pattern with numbers above nineteen (Mitchell, 1985, p.217). For example:

- (1) a. *binnan þæm_{dat} þrim_{dat} gearum_{dat}* (Or 128.25)
 within those three years
- b. *of þrim_{dat} folcum_{dat}* (Bede 52.2)
 of three nations

The second, and much more common, pattern was for the number to bear the case required by the role of the whole phrase in the clause and for the noun to be marked genitive. For example:

- (2) a. embe þreo and ðritig geara (ÆCHom I.236.24)
 about three and thirty years_{gen pl}
- b. sume hundred scipa (Bo 115.18)
 about hundred ships_{gen pl}
- c. swa fela ðusend engla (ÆCHom II.246.29)
 so many thousand angels_{gen pl}

With the loss of inflection in the change from Old English to Middle English, the morphology marking these patterns was of course lost, as was most other morphological inflection. However, in other genitive constructions, the genitive relationship continued to be marked in some way. While it is possible for a language to lose a case, as is shown by the history of the instrumental case in English (the loss of instrumental case in English was nearly complete by the time our written records begin, with only some vestigial elements of the case remaining in the demonstrative system), English did not lose the genitive case in the transition from Old to Middle English. In Middle and Modern English, relationships which were marked with the genitive in Old English continued to be marked in the syntax in various ways. The relationships so marked include relationships of noun to noun, verb to object, and adjective to noun, each of

which will be discussed in the following section. The genitive relationship between numeral and noun, however, did not continue to be marked.

4.1.1 PRESERVED GENITIVE RELATIONSHIPS

The most common relationship marked by the genitive inflection in Old English was that of a noun to a noun. While most morphological case marking was quickly lost in the Middle English period, this genitive was maintained, probably pronounced as syllabic [əs]. It eventually came to be marked in Modern English by the possessive phoneme /z/, pronounced [z] [s] or [əs], and now written 's, or by the preposition *of*, as can be seen from the glosses of the following Old English noun phrases.

- (3) a. Godes sunu (ÆCHom I.32.5)
 Son of God or God's son
- b. anes treowes wæstm (ÆCHom I.14.9)
 fruit of one tree

The phrasal genitive with *of* is an innovation and did not exist in Old English.

A second genitive relationship was that between certain verbs and their objects which in Old English took genitive forms. While in Middle English nouns were no longer marked with a genitive inflection of any kind when used as objects, it would not be appropriate to say that the genitive simply disappeared. While in many cases the verb which took a genitive itself disappeared (Visser 1963 p.358), many of the verbs continued in use and began to take a

prepositional phrase, a usage which has continued in at least some dialects up until contemporary times.

(4) My master will not like of it

(Also taste of, feel of, ask of, beseech of)

In addition, nearly all of the verbs which could take a genitive object could also take an object in the dative or accusative. The genitive object was the less common form; when the genitive marking on the object was lost, the case could be reanalyzed as accusative (Visser 1963 p.358-359).

A third relationship which could, in Old English, require a genitive marking was that between certain adjectives and a following noun. Where this relationship was marked genitive in Old English, a preposition took the place of the genitive in Middle and Modern English.

(5) pancful + genitive ⇒ thankful for

pancful +dative ⇒ contented with

In these relationships, noun to noun, verb to noun, and adjective to noun, genitive relationships were preserved in the syntax of the language. The genitive relationship between number and noun was not so preserved, however. There is no preposition between numeral and noun, nor any special marker, such on the noun.

4.1.2 REANALYSIS

The loss of the genitive relationship between noun and numeral suggests that there was a reanalysis of the relationship between the two elements. If this relationship were still one of case marking, we would expect some sign of the genitive case relationship, presumably a preposition, as we find in other Middle and Modern English structures which derive from an Old English genitive case, but such is not the situation. Because there is no sign of a genitive case relationship, it is reasonable to suspect that the relationship has been reanalyzed.

I propose that the following is the change which took place. While most genitive relationships continued to be marked in the grammar in some way, the genitive assigned to a noun by a numeral did not survive in the transition from Old to Middle English. When the morphological signs of case assignment were lost, the genitive relationship of noun to numeral was no longer overt. Instead of maintaining the relationship by inserting a preposition or some other reflex of the genitive, English speakers reanalyzed the relationship. Instead of head plus genitive dependent, the phrase was reanalyzed during the Middle English period as a noun projecting a NumP. Because the relationship was reanalyzed, we find no continuing marker of a genitive relationship. This new analysis, with N projecting NumP, then evidences itself in the emergence of the indefinite article and the other markers of the count/non-count distinction to be discussed below.

4.2 THE EMERGENCE OF THE INDEFINITE ARTICLE

If it is true that a new analysis of the relationship of numeral and noun (in which N is analyzed as projecting a NumP) occurred in the grammar of speakers living at the time of the transition from Old to Middle English, as I argued in section 4.1, and if the indefinite article is a marker of the presence of a NumP on count nouns, as I argued in Chapter Three, then the indefinite article should emerge historically in the same period that the reanalysis of numeral and noun manifests itself. The next section (4.2.1) summarizes the uses of *an* in Old English with the purpose of establishing that *an*, as used in Old English, was not an indefinite article. As predicted, the indefinite article comes into use early in the Middle English period.

4.2.1 CHANGES IN THE USE OF A/AN

The uses of *an* in Old English have been carefully cataloged by philologists. The evidence shows that, while it is clear that Old English *an* had much broader functions than the numeral *one* of Modern English, the uses of *an* did not include the function now filled by *a/an*. There is not evidence that the uses of *an* in Old English which are related to the rise of *a/an* constitute separate lexical items with different syntactic categorization features from the word *one*.

There have been many systems proposed for categorizing the uses of *a/an* throughout the history of English. The OED uses seven headings,

Rissanen (1967) ten, and Toller thirteen. The classification of uses given by Mustanoja (1960, p.292) provides the primary framework of the following discussion. It employs just four main categories, the numerical, the exclusive, the intensifying, and the individualizing use. Although most of the examples I cite are taken from Rissanen, I have opted for the simpler classification system of Mustanoja. Mustanoja's first category, numerical, includes both Rissanen's categories of "the strictly numerical sense" and "the sense *a single*." I have omitted discussion of Rissanen's three categories "denoting union" (exemplified by *We are one in Christ*); "with indefinite and interrogative pronouns" (exemplified by *Then shall each one's soul depart*); and "in the sense *once*" as being uses unrelated to the development of the indefinite article. From Mustanoja's fourth category, the individualizing use, I have separated out a discussion of Rissanen's category "The Indefinite Article." Rissanen's category "before cardinal numerals" is for the most part a Middle English use and will be discussed later.

4.2.2 NUMERICAL USES

In the first category there are in Old English the many uses of *an* which are clearly numerical, contrasting one object with two or more.

- (6) Hwæt gelæhtest þu? Twegen heortas & anne bar. (Æ Coll 25,71)
 What did you capture? Two harts and one boar.

In a context of numeration, such as this one, it is clear that *an* is used as a numeral because its semantic field is indicated by a contrasting number. However, when the context does not include a specific contrasting numeral, categorizing *an* as numerical often involves the exercise of judgment, for as Rissanen (1967) pointed out, nearly all uses of *an* include an implication of “one, not two (or three, etc.)” (p. 14). For example, in his study of 4000 instances of the use of *one* in Old and Early Middle English, Rissanen notes a slight functional difference between the use of *one* in a strictly numerical sense and the use of *one* meaning something similar to ‘a single’. The meaning is not so much ‘one not two’ as it is ‘just one’ or ‘one and nothing more’, and can be used to emphasize smallness.

- (7) a. ne wearþ þær forþon an Bret to lafe (ASChron A491)
There was not, consequently, one (a single) Breton remaining
- b. gyf þar man an ban findeð unforbærned, hi hit sceolan miclum gebetan (Or 21,12)
if anyone there finds one (a single) bone not burned up, he shall atone for it mightily
- c. Men geseoð oft þæt of anum lytlum cyrnele cymð micel treow (ÆC Hom I 236,17)
People often see that from (just) one little kernel comes a great tree.

The translations ‘a single’ and ‘one little’ are not identical, but they are interchangeable, and while differences between the numerical use and this use emphasizing smallness are important for achieving the most effective translation

of an expression into Modern English, the uses are, as Rissanen says, “closely related.” Inflections and position are identical in the two uses. These uses of *an* classified as numerical are not instances of an indefinite article.

4.2.3 THE EXCLUSIVE USE

Another category is labeled by Mustanoja the “exclusive use.” There is some evidence that this use with the meaning ‘alone’ or ‘only’ may have had a separate lexical entry from ‘one’ as early as the Old English period. Rissanen (p. 139 & p. 150) points out that the weak masculine nominative singular form *ana* was often used where another case would be expected by rule and that *an* in this meaning generally appears after the noun. Both factors indicate the possibility of an independent adverbial use. Typical examples are:

- (8) a. *buton Raab ana libbe* (Hept. Joshua 6,17)
 except Rahab alone lived
- b. *Iosep wæs ana innan his hlafordes huse* (Hept. Gen 39, 11)
 Joseph was alone in his master’s house

Again, this adverbial use cannot be analyzed as an indefinite article.

4.2.4 THE INTENSIFYING USE

A third classification is the “intensifying use.” Mustanoja notes that this use is much more frequent in Middle English than in Old English, but there are cases in Old English which seem to indicate that *an* could even then be used as an intensifier, something like the Modern English use *That’s one hot car*. A

passage which has drawn much discussion is the following from *Beowulf* in which *an* seems clearly to function with an intensifying purpose.

- (9) þa wæs on gange gifu Hroðgares oft gehæted; þæt wæs an cyning
æghwæs orleahre, op þæt hine yldo benam mægenes wynnum
(Beo 1885)

then was Hrothgar's gift, in the going, often praised. That was one king,
in every respect without blame until old age deprived him of the joys of
strength

Rissanen (p. 201) points out that this has been translated "he was a blameless king," "an altogether blameless king," "peerless," "he was an incomparable king" "he, at least, was a king (who was) altogether blameless" and "he was a king, if ever there was one." Another possible translation is "that was indeed a singular king." All of these translations are attempts to communicate an intensifying function for the word *an*. In these intensifying uses, *an* appears in the places and forms one would expect of the numeral one, and the differences in use seem to be a matter of idiomatic interpretation, not of syntactic function of the element *an*.

4.2.5 THE INDIVIDUALIZING USE

Mustanoja's fourth category is the individualizing use, and it is from this use that the modern indefinite article is believed to have arisen. In this use the numerical sense 'one,' while present, is less important in the communicative context than the sense 'one out of a possible group.' Particularly good examples of this use are the following:

- (10) *hig . . .hengon. . .anne sceapan on his swiðran healfe, and oðerne on
his wynstran (WS Gosp. Luke 23,33)
they hanged one thief on his right side and the other on his left*

The meaning 'one, not two' is present, as it is in numerical uses, but the communicative emphasis is on 'one of them.'

- (11) *Gyf Esau cymð to anum flocce & þone ofslyhð, se oðer flocc byð
gehealden (Hept. Gen 32,8)
If Esau comes to one flock and kills that, the other flock is preserved*

Here again the communicative emphasis is on 'one member of a set' rather than on the number of flocks approached.

These uses have been grouped by traditional scholars on the basis of the apparent communicative emphasis of the word *an*, but the individualising uses are not syntactically different in terms of position or inflection from the use of *an* in the numerical meaning.

4.2.6 THE "INDEFINITE ARTICLE"

Studies of *an* in Old English have at times used the term 'indefinite article' for some of these individualizing uses, even while noting that Old English did not actually use indefinite articles. Rissanen, in his exhaustive cataloging of the uses of *one* in Old and Early Middle English, devotes forty-three pages to the "indefinite article," but puts quotation marks around the term. He categorizes under "indefinite article" those uses in which "the numerical force of the word is clearly weakened," "it does not primarily single out an individual from a group or unity," and "it is not obviously stressed" (Rissanen, 1967 p. 261). Clearly, based

as they are on semantic information (numerical force), discourse function (singling out of an individual) and phonological form (apparent stress), these are not ideal tests for the syntactic classification of an element, especially in a language for which we lack native speakers, or even recordings. The tests say nothing definitive about the position of *a/an* in a generative grammarian's phrase structure tree.

Rissanen reports that this "indefinite article" was used very commonly "with nouns denoting a particular person or thing," a referential use which is often translated 'a certain.' Some typical examples are as follows.

- (12) a. *þæt an plegende cild arn under wænes hweowol ond wearð sona*
 dead (Martyrology 8,10)
 that a (a certain) playing child ran under wagon wheel and quickly died
- b. *þa he wæs on anre ceastre, þa wæs þær an hreofla* (Hept Judg 4,17)
 when he was in a (a certain) city then was there a (a certain) leper

In each case *an* is inflected as an adjective.

The aforementioned uses of *an* are assumed by many to be the forerunners of the indefinite article of Modern English, but the Old English usage is not equivalent to the modern indefinite article. Singular nouns which in Modern English would require *a/an* regularly appear without *an* even when they are "indefinite," and not previously identified in the discourse in any way. The uses which are closest to the indefinite article, are referential and are best translated as 'a certain.' Stevick (1989) describing Old English says simply, "Old

English did not have an 'indefinite article' to correspond to MnE *a/an*" (p. 81).

The evidence supports his conclusion.

4.2.7 ONE BEFORE CARDINAL NUMERALS

One last use mentioned by Rissanen is the use of *an* before cardinal numbers. Such use occurs in Old English, but is much more common in Middle English. When *an* is used in this way in Old English, it appears in the plural. An example is:

- (13) *ane nigon naman synt* (Ælfric Grammar 111,10)
 one nine names are

This has been read as a sign of collectivity, a set of nine elements. The plural marking of *ane* is an indication that this is a special use and not an example of an indefinite article. The use is rare in Old English but *one* or *a* before cardinal numbers is quite common from the 13th century until the 16th (Mustanoja, 1960 p.265) and is usually read as an indicator of approximation. Rissanen points out that when the following expression is a fixed compound such as *twelfmonþe* the Middle English texts use *a* not *one*. We can interpret that by saying that speakers used *a* as a marker on a count noun rather than as a indication of approximation on a numeric phrase.

4.2.8 Summary

The change from a system which did not include an indefinite article to one that did is one of the changes marking the change from Old English to Middle English. Fischer (1992), describing Middle English, says, "In Middle

English *a(n)* became a regular feature with indefinite noun phrases, used in more or less the same functions as in Present-Day English" (p.18). Mustanoja reports that there is little change in the use of *an* in texts from the 11th and 12th centuries, but then there is "a remarkable increase." In the *Ormulum* he finds *an* in individualizing function "practically in the same measure as in present-day English" (p.263) though generic nouns still often use a reflex of the Old English *sum*.

Middle English speakers continued to use the "old" rules at times, so there are examples in Middle English of noun phrases without the indefinite article which would now be expected and the result is that, as Fisher says, "usage varies." Different authors differ in the frequency of use of *a/an*. This is to be expected if the dual-base hypothesis of language change is true. However, the rise of the indefinite article is a pronounced, identifiable phenomenon located at the beginning of the Middle English period.

4.3 THE EMERGENCE OF THE COUNT/NON-COUNT DISTINCTION

In this section I will present evidence that Old English did not make the syntactic distinction between count/non-count that is made in Modern English and argue that changes which occurred at the beginning of the Middle English period are evidence of the development of a lexically marked division of nouns into two categories. In Modern English the count/non-count distinction is marked in several ways. In the point which is key to this paper, the distinction is marked

by the ability of a singular count noun to take the indefinite article. As the previous section has demonstrated, Old English did not have an indefinite article. In addition, the count/non-count distinction is marked by the possibility of the plural marker only on count nouns and by the collocation restriction exemplified by *many* and *much*. These markers were not part of Old English syntax. I analyze changes in plural use and in collocation restrictions, changes which were concurrent with the rise of the indefinite article in English, as evidence for the emergence of the count/non-count distinction. Section 4.3.1 looks at some evidence of the emergence of a count/non-count distinction in the use of plurals. Section 4.3.2 looks at the substantial evidence of the emergence of such a distinction found in the use of expressions of quantity.

In arguing that Old English did not mark count and non-count I am not, of course, implying that speakers of Old English were unaware of the difference between things which can be counted (people, animals) and things which cannot (air, light); we can assume that their cognitive powers allowed them to notice the difference. The differences were not, however, encoded into the syntax of the language, as they are in Modern English. In Modern English the distinction between count and non-count is a grammatical distinction not just a cognitive one. It is true that in Modern English nouns for physical entities are in general classed as either count or non-count on the basis of physical qualities. (Does the substance occur in separate countable items or is it a quantity that must

usually be weighed or measured?) However, in Modern English, all nouns, including quite abstract ones, are assigned a category of count or non-count. The meanings of *advice* and *suggestion* are conceptually quite similar; one may, however, *offer suggestions* but not *offer advices*. The reason is that *suggestion* is a count noun and *advice* is not. This is essentially an arbitrary classification made in the grammar of the language, and it was not made in Old English. Roman Jacobsen once said that languages differ not in what they can say but in what they must say. Unlike speakers of Old English, speakers of Modern English must indicate whether a noun is classified as count or non-count.

4.3.1 THE USE OF THE PLURAL MARKER

First consider the plural marker. In Modern English, only count nouns can be pluralized and so the presence of a plural marker is an indication of a count meaning for the noun. In Old English this was not necessarily so. Tracing the evidence is difficult, because when a word has multiple uses, dictionaries, and the scholarship they represent, give the word both a count and a non-count translation. The translation does not indicate whether a word's meaning was conceptually count or non-count to the Old English speaker; rather, it indicates that speakers of modern English need count and non-count equivalents in order to translate the word. There is evidence, however, that a plural form was not necessarily a marker of a count interpretation. As Bosworth and Toller note, *wæteres*, the plural form of 'water', is used to mean 'a lot of water' or 'much

water'. Such examples are not frequent, but then, with abstractions such as 'joys' we are frequently not in a position to judge whether an original author conceived of the abstraction as 'many joys' or 'lots of joy'.

4.3.2 COLLOCATIONS WITH WORDS OF QUANTITY

Secondly, there are the markers of amount. In Modern English, the words *many*, *few* and *fewer* collocate with count nouns, while *much*, *little* and *less* collocate with non-count (though there is a growing tendency to use *less* with count nouns as well, to the dismay of traditional prescriptivists). The historical antecedents of these words did not show the same distribution, again indicating that there was no syntactic distinction between count and non-count.

The Old English antecedent of *much* was *mycel*; the antecedent of *many* was *monig*. In addition, Old English had the word *fela* which has no Modern English descendants. All three words must be translated into Modern English as 'many or much' because all three could appear with nouns which now, being marked count or non-count, will take only one or the other word. Markwardt (1970) collected and presented the Old English data, but did not provide a theoretical interpretation. The analysis I am presenting in this paper allows one.

4.3.2.1 THE USE OF MYCEL (MUCH)

Mycel (much) was frequently used to indicate great size. Markwardt points to many uses of *mycel* with words for 'armies' and for 'land' or 'wind', and notes that *mycel menigu* is the usual translation for 'great multitude' in the

gospels. Some of these uses of *mycel* are with nouns for clearly countable items, such as *stan* (stone) or *fictreow* (figtree). There are also many uses of *mycel* with nouns referring to items more likely now to be classified as non-count, and for which size is difficult to distinguish from amount, nouns such as *wælsliht* (slaughter), *ege* (fear), *mod* (courage or zeal). In these uses with abstractions, the meaning is close to that of the Modern English *much*. In addition, *mycel* was used with the genitive of nouns in constructions in which it is quite clearly referring to quantity rather than size. Marckwardt gives this example:

- (14) *þær wearð seo cwen ofslagen ond micel þæs heres* (Or 1 10.46.22)
 then was the queen slain and much of that army

Marckwardt proposes that it is these uses which suggest quantity rather than size which led to the current use of *much* with non-count nouns.

It is my thesis that this distinction between size and quantity became required, not just a possible and available variation in meaning, when the count/non-count distinction became encoded in the syntax of the language. Evidence comes from a development which Marckwardt noted and was unable to interpret with confidence but which can be explained simply in the framework being developed in this paper. The word *great* began to refer to size rather than awkward coarseness, *large* began to refer to size rather than abundance, and *big* entered the language all at about the same time that *mycel* (*much*) began to

refer to quantity rather than size. As Marckwardt says, this “certainly hints at some kind of relationship among these various developments” (1970 p.54). I would argue that the use of *mycel* as a marker of non-count developed when the feature count/non-count was encoded into the syntax. When *mycel* became a marker of the non-count feature of a noun, new words took on the task of serving as adjectives for size with count nouns. *A big boulder, a large boulder or a great boulder* can roll down a mountain, but no longer *a much (mycel) boulder*, because there now exists a count/non-count distinction, and *much* is marked to collocate with non-count nouns only.

4.3.2.2 THE USES OF MONIG (MANY)

In Old English, *monig*, the antecedent of *many*, was used with both singular and plural nouns. With plurals *monig* (like the numerals) was frequently followed by a genitive form of the noun though (again like the numerals) it sometimes was in the same case as the following noun. The meaning of *monig* + singular is generally translated with 'many a', and this unusual construction with the indefinite article *a/an* between *monig* and a singular noun began to appear early in the thirteenth century (Marckwardt, 1970, p.52), the time at which we are positing that the syntactic marking of the count/non-count status of nouns began.

While *monig* often occurred with words for countable items, it also was used with abstractions, and the dictionaries translate it with both 'many' and

noun. It could be used with nouns with either a count or non-count meaning, because the distinction was not yet encoded in the language.

4.3.2.4 OBSOLESCENCE OF THESE FORMS

One of the most interesting aspects of the history of *micel*, *manig* and *fela* is the chronology of the obsolescence of their older uses. As Marckwardt points out, the last uses of *fela* are recorded in the last half of the sixteenth century as are the last uses of *much* meaning 'large' and of *many* with a singular noun unmarked with the indefinite article. He gives this evidence from the OED.

(17) 1598 So fele shippes this yeere there ware

1573 a tar kettle, little or mitch

1583 Countenance bears out many evill couseller

Marckwardt points out that "The correspondence may be coincidental; it may on the other hand point to . . . elements of a larger pattern of development"

(Marckwardt, 1970, p.52). I contend that these are definitely elements of a larger pattern. All three uses are signals that a speaker is using the rule system found in Old English in which a noun count/non-count feature is not encoded in the syntax. The three uses disappear together as they are surface manifestations of a single underlying element of the grammar. Apparently the last speakers who had access to the syntactic system in which count nouns are not syntactically marked to project a NumP died in the second half of the sixteenth century.

One would expect the words for limited quantity (few, less) to follow the same pattern. Unfortunately, the evidence is less clear cut. English speakers seem never to have given up completely the practice of referring to “eight items of less” at any time in the history of English. However, failure to observe a count/non-count collocational distinction regularly brings criticism from prescriptivists. I have not been able to trace the first complaints against this usage, but believe that if they could be found, they would correlate with the rise of the count/non-count distinction.

Because Old English did not pluralize only countables, and did not make a distinction in the collocation of *many* (*manig*), *much* (*micel*) or the no longer existent *fe/a*, we can conclude that Old English did not syntactically mark the difference between count and non-count nouns.

4.4 A/AN IN GENERIC USE

There is one other issue which should be discussed here. Scholars working within the grammaticalization framework analyze the rise of the indefinite article as a spread in function of the form *an*. Givon's (1981) implicational hierarchy is one statement of such a developmental path. As Traugott (1992) and Rissanen (1967) point out, *an* was not used with generics in Old English. (There is one possible example of such a use in Alfred.) In Early Middle English *a/an* begins to appear in true generics uses, as evidenced by these two examples from *The Owl and the Nightingale*.

- (18) a. An hors is strenger þan a mon (773)
 b. On ape may a bok biholde (1325)

This change in use is proposed as evidence of a gradual spread in the function of *a/an*. A point which must be noted, however, is that *a/an* is used with generics only when the generic is in the form of a singular count noun. *A/an* does not begin to be used as a general purpose generic marker for all nouns. This is because the function of *a/an* is to mark the [+count] feature of the head noun by filling a NumP node when it is the leftmost node; *a/an* never occurs with non-count or plural nouns. *An* does not appear with nouns in generic use in Old English because Old English did not have a rule requiring that nouns be classified a count or non-count with count nouns projecting a NumP. Instead *an* 'one' served numerical, exclusive, intensifying and individualizing purposes, and it is not surprising that *an* meaning the number 'one' or 'a certain' is not found in generic use. When *a/an* emerges as a marker of the noun feature [+count], noun phrases beginning with *a/an* are available for generic use. In Middle and Modern English, both definite singular count nouns (marked with *the*) and indefinite singular count nouns (marked with *a/an*) can be used generically (as can indefinite plural count nouns and indefinite non-count nouns). The patterns of usage of generic forms, the choice among the definite, indefinite and plural forms for count nouns, is a subject for research in discourse analysis. The use

of *a/an* with generics beginning with Middle English is not, however, simply a matter of an increase in the discourse use of Old English *an*.

4.5 THE SIGNIFICANCE OF THESE CHANGES

In the Principles and Parameters approach to historical linguistics, one looks for clusters of changes in the syntax speakers of a language use, with the hope that one may be able to find a single underlying change which results in a whole cluster of changes in the language overtly produced. It is my contention that in the transition from Old to Middle English we find such a cluster of changes in the English noun phrase. Neither the indefinite article nor the count/non-count distinction were part of Old English; they arose simultaneously at the beginning of the Middle English period. Both changes are accounted for by an analysis which posits that count nouns are lexically marked to project NumP. These two changes are concurrent with a change in the morphological case marking of the relationship between numerals and nouns and changes in the collocations of nouns with words of quantity. The change in the numeral to noun relationship can also be accounted for as a (re)analysis of the noun phrase in which count nouns project a NumP, and the changes in collocation indicate that words of quantity became divided between words which collocate with count nouns and words which don't. Instead of declaring that there were at least four separate changes in the language, we can posit one underlying change.

The difference between the Old English and the Middle/Modern English systems is that the lexical entries for nouns in the Middle/Modern English system include a formal feature [\pm count]. The presence of the feature [+count] forces the projection of NumP. The indefinite article *a/an* exists as the minimal marker of the presence of that NumP. One of the goals of the Principles and Parameters approach to historical linguistics is to discover the limits of parametric variation. One suggestion as to how variation may be limited cross linguistically is the suggestion that variation may be limited to formal features or to formal features of functional nodes (Chomsky 1995). The variation between the Old English and the Middle English system can be interpreted in those terms. NumP is a functional node. The change from Old to Middle English is the addition of a morphological feature to the lexical entries of count nouns requiring the projection of this functional node.

CHAPTER 5: THE DEFINITE ARTICLE

5.0 INTRODUCTION

The and *a/an* have been treated in traditional grammars as members of the same category, usually labeled *articles* or sometimes *determiners* (As an example, the *International Encyclopedia of Linguistics* defines determiner as "a grammatical element whose main role is to co-occur with nouns to express such semantic elements as quantity and number; for example, *the, a, this, some, much.*") Many analyses of English usage are organized around principles of choice between the definite and the indefinite article in various constructions. The argument I have made in the previous chapters is not consistent with such a categorization. *A/an* is an element of the category Number. *The* is not. In this chapter I will discuss the rise of the definite article *the* and some of the issues involved in its analysis. In section 5.1, I discuss the syntactic function of the definite article in Modern English. Section 5.2 discusses the rise of *the* as it emerged in Early Middle English. Since Abney (1987), the DP Hypothesis has been widely accepted within the Principles and Parameters approach to syntax, and under that hypothesis, *the* is an element of the category Determiner. In section 5.3, I discuss the question on whether Old English employed a DP node and show that the principle that the leftmost node must be identifiable can

account for the rise of the definite article under two different interpretations of syntactic changes of English. Section 5.4 discusses some ways in which the proposals I have presented relate to the research of others.

5.1 THE FUNCTION OF THE DEFINITE ARTICLE

As was stated in chapter three, since the work of Fukui and Speas (1986) and the dissertation of Abney (1987), the possibility that a noun phrase (NP) should be more accurately analyzed as a determiner phrase (DP) has been widely accepted in the Principles and Parameters approach to grammar. The original proposal of the DP hypothesis was that the head element of those structures traditionally labeled noun phrases is not actually the noun, but rather a functional element, the determiner. An NP is a phrase headed by the lexical element Noun and is a complement to a DP, a phrase headed by the functional element Determiner, just as a VP is a phrase headed by the lexical element Verb and a complement to an IP, a phrase headed by the functional element Inflection.

Among those who accept the DP hypothesis, as I do, there is disagreement about whether or not all noun phrases in a DP language are headed by a D node. In Chapter Three I argued that the occurrence of the indefinite article in Modern English can best be explained if we assume that only [+definite] noun phrases are headed by a D. If a noun phrase is not [+definite]

but is [+count], the NumP will be the leftmost node and if not filled by a true numeral must be marked either by the presence of plural morphology on the noun or by the presence of the indefinite article *a/an*. If however, a noun phrase is [+definite] the DP will be the leftmost node. If the principle that the leftmost node must be identifiable is an accurate one, the D node, too, must be identifiable.

I believe that the syntactic function of the definite article is analogous to that of the indefinite; that is, *the* is an element carrying only one syntactic feature, the feature [+definite], and the syntactic function of *the* is to serve as a minimal marker of the presence of a DP in the structure of a noun phrase. All of the other elements which may occupy the D node carry more information. The demonstratives and possessives carry with them multiple features (e.g. definiteness, deixis, proximity, or number); *the* marks definiteness alone. Carrying only the feature [+definite], it is a minimal marker of the defining feature of the D node in Modern English. As this is a statement of syntactic function only, it should not be taken as a statement of the discourse function of noun phrases containing the definite article, as opposed to those containing the indefinite, or as a statement of the semantic interpretation of the feature [+definite]. Those are very complex issues and are the subject of much research and debate, while this paper is limited to discussion of the syntactic function of *the*, especially as evidenced by historical change. The syntactic function of *the*

is to mark the presence of a [+definite] node when that node is not otherwise filled with a [+definite] element.

5.2 THE RISE OF THE DEFINITE ARTICLE

Like the rise of the indefinite article, the rise of the definite article *the* is a datable occurrence in the history of English. The system of demonstratives underwent changes in the transition from Old to Middle English, and at the same time the definite article emerged. This indefinite article is not merely the result of phonetic erosion or the collapse of morphologically inflected demonstratives.

It is generally accepted that the definite article developed in Middle English from the *se*, *seo*, *þæt* paradigm (Mossé 1952, Mustanoja 1960). *Se* and *seo*, the masculine and feminine nominative forms, were replaced by an uninflected form *þe* which quickly established itself as the standard form. As Mossé states, "a new form *þe*. . . tended to become from a very early period the common invariable form of the article even in the South. . . . The Northern dialect in early Middle English recognizes only this indeclinable form. The London region used it as early as the *Proclamation* of 1258." (Mossé, 1952, p.60). A plural form *þa* (or *þo*) was used "not infrequently" in the Middle English period (Mustanoja, 1960, p.233), and the inflected forms continued in use somewhat later in the South and Midlands than in the North. As would be expected, the rise of the definite article did not immediately eradicate all of the inflected forms; within their internal grammars, speakers still had access to the older forms.

However, as was the case with the rise of the indefinite article, the rise of the definite article is by linguistic standards a swift and thorough change.

Moreover, the definite article is not a remnant produced by the collapse of, or phonetic erosion of, the older paradigms. What Mossé calls “the genuine demonstratives” underwent change but continued as a distinct, separate set. From the *se, seo, þæt* paradigm, the neuter nominative/accusative form *þæt* became the singular demonstrative for all genders, followed soon by *þos* from *þa, þo* for the plural. From the *þes, þeos, þis* paradigm, the neuter nominative/accusative form *þis* remained. The new form *þese* entered the language, giving the four demonstratives which are still part of the English language, *that, those, this, these*. The origin of *these* has been a puzzle within the history of English, but it began appearing in the 1100’s, the time at which I argue that the count/non-count distinction entered the language. It is significant that the demonstratives, while losing the gender and case marking morphology of Old English, maintained a singular/plural distinction in agreement with the features expressed in count nouns, even developing a new element to maintain the number distinction in the paradigm. The demonstratives remained a complete set while a new functional element was added, the definite article.

5.3 THE CATEGORY DP IN OLD ENGLISH

In Chapter Four I argued that the rise of the indefinite article is simultaneous with, and evidence of, an underlying change in noun phrase

structure in which nouns came to be classified as count or non-count, with count nouns projecting a NumP. If the definite article is an element analogous to the indefinite, its historical emergence in the English language should also mark a change in the functional node structure of the English noun phrase. In the following sections I will explore two possible explanations for the rise of the definite article. The first is the possibility that Old English did not have a DP node and that this node emerged historically in the period of transition between Old and Middle English. If this is a correct interpretation of the history of the English noun phrase, then the rise of the definite article marks the rise of the DP node. It enters the language as the minimal marker of the presence of the DP. The second possibility is that Old English noun phrases contained a DP node, but that the defining feature of this node changed. If this is the preferred interpretation, then the rise of the definite article marks a change in the defining feature. *The* as marker of [+definite] emerges when [+definite] becomes the defining feature of the node.

5.3.1 OLD ENGLISH AS A LANGUAGE WITHOUT DP

Accepting the DP hypothesis does not necessarily mean analyzing all languages as containing a DP node. Languages in which nouns regularly appear with no overt determiner or in which word order of (apparent) determiners, adjectives, and nouns is quite free have been argued to be

languages in which the determiner does not exist. Old English had some, but not all, of the characteristics of languages which have been posited not to have a determiner node. This leaves open the question whether or not Old English should be analyzed as a DP language. Let us look first at some of the approaches used to argue that a language does not employ a DP node.

In Fukui and Speas (1986) it is argued that there is no D node in Japanese. In Japanese, modifying phrases can be successively attached to a noun indefinitely.

- (1) a. ko-no hon
this gen book
- b. John-no ko-no hon
John gen this gen book
- c. kireina John-no ko-no hon
beautiful John gen this gen book

Fukui and Speas argue that the reason these modifiers are iterable is that there is no D node in Japanese to close off a projection of N. In their analysis, the equivalents of the English elements *John's* and *this* are not elements of D, as they are usually analyzed for Modern English, but rather are parallel to adjectives, elements projected under a lexical category. Even in Japanese, however, the ordering of these elements is not completely free. Fukui and Speas state that there are "certain semantic conditions governing the mutual order among prenominal elements" (Fukui and Speas, 1986, p.134).

Yamamoto (1989) uses similar evidence to conclude that Old English did not have the functional category D. Her primary evidence is a rather briefly stated set of example phrases (of the type presented below) showing that word order in Old English nominals is much freer than in Modern English.

Corver (1989) presents a more fully developed argument for analyzing a language as lacking determiners, and his argument can be applied to Old English. He argues that Slavic languages do not have DP projections in nominals on the basis of three kinds of evidence: adjective declensions, word order in nominals, and left branch extractions.

First Corver argues that demonstratives and possessives are members of an adjectival category in Slavic languages. Using Czech as an example, he notes that morphologically the endings of possessives and demonstratives are very similar to those of standard adjectives. Second he notes that demonstratives do not appear only on the left of adjectives as would be predicted if they were determiners. Instead, again using Czech as an example, he shows that the word order in a noun phrase can be of many patterns.

(2) a. demonstrative - adjective - noun

ta pekna devcata
these pretty girls_{nom}

b. noun - demonstrative - adjective

devcata ta pekna

c. adjective - demonstrative - noun

pekna ta devcata

(3) a. possessive - adjective - noun

jeji dlouhe vlasy
her long hair_{nom}

b. adjective - possessive - noun

dlouhe jeji vlasy

c. noun - possessive - adjective

vlasy jeji dlouhe

Possessives and demonstratives, like ordinary adjectives, occur post nominally and "exhibit rather free ordering with respect to other adjectival modifiers" (Corver, 1989 p38).

Third, Corver argues that left branch extractions are possible in Slavic languages because there is no determiner node. (Left branch extraction means moving the "left hand" element of a phrase without moving the "right-hand" element too.) Like other Slavic languages, Czech allows patterns such as the following in which it is possible to move *her* or *which* without moving *book*, a left-branch extraction.

(4) Jakou čte Petr [t knihu]?
which-acc reads Peter book-acc
Which book is Peter reading?

- (5) Jelíi cte Petr [t knihu]
 her-acc reads Peter book-acc
 Her book Peter is reading!

Corver argues that the pattern is:

[VP V [NP AP [N' N XP]]]

By using the Barriers framework of Chomsky 1986, Corver deduces that this movement is possible only because there is no DP projection. Within that framework, the NP is L-marked by the verb and, therefore, is not a blocking category or barrier and the AP (adjective phrase, here including possessives as adjectives) can be moved to the Spec of C position via adjunction to VP. The analysis is possible only because there is no DP projection. In languages which do not have a DP projection, such as the Slavic languages, left branch extractions will be permitted. In languages which have a DP, such as Modern English, left branch extractions are ungrammatical.

What happens if we apply this method of analysis to Old English? First, as with Czech, the demonstrative and possessive paradigms in Old English are very similar to the paradigms for adjectives. The parallels are shown in the following tables. The adjective *tíl* 'good' is given in its strong declension which includes remnants of the instrumental case, as do the *se* and *þes* paradigms. The similarities between the adjective declension and demonstratives show most clearly in the *þes* paradigm, but are present in both.

Table 3. Old English Demonstrative and Adjective Declensions

	se paradigm	þes paradigm	strong adjective
Masc. Nom. Sing.	se	þes	til
Masc. Acc. Sing.	þone	þisne	tilne
Masc. Gen. Sing.	þæs	þisses	tiles
Masc. Dat. Sing.	þæm, þam	þissum	tilum
Masc. Inst. Sing.	þy, þon	þys	tile
Fem. Nom. Sing.	seo, sio	þeos	tilu
Fem. Acc. Sing.	þa	þas	tile
Fem. Gen. Sing.	þære	þisse	tilre
Fem. Dat. Sing.	þære	þisse	tilre
Fem. Inst. Sing.			
Neut. Nom. Sing.	þæt	þis	til
Neut. Acc. Sing.	þæt	þis	til
Neut. Gen. Sing.	þæs	þisses	tiles
Neut. Dat. Sing.	þæm, þam	þissum	tilum
Neut. Inst. Sing.	þy, þon	þys	tile
Nom. Plural	þa	þas	tile, m.f.* tilu n.
Acc. Plural	þa	þas	tile, m.f.* tilu n.
Gen. Plural	þara, þæra	þissa	tilra
Dat. Plural	þæm, þam	þissum	tilum
Inst. Plural			

*alternate fem. *tila*

The argument of morphological similarity of forms hints at the possibility that the paradigms can be analyzed as one category, but is not conclusive, or even particularly strong, evidence for a unification of the categories.

The second argument is that of word order. Word order in Old English is not as strictly limited as it is in Modern English. Demonstratives and possessives can appear after as well as before the noun, and both a possessive

and a demonstrative may appear together before or after a noun. The following patterns are well substantiated:

(6) possessive + demonstrative (+adjective) +noun

a. his sio gode modor (Or 270.26)
his that good mother

b. ðin sio winestre hond (Cura Pastoralis 389.20)
thy that left hand

(7) demonstrative + possessive (+adjective) +noun

a. in þis user ciriclice stær (Bede 282.23)
in this our ecclesiastical history

b. se heora halga bisceop (BIHom 201.24)
that their holy bishop

Stating that it is a rare form, Mitchell even cites the form

(8) demonstrative + demonstrative + adjective + noun

to þæs þam manigfealdum ungefohlicum stefnum (GD 64.27)
by his manifold and loud noises

This freedom of order suggests that demonstratives, possessives and adjectives may be elements of the same category. On the basis of such evidence, Yamamoto concludes that English did not have a DP node.

The evidence is not, however, conclusive. An argument against such an analysis of demonstratives and possessives as adjectives is that adjectives do not appear before the demonstratives or possessives, as might be expected if these were simply a series of adjective-type elements. It is possible, on the

other hand, that the restrictions on ordering are not because of type of node or projection, but rather the result of semantic restrictions on the mutual ordering of adjectives, the type of restriction Fukui and Speas say exists in Japanese and which exists among "ordinary" adjectives in Modern English. Yamamoto makes this one of her assumptions about Old English. Additionally, and perhaps more importantly, some of the unusual word orders may result from heavy Latin influence on translated passages. The example cited in (8) is from a section highly Latinate in syntax (Matti K. Kilpio, p.c.), and does not, therefore, provide a strong basis for judgments about Old English word order.

The third argument Corver presents, and his most important, is the argument from left branch extraction. I have not been able to find examples of the same extractions, but the following examples, taken from Mitchell, indicate that a separation of elements of a noun phrase was possible in Old English.

- (4) a. nu ic eower sceal frumcyn witan (Beo 251)
 now I your must origin know
- b. he ure wæs healdend (BIHom 243.18)
 he our was Lord
- c. þonne witodlice þa hie heora hæfdan witgan (BIHom 177.8)
 then truly at that time they their had prophets

These examples come from both poetry and prose, indicating that this is not merely a stretching of the word order rules in order to meet the constraints of a poetic form. However, because word order in Old English is Subject-Object-

Verb, it appears that the right branch rather than the left branch of a noun phrase in object position is the one that is moved in these examples.

Of the three arguments Corver makes in arguing that Slavic languages do not encase a noun phrase within a determiner phrase, only the argument of similarity between the forms of adjectives and demonstratives carries over unequivocally into Old English, and that argument is the least forceful of Corver's arguments. The evidence from word order is much less convincing, and although some have concluded on the basis of word order that Old English did not have a DP node, I believe the question is still an open one.

However, if we accept that Old English did not have a DP node and that Modern English does, the rise of the definite article is easily accounted for within the framework I am using. When DP emerges, it is the leftmost node of the noun phrase. As the leftmost node, it must be identifiable, and *the* serves as the minimal marker of its presence. Under the assumption that Old English did not have a DP node, the emergence of *the* is a marker of the emergence of a DP node.

5.3.2 OLD ENGLISH AS A LANGUAGE WITH DP

If we take the alternate possibility and analyze Old English as a language which had DP, it is still clear that there must have been a significant change in the system of definiteness between Old and Middle English. Old English simply did not mark definiteness in the way that Middle and Modern English do.

One way to account for the change is to look at the defining feature of the DP node. There exists research which suggests that the defining feature of a DP node is not identical in all languages. Lefebvre (1982) gives evidence that the defining feature of a DP node in Haitian Creole is the feature [+deictic] rather than the feature [+definite]. She defines deictic as previous reference in the discourse or reference made clear by context or shared knowledge.

If the defining feature of Old English DP is the feature [+deictic], the data in section 5.3.1 can be accounted for. First, adjectives do not occur before demonstratives in Old English because adjectives are generated adjoined to the noun and demonstratives occupy a functional node to the left of the noun. There is no need to appeal to semantic restriction to account for the ordering. Secondly, assuming the presence of a [+deictic] DP node accounts for the strongly preferred word order in Old English noun phrases. As stated earlier, while there are examples of two demonstratives or of a demonstrative after the noun, the examples are rare and may exist because of Latin influence on a translation or because of poetic stretching of the syntax. Thirdly, the lack of left-branch extractions of the pattern found in Slavic languages is accounted for, under Corver's analysis by the presence of a DP node. Finally, the argument of morphological similarity between demonstratives and adjectives has a counter argument. While the demonstratives are morphologically similar in inflection to adjectives, they are identical to relative pronouns which are a functional

category. The argument is not conclusive on either side, but does suggest that the demonstratives may very well be elements of a functional category rather than the lexical category Adjective.

If the defining feature of the DP node in English changed, the emergence of the definite article would then be interpreted not as a mark of the rise of the DP node, but as a mark of the reanalysis of the defining feature of the DP node. When the node became [+definite] *the* emerged as a minimal marker of that feature. I believe the evidence for this interpretation produces the stronger argument, but in either case, *the* remains the minimal marker of a [+definite] DP node. If Old English is analyzed as a language with a DP node, and that node is [+deictic], the principle that the leftmost node must be identifiable again accounts for the rise of the definite article *the*.

5.4 CORRELATIONS WITH OTHER RESEARCH

The analysis of the definite and indefinite articles has correlations with, and offers some potential improvements to, research done by others. In section 5.4.1, I discuss Yamamoto's proposed analysis of the rise of DP in English and the date of the change. In section 5.4.2 I discuss Lobeck's analysis of ellipsis in noun phrases and suggest some ways that the analysis I am arguing for may provide some simplification of her analysis.

5.4.1 TOPIC POSITION AND DP IN ENGLISH NOUN PHRASES

Yamamoto (1989) argues that English went from [-D] to [+D], but on the basis of an analysis completely different from the one I have presented. Her position is that Old English was a system in which possessive and demonstrative forms were all generated adjoined to N', with possessives generated to the right of demonstratives and then sometimes moved and adjoined to N' at the left of the demonstrative. In time the position adjoined to the demonstrative came to be treated as a Topic position within the noun phrase. A further reanalysis results in the Modern English system in which she proposes that the Topic position has been reanalyzed as a Specifier of D position. Possessives are base generated in the Specifier of D position if they carry the theta role *possessor*, with D assigning the possessor role. Possessives carrying the theta role *agent*, however, are generated in N' with the theta role indirectly assigned by N.

Yamamoto's analysis of the historical change is a complicated one and requires accepting a substantial amount of conjecture, while not taking into account the rise of the definite article. In fact there is no mention of the definite article *per se*. Her analysis consists of three statements: that Old English did not have a category *article*, that the indefinite article was not distinct from *one* in Old English, and that articles increased during the Middle English period. From this she concludes that "the introduction of the category. . . did not immediately lead to the introduction of the position of D. But the existence of articles as a

category seems to be a necessary condition for the establishment of functional category D" (p.15). I believe that a more coherent analysis can be made by analyzing the definite article as an element of D from the time of its introduction.

Yamamoto says that English went from being [-D] to [+D] "approximately in the 15th or 16th century" (Yamamoto, 1989 p.14). Her chief reason for this conclusion is that constructions compatible with a [-D] language died out at that time. It is more reasonable to assume, if one operates under a dual-base approach, that the new analysis was operative in the grammars of many speakers from the beginning of the Middle English period and forward, but that the last speakers with access to the old forms died considerably later. Too, it is known that dialect change was not evenly paced throughout the English speaking area. The late sixteenth century is also the period in which the last uses of *þe* and of *many* and *much* in their Old English meanings appear. The loss of all these forms is compatible with the speculation that the last speakers with access to the Old English rules within their internal grammars died in the late sixteenth century.

5.4.2 ELLIPSIS IN NOUN PHRASES

One of the interesting small mysteries of the changes in English between the Old and Middle English periods is why all of the "article or determiner like" elements of Old English could stand alone, while the new elements of Middle English, *the* and *a/an*, cannot. An explanation can be found if the similarities of

the two elements as minimal markers of the presence of a functional node are taken into account. This explanation is compatible with an analysis of ellipsis developed in Lobeck 1995 and may allow for some simplification of her theory.

Lobeck interprets the ability to "stand alone" without a following noun as an instance of ellipsis and presents principles which unite the rules of ellipsis across categories. Ellipsis is analyzed as the presence of a non-arbitrary, non-NP pronominal (*pro*), which is complement of a functional category, [Comp], [D], or Infl. A fundamental principle is the following:

(5) Licensing and Identification of *pro*

An empty, non-arbitrary pronominal must be properly head-governed, and governed by an X^0 specified for strong agreement.

An element X^0 is specified for agreement if and only if its features are shared with another X^0 or XP under government, and specified for strong agreement only if that agreement is morphologically realized in a productive number of cases. Typical agreement features are person, number and gender.

Applying this principle for the licensing and identification of *pro* to Modern English, Lobeck argues that in Modern English the strong agreement features for D and Num are [+possessive], [+plural] and [+partitive]. The features [+plural] and [+partitive] require some discussion.

First, is the feature [+plural]. Even if an element is specified for number (that is [\pm plural]), if it is not positively specified [+plural], it is not specified for

strong agreement. In Lobeck's analysis, *the* is not specified [+possessive] or [+partitive] and is unspecified for [plural]. *A/an* is not specified [+possessive] or [+partitive] and, while specified for number, is specified [-plural]. Therefore, neither *the* nor *a/an* can license ellipsis.

Lobeck employs the requirement that an element be specified [+plural] rather than [+number] to account for her datum that the following sentence is ungrammatical.

- (6) *Although John doesn't like [_{DP}this[e] that he got at K-Mart], he likes that new air conditioner that Mary bought at Sears.

Lobeck argues that because *this* and *that* are not specified [+plural], they do not license ellipsis. She then must account for ellipsis after *one*, clearly a singular element, and for ellipsis after *each*, also [-plural]. At this point Lobeck proposes the existence of a feature [+partitive] to account for this grammaticality.

The feature [+partitive] is assumed to be a feature shared by all elements which can enter into partitive expressions. If all elements which will enter into partitive constructions carry a feature [+partitive], and if this feature is a strong agreement feature, then *one* and *each* are [+partitive], specified for strong agreement, and their ability to license ellipsis is accounted for.

- (7) a. I bought one of the books. (partitive)
 b. I bought each of the books.
- (8) a. Kim bought two books and I bought one. (ellipsis)
 b. Kim selected two books and I paid for each.

A second result of analyzing [+partitive] as a strong agreement feature is that it can account for the inability of *every* to license ellipsis because *every* is the only English quantifier which cannot occur in partitives (Lobeck 1995 p.91). The questionable part of this analysis is declaring [+partitive] an agreement feature. It is not a typical agreement feature and to say it is morphologically realized in a productive number of cases requires some stretching of the definition of *morphologically realized*.

However, the evidence for Lobeck's analysis, overall, seems clearly convincing. The cross-category principle that ellipsed elements are *pro* complements of functional categories and licensed and identified under government by heads carrying specific features is straightforward. In the details of determining which features are strong and license ellipsis, I believe that the proposals I have presented on the structure of noun phrases and the role of the definite and indefinite articles may allow some improvement.

The following type of sentence has been known for years in my community as "a kind of sentence you can say but not write."

(9) How do you like my coffee? I know that that that Mary makes is great.

The grammaticality contrast between (6) and (9) can be accounted for if we consider the count/non-count distinction. Lobeck's datum indicates that the feature [+plural], a feature shared with Num and morphologically realized in a productive number of count nouns, is required to license the ellipsis of a count

noun. The feature [+plural] is a feature shared with a plural count noun and makes identifiable the count nature of the head noun. As a result, a plural demonstrative is 'strong enough' to license the ellipsis of both a NumP and an NP. If the noun is non-count then, by the analysis argued for here, there is no NumP and therefore no ellipsed NumP. The feature [+plural] is not required in order to license ellipsis.

In addition, the assumption that *one* is a numeral and *a/an* simply a minimal marker of count may make it possible to avoid appeal to the feature [+partitive]. Instead, we can say that numerals, including the numeral *one*, license ellipsis by making the count nature of the head noun identifiable. If so, there is no need to appeal as Lobeck does to the feature [+partitive], which is not a typical agreement feature, to account for the ability of *one* to license ellipsis. *One* is a numeral. *A/an* is not; it is inserted as a minimal marker of the presence of a NumP. Of course, this still leaves open the problem of *every*, but any progress in avoiding appeal to the feature [+partitive] in licensing ellipsis is useful.

Despite these quibbles with the data, the compatibility of my analysis under which the definite and indefinite articles are treated as minimal markers of a functional node with Lobeck's analysis of ellipsis should be clear. If *the* and *a/an* each have only one syntactic feature and that feature is the defining feature

of their respective nodes, they cannot share features with other elements or morphologically realize agreement in a productive number of cases.

5.4 CONCLUSION

Under the proposals I have made here, there are significant similarities between *a/an* and *the*, but they are not elements of the same syntactic category. Using terminology of the Minimalist Program, they are examples of expletives, similar to *there* as a subject. Each serves as the minimum element which can fill a functional node, and each has only one syntactic feature. They are not a pair [+definite] and [-definite]. Rather, *the* marks the [+definite] feature on nouns, whether they be singular count, plural count, or non-count nouns. *A/an* is present only in indefinite noun phrases not because it is a marker of [-definite], but because it has no syntactic function within a [+definite] noun phrase. *A/an* marks the feature [+count], and appears only in singular count nouns.

The semantics of definiteness continues to be a challenging study for scholars working in semantics and philosophy of language. The discourse rules describing when an English speaker chooses to use definite or indefinite forms are equally complex and, after decades of scholarship, continue to present puzzles. This dissertation does not attempt to answer the questions raised by these studies. I argue only that in syntax, *the* and *a/an* must be treated as simple, minimal markers of the features [+definite] and [+count]. Their function

is to mark the presence of the leftmost node in a noun phrase when it is unmarked by any other, more content-full element.

BIBLIOGRAPHY

- Abney, Steven. 1987. *The English Noun Phrase in Its Sentential Aspects*.
Doctoral dissertation, MIT, Cambridge, Mass.
- Bell, Allan. 1984. Language Style as Audience Design. *Language in Society*.
13:145-204.
- Brame, Michael. 1982. The Head Selector Theory of Lexical Specifications and
the Non-existence of Coarse Categories. *Linguistic Analysis* 10:321-325.
- Bybee, Joan, Revere Perkins and William Pagliuca. 1994. *The Evolution of
Grammar: Tense, Aspect, and Modality in the Languages of the World*.
Chicago: The University of Chicago Press.
- Campbell, Lyle. 1993a. The Explanation Of Syntactic Change: A Historical
Perspective. In *Historical Linguistics 1991: Papers from the 10th
International Conference on Historical Linguistics*, ed. Jaap van Marle, 49-
70. Amsterdam Studies in the Theory and History of Linguistic Sciences,
series IV, n.107. Amsterdam: Benjamins.
- Campbell, Lyle. 1993b. On Proposed Universals of Grammatical Borrowing. In
*Historical Linguistics 1989: Papers from the 9th International Conference
on Historical Linguistics*, ed. Henk Aertsen and Robert J. Jeffers, 91-109.
Amsterdam Studies in the Theory and History of Linguistic Sciences,
series IV, n.106. Amsterdam: Benjamins,
- Carlson, Anita M. 1978. A Diachronic Treatment Of English Quantifiers. *Lingua*.
46:295-328.
- Chomsky, Noam and Howard Lasnik. 1995. *The Minimalist Program*.
Cambridge, MA: MIT Press.
- Chomsky, Noam. 1965. *Aspects of the Theory of Syntax*. Cambridge, MA: MIT
Press
- Chomsky, Noam. 1970. Remarks on Nominalization. In *Readings in English
Transformational Grammar*, ed. Roderick A. Jacobs and Peter S.
Rosenbaum, 184-221. Washington: Georgetown University Press.

- Chomsky, Noam. 1982. *Some Concepts and Consequences of the Theory of Government and Binding*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 1986a. *Barriers*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 1986b. *Knowledge of Language: Its Nature, Origin and Use*. New York: Praeger.
- Chomsky, Noam. 1993. A Minimalist Program for Linguistic Theory. In *The View from Building 20: Essays In Linguistics In Honor of Sylvain Bromberger*, ed. Kenneth Hale and Samuel Jay Keyser, 1-52. Cambridge, MA: MIT Press.
- Clark, Cecily. 1958. *The Peterborough Chronicle, 1070 - 1154*. London: Oxford University Press.
- Corver, Norbert. 1989. Left Branch Extractions And DP. In *Linguistics in the Netherlands*, ed. Hans Bennis and Ans van Kemenade, 31-40. Dordrecht: Foris Publications.
- Disterheft, Dorothy. 1993. Parameter Resetting. In *Historical Linguistics 1991: Papers from the 10th International Conference on Historical Linguistics*, ed. Jaap van Marle, 87-98. Amsterdam Studies in the Theory and History of Linguistic Sciences, series IV, n.107. Amsterdam: Benjamins.
- Emonds, Joseph. 1985. *A Unified Theory of Syntactic Categories*. Dordrecht: Foris Publications.
- Emonds, Joseph. 1987. Parts Of Speech In Generative Grammar. *Linguistic Analysis*. 17:3-42.
- Epstein, Samuel David, Höskuldur Thráinsson and C. Jan-Wouter Zwart. 1996. Introduction. In *Minimal Ideas*, ed. Werner Abraham, Samuel David Epstein, Höskuldur Thráinsson and C. Jan-Wouter Zwart, 1-66. Linguistik Aktuell n.12. Amsterdam: Benjamins.
- Ferguson, Charles. 1978. Introduction. In *Universals of Human Language*, v.3, ed. Joseph Greenberg, 1-5. Stanford: Stanford University Press.
- Fischer, Olga. 1992. Syntax. In *The Cambridge History of the English Language, Volume 2:1066-1476*, ed. Norman Blake, 207-408. Cambridge: Cambridge University Press.

- Fontana, Josep M. 1993. *Phrase Structure and the Syntax of Clitics in the History of Spanish*. Doctoral dissertation, U of Pennsylvania, Philadelphia, PA.
- Fukui, Naoki and Margaret Speas. 1986. Specifiers and Projection. *MIT Working Papers in Linguistics*. 8:128-172.
- Giusti, Giuliana. 1991. The Categorical Status Of Quantified Nominals. *Linguistische Berichte*. 136: 438-454.
- Givon, T. 1981. On the Development of the Numeral 'One' as an Indefinite Marker. *Folia Linguistica*. 2:35-53.
- Greenberg, Joseph. 1978. How Does A Language Acquire Gender Markers? In *Universals of Human Language*, v.3, ed. Joseph Greenberg, 47-82. Stanford: Stanford University Press.
- Grimshaw, Jane. 1991. *Extended Projection*. Brandeis University Ms.
- Haider, Hubert. 1994. A Note On The Licensing And Identification Of Empty Functional Head Positions. In *Paths Toward Universal Grammar*, ed. Guglielmo Cinque, Jean-Eves Pollock, Luigi Rizzi, and Raffaella Zanuttini, 189-198. Washington: Georgetown University Press.
- Heim, Irene. 1982. *The Semantics of Definite and Indefinite Noun Phrases*. Doctoral dissertation, University of Massachusetts, Amherst, Massachusetts.
- Heim, Irene. 1983. File Change Semantics and the Familiarity Theory of Definiteness. In *Meaning, Use and Interpretation of Language*, ed. Rainer Bäuerle, Christoph Schwarze and Arnim von Stechow, 164-189. Berlin: Walter de Gruyter.
- Heine, Bernd. 1994. Grammaticalization as an Explanatory Parameter. In *Perspectives on Grammaticalization*, ed. William Pagliuca, 255-287. Amsterdam Studies in the Theory and History of Linguistic Sciences, series IV, n.109. Amsterdam: Benjamins.
- Hewson, John. 1972. *Article and Noun in English*. The Hague: Mouton.
- Hopper, Paul and Janice Martin. 1987. Structuralism And Diachrony: The Development Of The Indefinite Article In English. In *Papers from the Seventh International Conference on Historical Linguistics*, ed. Anna

Giacalone Ramat, Onofrio Carruba, and Giuliano Bernini, 295-304.
Amsterdam: Benjamins.

Jackendoff, Ray. 1977. \bar{X} *Syntax: A Study of Phrase Structure*. Cambridge, MA: MIT Press.

Kawashima, Ruriko. 1993. The Structure Of Noun Phrases: Arguments For Quantifier And Number Phrase. *Cornell Working Papers in Linguistics*. 11:56-72.

Keller, Rudi. 1994. *On Language Change : The Invisible Hand In Language*. Translated by Brigitte Nerlich. London: Routledge.

Kroch, Anthony. 1989a. Language Learning and Language Change. *Behavioral & Brain Sciences* 12:348-349.

Kroch, Anthony. 1989b. Reflexives of Grammar in Patterns of Language Change. *Language Variation and Change*. 1:199-244.

Laka, Mugarza. 1990. *Negation in Syntax: On the Nature of Functional Categories and Projections*. Doctoral dissertation, MIT, Cambridge, Massachusetts.

Lefebvre, Claire. 1982. L'Expansion D'une Catégorie Grammaticale: Le Déterminant *La*. In *Syntaxe de L'Haïtien*, ed. Claire Lefebvre, Hélène Magloire-Holly, and Nanie Piou, 21-63. Ann Arbor: Karoma Publishers.

Levin, Saul. 1992. Studies in comparative grammar: I: The definite article, an Egyptian/Semitic/Indo-European Etymology. *General Linguistics*. 32:1-15.

Lightfoot, David. 1990. Obsolescence and Universal Grammar. In *Papers from the 5th International conference on English Historical Linguistics 1987*, ed. Sylvia Adamson, Vivien Law, Nigel Vincent and Susan Wright, 281-293. Amsterdam Studies in the Theory of Linguistic Science, series IV, v.65. Amsterdam: Benjamins.

Lightfoot, David. 1991. *How to Set Parameters: Argument from Language Change*. Cambridge, MA: MIT Press.

Lobeck, Anne. 1995. *Ellipsis: Functional Heads, Licensing, and Identification*. New York: Oxford University Press.

- Løbel, Elisabeth. 1989. Q As A Functional Category. In *Syntactic Phrase Structure Phenomena*, ed. Christa Bhaatt, Elizabeth Løbel, and Claudia Schmidt, 133-157. Amsterdam: Benjamins.
- Marantz, Alec. 1995. The Minimalist Program. In *Government and Binding Theory and the Minimalist Program: Principles and Parameters in Syntactic Theory*, ed. Gert Webelhuth, 349-382. Oxford: Blackwell.
- Marckwardt, Albert. 1970. Many And Much: The Historical Development Of A Modern Distribution Pattern. In *Philological Essays: Studies in Old and Middle English Language and Literature in Honour of Herbert Dean Merrit*, ed. James L. Rosier, 50-54. The Hague: Mouton.
- Meillet, A. 1926. *Linguistique Historique et Linguistique Ge'ne'rale*. Paris: La Societe de Linguistique de Paris.
- Mitchell, Bruce. 1985. *Old English Syntax*. Oxford: Clarendon Press.
- Mossé, Fernand. 1952. *A Handbook of Middle English*; translated by James A. Walker. Baltimore: Johns Hopkins Press.
- Mustanoja, Tauno. 1960. *A Middle English Syntax*. Helsinki: Societe Neophilologique.
- Perlmutter, David. 1970. On The Article In English. In *Progress in Linguistics: A Collection of Papers*, ed. Manfred Poierwisch and Karl Heidolph, 233-248. The Hague: Mouton.
- Quirk, Randolph and C. L. Wrenn. 1957. *An Old English Grammar*, second edition. London: Methuen.
- Rissanen, Matti. 1967. *The Uses of One in Old and Early Middle English*. Helsinki: Societe Neophilologique.
- Ritter, Elizabeth. 1991. Two Functional Categories In Noun Phrases: Evidence From Modern Hebrew. In *Perspectives on Phrase Structure: Heads and Licensing*, ed. Susan Rothstein, 37-62. San Diego: Academic Press.
- Ritter, Elizabeth. 1992. Cross-Linguistic Evidence For Number Phrase. *Canadian Journal of Linguistics*. 37:197-218.
- Rizzi, Luigi. 1986. Null Objects In Italian And The Theory Of Pro. *Linguistic Inquiry*. 17:501-557.

- Rizzi, Luigi. 1986. On The Status Of Subject Clitics. In Romance. In *Studies in Romance Linguistics*, ed. Osvaldo Jaeggli and Carmen Silva-Corvalan, 391-419. Dordrecht: Foris publications.
- Roberts, Ian. 1993. A Formal Account Of Grammaticalisation In The History Of Romance Futures. *Folia Linguistica Historica*. 13:219-258.
- Romaine, Suzanne. 1984. Some Historical And Social Dimensions Of Syntactic Change In Middle Scots Relative Clauses. In *English Historical Linguistics: Studies in Development*, ed. N. F. Blake and Charles Jones, 101-122. Sheffield:University of Sheffield Press.
- Santorini, Beatrice. 1989. *The Generalization of the Verb-Second constraint in the History of Yiddish*. Doctoral dissertation, U of Pennsylvania, Philadelphia, PA.
- Seppänen, A. 1982. English A(N) -An Article Or A Numeral? *Linguistische Berichte*. 81: 32-51.
- Sportiche, Dominique. 1988. A Theory Of Floating Quantifiers And Its Corollaries For Constituent Structure. *Linguistic Inquiry*. 19:425-449.
- Stevick, Robert D. 1992. *A Firstbook of Old English*. Tokyo: Kenkyuoha.
- Stowell, Tim. 1981. *Origins of Phrase Structure*. Doctoral dissertation, MIT, Cambridge, MA.
- Suzuki, Tatsuya. 1988. *The Structure of English Gerunds*. Doctoral dissertation, University of Washington, Seattle, WA.
- Thompson, Sandra. 1992. Functional Grammar. In *The International Encyclopedia of Linguistics*, v.2, ed. William Bright, 37-40. Oxford: Oxford University Press.
- Thorne, James. 1987. The Indefinite Article And The Numeral One. In *Language Topics: Essays in Honour of Michael Halliday I*, ed. Ross Steele, 123-127. Amsterdam: Benjamins.
- Toller, T. 1921. *An Anglo-Saxon Dictionary Based on the Manuscript Collections of the Late Joseph Bosworth*. Oxford: Clarendon Press.
- Traugott, Elizabeth Closs. 1982. From Propositional to Textual and Expressive Meanings: Some Semantic-Pragmatic Aspects of Grammaticalization. In *Perspectives on Historical Linguistics*, ed. Winfred P. Lehmann and Yakov

Malkiel, 245-271. *Amsterdam Studies in the Theory and History of Linguistic Science*, series IV, n.24. Amsterdam: Benjamins.

Traugott, Elizabeth Closs. 1992. Syntax. In *The Cambridge History of the English Language, I: The Beginnings to 1066*; ed. Richard M. Hogg, 168-289. Cambridge: Cambridge University Press

Visser, F. Th. 1963. *An Historical Syntax of the English Language*. Leiden: E. J. Brill.

Yamamoto, Keiko. 1989. The Historical Development Of Determiners: A Parametric Approach. *English Linguistics*. 6:1-17.

VITA

Nancy M. Ackles

University of Washington

1997

Education:

M.A. 1989, University of Washington, Linguistics.

M.A. 1974, Mennonite Brethren Biblical Seminary, Practical Studies.

M.A. 1969, Claremont Graduate School, Education.

B.A. 1967, Whitman College, English, cum laude.

Publications:

The Indefinite Article, Historical Syntax and Noun Phrase Structure, 1996, Working Papers in Linguistics 14, University of Washington.

The Definiteness Principle and the Definite Article, 1992, Working Papers in Linguistics 10, University of Washington.