# Topics in diachronic English syntax. 

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## TOPICS IN DIACHROHIC ENGLISH SY:TTAX

## A Dissertation Presented <br> by <br> CYNTHIA LOUISE ALLEN

Submitted to the Graduate Schooi of the University of Massachusetts in partial fulfiliment of the requirements for the degree of

DOCTOR OF PHILOSOPHY
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Topics in Diachronic English Syntax

A Dissertation Presented
By

CYNTHIA LOUISE ALLEN

Approved as to style and content by:


Elisabeth O. Selkirk, Member


Ic bidde nu on Godes naman, gyf hwa das boc awritan wille, daet he hi gerinte wel be daere bysne, for dan de ic nah geweald, deah de hi hwa to woge gebringe durh lease writeras, \& hit bid donne his pleoh na min: micel yfel ded se unwritere, gif he nele his gewrit gerihtan
(I bid now in God's name, if anyone will copy this book, that he direct it well by the original, because I have no control, though anyone render it incorrectly, and it is then his peril, not mine; much evil does the bad scribe, if he will not correct his writing)
-- Aelfric, Abbot of Eynsham, preface to his translation of Genesis

## ACKiVOLLEDGEIENTS

In writing a thesis, one draws on the intellectual and emotional resources of more people than it would be possible to mention. However, I will attempt to thank here the people who have been the most helpful.

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I am indebted to Jean Lowenstanm, Anke de Rooij, Annie Zaenen, and Elisabet Engdah7 for help on facts about their respective languages.

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## ABSTRACT

Topics in Diachronic English Syntax<br>September, 1977<br>Cynthia Allen, B.A., University of Iowa<br>Ph.D., University of Massachusetts<br>Directed by: Professor S. J. Keyser

This dissertation is an investigation into the history of certain syntactic constructions in English from Old English to Late Middle English. The facts presented here are based on an examination of approximately seventy texts.

The thesis is divided into three major parts, the first two of which are basically descriptive, and the third, theoretical. Part One is a presentation of some 01d English syntax. The constructions focused on are relative clauses, questions, and comparative clauses. Another major question dealt with in Part One is that of when it was possible to have a "dangling" or "stranded" preposition in 01d English.

Part Two traces the changes from 01d to Middle English involving the constructions dealt with in Part One. One of the major changes discussed is the loss of a prohibition against "stranding" prepositions in several constructions. Other changes in relative clauses and questions, such as the replacement of the old demonstrative relative pronouns by the wh-pronouns, and the generalization of questions to infinitival constructions, are also discussed. Interesting changes in comparative clauses are the loss of the 01d English rule moving the compared material
to the front of certain types of comparative clauses, the development of the Modern English "proportional" comparative (as in the more I sleep, the tireder I feel), and the advent of "analytical" compared adjectives such as more intelligent (compared with O1d English intelligenter).

Part Three is a discussion of the theoretical implications of the facts discussed in parts One and Two. The importance of both the synchronic facts of various stages and of the different changes between stages are considered. One of the major synchronic theoretical results is that 01d English must have had two types of relativization, one by movement, the other by unbounded deletion under identity. This conclusion is reached by a consideration of the differences of preposition stranding in two types of 01d English relative clauses. An approach involving surface filters to deal with these preposition stranding facts within an analysis of both types of relatives as involving movement is shown to be inadequate. Another important result is that 01d English must have also had two types of comparative formation, one involving movement, and the other deletion. From a diachronic point of view, interesting findings include the fact that morphological identity of lexical items plays an important role in syntactic reanalysis, and that reanalysis of a construction may take place even when there remains in the language learner's data evidence supporting the older, rather than the newer, analysis.

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## CHAPTER I

## INTRODUCTION

1.1 Aims and Method of Investigation. This thesis is an investigation into the history of certain constructions in English. In particular, it is an examination of certain changes which took place in relative clauses, questions, and comparative clauses from 01d to Late Middle English. The unifying feature of these constructions is that they all involve types of complementation. The history of English complementation is of interest not only to those especially concerned with historical syntax in general or the history of English syntax in particular, but also to those focusing primarily on synchronic syntactic theory. A great deal of recent research has been devoted to exploring the application of rules across complementizers. The complementizer has become a focal point of the so-called Extended Standard Theory, as developed by Chomsky in his works from around 1970 to the present, because of the theory proposed by Chomsky that all constructions exhibiting certain characteristics involve the movement of a wh-pronoun into the complementizer position, even if there is no direct surface evidence that movement has occurred. Because of this, the history of the system of complementation in English is of great potential interest to anyone seeking evidence for or against Chomsky's hypotheses concerning movement rules. As it turns out, both the synchronic facts of O1d English and the diachronic facts concerning changes in the complementation system and movement rules present problems for Chomsky's system. I will argue that there is evidence in 01d English for relativization by means of unbounded deltion under identity, as
well as by movement. It will also be shown that certain other constructions, such as comparative clauses of a certain type and infinitival constructions of the pretty to look at type, among others, are also best analyzed as involving deletion under identity, rather than movement. Most of the evidence for this position concerns a difference in behavior with respect to preposition stranding in constructions in which movement was directly apparent on the surface, versus ones in which it was not. It will be argued that these facts about preposition stranding; cannot be dealt with effectively by a surface filter of the type proposed by Chomsky and Lasnik (forthcoming).

Not all aspects of complementation in Old or Middle English will be dealt with here, nor will the discussion be strictly limited to complementation. Little will be said about the semantic conditions selecting the type of complement, although some discussion of this matter will be found in Chapter Two. Instead, the investigation will concentrate on types of complements in which movement or deletion takes place. Some matters not directly related to complementation, such as the behavior of prepositions with pronominal objects, will be discussed because these matters bear directly on the question of how piedpiping and preposition stranding is to be treated in movement rules, which in turn bears on the question of whether certain constructions involve movement. The discussion will naturally have to be limited to constructions which appear in the texts studied with great enough frequency to detemmine their characteristics.

The methond of my investigation has been to read through 01d and

Middle English texts, collecting examples of the constructions under consideration and noting the non-occurrence of certain constructions. A list of texts examined, numbering about seventy, appears in the Appendix, along with brief descriptions of the manuscripts on which the texts are based and an explanation of the abbreviations found in the citations of examples.

The facts presented concerning 01d and Middle English are all based on my own investigations into the texts, although I have frequently turned to the works of the traditional grammarians for confirmation of my own findings. The facts presented here are not simply a reiteration of facts already presented by others. For example, facts about preposition stranding in Old English are available in Wende's (1915) excellent study, but I know of no study tracing this phenomenon carefully through the centuries, nor is it possible, as far as I can determine, to piece together the history of preposition stranding from different works. I know of no work covering preposition stranding in a large corpus of Middle English, and general history of English grammars cannot be detailed enough, by their nature, to give a blow-by-blow description of changes in any construction.

While the behavior of prepositions in 01d English has been studied before by various people, although from the viewpoint of a different theoretical framework, I have seen no mention in the literature of the comparative construction involving movement, discussed in Chapter Four and Chapter Seven so the facts presented here are entirely my own results. Furthermore, even when a construction has been much-stud-
ied, such as the relative clause, the theoretical orientation of the previous literature results in a focus very much different from that of the present thesis. For example, a great deal of the study of relative clausas concerns which type of pronoun was used with what type of anteceulent (such as the use of which as a relative pronoun with human antæcedents), a topic interesting in its own right, but of only marginal finterest here. The different orientation of the traditional literature has made it less useful to this study than it would have been if the same questions that a transformational grammarian is interested iln had been considered to be of paramount interest by the earlier investigators. Nevertheless, I owe a great debt to those Who have already written on the history of English syntax, and no one investigating diachronic English syntax can afford to ignore the very fruitful labors of previous investigators into the subject.

It is appropriate at this point to make a brief survey of the literature of diachronic English syntax. This survey will be divided into two parts. The first will be concerned with works on diachronic syntax in generral, and the second with works on the history of English, both general hïstorical grammars and works on specific constructions. 1.2. Survey of Literature.
1.2.1. Diachronic Syntax - General. Historical syntax is a notoriously neglected field. The literature contains more laments about our lack of knowledge of historical syntax than attempts to remedy this situation. Because we have relatively few studies of syntactic change, we know little about what kinds of change to expect in syntax,
while we know quite a bit (or at least, much more) about what types of phonological change to expect. Nevertheless, there has been a certain amount of speculation on the way syntax changes.

Traugott (1965) summarized some of the more recent proposals concerning language change (originally proposed for phonological change, and extended to syntax), blending them into a theory of linguistic change. The first proposal is that language changes by means of a series of individual innovations, primarily in the addition of single rules to the grammar of the adult speaker. Second, these innovations are generally made at some "break" in the grammar, such as before the phonological rules eliminating boundary markers, etc. Third, the innovations are passed on to the younger generation, which either internalizes the adult grammar, or more likely, simplifies it. Fourth, the simplification of the grammar by the child brings about a discontinuity in transmission from generation to generation, which may resuit in radical changes, such as restructuring. This linguistic "generation gap" cannot be too great, or else the old and young of a speech community could literally not understand each other.

Traugott notes that the intelligibility criterion, which limits the amount of divergence between the grammars of the generations (although how much divergence is possible remains undefined) has resulted in a general assumption that synchronic grammars reflect the chronology of rule addition (except in the case of reanalysis). This is because it is generally assumed that the addition of a rule at a low level
level (i.e. at the end of the grammar) will cause less disruption in the grammar than an addition at a higher level. This assumption was adopted by Klima (1964) in his study of the case-marking on relative and interrogative pronouns in various styles of English.

Traugott's own observations on these proposals, based on an investigation of the history of the auxiliary in English, are that there is little reason to believe that changes take place at breaks in the grammar or that mutation (restructuring) is rare in syntax, but that the other proposals discussed seem valid, and that any theory of language change must provide that language changes by means of single additions to an adult's grammar, by transmission of these innovations to new generations, and by reanalysis.

While the proposals discussed by Traugott make some suggestions as to how syntactic change proceeds from generation to generation, they say little about the exact nature of the changes. Types of phonological changes generally assumed to exist are rule addition, rule loss, modification of a rule (particularly by generalizing it), reordering of rules, and restructuring. The last three types of these changes were proposed by Klima (1964), who argued that the different use of case marking on relative and interrogative pronouns in Modern English are best described not by the addition of rules in one style to the grammar of another style, but by a change of rule ordering from the first style to the second, a change in the case-marking rule from the second style to the third, and a reanalysis of the base rules from the third style to the fourth.

The two other types of change mentioned above, rule addition and rule loss, were also suggested by Klima (1965) in his dissertation as types of syntactic change, along with the types just mentioned. Klima's approach, then, is to treat syntactic change as being similar to phonological change.

Of the types of linguistic change (both phonological and syntactic), Traugott (1972) says that we usually find that language change involves either simplification or elaboration, rather than the rearranging of material already available. Two kinds of simplification which Traugott notes are rule loss and the generalization of one pattern to another. She hypothesizes that one of the principle conditions for simplification is the presence of variable rules in the grammar, giving as an example the optionality of the rule inserting $\underline{r}$ before consonants and word-finally. This optionality results in a more complicated grammar, she says, and later generations are likely to reduce the complexity by eliminating the choice. ${ }^{1}$

The other major type of change, elaboration, Traugott considers to be rarer than simplification. The simplest kind of elaboration, according to Traugott, is the addition of a pattern to a language. Another type is the addition of restrictions on a pattern. Traugott hypothesizes that adults change their grammars only by elaboration, while children mostly simplify the grammar. This hypothesis is based on the assumption that after reaching the language maturation point, a person cannot usually restructure his grammar. For Traugott, restructuring is virtually identical to simplification. She says (p. 16):

Since it is the restructuring by children that brings about
major changes or mutations, and since that restructuring
nearly always involves simplification, simplification can
be regarded as the main types of change.
A similar claim is made by Bever and Langendoen (1971), who say that children can replace learned grammatical structures while adults can only add rules to already learned structures. However, they add that it is not clear that even children are willing to drastically restructure their grammars either, and stipulate that the child's grammar at one stage is a minimal change from the grammar of the preceding stage. How "minimal" is to be defined, however, is not clear, as they note.

Another idea about syntactic change which has had some currency is the notion that phrase structure does not change. This idea was adopted by King (1969) and Traugott (1969). King claims that phrase structure rules do not change from dialect to dialect, and probably not from language to language. King's statement reflects the idea that the deep structure of a language represents the semantic or conceptual structure, and that the tremendous surface differences in sentence structure in different languages are the result of the operation of transformations. This assumption about phrase structure, a basic tenet of the "generative semantics" school of transformational grammar, is not accepted by the proponents of the "extended standard theory" and has been hotly disputed in the literature. I will not go into the reasons for not assuming that all languages have the same base structures, but will merely note that without such an assumption, there is
no basis for supposing that change of the phrase structure is not a possible historical change. Furthermore, certain changes, such as the elaboration of the auxiliary system in English, are most easily expressed as changes in the phrase structure rules. ${ }^{2}$ The question of whether phrase structure changes is an empirical one.

Simplification of the grammar is one type of change expected by all linguists. Elaboration of the grammar, on the other hand, is more puzzling. Why should the language learner make his grammar more complicated than that of his elders? One approach to this question was made by Bever and Langendoen (1971), who noted that what makes a language easy to understand can often make it difficult to learn. For example, elaborate case marking is a perceptual aid to the listener, making the grammatical relations in a sentence clear, but such case marking is difficult to learn. They suggest that while rule simplification does play a role in change, not all changes can be attributed to simplification. They hypothesize that some changes are due to the dynamic interaction between the rules required for the production of sentences and the behavioral mechanisms (i.e. perceptual strategies) used to process sentences. In particular, the restrictions on the deletability of a relative marker in English became more complicated because when case marking was lost, a perceptual strategy was needed to tell the listener when a noun phrase was the subject of a clause, and the obligatory presence of a relative marker when the relativized item is the subject of its clause enables such a perceptual
strategy to give the listener better results in processing a sentence. The idea that the sources of linguistic change are not to be found merely in the form of rules was extended by Labov (1972), who studied change, especially phonological change, in its social setting. Labov's method was to study the occurrence of certain forms, such as a new pronunciation of a vowel, across the generations in a speech community, comparing the frequency of occurrence and the environment of the form in different age groups. He found that sound change occurs too rapidily to be attributed mainly to random fluctuations in the pronunciation of a sound. According to Labov, a sound change will generally originate within a restricted subgroup of a speech comnunity at a time when that subgroup feels itself to be in danger of losing its identity. The change begins with an irregular distribution of a new form, which then becomes more general, affecting all items of a given word class. At this point the form becomes an "indicator," a sort of badge of group membership. The form is then generalized further by subsequent generations and begins to show stylistic variation. Depending on the prestige of the group in which the change originated, the change will either spread to other groups, stay within the original group, or be completely suppressed.

From Labov's findings, it seems that some linguistic change is quite deliberate, a factor not usually taken into consideration when explanations for change are sought. Labov's type of investigation offers promising possibilities for the study of diachronic syntax. While it is often easy to see how one change led to another, it is usually
more difficult to find a good reason why the original change took place. The study of texts, while an invaluable source of information for what types of changes have occurred in the history of a language, and for insight into the peculiarities of the synchronic state of the language, gives us little insight into the question of how change begins, and what types of change are made by children, compared with adults. Studying changes which are taking place within a living language should help us find answers to these questions.

This concludes our survey of contemporary ideas on linguistic change. No attempt has been made to cover all ideas about change or the history of thought about change, but only the more recent proposals and widely accepted ideas. The one thing which all students of diachronic syntax agree on is that we know very little about the subject, and that investigation into particular changes is necessary before a real theory of diachronic syntax can be formulated. It is to be hoped that the present study will add a bit to our knowledge of the types of syntactic change.

I have included little discussion about the merits of the proposals mentioned in this survey, because my own ideas about change, along with a discussion of the proposals presented here, will be found in Chapter Nine.
1.2.2 Works on the History of English. I will make no attempt here to cover all works on the history of English syntax, which would be an enormous task, but will confine myself to a brief discussion of works which have been particularly helpful in this investigation and
the more recent works. I will first consider works on 01d and Middle English and general histories of English, and then works on specific constructions.
0.2.2.1. Old and Middle English Gramars and Histories of

English. More has been done in the history of English syntax than on the theory of syntactic change. Nevertheless, most general histories of English and Old English granmars are either completely lacking in any discussion of syntax, or nearly completely lacking such discussion. Such is the case with Campbell's (1959) Old English Grammar and Baugh's (1951) History of the English Language. Even recent histories of English, such as Strang (1970) are quite deficient in discussion of syntactic change, although Strang hints that she would give a fuller treatment of syntax if more information were available about syntactic change in English.

A notable exception to the generalization just made is Quirk and Wrenn's (1955) Old English Granmar, which devotes an unusually long (44 page) section to Old English syntax. However, this book is intended as a practical aid to students of Old English literature, rather than a theoretical discussion of Old English, and the syntax section is designed to facilitate the reading of Old English, rather than to present constructions in detail and give analyses of them.

Perhaps the general lack of any discussion of syntax in historical granmars is mainly due to the widespread (and in my opinion, quite mistaken) view that Old English syntax was really very similar to Mo-
dern English syntax, differing mostly in minor details. It is commonly asserted that the main change in syntax from Old to Modern English was the change of English from a synthetic (that is, highly inflected) language to an analytic (mostly uninflected, strict word-order) one. ${ }^{3}$ This viewpoint is expressed by Baugh (1951) who says (p. 190), "The changes in English grammar may be described as a general reduction of inflections."

The opinion that English syntax has changed very little through the centuries has been expressed as recently as 1975 by johnson in her Transformational Analysis of the Syntax of Aelfric's Lives of Saints. Johnson's method was to take a list of transformations for Modern English and see how they worked for Aelfric's English. Her conclusion was that:

The differences between Aelfric's syntax and Modern English syntax are few. Many of them are due merely to a difference in the relative frequency of application of optional rules.

## Later Johnson says:

In the English language, few changes in syntax have occurred in a thousand years; and most of these few did result in the clarification of a potentially ambiguous structure.

It seems clear that Johnson's conclusions result from her concentration on the over-all, very general similarity of the two stages of the language. She ignores any construction not found in her list of transformations for Modern English but found in Old English, and even most differences in detail of a transformation found in similar but different forms in 01d and Modern English. She says nothing, for
example, about the well-known fact that 01d English had a type of relative clause employing both a relative pronoun and a relative particle (the "se de" relative, discussed in Chapter Two here), although her list of transformations includes a relativization rule. She also says nothing about the fact that 01d English lacked the for-to construction, and has nothing to say about the differences between 01d and Modern English in deadless relatives, comparative clauses, etc.

The only changes Johnson does note are the change in the position of the negative element in the sentence, the change in subjectverb inversion from applying to all verbs to applying only to auxiliaries, the change from optionality to obligatoriness in the reflexivization transformation, and the possible non-existence of a thereinsertion transformation in Old English.

From Johnson's work one gets the impression that a speaker of Hodern English would only have to learn a new vocabulary to speak 0ld English reasonably well. On the other hand, works filled with examples of interesting syntactic changes are not completely lacking. Visser's (1963) Historical Syntax of the English Language, a stupendous catalogue of constructions found in the history of English, is full of obsolete constructions which should convince anyone that a considerable amount of syntactic change has taken place. Visser's sensitivity to subtle syntactic distinctions makes his very detailed work an invaluable reference for all students of historical syntax, or English syntax in general. Unfortunately, Visser's organization of the constructions in terms of syntactic units of one verb, two verbs, etc. often results in
his discussing the same construction in slightly different ways in two places, making it difficult to ferret out what one is looking for. This organization also results in a lack of discussion of many (but not by any means all) constructions which are not easily characterized in terms of the number of verbs.

Despite these difficulties, any one interested in diachronic English syntax will find it well worth his or her trouble to dig out what Visser has to say about a given construction. However, the fact that Visser's work is a study of many constructions makes it naturally impossible for him to go into the details of the history of many constructions in detail. While he does trace some constructions through the centuries, one will often find only examples of the construction under consideration in different times, with little information about when the construction entered the language, how frequent it was at a given time, or when it died out. For example, Visser's information on the history of preposition stranding is very sketchy. This work is therefore in many places incomplete, suggesting avenues of further research.

There are several other works which are basically grammars of Modern English with discussion of how Modern English constructions came about; for example, Jespersen's (1909) Modern English Grammar on Historical Principles, Curme's (1931) Grammar of the English Language, and Poutsma's Granmar of Late Modern English. These are all very useful works and give interesting suggestions as to the origins of many constructions, although the history of felv constructions are gone into
in detail, and by the nature of the enterprise, there is rarely any mention of constructions found in Old or Middle, but not Modern English. Among works devoted particularly to historical English we find the second volume of Einenkel's (1916) useful Geschichte der Englischen Sprache. In the transformational framework, we find Traugott's (1972) History of English Syntax. Traugott's aim was to present a broad outline of the history of selected sentence patterns and introduce the reader to some of the theoretical issues in the study of language change. This book is basically a textbook to introduce students to the study of historical English syntax and contains no detailed investigation into the inistory of any construction. Traugott's data base is also rather small, and a couple of factual errors in her book will be discussed as the occasion arises.

A grammar devoted entirely to Middle English is Mustanoja's (1960) Middle English Syntax, containing helpful information on the development of for-to constructions, changes in the relative clause system, etc.

Besides general syntaxes of 01d English and histories of English syntax, there are several works on the syntax of individual 01d and Middle English works and Writers. Wulfing's (1901) Die Syntax in den Werken Alfreds des grossen is cne of the best of these. However, all traditional syntaxes of 01d English are of less value to the transformational grammarian than one might hope because of their orientation. Most of the usual 01d English syntax is devoted to describing what cases were used in which constructions, which is of course an important
part of the grammar, but larger constructions are mostly neglected. Bacquet's (1962) La Structure de la phrase verbale a l'epoque alfredienne is a very important work which has helped to dispell the notion that 01d English word order was extremely free. Bacquet proposed that certain 0ld English patterns were basic, while others were "marked," being employed as stylistic devices. Bacquet's study goes beyond what is usually understood by the transformational grammarian as the "verb phrase," giving some discussion of inter-clausal syntax. However, Bacquet's failure to distinguish between declinable relative pronouns and indeclinable relative particles unfortunately diminishes the value of his discussion of preposition stranding in relatives. Bacquet's use of a structural model, requiring the organization of his data by the number of elements, etc. also resulted in a lack of any way of relating one pattern to another. Despite these shortcomings, this is a very important work because of its careful detail.

Goldman's (1970) thesis is an attempt to do, in a transformation case-grammar framework, for the Vercelli homilies what Bacquet did for Alfred's writings. This work is mainly concerned with word order, and is useful in giving examples of the different types of orders, but gives no sophisticated analysis of any construction.

Other studies of individual 01d English writers and texts include Carlton's (1970) Descriptive Syntax of the 01d English Charters and Sprockel's (1973) Language of the Parker Chronicle, among others. In the study of Middle English texts, we find Palmatier's (1969) Descriptive Syntax of the Ormulum and Shore's Descriptive Syntax of the

Peterborough Chronicle from 1122 to 1154 . It would take too long to discuss all of these works individually here, so I will merely note that they all tend to be less helpful for our purposes here than one might expect, because of a lack of sensitivity to rather subtle but important differences in constructions. Different sorts of items are often lumped together because of the arrangement by number and position of elements, and usually too few examples of a construction are given for the reader to determine what the author considers to be the defining characteristics of the construction under discussion. However, these works generally contain useful statistics on word order and information on the behavior of prepositions with pronouns and nouns as objects. Inter-sentential syntax, other than some discussion of relative clauses, is generally ignored.

In contrast to the works just mentioned, Visser's Syntax of the English Language of St. Thomas More is an excellent treatment of the syntax of that Early Modern English writer, exhibiting Visser's usual sensitivity to important syntactic distinctions, and full use of examples.

This concludes our survey of works on general 01d English syntax and histories of English syntax. To sumarize briefly, we can say that although one might expect froin the number of works on Old English syntax that no further data gathering would be necessary for a work such as this, this is far from the truth, since the different theoretical orientation of the earlier studies and of this study have resulted in
attention to very different sorts of facts.
1.2.2.2. Works on Specific Constructions. Now let us review briefly some works on particular constructions in 01d English and the history of particular constructions. Again, only those works of particular relevance to this study will be mentioned.

Much has been written on the history of the relative clause in English, but within the traditional framework such investigation generally concentrates on which relative pronouns were used with what types of antecedents, when the relative marker was omitted, etc., rather than questions of greater interest to the transformational grammarian. Therefore there is still a need for further investigation into the history of relative clauses.
S. O. Andrew's (1936) "Relative and Demonstrative Pronouns in Old English" is an attempt to distinguish which instances of demonstrative pronouns in 01d English were truly demonstrative pronouns, versus relative pronouns, since the demonstrative pronouns were used as relative pronouns. Andrew's findings are always somewhat suspect because he was a prescriptive grammarian where 01d English was concerned. After finding that a majority of the cases fell under a certain generalization, Andrew would not hesitate to emend "faulty" examples in the manuscripts to make them conform to his general rule. Andrew's findings are always useful and suggestive, but cannot be taken completely at face value.

Curme's (1912) "A History of the English Relative Constructions"
is an investigation into asyndetic relative clauses, that is, relatives with no overt relative pronoun or particle, in the history of English. Curne's analysis of various relative structures will not be convincing to most contemporary scholars. His proposed explanation for the development of the Middle English relative using the which, for example, is quite farfetched. Curme also failed to distinguish between manuscripts copied in the twelfth century and those originally composed in the twelfth century and therefore fell into the error of assuming that the which that type of relative in Middle English was a direct descendent of the Old English se de relative. This very commonly held assumption will be refuted in Chapter Six.

The development of the wh-words as relative pronouns is studied in Karlberg's (1954) The English Interrogative Pronouns. This work also has a very helpful chart of 01d and Middle English works by dialect, with descriptions of the manuscripts and publication information.

Koch's (1899) The English Relative Pronouns is another work mostly concerned with which pronouns were used under what conditions. McIntosh's (1847) "The Relative Pronouns Be and Bat in Early Middle English" defined the distribution of the relative particles de and dat when the former particle was losing ground to the latter.

Within the transformational framework we find Grimshaw's (1975) "Relativization by Deletion in Chaucerian Middle English" and Keyser's "Partial History of the Relative Clause in English." Keyser's article is a study of the history of relative clauses in English employing both a relative pronoun and a particle (the wh-that construction, which is
discussed here in Chapter Six). Keyser argues for an analysis of Hodern English relativization whereby the relative pronoun is fronted in all cases and then deleted in some cases, that is, in that relatives and relatives with no overt marker. Keyser extends this analysis to 01d and Middle English in his study of the cooccurrence of the relative pronouns and that.

In contrast to this approach, Grimshaw argued for two types of relativization in Middle English, one by movement, the other by deletion in place. The facts upon which Grimshaw based her argument will be discussed in Chapter Five. In Chapter Eight I will argue that Grimshaw's analysis of relativization for Middle English is correct for both that stage of the language and for Old English.

A work within the transformational framework investigating not only relative constructions, but also others, is Klima's (1965) Studies in Diachronic Transformational Syntax. A good part of Klima's thesis was devoted to accounting transformationally for the shape of the relative markers in the various stages of English. For example, Klima gives an account of changes in the case marking of the wh-relative pronouns.

Wende's (1915) Über die nachgestellten Präpositionen im Angelsáchsischen is an excellent study of prepositions in 01d English which will be referred to frequently in our discussions or preposition stranding.

Useful works on other types of subordinate clauses are Burnham's (1911) Concessive Constructions in 01d English Prose, Mitchell's (1959)

Subordinate Clauses in 0ld English Poetry, and Quirk's (1954) The Concessive Relation in Old English Poetry.

As mentioned earlier, I have been unable to find any detailed discussion of the various types of comparative clauses in Old English. However, Small's (1929) Germanic Case of Comparison investigates comparison by means of a particle versus by means of case marking in not only English, but the other Germanic languages as well.

Although the history of infinitive clauses will not be discussed in detail in this thesis, it will be touched on in our discussion of relative clauses and questions. Some excellent treatments of the history of infinitival clauses are available; for example, Callaway's (1913) The Infinitive in Anglo-Saxon, Einenkel's (1914) "Der Infinitiv im Mittelenglischen," Gaaf's (1928) "The Predicative Passive Infinitive," Stoffel's (1879) "Der Accusativus cum Infinitivo mid for im Englischen," and Zeitlin's (1908) The Accusative with Infinitive and Some Kindred Constructions in English. Thanks to these studies, the histories of various infinitival constructions are quite clear, although there is certainly much room for further investigation.

It should be noted here that some very good discussions of some of these individual constructions are also found in more general works, and anyone investigating any of these constructions will surely want to see what Visser and Jespersen, at least, have to say about them.

This concludes our survey of the literature about 01d English and the history of English relevant to the investigation in this thesis. Some relevant works have undoubtedly been inadvertently ignored, and
this survey is of course limited to works which were available to the author, but the references here should be a representative sample of the type of work on the constructions investigated here and be valuable as starting points for anyone wishing to investigate diachronic English syntax. The valuable results of the labor of the traditional and structural grammarians remain, for the most part, to be utilized by transformational grammarians. Furthermore, as noted earlier, despite all the historical investigation which has already been carried out, it is still impossible in most cases to piece together, from these works, a complete detailed history of a construction. Carefully detailed century-by-century studies of most constructions are still lacking, and even when a construction has been studied a good deal, investigation with a focus on different aspects of that construction is needed.

Now let us review the major theoretical issues which will be discussed in this thesis.
1.3 Theoretical Issues. Although this thesis is basically descriptive, tracing the history of various constructions in English, the data discussed bears on some questions concerning general linguistic theory. I will outline here briefly the theoretical questions which will be discussed in this thesis and the theoretical framework in which I shall be working.

The major theoretical questions which I will touch on in this thesis involve the nature of rules which appear to apply across a variable, that is, rules which do not appear to be limited, in general, in
their application across an indefinite number of clauses. Much recent discussion has revolved around the question of whether such rules involve movement into the "complementizer," a syntactic category proposed in Bresnan (1970). Complementizers are the particles introducing clauses, such as that and for in English.

Bresnan (1970) argued that WH (or Q) should be included in the inventory of English complementizers. By Bresnan's analysis, WH is generated in the complementizer node of questions, and Wh-Hovement (the rule involved in question formation) moves the questioned phrase into the complementizer, replacing the WH.

In his recent works, Chomsky has adopted Bresnan's "movement-into-COMP" analysis of Wh-Movement and has in addition proposed a system of constraints on transformations in which movement into COMP plays a crucial role. These constraints are intended to sharply limit the number of possible grammars. Slightly different versions of Chomsky's constraints are found in his different works. I present here the constraints as they are formulated in Chomsky (forthcoming).

Two of Chomsky's constraints refer to structures of the form (1) where is a cyclic node (either NP or $\bar{S}$ ):
(1) $\quad \cdots \underline{x} \cdots{ }_{\alpha}[\ldots \underline{Y} \ldots]_{\alpha} \ldots \underline{x} \ldots$

The first constraint applying to such structures is the Tensed S Constraint or Propositional Island Constraint, which stipulates that no rule may involve $X$ and $Y$ in such a structure where $\alpha$ is a finite clause. This constraint is proposed to account for the difference in grammaticality between sentences like (2) and those like (3):
(2) The dog is believed to be hungry.
(3) *The dog is believed is hungry.

Sentence (2) is derived from the string (4), while (3) would be derived from (5):
(4) PRO believes the dog to be hungry.
(5) PRO believes the dog is hungry.

Chomsky's explanation for the impossibility of passivizing the dog in (5), yielding (3), as opposed to the grammaticality of such passivization in (4) is that in (5), the dog is in a tensed sentence, while in (4) it is not.

The other condition applying to structure (1) is the Specified Subject Condition, which asserts that no rule can involve $\underline{X}$ and $\underline{Y}$ in structure (1) where $\alpha$ contains a specified subject. By the definition of Chomsky (forthcoming), a specified subject is a subject which does not contain $\underline{Y}$ and is not controlled by $X$. This condition proposed to account for the differences between sentences such as (6) and those such as (7):
(6) The candidates expected to defeat each other.
(7) *The candidates expected Bill to defeat each other.

In $(6)$, each other is related by the Reciprocal Rule to the candidates, but in (7), where the specified subject intervenes between the candidates and each other, this is impossible.

In Chomsky (1970) it was proposed that rules cycled not only on sentences, but also on noun phrases, and that the internal structure of the noun phrase was similar to that of the sentence. Extending this
analysis, Chomsky proposed that the possessive noun phrase has a subject. In John's book, for example, John is the subject. By this analysis, the Specified Subject Constraint accounts for the ungrammaticality of the following example:
(8) *Who did you see Bill's picture of?

This example is to be compared with the grammatical (9), which has no specified subject:
$(9)$ Who did you see a picture of?
Another condition, the Subjacency Condition, says that no cyclic rule may move a phrase from position $\underline{Y}$ to position $\underline{X}$ in (10), where and are cyclic nodes:
(10) $\left.\ldots \underline{X} \ldots{ }_{\alpha}\left[\ldots \quad \beta^{[\ldots} \underline{Y} \ldots\right] \quad \ldots\right] \quad \ldots \times \ldots$ In other words, this condition stipulates that a rule may not move a phrase over more than one cyclic node. Chomsky claims that it is this condition which accounts for the difference in grammaticality between (11) and (12):
(11) Who did you believe that John saw?
(12) *Who did you believe the claim that John saw?

To account for the ungramaticality of sentences like (12), Ross (1967) proposed the Complex NP Constraint; which stipulated that no element contained in a sentence dominated by a noun phrase with a lexical head could be moved out of that noun phrase. Chomsky argues for the superiority of his Subjacency Condition over the Complex NP Constraint as an explanation for the ungramaticality of (12) on the grounds that his condition also accounts for ungrammatical sentences
which the Complex NP Constraint cannot deal with:
(13) *Who did you write articles about pictures of?

This sentence violates Subjacency, since who is moved not only out of the iVP pictures of who, but also out of the larger NP beginning with articles. Since NP is assumed to be a cyclic node, this means that who has illegally moved across two cyclic nodes.

Chomsky notes that there are many apparent counter-examples to these conditions. For example, (14) seems to violate all three of these constraints with impunity:
(14) Who did Bill say that Fred thought that Sam saw?

First, let us see how Chomsky accounts for the apparent violation of Subjacency. Chomsky adopts a "successive cyclic" analysis of :iil-iovement by which the wh-word first moves into the complementizer of the clause in which the wh-word originates, and then by a special "COMP to COMP" movement moves up the tree from complementizer to complementizer until it reaches its final resting place. In this way, the wh-word moves across only one cyclic node per application, and so there is no violation of Subjacency in this example. In (12) and (13), on the other hand, since there is no complementizer in an NP, we have true violations of Subjacency.

We see that the movement-into-COMP analys is of Wh-Movement, in conjunction with the language-specific COMP-to-COMP rule, provides a sort of "escape hatch" (the complementizer) for things to move through in apparent violations of these conditions. This escape hatch also provides the explanation for the possibility of apparently violating the

Tensed $S$ and Specified Subject constraints, if the COMP to CoiAp rule is postulated to be exempt from the Tensed $S$ and Specified Subject Condition, under Chonsky's system, because the initial movement of who, into the complementizer position of the lowest clause, does not move Who out of a tensed clause, but only into the complementizer of the same clause, and the remaining movements of the interrogative pronoun are from COMP to COMP. Similarly, there is no violation of the Specified Subject Condition because although who is moved past the specified subject Sam, it does not move past it out of a cyclic node on the first application of Wh-Movement, and it then moves from Comp to Coitp. Another fact which Chomsky's system accounts for is the general inability to extract anything from a clause in which wh-Movement has already taken place (sometimes referred to as the "Wh island constraint).
(15) *What do you vonder who ate?

Since who already occupies the complementizer position in the subordinate clause at the time when what is to be extracted, what cannot move into the lower complementizer, and movement directly into the higher complementizer violates the conditions on movement.

Chonsky notes that the rule of Wh-Movenent exhibits the following characteristics:
(16) a. It leaves a gap.
b. Where there is a "bridge" (a complementizer which the wh-word can move into), there is an apparent violation of Subjacency, the Tensed S Condition, and the Specified Subject condition.
c. It obeys the Complex NP Constraint.

## d. It obeys the wh-island constraints.

It has been pointed out in various places, such as Bresnan (1975) and Bach and Horn (1976) that many constructions which appear to involve rules of deletion under identity over a variable, such as Comparative Deletion, Complement Object Deletion, etc. also exhibit the characteristics in (16). Chomsky (forthcoming) has argued that all constructions exhibiting the characteristics of (16) actually invcive Wh-Hovement, after which the wh-pronoun is deleted in the cases where it does not appear on the surface. I will refer to constructions which, under Chomsky's approach, involve Wh-Movement after which the Wh-pronoun is deleted as involving "ghost" Wh-Movement.

Chonisky reanalyzes such rules as, Comparative Deletion, Complement Object Deletion, and Topicalization as involving Wh-Hovement and suggests that since it seems possible (and by his system, necessary) to analyze many constructions apparently exhibiting deletion under identity over a variable as actually involving Wh-Movement, it may be that we can eliminate rules of deletion over a variable altogether from the stock of permissible transformations.

Chomsky's system raises at least four distinct, but related questions of theoretical interest:
(17) Does Wh-Movement move the affected item into COMP?
(18) Is Wh-Movement successive cyclic?
(19) Assuming that Wh-Movement does move the affected item into COMP, is Wh-Movement involved in all constructions exhibiting the same behavior with respect to Chomsky's constraints as Wh-Movement?
(20) Do there exist unbounded rules of deletion under identity? These questions, while related, are not completely dependent on one another. For example, we could agree that Wh-Movement does move the questioned item into the complementizer without accepting a successive cyclic formulation of Wh-Movement or Chomsky's constraints and the hypothesis that all constructions exhibiting the characteristics of (16) involve Wh-Movement. Similarly, the answer to question (19) could be affirmative, but there could still exist a class of rules of deletion under identity over a variable which did not show the characteristics of (16) and therefore could not be analyzed as WhHovement, even under Chomsky's system.

I have little to say about question (17), except that I find the arguments forwarded for the movement-into-COMP analys is of Wh-lovement unconvincing and will assume that the wh-word does not move into the complementizer, but to a position in front of the complementizer. Assuming that the answer to question (19) is negative (for which I will argue in Chapter iline), that is, assuming that there do exist unbounded rules of deletion under identity with the characteristics of (16), the particular formulation of Wh-Movement is not crucial to anything in this thesis, so I will merely refer the reader to arguments by ochers that Wh-Movement does not move the questioned item into the complementizer. Such arguments are to be found in Bach and Horn (1976) and Grimshaw (forthcoming).

In Bresnan (1976), Bresnan has abandoned her own carlier analy-
sis of Wh-Movement as involving movement into corip, and instead analyzes this rule as Chomsky-adjoining the questioned iten to the clause, giving surface structures like the following:
(21)

$$
\begin{array}{ccc} 
& \bar{s} & \\
& & \bar{s} \\
& & \\
& \text { (Comp) } & \mathrm{s}
\end{array}
$$

I will also adopt this analysis, although I know of no compelling reasons for assuming either sister adjunction or Chomsky adjunction of the wh-word. Again, this particular formulation is not crucial to any argument in this thesis.

I also have little to say about question (18). Unless the coill is to be used as an escape hatch in the manner proposed by Chomsky, there is no reason, as far as I know, to assume a successive cyclic application of the Wh.-Movement rule. At any rate, whether or not Wh-Movement is successive cyclic will not make a difference to any of the arguments in this thesis.

Question (19) is the theoretical question which will be discussed the most in this thesis. There are really two questions here. First, are the constraints which Chomsky has proposed the best way to account for the data about Wh-Movement? Secondly, supposing Chomsky's constraints are correct, can all rules behaving similarly with respect to the constraints be analyzed as instances of Wh-Movement?

As for the first part of this question, various objections to

Chomsky's constraints have been raised, and alternative proposals for explaining some of the facts these constraints are supposed to account for have been proposed. See, in particular, Bach and Horn (1976), Bresnan (1976), and Grimshaw (forthcoming). I have nothing to add to this particular controversy. On the other hand, I will argue in Chapter wine that there must be a distinction between movement and deletion rules in 01d English, on the basis of different behavior of preposition stranding in constructions where there is surface evidence of movement, compared with those where there is no such evidence. It will be argued that a way of treating the latter type of construction as involving movement suggested in Chomsky and Lasnik (forthcoming) is inadequate.

Since I will be arguing that there is a class of deletion rules in 0ld English, I will be arguing for an affirmative answer to question (20), as well as a negative answer to question (19), because, as I will show, the deletion rules proposed must apply across a variable, and the deletion must be a controlled deletion, rather than just a free "pronoun drop" rule.

For an interesting argument for unbounded deletion under identity in another language, see Rijk (1972) and Bresnan (1976). Rijk found that in Basque, relativization appears to involve controlled deletion over a variable and obeys the Complex NP Constraint. This is interesting because Basque has no rule of Wh-Movement. Questions in Basque are formed simply by leaving a question word in place. Therefore, it cannot be plausibly argued that the Complex NP constraint must
apply to some deletion rules.
For Modern English, Bresnan (1975) has argued that the rule of Comparative Deletion must involve deletion and has the characteristics of (16).

Another question of theoretical interest, related closely to questions (17) through (20), is the question of the role of surface filters in the grammar. It has been proposed by Chomsky and Lasnik (forthcoming) that linguistic theory would be greatly constrained in a desirable way by the elimination of the devices of ordering, obligatoriness, and contextual dependency in transformations. To achieve the effect of these devices, since without them, many ungrammatical sentences are generated, they suggest the use of surface filters ruling out certain ungrammatical configurations at the level of surface structure.

In response to a discussion of preposition stranding in 07d and Hiddle English in Grimshaw (1975) and Bresnan (1976), Chomsky and Lasnik propose two possible surface filters to enable a "movement in all cases" analysis of 01d and Middle English relativization to give the correct results for preposition stranding. These filters will be discussed in section 9.2.4, where it will be argued that both filters fail on the grounds of both descriptive and explanatory adequacy.

This concludes our introduction to the theoretical questions which will be important in this thesis. The reader should keep in mind that this thesis is basically a historical, rather than a theoret-
ical one. That is, the main thrust of the thesis is not to attack or support any theoretical position, but rather to explore the histories of various constructions and their consequences for theoretical issues.
1.4. I would like at this point to discuss the feasibility of drawing conclusions about the history of English syntax on the basis of the texts available.

There is no doubt that we can learn a considerable annount about the history of English syntax from the very large corpus of 01d and $\because i$ iddle English texts. However, the extent of the knowledge we can draw from such texts, and especially the reliance we may place on such texts, may be questioned. There are three major problems which one must face in working with Old and Niddle English texts: (1) the possibility of foreign influence in a text, (2) the difference between the spoken and the written language, and (3) the lack of negative data. Let us consider these problems individually.

First, much of the 01d Enylish prose which has come down to us are translations into English from Latin works. Many other works, such as some of Aelfric's homilies, are based on Latin works, although not translations of them. ${ }^{4}$ The question naturally arises as to whether these works were greatly influenced by Latin syntax, as the Gothic Bible was by Greek siyntax.

The overwhelming concensus of students of 01d English is that Latin influence was negligible in the 01d English texts. For example, discussing the possibility of Latin influence on the Old English accu-sative-with-infinitive construction, Zeitlin (1908) says that while cer-
tain similarities between the Latin and 01d English are found in the translation of Bede's Ecclesiastical History, the Latin construction is consistently translated by a completaly different English construction in certain circumstances, such as when the Latin construction Was used after impersonal verbs. Zeitlin concluded that the translator generally did not imitate the Latin construction when this construction went beyond the bounds of the native Anglo Saxon use, although, not surprisingly, sporadic examples clearly imitating the latin construction occur.

Latin influence is not a serious problem when dealing with 01d English texts. The Latin influence is slight. By comparing Latin originals and the translations, we find many systematic divergences betwean the Latin and the English, indicating that while the original Latin might cause a few instances of artificial constructions or increase the frequency of a construction used little in Old English, but ruch in Latin, in general the translatois were faithful to their own language. For example, in Old English texts we consistently find preposition stranding in a certain type of relative clause, while preposition stranding was not possible in Latin relatives.

In most cases, it is possible to compare the Latin original and the old English translation, since many of the Latin originals are still extant. In these cases we generally find not only that the 01d English syntax is quite different from the Latin, but the translators also deronstrated their independence by often expanding on some themes beyond the Latin original in some cases, and in others condensing sec-

## tions.

It is possibie to factor out Latin influence not only by comparing Latin originals with translations, but also by comparing translations from Latin with uriginal prose, such as the Peterborough Chronicle, or poetry.

A word of caution should be said here, however. In contrast to translations from Latin, glosses of Latin works, such as the Vespasian Psalter, are nearly useless from the syntactician's point of view, although they are of great use io the phonologist. In these glosses, the English words are simply written beneath the Latin words, telling us very little about the English syntax, since Lat in word order is maintaired.

It is not surprising to find that Latin influence is slight in translations, when we consider the purpose of these translations, which was to make these works available to those who knew no Latin. To distort the English syntax radically on the Latin model would defeat the translator's purpose.

Another language which had the opportunity to influence English writings was Danish, since for a period the eastern part of England was under Danish contro\%. With Danish, however, the problem is more a matter of whether certain changes in English can be attributed to Danish influence, as opposed to natural, language-internal causes, rather than determining the artificiality of a construction, as in the case with Latin. This is because Danish, unlike Latin, was a wide-
spread, living tongue in England for a period (see section 6.2.1), and the Danes assimilated to the English culture, making a good deal of mixture between the two languages possible. Any Danish influence in a text must be assumed to reflect colloquial usage, since in this case it was not a question of translating from a literary language. It is difficult to pinpoint Danish influence in Old English syntax, since the two languages were so similar in structure to begin with. The greatest problem here, as just noted, is determining whether a certain change, such as the sudden dropping of the restriction against preposition stranding in certain constructions, can be attributed to Danish influence. One problem here is that there are no Scandinavian texts dating from Old English times, so we can only be sture there is no Danish influence when an English construction antedates the first Scandinavian texts if those first texts do not contain the construction. Such is the case with preposition stranding, discussed in section 6.2.1.

In Middle English, it is French influence we must deal with. Many authors, such as Chaucer, were greatly influenced by French, since French was the prestige language of the time. However, others, who were concerned with writing religious works for the illiterate who knew no French may be assumed to be relatively free from French influence, or else their labors would have been lost, although French influence cannot be completely ruled out.

In dealing with authors greatly influenced by French, the main problem is determining how much of the French element in their works
are reflections of the actual English which they learned, versus deliberate attempts to imitate French. One possible guideline is that if a construction which appears to be an imitation of French suddenly crops up, enjoys a brief vogue, and dies out without a trace, we may assume that it was never a real part of the language. An example of this is the sudden upsurge of infinitives without to in the fourteenth century in constructions in which an infinitive with to had always been necessary in 01d English, and is again necessary in Modern English.

For a useful discussion of the progress of French influence in Middle English, see Baugh (1951).

To summarize, the problems presented by foreign influences on 01d and Middle English writings are by no means insurmountable. In 01d English, Latin influence in the texts is negligible and easily detected. Danish influence is harder to detect, but not too crucial in determining whether the texts faithfully reflected the spoken language, since any Danish influence in the texts was a result of such influence in the spoken language. French influence is more problematic, showing at times the artificial importation of a foreign construction. llevertheless, it is not impossible or even terribly difficult to draw conclusions about. English syntax in any period. Even in the texts of the period of greatest influence, English writings retain a basically English character, with many indisputably English constructions which deserve study. Finally, most important syntactic changes in English (but not all) cannot be reasonably traced to foreign influence.

The question of foreign influence on English writings is closely related to, and indeed a sub-part of, the question of how much the written language differed from the spoken language. This is a question which cannot be answered with any certainty. It seems clear that a written language always diverges to some extent from the spoken language, usually in the relative frequency of various constructions.

As for 01d and Middle English, I can only say that in the texts which were intended for the "lewd and unlearned" we may reasonably expect a minimum of literary artificiality. Comparing these texts with those aimed at a better educated audience is helpful in pin-pointing divergences between the spoken and written languages.

In general, one expects a written language to be more conservative than the spoken language it reflects. We may assume that there is often a gap between the introduction of an innovation in the spoken language and its appearance in the texts, and similarly between the demise of a construction in the spoken language and its disappearance in the texts. This means that it is usually impossible to determine precisely when a construction entered or left the language. However, the frequency of a construction in different texts can give us clues to its status in the spoken language.

When a construction first begins to appear sporadically in several texts of the same period, we may generally assume that it has some currency in the spoken language, but it has not yet gained complete acceptance in literary circles. However, if the construction is one borrowed from a prestige language, we must assume that it will begin
to appear in writings before it is entrenched in the spoken language. Finally, when a construction which has been common begins to dwindle and becomes sporadic in writings, we may assume that it has become defunct in the spoken language.

Each construction must be considered individually when trying to determine differences between literary and colloquial usage, since many factors may play a role. Fortunately, the most important question is usually that of the relative chronology of two constructions, rather than the absolute data of an innovation, and this is not such a difficult problen..

Finaily, we come to what is probably the worst problem faced by the historical syntactician, that is, the fact that no negative evidence is available. This is a particularly difficult problem for a generative grammarian, who is used to making heavy use of the ungrammatical sentence. Pillsbury (1967) expresses doubt that historical syntax can be done within a generative model, since the aim of the generative gramarian is to account for all and only the gramatical sentences of a language.

I do not believe that it is impossible for a generative grammarian to study diachronic syntax on the basis of texts, because there are ways to alleviate the problem of no negative data.

The syntactician may, first of all, content himself with producing only a partial grammar of a dead language. That is, he may concentrate on constructions which are attested frequently, giving analyses of then and tracing their histories. Much useful information can
be found without considering the possible nonexistence of some construction.

On the other hand, it is not possible to completely avoid making some judgments concerning the possibility of certain constructions. If we say that a rule entered the language at a certain time, we are asserting that it did not exist before that time. However, this is not always much of a problem. If we find no examples of a construction for say, four hundred years, and then find a few examples, and suddenly a flood of them, we may assume with confidence that this construction formerly did not exist. To make such conslusions, however, one must study a number of texts from the different periods, or else it may simply be a dialect difference that one is observing.

Matters are more difficult when only a very few examples of a construction are found. It is often difficult to determine whether a few instances of a construction are indications of a real possibility in the language, or are simply performance errors, since people do say things which they do not consider to be gramatical. There is no rigid rule which one can adopt in such cases. Rather, each case must be considered individually. One important factor is the frequency one might expect of the phenomenon under consideration. For example, suppose we are studying the history of preposition stranding in English, and want to know if stranding was possible in a certain construction. We find a few examples of stranding in this construction. Whether or not we conclude that preposition stranding was possible will depend, among other things, on the frequency of the construction being studied.

If we find that the construction has a very low frequency, these few examples are probably significant. If, on the other hand, the construction is quite common, but examples of preposition stranding in it. are rare, we might conclude that these few examples are simply mistakes. The investigator can only use his or her judgment in such cases, and try to stick to constructions for which the facts are clear, whenever possible.

On the possibility of determining whether 01d English obeyed certain syntactic constraints, see Chapter Eight.

To conclude, there are certain problems inherent in the study of the syntax of dead languages, but such problems do not preclude useful work in the history of English syntax. Similar problems are found in many disciplines, especially history. In some sciences, too, such as astronomy, one cannot experiment, but only observe, which is in some ways similar io the situation here, where we only have positive data. The data are incomplete and influenced to some extent by extralinguistic factors, but similar situations are not unknown in the sciences. Furthermore, even when studying a living language, speakers' judgments are not always reliable and may be influenced by a number of factors.

We might adopt the following guidelines in studying syntactic change by means of texts.

First, whenever possible, study a large number of texts. By studying many texts of different dialects, style, and purpose, one can
factor out the idiosyncracies of individual authors and some literary artificiality.

Second, it is important to learn something about the manuscript upon which one's text is based. In many cases, a manuscript may be a copy of a much earlier one, thereby reflecting the syntax of an earlier period. When different manuscripts containing the same work exist, it is very helpful to compare them to detect scribal errors, dialect differences, etc. In some cases, as with Layamon's Brut, we have earlier and later versions of the same work, which enables us to see certain syntactic changes fairly directly. In other cases, such as twelfth century versions of Aelfric's homilies, the later manuscript is a word-for-word transcription of the earlier one, and so is unreliable for syntax. For manuals to manuscripts, see the Bibliography.

Third, it is best to study constructions which occur frequently, whenever possible. In this way, one can get a good idea of the range of variation within the construction.

Finally, one should keep in mind the sociological factors, such as the existence of a prestige language or dialect, the intended audience, etc., and tailor one's conclusions accordingly.
1.5 Organization of the Thesis. I will conclude this introduction with a brief explanation of the organization of this thesis. The thesis is divided into three parts. The first two parts are descriptive, and the third theoretical. Part One is a description, with analyses, of certain constructions in 01d English. Relative clauses
and questions will receive special attention, and preposition stranding and the pied piping of prepositions in many rules will be examined. Comparative clauses will also be discussed. Part two traces the histories of the constructions discussed in Part One from 01d to Late Middle English. Where possible, explanations for the various changes will be proposed. The history of preposition stranding in particular will be gone into in considerable detail. Finally, Part Three is a discussion of the theoretical consequences of the facts presented in parts one and two. The final chapter is a discussion of the types of changes observed, and what we can conclude from these facts about the types of syntactic change we may expect in languages.

The reader who is interested only in the theoretical consequences of the facts presented here may wish to go directly to Part Three and refer back to earlier parts for clarification when necessary.

Footnotes to Chapter One

1 However, in her 1969 article, Traugott says that the change from optionality to obligatoriness is an instance of elaboration, since it is a case of the grammar becoming more restrictive. The change of viewpoint here points up the difficulty of determining whether some types of change fall into the "simplification" or "elaboration" category, and suggests that this way of characterizing types of change may be deceptive.

2 radical changes in phrase structure, see Lightfoot ().
${ }^{3}$ A similar viewpoint about the history of French syntax is expressed by Evert (1943), who says (p. 123):

The history of the French language consists largely in the abandonment of flexions in favour of particles and word order, in the passage from a synthetic to an analytic language.
${ }^{4}$ Aelfric, abbot of Eynsham, is known as the most eminent styis of Old English prose. However, as far as I know, there is little evidence for Traugott's (1972) (p. 66) suggestion that Aelfric was "possibly the most Latinate of the well-known writers." Traugott's suggestion is based on the fact that Aelfric's style was polished, "clearly inspired in many ways by Latin rhetorical devices, especially those used in periodic sentence structure." I am not aware of any rhetorical devices used by Aelfric which were not also used by other writers of the same time. In fact, it is not Aelfric, but King Alfred (in his translations, that is) who seems to me to show the most direct Latin influence in his syntax (although this influence is still small). The translator of Bede's Ecclesiastical History also shows more Latin syntactic influence than Aelfric.

Aelfric, who did his writing around the year 1000 , translated parts of the Bible and wrote many homilies and lives of saints, among other things, including a Latin grammar for English speakers. In the Latin grammar, it is interesting to see how Aelfric instructs the reader to translate certain Latin expressions. These translations do not slavishly follow the Latin.

# CHAPTERII <br> SOME SIMPLE SENTENCE SYiitaX 

### 2.0 Introduction

This chapter gives a description of some moventent rules applying within simple sentences in 01d English which will be of interest in the discussion of preposition stranding later. No attempt will be made to cover all of Old English simple sentence syntax, but only those constructions which will be discussed further in later sections due to the theoretical interest of their syntax in 01d [nglish and the interest of the changes they underwent in Middle English.

I will not attempt here to account for Old English word order, or even describe the possible word orders, but will merely note here a few general facts about the order of constituents in 01d English.

First, main clauses in 01d English normally had the object somewhere after the tensed verb:
(1) He andwyrde sona dam arwurdan were.
(He answered quickTy the venerable man=he answered the venerable man quickly)

$$
\text { Alc.S.XXIX. } 66
$$

(2) He daeide da his eahta ealle on aelmyssan (He distributed then his property all in alms= He then distributed all his property in alms)

Alc.S.XXVII. 195
(3) Martianus haefde his sunu aer befaest to woruldlicre lare (Martianus had his son earlier committed to secular learring=Martianus had earlier committed his son to secular learning)
Alc.S.IV.
(4) Ge ne magon understandan da micclan dconnysse ealles dyses godespelles.
Trou not riay understand the great deepness all-gen. thisgen gospel-gen. =you cannot understand the great deepness of all this gospel)

$$
\text { Alc.P.V. } 159
$$

(5) Se ylca Gregorius wolde Gode araeran halig mynsterlif gehende anre ea
(The same Gregory would God-dat. erect holy monastery near a river=the salle Gregory would erect a holy monastery for God near a river)

Alc.P.VIII. 106
(6) Daes we sceolan nu simle unabinnendlice mid ealre heortan meagomodnesse uruln Drihtne danc secgan
(This-gen. we ought now ever unceasingly with all heart's might our-dat. Lord-dat. thanks say=for this we ought always to say thanks unceasingly to our Lord)

Blickling p. 123
As these examples illustrate, when there was both a tensed and a tenseless verb in a main clause, the object(s) followed the tensed verb, but could either precede or follow the tenseless one.

An exception to the general rule that the object followed the tensed verb in main clauses is that if the object was a pronoun, it could either precede or follow the verb, and in fact it was more conmon for it to prececic the verb:
(7) He hiln oncraed ...
(He them ans!!ered... $=$ he answered them...) Alc.S.XXX. 250
(8) We de willad syllan gode mede
(We thee will give good revard=we will give you good reward)

$$
\text { Alc.S.XXX. } 253
$$

(9) Se sylfa Faeder lufat eow
(The self Father loves you=the Father himself loves you)

$$
\text { Alc.P.VIII. } 367
$$

The normal sVo (subject-object-verb) order of the main clause could be deformed by the rule of Topicalization, which fronted a con-
stituent of the verb phrase, ordinarily an object or a prepositional fhrase, giving the order OSV, and the subject and verb could invert after Topicalization or the fronting of an adverb, or if the verb mas preceded by a negative particle:
(10) Aicele ding abaedon da meran apostolas aet dan halgan Faeder aefter सacs Haelendes upstige (lireat things ashed the great apostles at the holy father after the Savior's ascensien-great things the great apostles ashed of the holy Father after the Savior's ascension)

Alc.P.VIII.i3
(11) Pa bead seo wydewe daa; madene sceattas (Then promised the widon the-dat. maiden-dat. treasures= then the widow promised troasures to the maiden)

$$
\text { Alc.S.H. } 141
$$

(12) Ve forbead he mid ealle aelome kon dam witan
(Not forbade he at all each judgerent the-dat. wise-dat. $=$ he dit nut forbid at all each judgerent to the wise)

Alc. P. XIII. 38
(13) Pa geworhte he durh his wisdom tyn engla werod
(Then mrought he through his wisdoy ten angels' bands= then he wought throush his wisden ten bards of angels)

$$
\text { Hep. Intio. } 54
$$

Such inversion is obligatory in most of the Germanic langmages after repicalization, because these languages have a restriction that the tensed verb must be the second constituent of the main clause. In old English, lawever, inversion has optional:
(1t) Beftor dysum dome ure Drihten fierd to his hoofonl ican Factier
(After this judgement our Lord goes to his heaveniy Father)

$$
\text { Alc.P.XI. } 519
$$

(15) en sumere tide martimus stan to ame up-flora (On one occasion iartin momed to an upper floor) Alc.S.AXYT. 601
(16) Bann biscope wulfhere se cining gesealde landes fiftig hida (The-dat. bishop Wulfhere the king gave land firty hides= the bishop Wulfhere, the king gave fifty hides of land) Chad 58

While inversion is more conmon after Topicalization than noninversion if the subject of the sentence was a full noun, I have found no examples of inversion of a pronominal subject with the verb after a topicalized object or prepositional phrase, even though such inversion was possible with pronominal subjects after a fronted adverb, or when the verb was negated, as examples (12) and (13) illustrate. The following are examples of Topicalization with no inversion of a pronominal subject:
(17) Bas word we saedon hwilon on sumion odrum spelle
(These words we said on one occasion is some other story)

$$
\text { Alc.P.IX. } 72
$$

(18) Fela ting he saede syddan his apostolum
(ilany things he said afterwards (to) his apostles)
Alc.P.VII. 189
(19) On da wisan he forgeaf tone gylt dam wife
(In that way he forgave the guilt the-dat. woman=in that way he forgave the woman her guilt)

$$
\text { Alc.P.XIII. } 22.8
$$

It seems probable that the difference in bchavior of the pronominal and non-pronominal subjects is related to the relative "lightness" of pronouns, but it is hard to see why pronouns invert after adverbs and with negated verbs, but not after noun phrases or prepositional phrases.

Although the nornal word order of the main clause was SVo, with some permutations possible, as we have seen, if the object of the verb was a pronoun, the order sov was a possibility, and was in fact quite
(20) We de willad syllan gode mede
(We thee willl give good reward-we will give you good re:ard) Alc.S.XXX. 253
(21) He him oncwacd...
(He theil answered=he answered them...)

$$
\text { Alc. } 5 . \text { Xxx. } 250
$$

While SVO order was the rule in main clauses, with the exception just noted, in subordinate clauses wither SVO or SOV order was possible, whether the object were a pronoun or not:
(22) ... daet dis is selre, Gact-te an man for eall fole dead drowige
(that this is better, that one man for all people death suffer=that this is better, that one man suffer death for all people)

$$
\text { Ver. } 1.56
$$

(23) Ba waes aefter dam worduat, dant he Pilatus urne crist Iudeun agef
(Then was after these words, that he, Pilate, own Christ Jews-dat. gave-then it was after these words that he, Pilate, gave our Christ to the Jews)

$$
\text { Ver. } 1.259
$$

(24) Da vimdrode Hact wif thet he wolde drincan of hyre facte (Thom bondered that woman that he would drink of her vessel $=$ than that boman wondered that he would drink of her vessel)

$$
\text { Alc.P.V. } 123
$$

(25) and hin waere selre daet he sodl ice ne cude daere sodfaestnysse weg
(and him worn better that he truly not knew the-gen. truthgen. Way and it would be better for him if he truly did not krow the way of the truth)

Alc.P.IV. 255
It should finally be noted that Old English word order was fairly free, especially in the order of the constituents of VP, compared with that of Hodern English, al though recent studies, such as Bacquet (1962), have demonstrated that there was less freedom in word order than has
sometimes been assumed. For details on Old English word order, see Bacquet's study, along with Gardner (1971), Pillsbury (1967), Shores (1971), Sprockel (1973), and Wulfing (1901). Some discussion of word order is also found in Quirk and Wrenn (1957). For our purposes, it $w i l l$ suffice here to note that while the order of prepositional phrases, adverbs, and direct and indirect objects was much freer in 01d than in Middle English, it was not generally possible to split up noun phrases or prepositional phrases. When these constituents moved, they normally had to move as a unit.

Noe that we have a rough idea of 01d English word order, let us consider some movement rules which applied in 0ld English simple sentences. We will first consider further the properties of Old English Topicalization, already discussed briefly.

### 2.1 Topicalization

We have already seen a few examples of Topicalization, with or without accompanying subject-verb inversion. Some more examples are given here to illustrate properties of this rule:
(26) Twa ding ic de gehet daet ic de wolde gelestan (Two things I thee promised that I thee would perform= two things I promised you that I would perform for you)

$$
\text { Sol.p. } 70.9
$$

(27) To daem sodum gesaeldum ic tiohige daet ic de laede (To the true happiness-dat. I intend that I you lead= to the true happiness I intend to lead you)

Boeth. XXII. 2 p.51. 12
(28) ...done modigan cedwallan mid his micclan werode de wende daet him ne mihte nan werod widstandan (the proud Cadwalla, with his great army, who thought that him not could any army withstand=... the proud Cadwall, with his great army, who thought that him, no army could withstand)

$$
\text { Alc.S.XXVI. } 28
$$

(29) fordam de him nan man done godcundan geleafan ne taehte (because that him no man the divine faith not taught= because hill, no man taught the divine faith)

$$
\text { Alc.S.XXX. } 12
$$

Examples (26) and (27) show that as in Modern English, OE Topicalization was not limited to applying only within the clause in which the topic originated, since here an NP or PP is topicalized out of a subordinate clause, ending up in the main clause. Examples (23) and (29), on the other hand, illustrate the fact that Topicalization could also take place within a subordinate clause. Note the subject-verb inversion in the subordinate clause in (28). Such inversion in subordinate clause in (28). Such inversion in subordinate clauses is rare in the tiermanic languages. ${ }^{\text {? }}$

I will assume that the rule of Topicalization simply moved the affected iten to the front of a clause:
(30) Topicalization

| W | $\overline{\bar{x}}$ |  |
| :---: | :---: | :---: |
| 1 | 2 | 3 |
| $2+1$ | 0 | 3 |

For a discussion of an alternative analysis of Topicalization involving the generation of the topic in the complementizer and wh-Movement, see section 9.2.4.

The fact about Topicalization which is of the most interest to us
here is that in Old English, unlike Modern English, it was generally not possible to topicalize the object of a preposition without moving the whole prepositional phrasc. The phemomenon of a preposition moving along with its object was dubbed "pied piping" by Ross (1967). ${ }^{3}$ Pied piping contrasts with preposition stranding, whereby the object of a preposition is moved by itsclf, leaving the preposition "stranded." In 0ld English, pied piping was generally obligatory in Topicalization (and, I will argue later, in all movement rules). However, there are many examples of preposition stranding with OE Topicalization which appear at first to present counterexamples to this claim:
(31) and me com dacr-rinte to godes congel mid rode (and tile came directly to God's angel with cross= and God's angel came directly to we with a cross)

Alc.S.VII. 356
(32) \& him da sidłan se feondscipe waes betweonum weaxende and between them emnity was afterwards growing)

$$
\text { Oros.p. } 232.26
$$

(33) and him man gebrohte da to fela bedridan menn (and him one brought then to many bedridden men=and to him were then brought many bedridden men)

$$
\text { Alc.P.XVII. } 14
$$

Notice that in each of these examples, the topicalized item is a pronoun, rather than a full noun. Examples of preposition stranding with a topicalized pronoun are extremely common in old English literature, while examples of preposition stranding with topicalized full noun phrases are very rare. ${ }^{4}$ To understand why pronouns allowed preposition stranding in this construction, it is necessary to take a closer look at the behavior of promominal objects of prepositions in Old English.
2.1.1 P-Shift and PP-shift. In Old English, pronominal objects
of prepositions could invert with their prepositions:
(34) and hi ne dorsten him fore gebiddan
(and they not dared hill for pray= and they dared not pray for him)

$$
\text { Alc.P.XIX. } 226
$$

(35) Gif ic cow fran ne fare
(If I you from not go=if I do not go from you) Alc.P. XIII. 46
(36) and him of gewann ealle ta geleafullum on his gelatunge (and him of won all the faithful into his congregation= and won all the faithful from hili into his congregation) Hep. 1. 482
(37) Oa cwaed se Haclend him to be dam hetolan deofle dus (Then said the Savior them to about the wicked devil thus= then the Savior said thusly to thellI about the wicked devil...)

$$
\text { Alc.P.IV. } 107
$$

(33) ... dact ic on bigspeltum eow to ne spraece (that I in parables you to not speak=that I do not speak to you in parables)

$$
\text { Alc.P.XIV. } 35
$$

(39) Ba urnon hym togeanes twegen de haefdon deofolseocnysse (Then ran him towards two that had devil-sickness=then two that were possessed by devils ran towards him)

$$
\text { St.Mat. } 412
$$

This optional process of inversion was quite common with pronominal objects of prepositions, although it was quitc rare with full noun phrases, at least in prose. Inversion with full noun plirases was more common in poetry, especially with nouns of three syllables. ${ }^{5}$

In the examples just given, aftor inversion the preposition and its object are still adjacent to each other. That these two clements still form a constituent after they invert is demonstrated by the fact that they may move around together by Topicalization and other rules Which move prepositional phrases:
(40) Hym to genealaehton his Teorninycnyhtas
(Him
him) to approached his disciples=his disciples approached

$$
\text { St.Mark. } 811 \text { (XIV.15) }
$$

(41) Drihten him to cwaed...
(Lord him to said=the Lord said to him...)

$$
\text { Alc.S.XIII. } 4
$$

That Topicalization must follow inversion will be made clear in a moment.
On the other hand, after inversion it was also possible for constituents to intervene between the object and its preposition:
(42) Da wendon hi me heora baec to
(Then turned they me their backs to=then they turned their
backs to me)
Bocth.II.p.8.12
(43) Ba for daere ceorunge sende him God to byrnende naeddran (Then for the grumbling sent them God to burning adders= then for the grumbling God sent burning adders to them)

$$
\text { Alc.P.XX. } 314
$$

(44) Da genealaehte hym an man to
(Then approached him a man to=then a man approached (to) him)
St.Mat.1083(XIX.16)
(45) Ba feoll Quirinus afyrht to his fotum, ofdraedd daet him Godes yrre on becuman sceolde
(Then fell Quirinus frightened to his feet, afraid that him God's anger on come should=then Quirinus fell frightened to his feet, afraid that God's anger would come on him)

Alc.P.XXIII. 118
(46) Aefter dam faestene him comon faerlice to twegen scinende englas
(After the fast him came suddenly to two shining angels= after the fast two shining angels came suddenly to him)

Alc.S.XXXI. 449
(47) Se deoful hym sume hwyle from gewat (The devil him some while from went=the devil went from him for a while)
(48) ... for dam de se heofonlica God hille sende gelome to heahfaederas and witegan (because the heavenly God them sent often to patriarchs and prophets-because the heavenly hod often sent patriarchs and prophets to them)

Alc.P.ILI.115
(49) and crace him sona to (and said him soon to and said to him snon)

$$
\text { Alc.P. XxILI. } 163
$$

Since nothing ever intervened between a preposition and its object when the object followed the preposition (that is, when inversion did not take place), we must postulate a rule which could break up a prepositional phrase when the preposition and its object were inverted. That this break-ing-up of such prepositiomal phrases was not accomplished by the inversion rule itself is demeristrated by the fact that it was possible for inverted prepositional phrases to behave as a constituent, as we have just seen.

To account for the facts about pronominal objects of prepositions, I will propose tho rules. The first rule, which I call "P-Shift," simply permutes a personal pronoun ${ }^{6}$ and the preposition of which it is the object:
(50) P-Shift

| $W_{1}$ | $p p[P$ | $N P$ <br> $[+p r o j$ <br> +pers | $W_{2}$ |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 |
| 1 | 3 | 2 | 4 |

An alternate way of formulating this rule would be to postulate that the pronoan moves leftward. Under the trace thenry of movement, first proposed briefly in Chomsky (1973) and developed by liengo (1974), anlong others, all nown phrases leave a "trace" when they are moved, so the rule
would be formulated as follows:
(51) P-Shift (trace theory version) ${ }^{7}$


Which formulation of the rule is correct is not crucial here. The important thing is that the prepositinn and its object still form a constituent after this inversion.

Now we come to the process which permits an inverted prepositional phrase to break up. As far as I can determine, there is no regular pattern of what intervenes between the pronoun and the preposition after inversion. In (42) it is the direct object which separates the pronoun and its preposition. In (43) through (45) it is the subject, in (46) and (48) it is both the verb and an adverb, and in (49) it is a single adverb. The only generalization that can be made is that the pronoun always precedes its preposition when they are inverted. Otherwise, the pronoun appears in all positions in which ordinary pronominal objects (or for that matter, prepositional phrases) could occur.

In the cases where the pronoun precedes the verb, we could attribute the pronoun's separation from its preposition to a rule moving pronouns to the front of the verb phrase, since pronominal objects could normally precede the verb. However, in other cases there is no justification for supposing that the pronoun has been moved. Furthemiore, all the items intervening between the pronoun and its prepositions are fairly mobile ones.

For example, in (43) the subject intervenes between the pronoun and its preposition. But subjects could move not only after the verb, but beyond, ending up after adverbs, prepositional phrases, and direct objects, ${ }^{8}$ as the result of subject-verb inversion after Topicalization or the fronting of an adverb. An example of the subject cominy last in the sentence is given in (46). Examples of the subject appearing in other positions within the verb phrase are given here:
(52) Ba com daer betwux dam of Samarian byrg ann wif to daem Waterscipe
(Then came there meanshite from Samaria town a woman to the well=then meanwhile a woman from Samaria came to the well) Alc.P.V. 11
(53) Be dacre ylcan endebyrdnysse awrat eac Iohannes (About the same order wrote also John-John also wrote about the same order)

$$
\text { Alc.P.XI. } 459
$$

Since subjects could move about in the verb phrase after subjectverb inversion, there is no reason to assume that in (43) the pronoun has been moved in front of God, rather than God after the pronoun. Similarly, prepositional phrases and adverbs had great mobility in 01d English, so it is reasomable to suppose that the different possibilities of constituents appeariny between the pronoun and its preposition was due to the movement of those constituents between the pronoun and the preposition, rather than to a rule moving aither the pronoun or the prepesition. Therefore, we need a mile which makes an inverted prepositional phrase into two non-constituents, since othemvise it would not be possible for elements to move in between the pronom and the preposition. I propose that the splitting up) of the prepositional phrase is accomplished by a readjustment rule which converts an inverted prepositional phrase into two constituents. I
will call this rule "PP-Split." This rule converts the structure (54) into (55):
(54)


As far as I know, there is no way to formulate this rule as a transformation, since it involves only a change in bracketing, unless we formulate the rule as involving a movement of the noun phrase to the left, for which there is no justification. It seems probable that rules which mierely adjust bracketing of constituents, breaking up one constituent into two, are a different sort of rule from ordinary transformations which move elements. ${ }^{9}$ If we assume that P -Shift and PP-Split both precede Topicalization, we can account for the fact that sometimes an inverted prepositional phrase is topicalized as a unit, while at other times only the pronoun is topicalized, leaving the preposition behind. Because PP-Split is optional, the inverted PP may be a constituent or a non-constituent when Topicalization applies.

Wie have now seen how pronominal objects of prepositions could invert with and be separated from their prepositions in simple sentences. We are now in a pisition to understand why it was possible to topicalize a pronominal object of a preposition, stranding the preposition. If PShift and PP-Split liad applied before Topicalization, pronominal objects of prepositions which had undergone the first two rules would be available to Topicalization and able to move without their prepositions, since the pronoun and preposition no longer would form a constituent. Thus we see that the fact that only pronouns could strand their prepositions under

Topicalizati follows directly from the fact that only pronouns generally underwent $P$ ift and PP..Split. ${ }^{10}$ To conclude, we may say that pied piping was Jatory for 01d English Topicalization, and the cases of preposition anding with Topicalization are due to the application of other rules.
2.1.2 Preposition deletion and locative shift. Now let us consider the behavior of locative pronouns in 01d English, which also present some apparent counter-examples to the claim that pied piping was obligatory with Topicalization in 01d English. The following are examples of topicalized locative pronouns with preposition stranding:
(56) ....daet faer waes butan seo swatu on
(that there vias but the mark on=that only the mark was (on) there) Mart.p. 102.22
(57) ...od daet daer com to sum arfaest wif (until that there came to some faithful woman=until some faithful woman came ( to ) there)
(58) and ealle da untruman men da de dyder conion to hy waeron sona haele
(and $a!1$ the infirm men who that thither came to, they were soon well=and all the infirm men who came (to) thither, they were soon vell)
Mart.p.198.5
(59) \& daer donne befeolle on odde oxa odde esol (and there then fell in either ox or ass=and either ox or ass fell in there)

$$
\text { CP } 549.24
$$

However, as with the examples just discussed, the apparent freedom of preposition stranding in Topicalization of locative pronouns is illusory. Like the personal pronouns, locative pronouns participated in an inversion with their prepositions:
(60) ealle de daerbinnan ${ }^{11}$ waeron
(all that there within were $=$ all that were within that place) Oros.p.200. 16
(61) He com to dam trewe, sohte waestn daeron, and naenne ne gemette
(He came to the tree, sought fruit thereon, and none not found=he came to the tree, sought fruit thereon, and found

$$
\text { Alc.Th.vol. } 2 \text { p. } 408.1
$$

(62) ...daet cristene menn derto faran magan (that Christian men thereto go may=that Christian mon may go
there) there)

$$
\text { Wulf. Xvili. } 35
$$

(63) Alyyrtwala graedignysse of dinre heortan, and aplanta daer on da sodan lufe (Root. up greediness from thy heart, and plant thercin the true love)

$$
\text { Alc. Th. vol. } 2 \text { p. } 410.2
$$

To account for this inversion, I propose a rule of Locative Shift, similar to the rule of P-Shift, to invert a demonstrative locative pronoun and its preposition:
(64) Locative Shift

$$
W_{1} \quad\left[\begin{array}{lc}
{[P} & \left.\begin{array}{c}
N P \\
+p r o \\
-w h \\
+l o c
\end{array}\right]
\end{array}\right] \quad W_{2}
$$

The feature - in is included to capture the fact that interrogative locative pronouns, unlike their demonstrative counterparts, do not undergo Locative Shift. There are no instances, to my knowledge, of hwaerto "whereto", hwaerfor "wherefore", etc. in 01d English. ${ }^{12}$ The first examples of Locative Shift with the interrogative pronouns are found in the thirteenth century (see section 5.1.1 for details).

The Locative Shift rule differs from P-Shift in that P-Shift does not apply to demonstrative pronouns, and Locative Shift does. It would be possible to collapse the two rules by means of angle brackets, stipulating that if the pronoun was +locative, it was also +demonstrative, but collapsing the rules in this way would capture no generalization, as far
as I can see.
After Locative Shift applies, the inverted prepositional phrases resulting from this rule should be able to be broken up by PP-Split, and this is in fact the case:
(65) daet Ercol se ent daer Maes to gefaren (that Hercules the giant there was to gone=that Hercules the giant had gone there) Oros.p. 132.10
(66) $\ldots$ daet hic daer mehten betst frid binnan habban
(that they there might best security within have=that they might have the best security within there)

$$
\text { Oros.p. } 116.5
$$

Thus we see that the possibility of preposition stranding with the Topicalization of daer and other locative pronouns is due to the inversion of these pronouns with their prepositions, as with personal pronouns.

There are a couple more rules which need to be mentioned involving locative pronouns. First, sometimes locative pronouns which participated in Locative Shift did not have a locative meaning, but rather the meaning of neuter demonstrative pronouns:
(67) Daet is daes godan weorces maegen, daet man daeron durhwunige
(That is the-gen. good-gen. work's virtue, that one thereon continue=that is the virtue of a good work, that one continue therein)

$$
\text { Ang 1. Hom. XII . } 148
$$

(68) Nu wylle we cow geopenian daet andgit daerto
(Ilow will we you open the meaning thereto=now we will open the meaning to it for you)

Alc.P.XIII. 35
(69) He urum gyltum miltsad, and daertoeacan daet heofenlice rice behat
(He our guilt has-mercy-on, and there-in-addition the heavenly kingdom promises=he has mercy on our guilt, and in addition to that promises the heavenly kingdom)

$$
\text { Alc.Th. vol. } 2 \text { p. } 84.8
$$

(70) Bonne bid se sumandaeg daeraefter Easterdaeg (Then is the Sunday thereafter Easter=then the Sunday after that is Easter)

Lchdm. III. 244.18 (BT)
(71) Swa swa we eft heraefter secgat
(As we later hereafter say=as we will say later after this) Bede 3.30
(72) Hig to lyt daerymbe dencead (They too little thereabout think= they think too little
about that) Wulf.N. 273.1

To account for this fact, we can postulate a rule changing a neuter demonstrative pronoun to a locative pronoun:
(73) Locative Replacement

| $W_{1}$ | $p p[P$ | IIP <br> tpro <br> +neut <br> tderi |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 |$\quad W_{2}$

This rule converts a neuter demonstrative pronoun into a locative pronoun by changing a feature. The pronoun in (68), for example, would be hit "it" if the feature +locative were not present. Such rules are common in the Germanic languages. It is interesting to compare the Old English situation with that of Modern Dutch, which also has a locative shift rule and a rule substituting locative pronouns for the neuter pronominal objects of prepositions. However, in Dutch, this latter rule is obligatory, while it was uptional in 01d English:
(74) *Hij weet niets van dat. (He knows nothing of that)
(75) Hij weet niets daarvan.
(He kno:ks nothing thereof=he knows nothing of that)
(76) Hij weet niets van dat bock.
(He knows nothing of that book)
Furthermore, in Dutch this rule applies not only to demonstratives, but also to interrogative pronouns:
(77) Haarvan is het gemaakt?
(Whereof is it made=what is it made of?)
As in 01d English, such prepositional phrases can be broken up in sinple sentences:
(78) a. Daarvoor doe ik het niet.
b. Daar doe ik het niet voor.
(There do I it not for=I an not doing it for that)
It should be noted here, however, that in Dutch there is some evidence for a specific movement of locative pronouns from the prepositional phrase, since the locative pronoun always goes to a position irmediately to the right of the subject, not counting the verb of a root sentence, when it is separated from the preposition, although another rule, such as Topicalization, as in (785), may subsequently move it from this position. See Riemsdijk (1977) for a discussion. The important thing here is that these prepositional phrases are separable in simple sentences, while non-inverted prepositional phrases are not.

To see that this rule of Locative Replacement was optional, compare example (79) with (70), and (80) with (69):
(79) $\frac{\text { Aefter }}{\text { (After }} \frac{\text { daen }}{\text { that }}$ for Hannibal ofer Bardon (After that went Hannibal over Bardon=after that, Hannibal went over Bardon)

Oros.p. 186.32
(80) Toecan da me him waes swide ondraedende daet him his fiend

## waeren aefterfylgende

(In addition to that he him was greatly fearing that him his enemies were after-foliowing=in addition to that, he was greatly fearing that his enemies liere following after himl) Oros.p. 84.8
After Locative Replacement, the locative pronouns were non-Incative meanings were also available to PP-Split:
(81) Be dem du meaht ongietan dact du daer nane myrhde on naefdest
(By that you may understand that you there no joy in not-had =by that you may understand that you had no joy in that) Boeth.VII.i p.15.11
(82) Gelef me, nu ic hit de secge: naefst fu daer nauht aet (Believe me, now that I it thee say: not-hadst though there nothing at=believe me, now that I say it to you: you! had nothing from that)

$$
\text { Boeth.XIV.ii p. } 31.15
$$

(83) an he eac swilce wisan daer sylf toeacan geihte
(and he also such practices there self in-addition-to added= and he also added similar practices in addition to that)

Alc.S.Xxili.B. 26
The final rule we need to consider concerning locative pronouns
is the one involved in the following sentences:
(84) Ic Gaer cwom to dam hringsele
(I there came to the ring-hall $=I$ cane there, to the ringhall)

Beo. 2009
(85) Waes Haesten daer cumen mid his herge
(Was Haesten there come with his army=Haesten had come there with his army)
P.C. 394
(85) Gif edaer man an ban finded unforbaerned
(If there one a bone finds unburned=if one finds a bone unburned there)

Oros.I.1 p. 21.12
(87) Sume daer bidon
(Some there waited=some waited there)
Beo. 400
(88) and manega untrume fram mislicum codum daer wurdon gchaelede (and many infirm from various diseases there were healed=
and many infirm people were healed there fron various discases)

Alc.S.AXVII. 131
In these examples, the locative pronoun is understood as the object of a preposition, although there is no preposition apparent on the surface. In ( 84 ) and ( 85 ), the understood preposition is to. In (80) through (38), the understood preposition is net "at." The combinations aet dace, to dacr are not found in O1d English. Rather, when daer is understood as the object of act or to, either daer by itself occurs, or else the aet or to is postposed by locative shift.

These 01d English facts are similar to Nedern Enylish facts about locative proneminal objects of prepositions. Consider the folloning facts:
(89) a. John went tou schoul.
b. *ilohn went to there.
c. John went there.
(90) a. At what store does John work?
b. *At where does John work?
c. Where does John work?
d. Where does Jollu work at? (Dialectal)
(91) a. The phace at which John works is a bakery.
b. *The place at where Johm riorks is a bakery.
c. The place where John rooks is a bakery.
d. The place where John works at is a bakery. (Dialectal)

To account for such facts, Katz and Postal (1964) proposed a rule deleting a preposition which infediately precedes its promominal locative object. If this rule is ordered before Relative Clause formation and

Question Hovement, the (c) sentences in (90) and (91) will be generated. On the other hand, if the Preposition Deletion rule is ordered after these rules, the (d) sentences will be generated, so the difference in dialects with respect to the gramnaticality of the (d) sentences is accounted for by the different ordering of these rules in different dialects. Note that this rule of Preposition Deletion must not apply to all prepositions. For example, the following sentences are grammatical: (92) We went from there to Spain. (93) John is in there. It seems that only to and at must be deleted before locative pronouns. ${ }^{13}$ We may formulate the Preposition Deletion rule thusly:
(94) Preposition Deletion

| $W_{1}$ | $p p\left[\begin{array}{ccc}\text { to } \\ \text { aet }\end{array}\right.$ | NP <br> +pro <br> +loc | $W_{2}$ |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 |  |

Note that in 01d English, Preposition Deletion must be ordered after P-Shift, or else all instances of daer to and daer aet would be ruled out. With P-Shift ordered before Preposition Deletion, aet and to can be inverted with their objects, and the resulting configuration does not fit the structural description of Preposition Deletion.
2.1.3 Summary of $O E$ topicalization facts. This concludes our discussion of Topicalization in 01d English. To summarize, we have found that preposition stranding was not possible in Old English Topicalization, and that apparent counterexamples to this generalization can be accounted for in a principled way by the operation of independently motivated rules, namely P-Shift, Locative Shift, and PP Split. The changes in
preposition stranding in Topicalization (and other rules) in Middle English will be described in section 6.1, and the theoretical inportance of the facts discussed above and in section 6.1 will be discussed in section 9.2.

I present here a list of the rules proposed in this section, in the order in which they apply:
(95) List of Rules Concerning OE Topicalization
a. P-Shift (50)
b. Locative Replacement (73)
c. Locative Shift (64)
d. PP-Shift (54-55)
e. Topicalization (30)
ilot all of these rules are crucially ordered with respect to all of the others. The P-Shift and Locative Shift rules are not crucially ordered with respect to each other, nor is the Locative Replacement rule crucially ordered with P-Shift, although it must be ordered before Locative Shift. PP-Split must be ordered after all the rules which precede it in this list, and Topicalization must be ordered after PP-Split.
2.2 01d English Passivization. Let us now discuss briefly another rule which applied in simple sentences in Old English. As in Modern English, in Old English it was possible to make the logical object of a transitive verb the subject of the sentence:
(96) Bys is durh God gedon
(This is through God done=this is done through (i.e. by) God)
(97) furh daes wheteres styrunge waes eac getachod dabs Haelendes arowulig (Thruigh the Water's stirring mas also betokened the savior's passion-the savior's passion was also betakened through the stirring of the water)

$$
\text { Alc.P. II. } 130
$$

(98) and se brosnigenda lichatba bied mid deade fommen and to duste avend (and the corruptible body is by death destroyed and to dast turned=and the corruptible body is destroyed by death and turned to dust)

$$
\text { AlC.P.II. } 107
$$

(99) da weard him gebroht to sun witseoc man (Then was him brought to sowe mad man=then a madran was brnught to hin)

$$
\text { Alc.P.IV. } 3
$$

Sentences of this sort are generally considered to be the result of a ruie of fassivization which turns the object of a habsitive verb into a subject. In 0ld English, the newly created subject did not have. to occur in first position, as the examples above illustrate, due to the nobility of subjects in Old English. However, the momative case marking of the subject croated hy fassivization indicates that these former objects are in fact subjects.

I will assume, following Gresnan (1976) that the deep structure for a passive sentence like Jolin was killed (in both old and Yodern English) is as finlluins:


The ebject iNP is then pronoted to the empty subject position b."
the rule of Passivization, which I will formulate here following Bresnan (1976):
(101) Passivization

| $W_{1}$ | NP | Aux | $V$ | $W_{2}$ | NP | $W_{3}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | 6 | 3 | 4 | 5 | 0 | 7 |

Nothing in our discussion of OE Passivization, either here or later, depends crucially on the deep structure and rule proposed here, as long as it is assumed that Passivization involves some sort of movement of an object into subject position. ${ }^{14}$

The only fact about OE Passivization which is of particular interest for our purposes is the fact that unlike Modern English, in Old English there are no passive sentences of the sort John was laughed at, where the object of a preposition is passivized. The advent of passive sentences of this sort in Middle English will be discussed in section 6.1, and it will be argued in Chapter Nine that the fact that such passives were not possible in 01d English is best accounted for by a general restriction against the movement out of a prepositional phrase, which was drcoped in Middle English. It will also be shown that the lack of this surt of passive construction in 01d English cannot be attributed to a lack of "compound verbs" in that stage of the language.
2.3 Conclusions. In this chapter we have discussed some movement rules which applied in simple sentences in Old English, namely Topicalization, Passivization, and other movement rules affecting the operation of Topicalization. These rules will be discussed further in Chapter Six and Chapter Nine, where the changes these rules underwent in Middle

English and the theoretical import of the 01d and Hiddle English facts will be explored.

In the remaining three chapters of Part One we shall see that the facts about preposition stranding described in this chapter tie in with the facts about preposition stranding in Old English relative clauses, questions, and comparative clauses.

## Footnotes to Chapter Two

There were certain rules in Old English which broke up complex noun pirases. One of these rules, which allowed certain genitive noun phrases to split up, will be discussed briefly in Chapter Four. The inportant fact here is that deteriliners and adjectives could not move dway from the nouns they modified, at least in prose. It was also possible for prepositional phrases to be split up in Old English after a process inverting prepositions and their pronominal objects. These facts are discussed in sections 2.1.1 and 2.1.2.

2
However, Annie Zaenen has informed me that such inversion after Topicalization in subordinate clauses also occurs in Modern Icelandic.
$3^{3}$ pied piping refers not only to a preposition being moved along with its object, but also to the phemomenon of more inclusive NP being Hoved when one might expect only a less inclusive NP or PP to be moved, as in The children, pictures of whom were hanging on the wall, were very cute. However, the type of pied piping we will be most concerned with here is the movement of the preposition along with its object.

4 This statement is based on my own examrination of all the old English texts listed in the Appendix, but agrees with Wende's (1915) findings.

Dani folce eode aetforan symle Godes wolcn (The people-dat. Went before always God's cloud=the people, God's cloud always went before)

$$
\text { Alc.vol. } 2 \text { p. } 196.7
$$

Ban deowan is beboden \& dus to cueden (The servant-dat. is promised and thus to said=the servant is pronised and thus told)
Wende notes that the second example is somewhat dubious, since the preposition stranding is probably due to the fact that a verb not taking a prepositional object is conjoined with one that does. He notes that the to may be an adverb here.

Wende found more examples of prepositions separated from their full IP objects in Gregory's dialects, in which he also found a greater frequency of simple inversion (without separation) of prepositions and full NP objects. The fact that stranding is more conmon in this text in which inversion is also more common indicates the validity of attributing the possibility of preposition stranding with topicalized pronouns to the ability of pronouns to undergo $P$-Shift and PP-Split. In Gregory's dialogues, P-Shift and PP-Split applied to full nouns, as well as pronoune. We may conclude, therefore, that preposition stranding

Was not possible in Old Erglish Topicalization. Apparont countrrefimples with full rem phrases are so rare in lost texts to be considered herely mistakes, an extension of PP split to full noun ploases. For statistics on the stranding of prepositions with topicalized pronowns, see Wemde's study. Vende found only two exa ples of tonicalized full nown phrases sevarated fron their prepositions in the texts he examined, excluding Grescry's Dialogues.
${ }^{5}$ For statistics on the frequency of inversion of pronouns vs. full nouns with prepositions, see liende (1915).
${ }^{6}$ Personal pronouns vere the only ones wifich regularly unterwent PShift. liende foand only four examples of a delonstrative promoun preceuing $t$, preposition of which it was an object in the text's that he examined, compared with 43.4 exalples of inverted personal promouns. He found no examples of an interroyative pronoun prece-ing its preposition.

7 Such a trace-theory version of this rule is propased for nutch by Ricmisdijk (1975).

Bhowever, there seenis to have been a constraint that a full ip object (as compared with a pronominal object or a prepositional phrase) conid not intervenc between the verb and the subject when the subject followed the verb.
${ }^{9}$ A similar rule to readjust the bracheting of certain nom phrases is proposed in Chomsky (forthcoming). This rule breaks up the ap a picture if coln, for exanule, into an NP and a PP. chomsky notes that this rule could also be an extraposition rule, but is probably a readjustment rule.

10 There are a few cases of full ip's underguing PP-Split, and also a very few examples of topicalized full noun phrases with stranded prepositions. For statistics, see !!ende (1915). Nende fond one text in bhich F -Shift has rore com:on with full noun phrases than in the other texts, and prepusition stranding with topicalized full noun phrases was also rore col on. Wende's findings are evidence that preposition stranding in OE Topicalization has a result of P-Shirt and fP-split.
$11_{\text {mlthongh binnan las historically a compound on inman, which could }}^{\text {inn }}$ be either a preposition (taking dative or accusative objects), biman is listed in Boshorth and Tollor's dictionary as being only a preposition. The following is an example of biman with a non-proneminal object:

Baet heo thast eal? genom dact bimman daere byrg was (That is rost all took that with the-dat. city was=that it took almost all that was within the city)

12
However, the interrogative pronouns were also used as indefinite pronouns in 01d English, and in this capacity, I have noted one example of P-Shift:

Ac torne hi hwaem fro hweorfende biot ...
(But when they whom departing are but when they are departing
from anyone...)
Bocth.VII.2 p. 16.14
For further discussion of the use of interrogative pronouns as indefinite pronouns in 01d English, especially in free relatives, see section 3.1.2.2. Wende (1915) found no examples of preposition stranding with interrogative pronouns.

13
However, notice that when in does not mean "inside," but merely expresses location, it is deleted:
a. Hie lives in that town.
b. He lives there.

In (b), it is not completely clear whether in or at has been deleted, since both these prepositions are used to express Tocation. The (b) sentence could also be used as an alternalive to (c.):
c. He lives at that address.

It seems likely that rather than referring to specific prepositions, the Preposition Delction rule should refer to semantic features. Howcver, the exact characterization of which prepositions are deleted by this rule is not important here.

14 By this analysis, the by phrase in sentences such as John was killed by Bill does not originate as the subject, to be turned into a prepositional phrase by the Passivization rule, but is generated as a PP within the VP. Under this analysis, there is no deletion of an unspecified agent in sentences such as John was killed. Again, this particular formulation of Passivization is not crucial to any argument here.

# CHAPTER III SOME COAPLEX SENTENCE SYMTAX 

### 3.0 Introduction

In the second chapter we studied some rules applying within simple sentences. In this chapter we will investigate some types of complex sentences in 0ld English and rules relating items in subordinate clauses to ones in main clauses. In particular, we will study relative clauses, both headed and free, and questions, both direct and indirect. lie will be particularly interested in the facts about preposition stranding in these constructions. These facts will be crucial to our discussion in Chapter idine concerning whether certain constructions in Old English offer examples of unbounded rules of deletion under identity. He shall see that preposition stranding was possible only in Old English in constructions in which there was no overt surface evidence of movement.
besides relative clauses and indirect questions, some other types of subordinate clauses will be discussed here, as this discussion will help us to understand how the complementizer that came to be found in a wide range of subordinate clauses, including indirect questions, in the fourteenth century, a phenomenon discussed in Chapter Eight.

Let us first consider relative clauses with heads.
3.1.1 Headed relative clauses.
3.1.1.1 Ee relatives. The most cormon type of relative clause in 01d English was one introduced by an indeclinable relative particle de. This type of relative clause basically corresponds to relatives with that
in fiodern English. The following are examples of the 01d English construction:
(1) Gemyne he daes yfeles de he worinte
(Remenber he the evil that he wrought=let him remen ber the evil that he wrought)

Sweet CP 25.54
(2).. be dam drim dingum de se Haelend saede (about the three things that the Savior said) Alc.P.VII. 84
(3) $\quad$. aerest $y \mathrm{mb}$ min land de ic haebbe, \& me god lah
(first about my land that I have, and me God lent=first about my land that I have, and God lent me)
S.OET CT 41.3
(835, Kentish)
(4) Hi getacniad da geleaffullan on godes geldunge de mid geleafan underfod da cladan gecydnysse
(They betoken the faithful in God's congregation that with faith receive the old testament)

$$
\text { Alc.S.XV. } 56
$$

(5) Her sindon daera manna naman awritene de deosse wisan geveotan sindon
(Here are the men's names written that this-gen. will witnesses are=here are written the names of the men that are witnesses to this will)

$$
\text { S.OET Ct. } 45.54
$$

In the first three of these examples, the relatived item is the object of the relative clause. ${ }^{1}$ In the remaining two, the relativized item is the subject of its clause.

It was also possible for the relativized item to be the object of a preposition within the relative clause, in which case the pieposition was always stranded:
(6) Ac he sylf asmeade da up-ahefednysse de he durh ahreas (But he self devised the presumption that he through fell= but he himself thought up the presumption that he fell tirrough)

$$
\text { Alc.Th.XIII p. } 192
$$

(7) Seo gesyd de we god nyyd gescon scylon is angyt (The sight that we God with see shall is understanding= the sight that we shall see God with is understanding)

$$
\text { Sol. p. } 67.6
$$

(8) For don de hie us gelaeddon durh da lond de da unarefnedlican cyn naedrena \& hrifra wildeora in waeron (Because they led us through the land that the unbearable breed adders-gen. and firce-gen. wild beasts-gen. in were= because they led us through the land that the unbearable breed of adders and fierce wild beasts were in)

$$
3 \text { OE p. } 9.4
$$

(9) ... dam burgun de he on geworhte his wundra
(the cities that he in wrought his miracles=the cities that he wrought his miracles in)

Alc.P.XVII. 54
(10) Ic sceal aerest afyllan da tincg de ic fore asend eont (I shall first fulfill the things that $\bar{I}$ for sent am= I shall first fulfill the things that I am sent for) Alc.S.XXIV. 119
(11) He naenigre waetan onbitan nolde, de druncennysse durh come
(He no liquid swallow would, that drunkenness through came= he would drink 110 liquor that drunkenness carie through) St.Guth. 2.82

As in Hodern English that relatives, it was not possible for de to be preceded by a preposition.

Such examples of preposition stranding in de relatives are extremely common in all the Old English texts. One might suggest that in these examples the apparently stranded preposition is actually an inseparable prefix to the verb. ${ }^{2}$ The Germanic languages commonly have verbs consisting of a preposition plus a verb, and 01d English was no exception. A few such verbs in O1d Eng? ish were ofer-deon "to excel," in-gan "to go in," and durh-stingan "to stab through" or "to pierce." That the particle preceding the verbs in these cases were not true prepositions, but part of the verb, is shown by the fact that these parti-
cles always preceded the verbs:
(12) He on daes gesides hus ineode (He in the-gen. companion's house in-went=he entered in the companion's house)

$$
\text { Bede } 5.4
$$

(13) ... dact he hine selfne ne durhstinge nid dy sweorde unryhthaeniedes
(that he him self not through-sting with the sword formi-cation-gen, =that he not pierce himself with the sword of fornication)

$$
\text { CP } 318.8
$$

However, the prepositiontverb combinations given in the relative clauses above are not listed in the Bosworth and Toller Anglo-Saxon dictionary as verbs, as the verbs with particles just discussed are. Furthermore, these combinations which are not listed as verbs with prefixes occur only in de relatives and in other constructions silitilar to de relatives in not allowing pied piping, proving that (6) through (11) contain true examples of preposition stranding, since otherwise we would have the inexplicable fact that many "verbs with prefixes" occurred only in constructions in which no movement was apparent on the surface (that is, constructions which I ant analyzing as involving deletion, with preposition stranding possible). Wende (1925) also argued that examples of this sort were true examples of preposition stranding, rather than examples of verbs with prefixes.

The existence of verbs with prefixes in 01d English means that many possible examples of preposition stranding are ambiguous between being real cases of preposition stranding and instances of such verbs with prefixes, especially since stranded prepositions nearly always innediately preceded the verb. In giving examples of preposition strand-
ing, I will be careful to use only examples with con binations of prepositions and verbs which are not listed in the Bosworth and Toller dictionary as verbs with prefixes. It should also be noted that Wende was very sensitive to the difference between verbs with prefixes and stranded prepositions before verbs, making his study all the nore valuable.

Three important facts about de relatives are illustrated by the following examples:
(14) Dis is se rinta yeleafa de acghwylcum men gebyred daet he wel gehealde \& gelaeste
(This is the correct belief that each-dat. Man-dat. behooves that he well hold and performethis is the correct belief that it behooves every man to hold and perform well) Blickling p. 111
(15) Ne meaht du Ala Arowunge gelettan, de Faeder vol de \& geteohod dact ic for mancymes haclo getrow an sceolde ( Wot might you the suffering prevent that Father would and intended that I for mankind's salvation suffer should= you cannot prevent the suffering that Father willed and intended that I should suffer for mankind)

$$
\text { Ver.I. } 42
$$

(16) ...ealra daera deoda de ge nu wilniad swide ungemetlice Gact ge scylon eowerne naman ofer tobraedan
(... all the-gen. people-gen. that you now desire very inmoderately that you shall your name over extend=all the people that you now very inmoderately desire that you extend your name over)

Boeth. XVIII. 1 p. 42.24
(17) Ac for dacir he genedde swidost ofer done munt de he wiste tact Flamineus se consul wende diat he buton sorge mehte on daem wintersctle gevunian
But because he ventured quickest over the mountain that he knew that Flamineus the consul thought that he without care might in the winter quarters dwell=but because he ventured most quickly over the mountain that he knew that Flamineus the consul thought he might dwell on in winter quarters without care)

Oros. p. 188.3

In all these examples, there appear to be be violations of the Tensed S and Specified Subject constraints, discussed in the Introduction. For example, the underlying structure of the relative clause in (15), leaving out constituents not essential to the structure of the relative clause, must be something like (18):
(18)


The relativization rule (whether it is a movement or a deletion rule) relates the relative marker te and the relativized NP da drowunge across the cyclic boundary of the tensed daet clause and over the specified subject ic. These facts will be important to the discussion in Chapter Nine. Notice, incidentally, that in (17) relativization must take place over not only one tensed clause, but two.

A:luther interesting fact about de relatives is that it was possible to relativize the subject of a subordinate clause:
(19) Wine gebrodra, ne lufige ge disne widdangeard do ge geseod daet lange wunian ne maeg
(iiy brethren, not love you this world that you sce that long last not my=my brethren, do not love this world that you see cannot last long)

$$
\text { Alc.Th.XL.P. } 614
$$

(20) Fordari de we habbad gecanawen fela daera fortacna de Crist sylf foresaede daet cuman scolde
(Because that we have observed pany the-gen. portents-gen. that Christ self predicted that co es should=because we have observed rany of the portents that Christ himseli said should cone)

$$
\text { Wulf.VI. } 197
$$

(21) Ac ic wolde witan hu de Eute be daen monnum Ele wit aer cwaedon daet unc duhte daet waeren wildiorum gelicran tome rionnu
(But I would know how thee scened about the men that we earlier said that us seelied that were wild beats like-er than ren = but I would know how it scemed to you about the ren that we said earlier seemed to us to be more like wild beasts than men)

Boeth. XXXVII. 5
p. 122.13
(22) Is dis eower sunu de ce secgat daet blind waere acenned?
(Is inis your son that you say that blind was born=is this your soll that you say was born blind?)

$$
\text { Jolin IX. } 19
$$

(23) Hu ge hatbid gehyred hwilc dies god is de ge wendon daet eow jehaelde
(Moy you have heard wat this god is that you thought that jou harled-now you have heard what this god is that you thionght liealed you)

$$
\text { Alc. Th. XXXI. p. } 467
$$

In Hiodern Englisin, such relative clauses are possible only if the relative narker is deleted:
(24) a. *he is the man that bill said that bought the house.
b. He is the man that Bill said bought the house.

Sinilarly, in iodern English it is impossible to question the subject of
of a subordinate clause without deleting the complementizer.
(25) a. *Who do you think that bought the house?
b. Who do you think bought the house?

To account for such facts, Bresnan (1972) proposed a constraint, the Fixed Subject Constraint, which prevents extraction of a subject next to a complementizer. This constraint is assumed to be language specific, rather than universal, although it may correlate with certain typological features of languages. Chomsky and Lasnik (forthcoming) claim that only languages with a free pronoun dropping rule violate the Fixed Subject Constraint. ${ }^{3}$ As noted By Bresnan (1976), however, Old English had no free pronoun dropping rule. This means that 0ld English provides a counterexample to Chomsky and Lasnik's claim about the typology of languages not obeying the Fixed Subject Constraint. ${ }^{4}$

I will defer discussion of how de relatives are to be analyzed until section 3.1.1.4, where analyses for the various types of relatives will be given. Let us now turn our attention to another type of 01d English relative.
3.1.1.2 Se relatives. The second type of relative clause in 0ld English was one in which a demonstrative pronoun was used as a relative pronoun. This type of relative is very common in the Germanic languages. In Modern German, for example, the demonstrative pronouns are still vying with the interrogative ones as relative pronouns. In Old English, the interrogative pronouns werc used as relative pronouns only in free relatives (see sections 3.1.2.2 and 3.1.2.3). Since the masculine singular nominative form of the demonstrative pronoun was se, this type of rela-
tive is traditionally referred to as the se relative. The following are examples of such relatives:
(26) Ac ge onfod daem maegene Halges Gastes se cyml ofor cow (But you receive the-n.d.s. power-n.d.s. Holy-ll.g.s. Ghost's-min.g.s. who-m..11.s. comes over you-but you receive the power of the Holy Ghost, who comes over you)

$$
\text { Blickling p. } 119
$$

(27) Her feng to Dearne rice Osric, Hone Paulinus aer gefullode (Here succeeded to Deira kingdom Osric-nom. Whom-h. a.s. Paulinus earlier baptized=in this year Osric, whom Paulinus had earlier baptized, succeeded to the kingdom of Deira) P.C. 643
(28) 日a man ofsloh des Caseres gerefan se was Labienus gchaten (Then one killed the emperor's reeve-n.a.s. who-m.n.s. was Labienus called=then the king's reeve, who was called Labienus, was killed)
P.C. Prologue

The various forms of the demonstrative, personal, and interrogative pronouns are listed in the Appendix.

In contrast to the de relatives, in the se relatives, when the relativized noun phrase was the object of a preposition, pied piping of the preposition was obligatory:
(29) Weordian we eac da cladas his hades, of daem waes ure gekind geedneowod
(Honor we also the clothes his person-ll.g.s. by which-m.d.s. was our race reneved=let us also honor the clothes of his person, by which our race was renewed)

$$
\text { Blickling p. } 11
$$

(30) ...ure yfelan word wid done we geremodon (our evil word-n.a.s. with which-ll.a.s. we provoked)

Alc.S.XV. 190
(31) ...daet he us dingige wid tone Heofonlican Cyning, for daes naman he trowode That he intercede for us with the Heavenly King, for whose name he suffered)

Alc. Th. XXIX p. 436
(32) Gehyr du arfaesta God mine stefne, mid daere ic earm to te cleopie (Hear thou gracious God my voice-f.a.s. with which-f.d.s. I miserable to thee cry-hear thou, gracious God, riy voice, with which I, miserable, cry to thee)

Blickling p. 89
I have found no counterexamples to the generalization that preposition stranding was impossible in se relatives in Old English. My findings accord here with those of Wende (1915). The only exceptions to obligatory pied piping of prepositions in these relatives are found in relative clauses with daer, the locative relative pronoun, which could strand prepositions. These relatives with daer will be discussed in section 3.1.1.5, where it will be shown that these relatives do not constitute true counterexamples to the rule that pied piping of prepositions was obligatory in se relatives.

Note that in all the examples given here, if the case of the head IIP differs from the case which the relativized NP should have according to its role in the lower clause, it is the lower clause case which the relativized IIP exhibits. For example, in (27) the head noun, Osric, is the subject of the higher clause, but the corresponding noun in the lower clause is the object of that clause, and accordingly receives accusative case marking, rather than nominative. Similarly, in (28) des Caseres gerefan, the head of the relative clause, is in the accusative, being the subject of the verb ofsloh, but the relative pronoun turns up in the nominative form, se, because the relativized noun phrase is the subject of the relative clause. It is in general the case with se relatives that the pronoun exhibits the lower clause case, although there are a few examples where the relative pronoun "attracts" into the
case of the head noun phrase.
Like the de relatives, the se relatives exhibit apparent violations of the Tellsed $S$, Specified Subject, and Subjacency conditions:
(33) Ic seolfa cude sumne brodar, done ic wolde daet ic naefre cude
(I self knew some brother-m.a.s. whom-m.a.s. I would that I never knew)

Bede p. 442.9
(34) \& of dam ilcan bocum tyn capitulas, da ic geond stowe awrat \& ic wiste daet swidost neddearlecu waeron, sealde ic him
(and of the same book ten chapters, which-f.a.p. I passage-by-passage transcribed and I thought that most needful were, gave I them=and I gave them chapters of the same book which I transcribed passage--by-passage and thought were most needrul)

Bede p. 278.1
(35) Eode da to sumum maessepreoste, from daem he gewende daet him haelu weg aeteaved beon meahte (Hent then to some mass priest, from whon-m.d.s. he thought that him salvation say shown be might=he went then to a mass priest, by whom he thought that the way to salvation might be shown to him)

Bede IV. 25 p. 350.16
(36) \& ongan arweordian da drowunge dara haligra martyra, durh da he aer wende daet he acyrran meahte fram aefestnysse (and began honor the suffering the-gen. holy-gen. martyrs, through-f.a.s. he earlier thought that he them turn might from devotion=and began to honor the suffering of the holy martyrs, through which he had earlier thought that he might turn theill from devotion)

Bede p. 40,19
By Chorisky's system, therefore, these relatives must involve movement into COMP. Example (34) is also an example of a violation of the Fixed Subject Constraint.

As noted carlier, the relative pronouns which we are denoting collectively by se were also demonstrative pronouns. These demonstrative pronouns were furthermore frequently used in place of the personal pro-
nouns:
(37) Gif du heafst aenige feond send tone to Homl feo (If you have any encmy, send that-1I.a.s. to the treasure $=$ if. you have any enemy, send him to the treasure) Alc.S.XXV. 802
(38) Ba weard daer an daera engla swa scinende... dact se waes Lucifer genemned (Then was there one the-gen. angels-gen. so shining that that-m.n.s. Was Lucifer maned=then there was one angel so shining that he was named Lucifer)

$$
\text { Hulf.vi. } 27
$$

Because of the identity of the relative pronouns with these pronourls, it is often difficult to determine whether a given pronoun is really demonstrative or relative. For example, it may he tiat a better translation for example (28) would be "Then the king's reeve was killedhe was called Labienus." Similarly, in (27) it is possible that fone is actually a topicalized demonstrative pronoun, rather than a relative pronoun. It is generally agreed that the se relative developed from such sentences where a demonstrative pronoun was fronted. Such sentences could easily be reanalyzed as relative clauses on a noun in the preceding sentence, with the demonstrative pronoun being analyzed as a relative pronoun.

An analysis of the se relative will be given in section 3.1.1.4. Let us now consider the third major type of relative clause in 01d English.

### 3.1.1.3 Se de relatives. The third type of relative clause

 appears to be a combination of the first two, exhibiting both the demonstrative pronoun and the indeclinable particle. This type is called the "se de" type, and here the pronoun may have either the case of the rela-tivized NP or that of the head. The pronoun optionally attracts into the case of the head noun only when the relativized item is the dative or accusative object of the higher clause. The following are exaliples of this type of relative clause:
(39) Ic wat wytodlice dact ge secad done haclend done tee on rode ahangen waes
(I know truly that you seek the-mia.a.s. Savior-m.a.s. whomm.a.s. that on cross humg was $=1$ know truly that you seek the Savior, who was hung on the cross)

St. Hat. 1766 (XXVIII.5)
(40) Ne we ne durfon secan ofer sae ne ofer land mid widgire worunge, done welwillendan God, done de daet arfaeste mod mid him aefre haeft
(Hor we not need seek over sea nor over land with :vide roving the-n.a.s. well-willing God-m.a.s. whom-li. a.s. that that merciful spirit with hime ever has=nor do we need to seek over sea nor over land, with wide roving, the wellwilling God who is always merciful)

Alc.P.V. 185
(41) Ne he bid Iudeun anum seald, ac he bid callum deodum, dam de on God gelyfan willad
(Not he not is Jews-d.p. alone-d.p. given, but he is all d.p. people-d.p. whom-d.p. that in God believe will=he is not given to the Jews alone, but to all people who will believe in God.
(42) Ure Drihten araerde anes ealdormannes dohtor, seo de laeg dead
(Our Lord raised an aldorman's daughier-f.a.s. who-thatf.ll.s. lay dead)

Alc.P.VI. 176
(43) Swa swa Aaron waes, se arwurda bisccop, done de God sylf geceas
(As Aaron was, the-m.n.s. Worthy bishop-m.n.s. Whom-m.a.s God self chose=as Aaren, the worthy bishop, whom God himself chose, was)

$$
\text { Alc.P.XX. } 243
$$

(44) and sendon to domiciane, dan deoflican casere se de aefter nero genyrwde da cristenan
(and sent to Domitian, the-m.d.s. devilish caesar-m.d.s. who-III.II.s. (that) after Wero oppressed the Christians)

Alc.S.XXIX. 190
(45) wolde eac done cyning swilce mid dissun wilwendlicum aarum wuldrigan, daell te he taes heofonlican rices wuldor... openede
(would also the-m.a.s. king-m.s.a. with these temporal distinctions glorify, whom-m.d.s. tilat he the-gen. heavenly kingdom's glory opened=he would also glorify the king, (to) whom he opened the glory of the kingdon of heaven, with temporal distinctions)

Bede I.XVII p. 90.10
(46) Ac gif we asmeagad da eadmodlican daeda Ha de he morhte, tonne tince us daet nan wundor (But if we consider the-f.a.p. hurble-f.a.p. deeds-f.a.p. which-f.a.p. that he wrought, then not seems us that no wonder=but if we consider the humble deeds which he wrought, that will scem no wonder to us)

Blickling p. 33
[n the first threc of these examples, we sec the effects of case attraction. In (39), the relativized item is the subject of the relative clause, but the relative pronoun appears in the accusative case because the head of the relative clause is accusative. The same is true of (40). In (41), the relativized noun phrase is again the subject of its clause, but here it attracts into the dative case of the head noun phrase. In (12) through (45) there is no case attraction. In (42), for example, the head noun phrase is accusative, but the relative pronoun is nominative, since the relativized item is the subject of its clause.

As with the plain se relatives, when the relativized item in a se de relative was the object of a prepositional phrase, pied piping was obligatory:
(47) Eala du wundorlice rod, on daera de Crist wolde drowian (Hail, though wonderful cross, on which-f.d.s. (that) Christ would suffer)

Alc.S.XXVII. 115
(48) Wa dam men durh done de byd mannes sunu belaewed (Woe the-dat. man-dat. through whom-m.d.s. that is mannes sunu betrayed=woe to the man through whom the son of man
is betrayed)

$$
\text { St.Fat. } 1561
$$

(49) Ba gesomnodon da sticceo hi in da druh turh ta de daet waeter fleow
(Then gathered the pieces they in the channel-f.a.s. through which-f.a.s. that the water flowed=then they gathered the pieces then in the channel through which the water flowed)

Mart. p. 16
(50) Nu ne sceolon da maedenu heora moodru forseon, of dam de hi comon
(How not shall the maidens their mothers despise, of whomf.d.p. that they came=now the maidens must not despise their mothers, of whom they came)

$$
\text { Ang 1. Hom. I I I . } 322
$$

There is no possibility that the de in the se de relative is simply an optional part of the relative pronoun, because the de may be separated from the relative pronoun when a genitive noun phrase is relativized:
(51) and daet he hine betaehte dam heofonlican Gode, durh taes nihte de he afligde daera haedenra godas Tand that he him consecrate the-m.d.s. heavenly-m.d.s. Godm.d.s., through whose-m.g.s. might that he drove out the heathens' gods=and that he consecrate him to the heavenly God, through whose might he drove out the heathens' gods)

$$
\text { AIC.P.XXI. } 634
$$

It is not difficult to see how the se de type of relative must have developed in pre-literary English. The se de relatives are superficially very similar to a t.ype of relative, which will be discussed in section 3.1.2.1, which had demonstrative pronouns as heads. These relatives correspond roughly to Hodern Engłish relatives like he that lives in a glass house... etc. In such relatives with demonstrative heads, there is no reason to propose any movement of the demonstrative pronoun. Rather it seems clear that the pronoun should be regarded as the head of thie relative. In preliterary 01d English, it is probable that the juxtaposition of such demonstrative-headed relative clauses and noun
phrases related to those clauses led to a situation whereby these relatives were reanalyzed as involving movement of the pronoun. For example, consider example, (46). Here it is impossible to deteruine for certain whether the relative clause is really a clause on the head da eadrodlican daeda, or a parenthetical relative clause with a pronominal head, in which case it should be translated, "if we consider the humble deeds, those that he wrought." On the other hand, when the object of a preposition is relativized, as in (47) through (50), there is no structural ambiguity. Hovement has clearly occurred in these relatives, since the prepositional phrases could not be generated in the main clause. Thus we see that whatever the origins of the se de relative, it clearly involved movement of the relative pronoun by literary times (in some cases at least).

Unlike the de and se relatives, I have found no clear examples of violations of Chomsky's constraints in the se de relatives, probably die to their ambiguity that have case attraction. However, I do not believe that this really indicates that such apparent violations were not possible in this construction, because the se de relative was considerably rarer than the other two types, so there was less opportunity for such exaniples to crop up. Also, as noted, many possible se de relatives were structurally ambiguous, and I have not considered any such ambiguous examples in my search for violations of the constraints.

A great deal of effort has been expended by many people to find out what, if anything, besides caprice determined which type of relative marker was used in what contexts in 01d English. S.O. Andrew has argued that the se relative marker was appositive, the de relative was restrictive, and the sc de relative was restrictive when the pronoun agreed witil
the antecedent, otherwise appositive. However, as ilitchell (1959) points out, Andrew was only able to support these clains by nunerous unwarranted aisendations of texts to make then conform to his rules. Mitchell concludes ( $p .136$ ) that "It must be agreed that the various relatives appear to be used in accordance with no disccrnable principle." The practice of limiting the indeclinable particle to restrictive relatives is a modern one. In 0ld English, de could be used in non-restrictive relative clauses, as well as in restrictive ones.

However, Mitchell does give some general tendencies of usage, although there are no rigid rules. Clauses introduced by de do tend to be predominately linriting. Se is the most common non-restrictive marker, but is found just as frequently in restrictive clauses, Hitchell found in his detailed study of poetry. Se de clauses are fredominately restrictive. In addition, heads containing a deteririner (such as se ran "the man") tend to take de, presurably because the fact that the case, gender, and number of the head is given in the deteminer makes the relative pronoun unnecessary.
3.1.1.4 Analyses of the relatives. Now let us consider how the different typos of relative clauses might be analyzed. It seems clear that the se relatives should be analyzed as involving movement of the relative pronoun. If not, we would expect those pronouns to have the case determined by the upper clause, instead of the case expected of the reiativized IIP, and we would not expect pied piping of prepositions to be possible.

The question now arises as to whether the pronoun should be moved
into tha complementizer or merely to the front of the sentence. I have no arguments one way or the other about this matter, but will eerely assure here without argurientation an alysis whereby the relative pronoun is just noved and Chorisky adjoined to the front of the clause:
(52) Old English Relative Hovenent ${ }^{5}$


This particular formulation will not be crucial in any argument here.

Noli lie turn to the question of how the ee relatives are to be analyzed. It seemis ciear that de itself is to be analyzed as a corplementizer (or in more traditional terms, a subordinating conjunction) ${ }^{6}$, rather than a relative pronoun, since it is indeclinable and cannot be preceded by a preposition, in contrast to the true Old English relative pronouns, which were declinable and furthermore had to be preceded by any preposition of which they were the object. Assuming this analysis of te to be correct, we are left with the question of whether the relativized item in a de relative is deicted in place, or first moved to the front of the sentence (possibly into the complementizer) and then deleted. I wili argue in Chapter Wine against a movement analysis of de relatives, so i will assume here that de relatives are formed by a deletion in place of the relativized item.

Row we must consider the problen of whether the deletion is a controlled deletion, that is, a deletion of the relativized iton under identity to the head of the relative, or a free delecion of a relative Monoun. The latter analysis has some initial plausibility, since there are exaliples of "returning pronouns" in de relatives:
(i3) Fordon de hi habbad manega satla on heora gewaldunn te him wile git God miltsian
Because that they have many souls in their power that thom will yet God have-mercy-on=because they have many souls in their power that God will yet have nerey on)

$$
\text { Blickling p. } 47
$$

(54) and his brucan mot aeghwylc on cordan de him eagna ges ind sigora sodeyning syllan wolde
(and it-gen. enjoy may everyone on earth that himeyes' sight victory's true-hing give would and anyone that the true king of viclories would give cyesight liay enjoy it) Exeter Wonders 65
lne nliyht argue thal the deletion rule is optional, explaining the occasional presence of these pronouns. However, for this argument to go through, one would have to show that there were no returing pronouns in se or se te relatives, where we clearly have movenent of the relative pronoun. But in fact these relatives could also have returning pronouns:
(55) Se brithen, se faes setl ys on heofenum
( The Lord, who his seat is in heaven=the Lord, whose seat is in heaven)

$$
\text { P's.Th. } 10.4 \text { (BT) }
$$

(56) ...daes dedelan weres, done Datianus se casere seofan yoar mid undsacgendlice witum hine dreade daet he criste widsoce (the ho? man-gen., whom-ace. Datianus the caesar seven years with maspeakable tortures him-acc. impelled that he Christ repudiate of the holy man, whom Datianus the caesar inpelied for seven years with unspeakable tortures to repudiate Christ)
(57) ...daet se ne maege oderra monna scyldd ofaducan, se se de hine donne giet his agena onherigead (that he not may other-gen. men's guilis wash-away, he who that hin then yet his own harass= that he may not wash dway the guilts of other men, he who his own (guilts) still harrass)

$$
\text { Sweet PC p. } 73.17
$$

These facts indicate that these returning pronouns were inserted after relative movenent, rather than being generated in the base. 7 In the case of relative deletion, the presence of a returning pronoun could simply mean that deletion failed to apply.

There are also a couple more considerations against a free pronoun deletion analysis of de relatives. First, Old English did not have a general rule of pronoun deletion, as noted by Bresnan (1976b). To my knowledge, free-pronoun-deletion analysus of relativization have been proposed only for linguages which have general free deletion of not only relative, but all promouns. Secondly, if the head of the relative clause Was the object of a preposition and if that preposition was identical with a preposition in the relative clause of which the relativized item was the object, the whole lower PP could be deleted:
(58) and aefter disumt wordum his hors bestrad, on dam sidfacte de he sider con aweg-ferende
(and after these words his horse mounted, on the way that he thither came away-going=and after these words his horse mounted, going away on the way that he came (on))

Alc. Th. vol. 2 p. 136.3
(59) and he waes eft-cyrrende durh done ylcan sidfat daes westenes de he aer dyder becom
(and he was returning through the same path the-gen. wilder-ness-gen. that he earlier thither came=and he was returning through the path in the wildemess that he earlier came there (through))

Alc.S.XXIIIb. 641
(60) Iudas se swicola hrade eode to dani arleasum ehterum, de he acr gespraec
(Judas the traitor quickly went to the impious persecutors that he earlier spoke (to))

$$
\text { Alc.Th.vol. } 2 \text { p. } 246.7
$$

The underlying structure of (60), for example, must be something like (61):
(61)


Clearly, a simple pronoun deletion rule could not delete the whole prepositional phrase. I conclude that a rule of deletion under identity is needed, with identity being defined on cither an NP or PP head:
(62) 01d English Relative Delction

| $\overline{\bar{x}}$ | $\mathrm{W}_{1}$ | $\mathrm{N}_{2}$ | $\begin{array}{r} \text { Pro } \\ \text { +dem } \end{array}$ | $W_{3}$ | $\mathrm{H}_{4}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | 2 | $\emptyset$ | $\emptyset$ | $\emptyset$ | 6 |

As for the se de relatives, I will assurne that they are merely variations of the se relatives, in which the complenentizer de has been retained. It seenis probable that the greater frequency of case attraction $i n$ the se de relatives is due to their superficial similarity to relatives with derionstrative pronoun heads.

Before concluding this section, I would like to make note of another type of relative clause in Old [nglish, which had no relative marker:
(63) Bonne is oder stow elreordge beat on (Then is other place barbarous men are in=then there is another place barbarous wen are in

$$
3 \text { or p. } 60.9
$$

hote the stranded preposition. I will amalyze relative clauses without relative narkers as being de relatives, with the deletion of the relativized material, and the subsequent deletion of the relative coiiplerentizer. Such relatives do not appear frequently in the 01d [nglisin texts. For a discussion of these relatives, see curme.
ilow let us turn to another type of 01d English relative.
3.1.1.5 日aer relatives. We have seen that the demonstrative, ratier than the interrogative, pronouns were used in 01d English as relative pronouns. This was also the case in relatives on locative heads, in which lie find the demonstrative locative pronoun daer, rather than its interrogative counterpart hwaer:
(64) Aaet waes sio stow, daer man mytenum hira andif fan sealde (That was the place, where one beasts-dat. their food gave= that was the place where one gave beasts their food)
(65) Rind acfter dissur, se haliya Guntreas net cyricall getifarian on छaere sou.e ejer se sto (ind after this the looly Andreas ondered ehrlen fiyiluins. On the plaie wiere the collom stoodrand arter th is the holy Andreas ordered à churd to de twilt on the placo wiere the coluer stood)

Blickling p. 217
Wh on dzen has the object of a prenosition, it was possible for the shen to be relativized, stranding the preposition. This bas the whetler the edae: was truly iocative or the result of the rule of Lecative Replace:ent (see section 2.1.2):
(5i) And s: stede aefre syedtan waes Ju"tig, deer heo aal oll sted (And tia place ever after has epty, whice it barlier un stoud=and the place where it earlier steca (on) was effty ever after)
angl. Hita 4.26
(67) ...enat se dael abere ciricean ne masc heoban hroi dayr sacs haeiendes forlastas sindoh unber (that the part the-gen. charcli-gen. not way have roof nibore the savior's footnarks are under-that the part of the reuf Where thie savior's footsteps are unter may not have a roof)

Part. p. 76.11
(68) and ferdan to danl yelande, daer se halba vere Guthlac en vaes
fand beent io the island, where the boly ran cuthlac on was= and went to the is land where tie holy man Guthlac has (on))

St. Guth. 11.6
(01) ...forai daet he wolde us to his rice gebringan edaer we to y: sceap-ne vaeron
crecause that ie would us to his kirgdom hring, here be to created here=recaus he liould brimg ha to his kingder, to (i.e. for) which we were created)

Alc. Th. ! 'el. 2 p. $6.2 \hat{5}$
fot only dacr. Lut other locative promouns, such as deder "thither" could also participate in this construction:
(70) ... darh da scimentan heofonan, duder de he to sceolde ${ }^{8}$ for his soekan geleafan (through the shining heaven, wither that he to should for
his true faith=through the shining heaven, whither he should go for his true faith)

$$
\text { Alc.P.XIX p. } 235
$$

These locafive relatives with stranded prepositions at first seen to offer counterexamples to the claim that preposition stranding was not possible in se relatives, if eaer is considered a forll of se, and in any case to the claim that preposition stranding was not possible in any movement rule. However, recall that we saw in section 2.1.2 that locative pronouns could invert with their prepositions and separate from them even in simple sentences. We accounted for this fact by means of a Locative Shift rule, coupled with the independently needed rule of PP Split, motivated in section 2.1.1. If Locative Shift and PP Split are ordered before Relative llovement, the facts about preposition stranding in locative relatives fall out automatically. Let us consider, for exariple, the derivation of example (66):


We have Locative Shift applying in the subordinate clause, followed by PF Srlit, yielding the following structure in the subordinate clause:
(72.)


Relative Movement then applies, along with the extraposition of the relative clause, giving this surface structure:
(73)


Thius we see that the locative relatives do not constitute true counterexauples to the claim that no movenient rule in 07d English permitted preposition stranding, since the preposition stranding is a function of the PP Split rule.

Since PP Split was optional, ve would expect to find some locative
relatives with inverted locative pronouns and prepositions therein the entire PP has been fronted, and such examples do indeed exist:
(74) Se engel me laedde dacrrinte to east-dale.... into anre byrig, daer bimnan waes swide sneede feld and brad
(The ange Tre Ted immediately to east, into a city wherein was very sn:ooth field and broad-the angel insiediately led me to the east, into a city wherein was a very smooth and broad field)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 352.5
$$

On the status of oimnan as a preposition, see footnote 11 to Chapter Two.
(75) By feortan daege he waes on Sirones huse daes liceroweres, daerin ${ }^{9}$ geat daet wif da deorwyrdan stterenesse on his heafod The fourth day he was in Simon's house the-gen. Ioper's, wherein poured the woman the precious ointment on his head=the fourtin day he was in the house of simon the leper, wherein the woman poured the precious ointment on his head)

Blickling p. 73.2
There is interesting confirmation in a modern language for the hypothesis that preposition stranding in daer relatives was due to Locative Shift and PP-Split. In Dutch, as in Old English, the locative pronouns inverted with the prepositions of which they were the objects in simple sentences (see section 2.1.2). Dutch, unlike Modern English, does not generally allow prepositions to be stranded:
(76) a. Van wie is die pijp? (1) f whom is this pipe=whose pipe is this?)
b. Wie is die pijp van?
(!!no is this pipe of?)
(77) a. Met meisje met wie je sprak... (The girl with whoin I spoke)
b. *Het meisje wie je sprak $\left\{\begin{array}{c}\text { met } \\ \text { mee }\end{array}\right\}$

However, when the locative pronouns are used, preposition stranding is possible in both relative clauses and questions:
(78) a. W'aaraan denk je?
(:Wereon think you=what are you thinking of?)
b. Yaar denk je aan?
(79) a. Uit is het boek waar ik gisteren voor naar de bibliotheek gegaan ben
(This is the book where I yesterday for to the library gone ain=this is the book that I went to the library for yesterday)
(This example is from Riemsdijk (1977))
b. Dit is het boek waarvoor ik gisteren naar de bibliotheek gegaan ben
(This is the book for which I went to the library yesterday)

The fact that pied piping is not obligaiory in Dutch relative clauses and questions just in case the prepositional phrase can be broken up by another rule is confirmation for the hypothesis that the possibility of stranding prepositions in Old English daer relatives is due to the inversion and subsequent separation of prepositions and daer. Hote that in Dutch, unlike Old English, Locative Shift applied to interrogative pronouns, as attested by example (78), which also illustrates the fact that the inverted preposition and its locative object could move as a unit. It is striking that in Dutch, preposition stranding was possible with interrogative locatives, while in Old English it was not. This fact follows from our hypothesis that preposition stranding with daer wias due to the fact that daer undervient Locative Shift. Since hraer did not participate in Locative Shift in Old English, preposition stranding with hwaer was not possible, but preposition stranding with the corresponding Dutch interrogative is possible because the Dutch Locative Shift
rule differs from the 01d English rule in not having the feature -wh. 3.1.1.6 Baet relatives. We have scen that in nid conglish de lias the ordinary complementizer for relative clauses. However, even in Old English, daet "that" was occasionally used in relative clauses. U.e sinall see in section 3.3.1 tilat daet was a complementizer in old English, used especially in indirect discourse. At the monent vie will limit our attention to the use of daet in relative clauses. In old English, this use was very limited. The use of relative dact was most frequent in the following types of relatives: (1) relatives with a neuter head, (2) relatives on temporal heads, and (3) relatives with eall "a11" as their head.

The following are some examples of the first type:
(80) Se Haelend him saede daet daet he sylf wiste (The Savior him said that that he self knew=the Savior said to him that which he knew himself)

$$
\text { Alc.P.XII. } 178
$$

(81) Ond daet seolfe waeter, daet heo da baan mid diwogon, guton in aenne ende daere cirican (And the self water-n.a.s. that they the bones with washed, poured-out in one end the-gen. church-gen.- and poured out the water that they washed the bones in at one end of the churchi)

Bede II. 2 p. 184.3
(82) Ba for he ford bi daem scraefe daet he oninnan waes (Then went he forth by the-n.d.s. cave-n.d.s. that he within was=then he ${ }_{1}$ went forth by the cave that he ${ }_{2}$ was within)

Sweet CP p.197.12
Ciotice that in examples (81) and (82) we have stranded prepositions. This faci makes the question of how to analyze dact relatives an ioportant one. Before turning to this question, however, let us see exa- ples of the other two colimon types of daet relatives. Examples of
daet relatives with tempural heads:
(83) Ilu is se tima daet deos woruld is genlacneged mid rieanig realdan mane
(How is the time-m.n.s. that this world is confused with
many evils)
Wulf.V.2.
(84) Se Haelend wiste daet his tid com Haet he he volde gewitan of dyson middanearde to his Faeder
(The Savior knew that his tine-f.n.s. Cane that he would depart of this :orld to his Father-The Savior knew that his time approached when he would epart from this world to his Father)

St. John XIII. 1
(85) Mitte-de hit da daere eadegan tide nealaehte daette ${ }^{10}$ Dryhten lichomlice wolde wesan geboren
(When that it then the-dat. blessed-dat. time neared, that Lord bodily would be born=when it neared the tine that the Lord vould be born bodily)

$$
\text { Ver.VI. } 19
$$

Finally, daet was nearly always used with eall ${ }^{11}$ :
(86) Sanla nergend se us eal forgeaf daet we on lifgas (Soul's savior who us all gave that ve on live=soul's savior, who gave us all that we live on) Ex. Gnomic 135
(87) Eall dact du waere, ic waes dis eall on de (All that you viere, I was this all in you=all that you were, I was all that in you)

Ver. IV. 312
How are the daet relatives to be analyzed? Two possibilities come to mind. First, the daet relatives could simply be a variation of the de relatives, with relativization by deletion, and dact inserted into the complementizer position iustead of de. Secondly, it is possible that in these relative clauses the fiaet is actually a relative pronoun, since it is homophonous with the nominative and accusative singular forms of the neuter demonstrative pronoun.

It is clear that if we are to maintain the hypothesis that preposi-
tion stranding was not possible in relative clauses with novenent, we must analyze daet as a complementizer, rather than a pronoun which has undergone movement. This is because relatives with diaet frequently exhibit preposition stranding, as in (81), (82), and (86). Fortunately, there is independent evidence that daet is not a relative pronoun in these relatives. ${ }^{12}$

First, we have seen that dact was used in relative clauses with temporal heads. If this daet were a relative pronoun, we would expect that it could only be used with neuter heads, temporal or otherwise. But in examiples (83) through (85) we see that daet is used with masculine and feminine heads. ${ }^{13}$ Another, non-temporal example is given here:
(88) Fordan daer ne waes oderu stow on dam gisthuse, daet hio dact cild meahte on-asettan
(Because there not was there place in the guest-house, that she that child might in-set=because there was no other place in the guest-house that she might place that child in)

Ver.V. 26
If daet is a pronoun in these relatives, we will have to stipulate somehow that daet is the only relative pronoun which does not have to agree with its head in gender.

Secondly, daet was also sometimes used as a relative marker with plural heads:
(89) ...hwaer hie landes haefdon daet hie mehten an gewician (where they lands had that thiey might on camp=where they had lands that they might camp on)

$$
\text { Oros. p. } 80.8
$$

Again, if this daet is a pronoun, we must exclude daet from the usual requirement that a relative pronoun agree in number with its head.

Finally, consider again example (82). Bacquet (1962) noted that
the preposition oninnan required a dative object, and that if dect in this example were a pronoun, we should expect it to be in the dative case. Instead, it is either accusative or nominative. If we treat dact as a colrplementizer, however, there is no problem.

To summarize, we see that there is no reason to consider the daet occasionally found in relative clauses to be a pronoun in all cases, and there is good evidence to believe that it could be a complementizer. Therefore, examples of preposition stranding in dact relatives do not offer counterexamples to the claim that preposition stranding was not allowed in Old English movement rules.
3.1.1.7 Infinitival relatives. The final type of 01d English relative clause taking a full noun phrase head was the infi.itival relative, very similar to its modern descendent:
(90) Ic haebbe miete to etenne done de ge nyton
(I have meat to eat wich that you not-know=I have meat to eat which you do not know) Alc.P.V. 72
(91) ... cwace dact he naefde dact feoh him to alenerne (said that he not-had the money him to pay=said that he did not have the money to pay him)

Alc.Th.vol. 2 p.178.2
If tine relativized item was the object of a preposition, the preposition was alway's stranded:
(92) \& nyle us forstandan act danz aryrgdan diofle, de of daere stylenan helle cunad mid his scearpan straelum us mid to scotianile (and will us stand-before against the cursed devil, that of the hard hell come with his sharp arrows us with to shoot= and will stand before us against the cursed devil, who cones from the hard hell with his sharp arrows to shoot us with)

$$
\text { Ver. IV. } 375
$$

(93) Seo cwen ... baed Osweo ... Haet ne deer forgefe stcrie mynster on to timbrenne daem foresprecenan Godes deove Truminere
(The queen bade Osweo that he there qave place monastery on to kuild tie-dat. aforementioned God's servant Truilhere= the queen bade Osweo to give the aformenticned servant of God, Trumhere, a place there to build a ronastery on) Bede p. 238.22
(94) God ne bedearf nanes odres fultomes buton his selfes his gesceafta nid to wealdanne (God not needs no other help but his self's his creations with to rule=God doesn't need any help but his oun to rule

Eoeth. XXXY. 3 p. 96.32 staef mid to uredianne (If there then is rod with to beat, be there also staff with to support=if there is then a rod to beat with, let there also be a staff to support witi)

$$
\text { Sweet CP } 126.1
$$

(96) Ba geboiton hig aenne aecer myd dam feo tygelnyrhtena on to bebyrgeanne aelfeodige nien
(Then bought they an acre with the noney wise men-gen. in to bury noble men=then they bought an acre to bury noble men in with the money of the wise men)

$$
\text { St. Mat. } 1660 \text { (XXVII.8) }
$$

As with the de relatives, the stranded preposition generally preceded the verb. Hote that there can be no question of the prepositions really being prefixes to the verb here, since the preposition and the verb are separated by to, while the verbs that take prefixes, to precedes the prefix:
(97) En craeftas ne sint to widnetanne wid daere sawle craefta aenne
(These crafts not are to conpare with the soul's crafts alone=these crafts are not just to be compared with the crafts of the soul)
(98) Beah de he no si his foregengan to widetenne (Though that he not is his ancestors to compare=though he is not to be compared to his ancestors)

$$
\text { Bede } 5.8
$$

(99) Hiaet eart du swa wunderlic on anes mannes hive us to oferdryfenne Thihat are you so wonderfully in a man's guise us to overcome=what are you to overcome us so vionderfully in the guise of a man?)

Micod.Thw. 16.20
(BT)
Unlike the Modern English infinitival relative, it was never possible for a relative pronoun to be used in the Old English relative; there were no relatives corresponding to a friend to whom to talk, but only a friend to talk to. Thus, there is never any surface evidence of fiovement in 01d Englisin infinitival relatives. Therefore, I will assume that these relatives, like the eie relatives, are formed by deletion. Under a movement analysis of infinitival relatives, there would be two possible ways of blocking infinitival relatives with pronouns. First, We could hypothesize that Old Englisi infinitival phrases had no complementizer, so there could be no Wh -Movement to the front of the infinitive. Secondly, we could say that 鱼-Movement could apply within infinitival phrases, but a surface filter blocked the output of this rule.

For a brief discussion of how infinitival relatives with pronouns came in in Middle English, see Chapter $V$.

We have nol: examined the various types of relative clauses with full noun phrase licads in Old English, and have found that preposition stranding was possible only in relatives in which there was no surface evidence for movement. Apparent counterexamples have been accounted for by independently motivated analyses of certain constructions. Now
let us turn our attention to relative clauses with pronminal heads, or no heads at all.
3.1.2 Free relatives. In this section we will explore the lypes of "free" relatives in Old English, or relatives that a!pear to have no antecedents. Some free relatives in Modern English are those beginning with vhoever, whatever, etc. He shall see that some 01d English free relatives had heads, while others did not. First let us consider a type of free relative with demonstrative pronouns.
3.1.2.1 Relatives with demonstrative heads. As alluded to in section 3.1.1.3, old Englis' had a type of relative clause roughly equivalent to the Modern English "he who" type. The following are some examples of this construction:
(100) Haet is, dact man for-gife, daln de wid hine gegylted (That is, that one forgive him-dat. that against hin sins= that is, that one forgive him who sins against him) Ver.III. 170
(101) Micele mare mitht ys menn to gescippene donne to araerenne done de aer waes Tiluch greater might is man to create than to raise him-acc. that, earlier was=it is much greater power to create a man than to raise him who was earlier)

Alc.P.VI. 122
(102) \& befanste he mid his lifes bisenum da lare daem de his wordum ne geliefan (and confirm he with his life's example the teaching thosedat. that his words not believe=and let him confirm the teaching with the example of his life to those who do not believe his words)

> Sweet CP p.25.2
(103) Me hafast du aenige mihte wid ino butan da de ic ville dast du haebbe
(ilot have you any power against me except that-f.a.s. that I will that you have=you have no power against me except that which I desire that you have)

It riight be suggested that these relatives involve movenent of the demonstrative prono.ns, as in the se de relatives. Howner, we saw that case attraction of the relative pronoun was optional in the se de relatives. In these relatives, on the other hand, the case marking of the pronoun is always that demanded by the upper clause. In (100), for example, the relative pronoun is in the dative case, as the object of for-gife, while its role in the subordinate clause is that of subject. I suggest that in these relatives the demonstrative pronoun is actually the head. In other vords, these relatives are simple de relatives, involving deletion, which happen to have pronominal heads. Assuming this analysis, it is not surprising to find that preposition stranding was possible in these relatives:
(104) Fordon de ve nabbad da te he on drovade
(Because that we not-have that-f.a.s. that he on suffered= because vie do not have that wich he suffered on)

Alc.Th.vol. 2 p. 306.22
(105) ...daet he violde mancynn ahreddan durh done de he ealle gesceafta mid gevorhte
(that he would all mankind redeem through him-acc. that he all creatures with virought= that he would redcem mankind through him who he wrought all creatures with)

$$
\text { Alc.Th. p. } 192.20
$$

(106) \& he tobryst done de ho onuppan fyld (and it crushes him-m.a.s. that it upon falls=and it crushes him who it falls upon)

St.Mat. 1249
(107) He is se liflica wylspring, and dam. ${ }^{14}$ de he on wunat ne dyrst on ecnysse
(He is the vital well-spring, and him-dat. that he in dwells not thirst in eternity=he is the vital well-spring, and he who he dwells in will not thirst in eternity)

Alc.P.V. 148
For clarification, let us see how example (104) would be derived:
(108)

$\mathrm{NP}_{2}$ is simply deleted under identity to ilp $\mathrm{F}_{\mathrm{T}}$.
In all the examples given so far, the pronouns are "in place" in the main clause; they are in the positions we would expect from their roles in the main clauses. There is a different construction, showing some superficial similarities with the construction just discussed, in which the demonstrative pronoun is fronted:
(109) Ea de his leasungum gelyfat, dam he arad

Those-ncm. that his lies believe, those-dat. he honors= those that believe his lies, those he honors)

Alc.Th. Preface p. 6
(110) ...fordam se de syngad hys savul ne loefad (because he tiat sins, his soul not lives=because he that sins, his soul does not live)

Alc.P.VI. 140
(111) and tone de tu nu haefst, nis se din vere
(and him-acc. that you now have, not-is he your husband= and the one that you not have, he is not your husband)

Aic.P.V. 37
Hote that when the subordinate clause is fronted, as in these examples, there is a returning pronoun in the main clause.

Ross (1967) proposed a rule of Left Dislocation, whicin moved a constituent to the left and replaced it in its original position with a pronoun. I vill assume that such "ieft dislocation" structures are base-generated, rather than created transformationally, but this matter is not crucial here. The important point is that in the left-dislocated structures, the relative clauses we have been considering must involve n:ovement, or else we cannot explain the case marking of the pronouns. In these structures, the relative pronoun is not the head, but is generated in the subordinate clause, and moved to the front, accounting for the fact that the case marking of the pronoun is that which we would expect froill its role in the lower clause. I am assuming in these structures that the "left dislocated" clause is an $\bar{S}$, poszible doninated by iiP, under the main $S$, generated by the following phrase structure rule:

$$
\bar{s} \longrightarrow \bar{s} \quad s
$$

It is not clear whether the rest of the material (the main clause) of the sentence should be dominated by another $S$ under the highest $S$, but this matter is not crucial here. For example, the deep structure of (109) would be (112):


Relative llovement applics, giving the surface structure:
(113)


As we :rould expect, there are no examples of preposition stranding in these left-dislocated relatives, in contrast to the "in place" relatives with demonstrative heads. I have found one example of pied piping of a preposition in this construction:
(114) Ofer done de du gesyht nyder stigende Gast and ofer hine vuniende, daet is se de fullad on Halgum Gaste Over him that jou see descending Spirit and over him remaining, that is he that baptizes in Holy Gost=the one that you see a spirit descending and remaining over him, that is he who baptizes in the Holy Ghost)

$$
\text { St. John I. } 33
$$

However, examples of left-dislocated relatives of this sort are quite rare when the relativized item is anything other than the subject of the relative clause. The "in place" prononinally-headed relatives are much more common when the relativized iten is an object of the lower clause.

The left-dislocated relatives must not be confused with relatives such as the following which are fronted with no returning pronoun in the
main clause:
(115) Ac dani te on helle beod ne gehelped nan fordelingung (But those-dat. that in hell are not helps no intercession= but those that are in hell, no intercession helps) Alc.P.XI. 242
In such examples, the relative clause is fronted, but only by the rule of Topicalization. The difference is that there is no returning pronoun. In these cases, the case marking of the pronoun is that of its role in the main clause, indicating that these are instances of pronominally-headed relatives.
3.1.2.2 Relatives with wh-pronoun heads. In 01d English the interrogative prohouns were also used as indefinite pronouns, meaning "anyone," "anything", "someone," "something," etc. The following are some examples of this indefinite use:
(116) And de nis nan neod taet de hwa ahside (And thee not-is no need that thee who ask=and you have no need that anyore ask you)

$$
\text { Alc.P.VIII. } 48
$$

(117) gif du hine gesave on hwelcum eardodu (if you him saw in any-dat. difficulty=if you saw him in any difficulty)

> Boeth. X
(118) Wenst du daet hit hwaet niwes sie ... dact de on becuman is?
(Think you that it anything new-gen. is...that (which) thee on come is?=do you think that that which has come upon you is anything new?)

> Boetn.VII.ii
(119) Oft donne hwaem gebyred dact he hwaet maerlices \& wunderlices gedea,....donne ahefd he hine on his mode (Often when anyone-dat. happens that he anything great and wonderful does, then raises he him in his mind=often when it happens to anyone that he does anything great and wonderiful, he becomes puffed up in spirit)

Sweet CP 38.6

These wh-promouns could also be used to form relative clauses. When used in a relative clause, the wh-pronoun was both preceded and followed by sva, which neant "so" or "as." Suaa was also used as a determiner with quantifiers, as in Modern English "so tall," "as tall," etc. For details of the use of sya in comparatives, see Chapter Four. Here We will be concerned only with the use of swa in relative clauses. The following are examples of relatives in 01d English using the wh-pro.no!!ns:
(120) \& ure savle dearfe, da de sculon bion on ecnesse aefter dyssum life mid sawle \& lichoman in swa-hwaedrum-swa we her nu ge-earniad
(and our soul's need, who that shall be in eternity after this life with soul and with body in so-what-dat.-as we here now: carn=and the need of the souls of us who will be in eternity after this life with soul and body in whatever (state) wife now earn here)

$$
\text { Ver. II. } 132
$$

(121) Faeder and moder moton heora bearn to swa heylcum cracfte gedon sl:"a him leofost byd (Father and rother must their child to so which-dat. occupation put as him liefest is=father and mother must put tireir child to whatever occupation is most pleasing to himi)

$$
\text { Alc.P.XIX. } 54
$$

(122) Sodes ic de sylle swa hwaet swa du me byddest (Truly I you give so what-acc. as you me asi.: truly I give you whatever you ask of me)

St. Mark 290
(123) Gonne minte me micle dy ed gedolian swa hwact earfodnessa sya us oll become
Tinen might we much the easier endure so what-acc/nom. miseries as on us come=then might we much the more easily endure whatever miseries came to us)

Bocth. X
(124) liefne god sylfa, sigora sodcyning, sealde dam de he wolde (he is manna gehyld) hord openian, efne swa hilylcum manna swa him genet duhte
(Unless God himself, victories-gen. true king gave him that he would (he is men's protector) hoard open, even so which-dat. men-gen, as him fitting seened unless God Himself, the true king of victories (he is the protector of men) gave it to him that he chose, even to whichever man seemed fitting to him, to open the hoard) Beo. 305
In these examples, the relative clauses are "in place" in the main clauses, and we find that the wh-pronouns have the case marking demanded by their roles in the main clause. In (120), for example, the pronoun, as the object of the preposition in has dative case marking, although it plays the role of an accusative direct object in the lo:ier clause. In (121) the relativized item is the subject of the 1cwer clause, but the pronoun is dative, as the object of to. In (122), if the pronoun took its case from its role in the lower clause, we would expect genitive case marking, because the verb byddan requires a genitive object as the thing requested, and so on. Since the case marking of the pronoun is always determined by its role in the main clause, I will assume that the pronouns are the heads of these clauses, generated where they end up, rather than being moved from a position in the lower clause. These relatives, then, are parallel to the relatives with delionstrative pronouns as heads.

Ho:l is the second swa in these relatives to be analyzed? It is clear that this swa cannot merely be attached to the indefinite pronoun, as snever in Modern English whosoever, etc., since in examples (121), (123), and (124) swa is separated from the pronoun. I will therefore analyze tile second swa as a complementizer selected for by the determiner swa (in both relatives and comparatives). This situation of a deter-
miner sclecting for a particular complementizer has a close parallel in Modern English. When we wish to make a relative clause on a head containing such', we must use the complementizer as:
(125) a. Such snakes as we saw on Black ifounta in were uninteresting.
b. *Such snakes that we saw on Black Mountain were un-
interesting.

I will assume, then, that these relatives are formed exactly like de relatives, with the pronouns being the head of the relative clauses and the relativized itell deleted under identity to the head. Since preposition stranding was possible in fle relatives and relatives with demonstrative heads, we would expect to find that preposition stranding was also possible in these relatives with indefinite pronominal heads, and this prediction is borne out: ${ }^{15}$
(126) Sc de ratost com on done mere aefter daes wacteres styrunge weard gehaeled fram swa hwilcere untrumnysse swa he on waes
(He that quickest came in the lake after the-gen. water's stirring was healed from so which-dat. infimity as he in was:-he who came most quickly into the lake after the stirring of the water was healed from whatever infimity he was in)

St. John V. 4
(127) And heo gefret softnysse odkle sarnysse, swa hwaeder swa heo oll bid (And it feels softness or pain, so which-acc. as it in is= and it feels softness or pain, whichever it is in) Alc.P.XI. 218

The underlying structure of (126), then, must be something like (128), given in two parts:


Relative Daletion then applies in both $\bar{S}_{1}$ and $\bar{S}_{2}$, giving the followinis surface structure:

3.1.2.3 Free relatives with Wh-lovement. We saw in section 3.1.2.1 that left-dislocated free relatives with demonstrative relative pronouns in 0ld English were best analyzed as involving movement of the pronoun. The same is true of free relatives with indefinite (wh) pronouns which were left dislocated. In these relatives we find that the case of the pronoun is that of its role within the subordinate, rather than the main clause. Also, when the relativized item is the object of a preposition in the subordinate clause, the preposition was obligatorily pied piped:
(130) and swa nwaes swa hie rihtlice biddad for dinum naman \& for dinum gearningum hig hyt onfod (and so what-gen. as they rightly ask for thy name and for thy merit, they it receive=and whatever they ask for
thy name and thy merit, they receive it)

$$
3 \text { OE P. } 74.4
$$

(131) and swa hwylc man swa nele his ceapes \& his waestina done teodan dael for Godes naman daelan, domne ne bit daen selad Drihtnes mildheortnes
(and so which-mom. man as not-will his goods and his harvest the tenth part for God's nalle distribute, then not is him given Lord's mercy-and whichever lan will not distribute the tenth part of his goods and his harvest, then the Lord's mercy will not be given to him)

$$
\text { Blickling p. } 49.22
$$

(132) Fordan de Drihten civaed to hin daet swa hwylcne swa he on eordan gebunde, daet se waere on heotonuin gebunden (Because that Lord said to him that so which-acc. as he on earth bound, that he was in heaven bound-because the Lord said to him that whichever he bound on earth, that he was bound in heaven)

Blickling p. 49.15
(133) ond furh swa hivelces bene swa he gehaeled sy, disses geleafa \& Myrcinis seo Tefed God onfenge (and through so which-gen. prayer as he healed is, thisyen. Faith and works be believerd God acceptable=and whoever's prayer his is healed through, let his faith and wor's be believed acceptable to God) Bede II. 2 p. 98.31
(134) And to siva hwilcere leode swa we cumad, we cunnon daere gereord
Find to so which-dat. people as we come, we know their lanyuage=and witherer people we come to, we know their 1 anguage)

$$
\text { Alc. Th. vol. } 2 \text { p. } 474.2
$$

(135) Ond an swa hwelcre stowe swa min trowunge awriten sy ondrun सa maersige, afyrr du, drihten from daere stowe blindnesse
(And i:l so whicir-place as my suffering written is and one it ce? comates. Urive you, Lord, from that place blindness= and whatever place my suffering is written in, Lord, and is celebrated, drive blindness from that place)

Miart. p. 116.8
Note the returning pronoun in the main clauses. In (135) there
is not a returning pronoun, but a full noum phrase. Such examples indi-
cate that left-dislocated sentences are not formed bJ a movenent rule leaving a pronowinal copy, but are base generated.

The derivation of (134) would be as follows. The deep structure is (136):
(136)


The surface structure is derived by the application of Relative Movement:

3.1.3 Conclusions about relative clauses. This concludes our discussion, for the moment, about 01d English relative clauses. The theoretical inportance of our findings here will be discussed in Chapter

Hine.

To summarize our findings about relative clauses, we have scen that in relatives where there was direct surface evidence for the movement of a relative pronoun, pied piping was obligatory in Old English. Where there was no such direct evidence, preposition stranding was obligatory. In free relatives, we found that sometimes what appeared to bc a relative pronoun was actually the head of the relative, in which case We get preposition stranding. In left-dislocated free relatives, we found that moverlent was involved, with obligatory pied piping of prepositions.
3.2 Questions. In this section we mill discuss very briefly solie basic facts about questions in Old English. We will first consider direct questions, then indirect ones.
3.2.1 Direct questions. Most direct questions in Old English Were parallel to those in Modern English, except that in Old English there was subject-verb inversion between any tensed verb, rather than just the auxiliaries, and the subject. Do was not used as an empty tense and number carrier. Another difference is that in Old English pied piping was obligatory in questions. I have found no violations of this rule. The following are a few examples of direct questions in $O E$ :
(138) Hivelc wite wene we dact se felaspraecea scyle habban, de simle on oferspraece syngad? (1:Hich punishnent think we that the lognacious shall have, that always in loquacity sins?= Which punishment do we think that the loquacious, who always sins in loquacity, sha11 have?')
(139) Ac hwaet saegst du donne daet sie forcustre donne sio ungesccadwisnes?
(But what say you that is wickeder than foolishness?= But what do you say is wickeder than foolishness?) Boeth.XXXVI. 8
(140) To hwaem locige ic buton to dacm eadmodum?
(To whom look I but to the humble?= But to whon should I look but to the humble?)

Sweet CP p.299.19
(141) And gif ic on his naman adraefe deofla of mannum, on hwacs naman adraefad eowre suna donne?
(And if I in his name drive-out devils of men, in whose name drive-out your sons then?=And if I drive devils out in his name, in whose namie do your sons drive them out?)

$$
\text { Alc.P.IV. } 25
$$

(142) Od hwelce cneorisse sculon cristne men mid heora maegun hitn betweohn in gesinscipe gedeodde beon?
(To which affinity shall Christian men with their kin ther between in marriage joined be=up to what degree of affinity may Christian men be joined in marriage with their kin?)

Bede p. 68.26
Wote that in (138) a noun phrase is questioned out of a subordinate clause, apparently violating the Tensed S, Specified Subject, and Subjacency conditions. Thus, by Chomsky's approach, 01d English Question Hoverient would have to involve movement into COMP. In (139) the subject of a subordinate clause is questioned, with the complementizer remaining, apparently violating the Fixed Subject Constraint, along with the Tensed S and Subjacency conditions. Such examples are quite common. For a discussion of the theoretical importance of the 0ld English violation of the Fixed Subject Constraint, see Chapter IX.

Another way in which 01d English direct, questions differed from Modern English questions was that it wäs possible for direct yes-no questions to begin witi hwaeder, "whether":
(144) Hwaenne not ic hine yeseon? Hwaeder ic mote lybb in oddact ic hine geseo?
(When may I him see? Whether I may live until that I hin see?=When may I see him? Hay I live until I sce hinn?) Alc. Th. Vol.I p.136.30
Hote the lack of inversion in the hwaeder question. There was generally no subject-verb inversion in hwaeder questions in which the truth of a whole clause was being questioned, although inversion was the rule if only a sub-part of the sentence was being questioned:
(145) Hwaeder cwede we de ure de daera engla?
(Whether say we or ours or the-gen, angels-gen. =shall we say "ours" or "the angels")

A1c.Th.vol. 1 p. 220.20
I will not pursue the question of how these constructions are to be analyzed in this thesis, but merely point out their existence. ${ }^{15}$
3.2.2 Indirect questions. A major difference between 0ld and Hodern English indirect questions is that in Old English, pied piping of prepositions was obligatory in this construction, while in Modern English it has become nearly inipossible to pied pipe prepositions in indirect questions. The following are a few examples of 01d English indirect questions:
(146) 日a ongon heo gelomelice in gesonnunge dara sweostra secan \& ascian, in hwelcere stowe daes mynstres heo woldon daet heon liictum geseted waere (Then began she often in meetings the-gen. sisters-gen. scek and ask, in which-dat. place-dat. the-gen. convent they :would that them cemetery set were=then she began to often ask and seek of the sister's in meetings in which place they desired that a cemetery be set for theni) Bede p. 284.1
(147) Seolfa ne cude, durh hwaet his woruldc gedal weordan sceolde
(Self̂ not knew through what-acc. his world-separation become should=he himself did not know through what his death should come)
(148) Ic nat ful geare ymb hwact du giet tweost
(I not-know full well about what-acc. you yet doubt=I do not know full well about what you still doubt)

Boeth. V. 3
(14y) Gehyran we nu forhwon se blinda leoht onfeng (Hear we now for what-inst. the bling light received let us now hear what the blind man received light for) Blickling p. 19.21
(150) Fordaem sio halige gesomnung durh gesceadyisnesse gesind \& ongietad of hwaem aelc costung cymed (Because the holy assembly through sagacity sees and understands from :hom-dat. each temptation comes) Sweet CP p. 64.24
Incidentally, (149) illustrates a construction in which pied piping has become impossible in most dialects of Viodern English. We can no longer say, "For what did you do that," but only "What did you do that for." The question word in (149), hwon, was a form of the instrumental case of the interrogative pronoun. The more usual form of the interrocative case was hwi, which became a frozen form and is the ancestor of why.
ilote the apparent violations of Tensed S, Specified Subject, and Subjacency in (172).

Another fact of interest about 01d English indirect questions was that it was not possible to form them within infinitival complements. There are no sentences of the sort I don't know how to do it in 0ld Englisin. ${ }^{16}$ on the other hand, it was possible to question out of an infinitival phrase to the front of the sentence:
(151) Ac daer su ongeate hwider ic de nu tiohige to laedenne (But when you understand whither I you now intend to lead= but when you understand where I intend to lead you now...) Boeth, XXII. 2 p. 51.6

The restriction, then, is not simply on questioning an item with-
in an infinitival phrase. It could be that the question rule sinply did not apply within infinitival phrases, but only within fully tensed sentences. By the movement into comip approach, we could account for this fact by not generating a colip in infinitival phrases. Othervise, we could formulate the Question Hovenent rule to apply only to $S$, not yp, assuaing the infinitival phrases were just verb phrases. Another approach to accounting for the facts would be to devise a surface filter to rule out the ungrammatical outputs.

The situation with questions in infinitival plorases was similar to that with infinitival relatives. We saw carlier that infinitival relatives in Old English, unlike liodern English, never exhibited relative pronouns, with or without accompanying prepositions.

A final fact about indirect questions, and one which we will returil to in Chapter Eight, is that the interrogative pronouns never co.. occurred with se, daet, or any other complementizers, unlike the relative pronouns.

This concludes our discussion of questions in 01d English. Now ve will examine some other types of complements in Old English.
3.3 Other complements with de and dact. In order to understand how relatives ind interrogatives with wh-that came into the language in iliddle E.nglish, it will be necessary to take a look at other complements in Old English. The complements that we will be interested in here are those introduced by de, which we have already seen as a relative particle, and daet "that". Let us first look at the uses of daet.
3.3.1 Eaet complements. The complementizer daet was homophonous with the neuter singular nominative and accusative demonstrative pro-
nouns. It is generally assumed that the use of daat as a complematizer arose out of its derionstrative use, since Indo-Furopean apparantly had no complementizers (see Lehriann 1972). This could happan when thet lias used as a pronoun to refer to the next sentence, is in he said that: Joln left. The 01d English uses of eaet were pretty auch the same as its rodern uses. It was used to report discourse indirectly, and similarly, thoughts and beliefs:
(152) Da he ta Crist cwaed, daet his rice heonon ne waere of dyssul middangearde, da cheed Pilàus to hin
(When he then Christ said that his Lingion hence not was of this ::orld, then said Pilate to himithen he, Christ, said that his coning kinglum was not of this world, then Pilate said to hin...)

$$
\text { Ver. I. } 178
$$

(153) We secgad swadeah daet si eadre to beterme da yfeian gedohtas dome da yfelan daeda (We say however that are easier to atone the evil thoughts than the evil deeds=we say however that the evil thoughts are easier to atone for than the evil deeds)

Alc.P.XY. 99
(154) ilu we witon sod? ice dact du wast ealle sing (How we know truly that you know all things)

$$
\text { Alc.P.VIII. } 47
$$

It was also used to introduce clauses of intention or purpose:
(155) Aa sende he his deowan to dall foresaedum tilium daet hi underfongon daes wincardes waestmas
(Then sent he his servants to the afore"entioned husbandmen, that they collected the vineyard's fruits=then he sent his servants to the afore"elitioned husbandeen so that they lould enllect the fruits of the vineyard)

$$
\text { Alc.P.III. } 10
$$

(156) Wepen we on disse med-nyclan tide, daet wie ne dulfon eft wepan done ungeendon wop (lieep ve in this short tine, that lie not ineed after licep the etemal weeping-let us weep in this short time, that we need not weep later the eternal weeping)

$$
\text { Ver.IV. } 67
$$

(157) Eail swa eadlice riaery se aelnightiga God belucan do deofla on dan deorcan fyre, daet hi dacron cwilnion (All so easily may the alliighty God confine the devils in the dark fire, that they therein suffer)

$$
\text { Alc.P. XI. } 487
$$

In conjunction with sw'a 'so', dact was used to introduce clauses of result or extent:
(158) and da manfullan Iudei swa dyrstige waeron daet hi doraton hine acrellan (and the wicked Jews so so audacious were that they dared him kill=and the wicked Jews were so audacious that they dared to kill him)

$$
\text { Alc.P.III. } 127
$$

(159) And se Gallicanus weard syddan swa halig daet he wundra worhte
(And this Gallicanus became afterwards so holy that he miracles wrought=and this Gallicanus aftemards becane so holy that he wrought miracles)

Alc.P.XXII. 56
Finally, dizet was the complementizer used for other sorts of nonrelative or comparative clauses:
(160) Ea wundrode daet wif daet he wolde drincan of hyre facte (Then marvelled that woman that he would drink of her vcssel=then the woman marvelled that he would drink of her vessel)

Alc.P.V. 123
(161) and him waere selre daet he sodlice ne cude daere sodfaestnysse weg
(and him were betwer that he truly not knew the truth's way=und it would be better for him if he truly did not know the way of the truth)

Alc.P.IV. 255
(162) liicel synn him :iraes de gesawon his wundra, taet hi noldon gelyat on done ?eofan Haelend Great sin the was that saw his miracles, that they notrould believe in the dear Savior=it was a great sin to those who saw his miracles, that they would not believe ill the dear Savior)

Alc.P.VII. 90
In general, we can say that daet was the complementizer used
when nothing in the lower clause, nor the whole clause itself, referred back to anything in the main clause. Baet was also limited to clauseinitial position; it never followed a subordinating conjunction, another complementizer, or a relative or interrogative pronoun. Dact was even riore limited in this respect in Old English than in Ilodern English we can say things like now, that you've left, I have nothing, but in old English nu 'now', when it introduced subordinate clauses, was not followed by daet:
(163) Hwaet nage we la don, nu des man dus wyrcd fela tacna? (What may we do, now this man thus works many signs?) Angl.Hom. V. 4
(164) Ac se mildheorta Crist wolde him aeteovian, on his agenum gylte, inu he odrun sceolde rannum gerilitsian on islicum gyltum, nu he eallunge haeft heofonan rices caege (But the nildhearted Christ would him show in his own guilt, ho:l he other-dat. should men-dat. show-mercy in various guilts, now he fully has heaven's kingdon's key=but the mildhearted Christ hould show him in his o:rn guilt how he should have miercy on the other mien in various sins, now that (i.e. since) he fully has the key to the kingdom of heaven)

$$
\text { Alc.TH.Vol. } 2 \text { p. } 250.4
$$

It should be noted here that in the older texts, that is, the ones compused before the end of the tenth century, an augimented form of daet, namely daette was frequently used:
(105) Za codo he eft Iohannes to dam geat-wearde \& gespraec, tantte lie Petrus infor-lete
Then lient he later John to the gate-keeper and spoke, that he Peter let-in=and then he, John, went and spoke to the gate-keeper, in order that he let Peter in) Ver.I. 68
(166) Nu ic wilnige dactte does spraec stigge on daet ingedonc daes leorneres
(. OW I will that this discourse rise in the liind of the learner)

$$
\text { CP p. } 23.16
$$

(167) Baer waes swide swete stenc swa etaptte edlle da slepan de daer waeron (There was very sweet smell so that all those slept that there were=there was a very sweet snell, so that all those that were there slept)

Blickling p. 145.29
The form dactite was apparently descended from daet+de, with the initial consonant of de assimilating to the final one of dact. It seems possible that daet de was a reflex of the earlier demonstrative status of daet, with de appended to show subordination of the second clause to the first. I know of no evidence, however, to suggest that daette was anything more than a variation of dact during the literary period. There seems to be no reason to analyze daette as a sort of double complefrentizer, or as a demonstrative pronoun plus a complementizer.
:.hile de assimilated to daet when daet was a complementizer, it did not when daet was clearly a pronoun:
(163) I coni to secenne and to gehaelenne taet de on mancyyne losode
(1 came to seek and to save that that in mankind was-lust= I cam to seek and to save that which was lost in mankind)

Alc.Th. XXXVIII p. 582

Later autiors, such as Aelfric and Wulfstan, who wrote at the end of the tenti century and the beginning of the eleventh, use only the sirple daet.

For the use of dact as a relative complementizer in 0ld English, see section 3.1.1.5.
3.3.2 De complements. How let us see how de was used as a compleniencizer, other than in relative clauses.
3.3.2.1 Be was regularly used to introduce the sentential corple-
ments of prepositions in conjunction with a denonstrative pronoun. That is, a preposition which had a sentential complement was nomilally followed by a demonstrative pronoun, usually in the dative or instrumental case, Which was in turn followed by de:
(169) Ure geleafa is mara donne daere macnigu waere, for Ham de we gelyfad on daes lifigendan Godes Sunu Jour faith is greater than the crowd's was, for thatdat. that We believe in the living God's Son=our belief is greater than that of the crowd's, because we believe in the Son of the Living God)

$$
\text { Alc.P.III. } 176
$$

(170) Swa swa se engel cwact be him aer dan de he acenned waere (As the angel said about him before that-inst. that he born was=as the angel said about hin before he was born) Alc.P.II. 96
(171) $\frac{i l i d}{d a}$ sive de heo gehyrde done fruman daes godcundin tiddres,
(!!ith that-inst. that she heard the beginning this-gen. divire issue, then said she when she heard the beginning of this divine issue, then she said...)

Blickling p. 7
(172) $\frac{\text { lid }}{\text { (!ith that }} \frac{\text { de }}{}$ he dis clypode, ta cwaed him sum wif to... Woman to-when he said that, then some woman said to him...) Ver. VIII. 46
(173) He gehaelde his untrumnysse mid dam de he het hine arisan (He healed his infimity with that-dat. that he commanded him rise=he healed his infirmity when he ordered him to arise)

$$
\text { Alc.P. II. } 186
$$

 (For that-inst. that you loved ne, before that-dat. that
earth was=because you loved me before the carth existed)

$$
\text { AlC.P.XI. } 532
$$

(175) Baet mod deah haefd micle frofre on dam de hit gelyfd and geare wot faet da gelimp and da ungesaelda disse wur? de ne bend acce
(That wind though has great comfort in that-dat. that it belicves and well knows that the fortunes and misfortunes this-gen. world not are eternal= the mind, however, has
great confort in the fact that it believes, and know well, that the fortunes and misfortuncs of this world are not eternal)

$$
\text { Sol. p. } 68.6
$$

(176) ac we de aeton mid him, and eac swilce druncon, aefter dan te he aras of dam deade gesund...
(But we that ate with hin, and also drank, after that-dat. that he rose of the death sound=but w? who ate wi in hin, and also drank, after he rose sound from death...)

$$
\text { Alc.P.IX. } 161
$$

(177) Swa swa hit seoddan gelamp, xl wintra aefter fion de hie Crist on rode ahengon
(As it happened afterwards, 40 winters after that-inst. that they Cirist on cross hanced=as it afterwards happened, 40 winters after they hanged Christ on the cross)

Blickling p. 79
(178) Hys nama is Haelend, for dan de he gehaelp his folc (His name is Savior, for that-inst. that he helps his folh=his name is Savior, because he helpe his foll)

Alc.P.II. 95
The presence of de was optional in these constructions, as the follo:nng examples illustrate, but it was much more common for to to be present:
(179) Min gast mynsumad on God minum Halende, fordon he sceavode da eadmodnesse his deowene
(iiiy spirit rejoices in God my savior, because that-inst. he showed the condescension his servanteny spirit rejoices in God my Savior because he showed great condescension to his servant)

$$
\text { Blickling p. } 7
$$

(180) Utan vie !u forkan efstan to Gode, aertan us se dead gegripe (Let us now therefore hasten to God, before that-inst. us the death seize=let us therefore hasten to God, before death seizes us)

Ver. II. 138
(181) Ne se goda man ne sceal for hys godnysse... done synfullan forseon, for dall hit swa getimad foroft dact se synfulla monn his mandaede behreowsad
(iior the good man not shall for his goodness the sinful despise, for that-dat. it so happens often that the sinful man his evil-deeds repenis=nor shall the good mila despise

> the sinful because of his goodncss, because it often happens that the sinful man repents of his sins)
> Alc.P.VI. 294

The following is'a partial list of the prepositions taking de coliplements in 01d English:

| Construction | Heaning(s) |
| :--- | :--- |
| aer dan de 17 |  |
| aer dam de | before |
| for dan de | because |
| for dam de | when, <br> mid dam de the fact that, <br> on condition that |
| mid dy de | when |
| aefter dan de | after |
| aefter dam de |  |

The variation between the instrumental and the dative cases of the de:ionstrative pronoun in these constructions reflects the fact that all these prepositions could govern either the instrumental or the dative case. The following are examples in which the objects of these prepositions are in the dative case:
(182) Ure Haelend Crist ne cymd na to mancynne openlice aeteowed on dissere weorlde aer dani micclan daege donne he mancynne deme
(Our Savior Christ not comes not to mankind openly revealed on this :world before the-dat. great day-dat. When he mankind judges=our Savior Christ will not conie openly revealed to mankind in this :world before the great day when he judges mankind)

Alc.P.XVIII. 383
(183) Ba wunode he twegen dagas on daere ylcan stowe, and aefter dam cwaed to his 1 corningenihtum...
Then divelled he two days in the same place, and after thatdat. said to his disciples=then he duelled two days in the salie place, and after that said to his disciples...)

$$
\text { Alc.P.VI. } 19
$$

(13!) Aa wacron da cild nid hird blode yefullode ond da fador mid dam tearum yefullode for dall sare do hie det dan ciTduri gesawon (Then were the children with their blood baptized and the rothers with the-dat. tears baptized for the-dat. sorro: that they at the children experienced=linen the children were baptized with their blood, and the nothers were baptized with their tears for the sorrow they experienced on account of the children)

Mart. p. 10.7
Compare these with the following examples, where the objects of the sathe prepositions are in the instrumental:
(185) Hio donne aefter dan gedale aslidan scile in da ccean helle-witu
(It then after the-inst. separation slide shall into the etermal hell-punishnents=it then shall slide after the separation into the eternal punishirents of hell) Ner. II. 87
(186) Rade aefter $\frac{\text { don on fagne flor feond treddode }}{}$ (Soon after that -.inst. on shining floor enemy trod=soon after that the enely trod on the shining flooi)

Beo. 724
(187) Aer don we :.'aeron steopcild geworden
(Before that-inst. we were stepchildren becomebefore that, we had becoille stepchildren)

Blickling p. 107
(188) i'tan we nu forean efstan to Gode
(Let us now for that-inst. hasten to God=let us now therefore hasten to God)

Ver.II. 138
(189) a het he suinne scinlaecan him sellan etan daet flaesc, dret waes geattred midd dy verrestan attre
(Then ardered he soiile sorceror himg give eat the meat that was poisoned with the-inst. worst poison=then he ordered a sorceror to give him meat to eat that was poisoned with the worst poison)

Mart. p. 82.6
The instrumental case was already moribund by the tine of the oldest texts, having in most, cases collapsed with the dative. It remained only in the masculine and neuter demonstratives, and in some adjectival
declensions. The instrumental forms of the dellonstratives in these sentential complements of prepositions lingered on after the instrumental case had disappeared in English. Cievertheless, the irportant point here is that in 0ld English, when the instrunental case still enjoyed a linited productivity, the instruniental denionstrative pronouns are found in these conplements after just the prepositions which could govern the instrumental, as the dative ones are found after prepositions which could govern the dative. In contrast to this, the prepositions durh 'through' and od 'until', which normally governed the accusative, were followed by daet, rather than don or dam, when they introduced a sentential comple:ent. Examples (190) and (191) show that these prepositions could govein the accusative, while (192) through (191) illustrate their use in subordinate clauses:
(190) $\frac{\text { Burh }}{\text { (Through }} \frac{\text { duru we gad in }}{\text { the-f.a.s. door-f.a.s. we go in) }}$ Alc.Gr. 47
(191) Ac he heold witodlice daet weore him sylfum od da geendunge dysre :worulde
(But he holds truly that work him self until the-f.a.s. ending-f.a.s. this-gen. world=but he truly keeps that work to himself until the end of the world)

Alc.P.VI. 129
(192) Eaet hy \& heora yldran me swa gegremedan durh daet hy noldan mine lage healdan
(That they and their ancestors me so angered through thatacc. they not-lould my law hold=that they and their ancestors so angered me through not holding my law)

Nulf. p. 71
(193) ac hira bliss ne bid na swadeah gewanod durh daet daet hi geseod da synfullan on witum
(but their bliss not is not however diminished through thatacc. that they see the sinful in punishment=but their bliss is not diminished, however, through seeing the sinful in punishment)
(194) Ba sceolon to wituri faran, and of dam witum drowian, of dact hi wurdon claene
(They shall to punishments go, and in the puniznents suffei, until that-acc. they becone clean they shall yo to pumishments, and remain in the punsihnments, unf if they become clean)

$$
\text { Alc.P.XI. } 188
$$

It may be that the dact in some of these examples is a complenentizer, rather than a neuter accusative demonstrative pronoun. However, even if it was a complementizer, it scens clear that the reason these prepositions took flaet instead of don or tann is that they normally took accusative, rather than dative or instrumental objects, and the complementizer daet was homophonous with the demonstrative pronoun appropriate for these prepositions. The fact that in the sentential complenconts of prepositions, the demonstrative pronouns appar in the case one would expect of the objects of the given preposition sugjests that we denionstrative pronouns in these constructions are in fact the objects of the prepositions, and thal der ton, for example, is not just a frozen expression meaning "before." This hypothesis finds diachronic support in the fact that when all case marking disappeared in the demonstrative pronouns, don and dam in these constructions were replaced by that, which had becume the universal form of the demonstrative, indicating that these constructions wore still analyzed as containing demonstrative pronoms. The following examples from the omulum, written around the year 1200, illistrate this point:
(195) \& affter datt tatt he waes dead ne toc sho widd nan oder (and arter that that he was dead, not: took she with none other=and after he was dead, she did not take up with any other)

$$
\text { Orm. } 7667
$$

(196) Biss illke Ezeckiel wass an wurrdfull \& heh profete full nikell fresst biforrenn datt datt Crist com her to mane (This salle Ezekict Was a honorable and high prophet full great time before that that Christ came here to man this Ezekiel was a honorable and high prophet a long time before Christ came here as a man)

$$
\text { Orin. } 5800
$$

Since there are two occurrences of that in these exatuples, the first cannot be a complementizer, but must be a pronoun. This is not to say that none of the constructions under discussion becane "frozen." Fordi remained as "because," even though the instrumental case was long gone:
(197) Acc ure Laferrd Crist ne wass durrh nan fandige wundedd, forrdi datt he forrsoc to don de lade gastesse wille (But our Lord Christ not was through no terptation wiounded, because that he refused to do the loathsome spirit's will=but our Lord Christ was not wounded through any temptation, because he refused to do the loathsome's spirit's will)

Orm. 11803
The important point, however, is that not all of these constructions became so frozen.

I propose that constructions such as for don de, aer don de, etc. be anaiyzed as having the following structure, or one similar to it:


Under this analysis, these structures are exactly like relative clauses, except thai there is no shared material in the upper and lower clauses.

Instead, the head of the clause, in these cases a derfonstrativ? pronolin, refers to the whole subordinate clause, as in Modern English the fact that, the suggestion that, the iden that, etc. when there is no iip in the lower clause coreferential with fact, suggestion, or idea. If the suggestion that these constructions are a type of relative clause is correct, we now have an explanation for why these clauses have de, rather than daet, as a complementizer, since de was the normal complementizer for relatives.

We saw earlier that the usual complementizer for clauses of purpose or extent was daet. What happens if such a clause also has a denonstrative pronoun head and is the object of a preposition? In these cases, we find didet, rather than de, so it seens that meaning, rather than structure, may have been the more important factor in the selection of complementizers. The reievant constructions are the following:
(199) Construction Meaning(s)
to don dact to the end that, to dam daet so that
for den dact in order that for dall daet so that
io daes Adj. daet so Adj. that to dan Adj. daet

## Examples:

(200) Nis daal to wundrigenne deah de he waere costod se to don coln chet he acveald beon wolde (not-is that to wonder though that he were tempted, who to that-inst. came that he killed be would=it is not to be Wondered at that he was tempted, who came in order that he be killed)

Bricking p. 33
(201) Ba saende he his moder da halgan faciman elenan mili mycl in werode to dare wuldorfullan hierusalen to doin taet hio daer ofaxian da halgan rode
(Then sent he his miother the holy worian Helend with great company to the vonderful Jerusalem to that-dat. that she there inquire the holy cross=then he sent his motier, the holy woman Helena, to Jerusalem to inquire about the holy cross)
M. Halgan Rode p. 7
(202) God laett libben da yfele maenn for dan daet gode beon durh heom gefandode (God lets live the evil men for that-inst. that good be through them tested=Giod lets evil men live so that the good may be tested through them)

Warner XLV. p. 142.22
(203) Ac da yflan for hiora yflum weorcurl waeron gewitnode \& oferswidde, for daem daet da witu gestirden odrum daet hi swa gedon ne dörsten
(But the evil for their evil works were punished and overcome, for that-dat. that the punishments stirred others that they so do not dared=but the evil were punished for their evil works and overcome, in order that the punishments might move others not to dare to do as they had done)

$$
\text { Boeth. XXXIX. } 11
$$

$$
\text { p. } 134.4
$$

(204) llaes se vinter eac dy geare to daes grim daet manig man his feorh for cyle gesealde
(Was the winter also that year to that-gen. cold that many man his life for cold lost=the winter was also so cold that year that many a man lost his life on account of the cold)

Blickling p. 213
(205) Fortan ne bid naefre se man to dam swide synful, daet him sylile ne sie sio bot alyfedu
(Because not is never the man to that-dat. very sinful, that hin truly not be the assistance granted=because a man is never so sinful that assistance will not be granted to him)

Ver.II. 136
A feiv words need to be said about to tlam and to daes as "to the extent." Both the dative and the genitive cases could be used to express extent: although it is difficult to find examples where the extent
is not expressed in a whole clause:
(206) Gaet he das halgan tide gehealde mid clacrum fuestenc to anes miaeles
(The he the holy time held with clean fast to one-yen. meal-gen. $=$ that he held this holy tirue with a clean fast to the extent of (eating only) one meal)
Wulf.285.1
(207) ...to anum maele faestende (to one meal fasting=fasting to the extent of (cating only) one rieal)

$$
\text { Alî.S.I. p. } 20.42
$$

The fact that when to, denoting extent, introduces a subordinate clause, it takes the sanle cases of its objects as in simple sentences is further support for the analysis in (198).

U: may conclude that in 01d English, de was basically limited to being a relative complementizer, while dact was used for all sorts of other complemints, except comparative clauses, especially clauses of purpose and resuli or extent. In the older texts, the distinction between de and daet is quite clear-cut. For dam de always means "because," for dam daet always means "so that," etc. However, just as daet was occasionally used in ordinary relative clauses, it was also beginning to creep into these complements of prepositions, although rarely, in the 1ate tenth century texts:
(208) Ac daes wundredon men, na fordi daet hit mare wundor waere, ac forsi daet hit waes ungervunelic (iut this-gen. wondered men, not for that-inst. that it greater wonder was, but for that-inst. that it was unusual=but men wondered at this, not because it was a greater wonder, but because it was unusual)

$$
\text { Alc.Th. p. } 184.29
$$

In Chapter Eight we shall see how daet replaced de everywhere.
3.3.2.2 Each de. One type of clause regularly introduced by de

Was the type that began with deah "although". This construction does not conform to the types discussed above, since it has no noninal head but is introduced by de. We would not expect this sort of clause to have a nominal head, since deah, which also meant "however" in a simple sentence, could not take objects. What is problematic is the fact that deah required de, rather than faet, as a complementizer:
(209) Hi waeron daes Haelendes gewitan, deah de hi hine tagyt
ne cudon
(They were the Savior's witnesses, though that they him then-yet not kney=they were the Savior's witnesses, al though they did not yet know him)

$$
\text { Alc. Th. p. } 84.4
$$

(210) Swa eac de ne fremat, deah de du ta halgan lare gehyre, butan du hi to godum woorcum awende
(So also thee not help, though that you the holy teaching hear, without you it to good works turn=so it also does not profit you, though you hear the holy doctrine, if you to not turn it to good works)

Alc.Th.vot. 2 p. 402.3
(211) dact he haefde mod micel, deah de he his magum naere arfaest aet ecga gelacum (That he had courage great, though that he his kin notwere kind at sword play=that he had great courage, though he was noi kind to his kin at sword-play)

$$
\text { Beo. } 1167
$$

I have found no examples of deah daet. I do not have any very satisfactory explanation for deah de, although it scems possible that the presence of de is due to the fact that deah clauses, although they had not heads, had a relative-clause like meaning. That is, they could be paraphrased by "in spite of the fact that." It should be noted here that gif "if" was never followed by a complementizer in 0ld English, whether de or dact.
3.3.2.3 Other de complanients. A few other types of complements
beginning with de remain to be mentioned. First, clauses headed by dhe hwile "while" took de:
(212) \& helpan ure sylfra da hwile de we miagan \& motan
(and help our selves the while that we can and may-and help ourselves while we can and may)

$$
\text { Hu7f. III. } 75
$$

(213) Eaes mannes savul is belocen on his lichaman ta hyile de he lybbende bid (The man's soul is locked in his body the while that he living is=man's soul is locked in his body while he is living)

$$
\text { P.XI. } 481
$$

Since hwile was a feminine noun, as reflected in the determiner da, which is the accusative feminine singular form, these clauses are exactly parallel to the complements of the fact that, etc., and the presence of do is predictable. The following is an illustration of the use of hyil as a noun in a simple sentence:
(214) Haes seo nimil micel
(Was the while great=it was a great while)
Beo. 146
A second type of complement was headed by dy laes, 'lest'. Hote the instrumentai formi of the determiner. ${ }^{12}$ This was the case always used in 01d English in the more, the tireder, etc. (see Chapter Four). As We shall see in the discussion of comparatives, any clause with dy in its head required a de complementizer, no matter what the meaning of the construction. Therefore the appearance of de after dy laes is expected. Sone examples:
(215) Heald de nu heonon ford tact du ne syngie, dy laes de de sum ting wyrse gelimpe
(Hold you now hence forth that you not sin, the less that you some thing worse happen=be careful now that you do not sin henceforth, lest solilething worse happen to you)

Alc.P.II. 55
(216) We ne durran gelencgan na lenty dysne traht... de laes de eower suil ceorige on rode We not dare lengthen no longer this exposition the less that you-gen. Soline complain in mind=i.e dare not extend this exposition any longer, lest some of you conplain in your minds)

$$
\text { Alc.P.VI. } 367
$$

Finally, there are de complements with genitive dernonstrative pronouns as heads. These fail into two types. First, some verbs in old English took genitive objects:
(217) Drihten, gehelp ure (Lord, help our=$\overline{\text { Lord, }}$, help us)

Alc.P.XVII. 209
(218) Hie Gode dancundan daes siges
(They God-dat. thanked the-m.g.s. victory-mi.g.s. $=$ they thanked God for the victory)

Blickling p.203.33
(219) Ba baed he tone halgan were daes feos
(Then asked he the-acc. holy mian then.g.s. money-n.g.s. $=$ then he asked the holy man for the mioney)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 178.1
$$

These verbs sometimes take a complement with a head, and the head is then gonitive, as one would expect:
(220) Ac we sculon doncian deodne macrun awa to ealdre dacs de us se eca cyning on gaeste wlite forgiefan wille
(But ve shall thank lord great ever to age that-gen. that
us the eternal king in spirit beauty give will=but we shall thank the great lord for ever and ever that the etemal king will give us beauty in spirit)

Ex. !!onders. 31
(221) Heom sonne on daed Crist sylfa to clypad \& luflice gedancad daes de hi on life him rihte gehyrdon (Then then on day Christ self to speaks and lovingly thanks that-gen. that they in life him rightly obeyed=on that day Christ himself will speak to them, and lovingly thank thell for obeying him in life)

$$
\text { WUlf.VII. p. } 145
$$

Holever, verbs like doncian did not have to have an IW object when
they took a complement. In the cases where there is no head to the complement of doncian, we find daet as a complementizer:
(222) Ic dancige de daet du me geladodest to dinum wistum (I thank you that you invited mie to your feast) Bright 84.17
This shows that it is not the verb itself which requires the coimpementizer de, but the fact that the clause has a head.

The second type of clause with a genitive demonstrative head was a temporal clause meaning "after". The following are some examples:
(223) On tam feowerteogetan daege daes de he of deate aras he astah to heofonum (On the-dat. fortieth day that-gen. that hee of death arose he ascended to heaven=on the fortieth day after he arose, he ascended to heaven)

$$
\text { A1c.P. XL.a. } 153
$$

(224) Cud is daette hrade Drinten, daes de he of dam fulwihtes baede eode, da faestte he sona (Certain is that quickly Lord, that-gen. that he of the baptism's bath went, then fasted he soon=it is kriown that the Lord, fasted soon after he went from the bath of baptism)

Blickling p. 27
The use of the genitive here is again predictable, since the genitive is used to mean "after" in simple sentences:
(225) Ond da daes aefter sectene gearum da forlet he done laenmarl of daes maenniscan lichoman
(And then this-gen. after sixteen years then left he the carthen furnace the human body=and sixteen years after this he left the earthen furnace of the human body)

$$
\text { Mart. p. } 18.11
$$

(226) Ea or áaere eahtodan nihta hyre fulwihtes da gegyrede heo hy mid haerenre tunecan
(Then on the eighth night her baptism-gen. then dressed she her with hair tunic=then on the eighth night after her baptism she dressed herself in a tunic of hair) Mart. p. 190.27
issuming that taes de $S$ has a structure like a relative clause,
the de is also predictable.

## Footnotes to Chapter Three

${ }^{1}$ Such examples disprove the claill of Beaver and Langendoen (1971) (p. 441) that "in relative clauses introduced solely by the relative particle de, the shared nominal could be deleted only if it was the subject of the relative clause." This error has also been pointed out by Bresnan (1976b).

2 see Kennedy (1920).
${ }^{3}$ Chino is ky and Lasnik further claim that there is no Fixed Subject Constraint, but rather a surface filter which rules out the urgramnatical sequences. See Chapter line for further discussion.
${ }^{4}$ joan ilaling has informed me that Modern ilorvegian is another case of a language with no pronoun drop rule which violates the Fixed Subject constraint. Annie Zaenen informs me that the same is true of her dialect. of Dice. Therefore, it seems that there is no validity to the claim that only languages with free pronoun drop rules permit violations of the Fixed Subject Constraint, although it does seem to be true that such violations are more common in pronoun-drop languages.

SIt should be noted that this is merely an informal way of stating the rule. In the notation adopted by Bresnan (1976a), it will not be necessary to formulate the rule as moving three items. Rather it $\frac{w i l l}{S}$ be stipulated that terms 2 through 6 must together constitute an $\bar{S}$, terms $\frac{3}{}$ through 5 constitute an $\bar{X}$, etc. In this way we merely state that the $\bar{\lambda}$ made up of terms 3 through 5 is moved. Furthermore, we can state that this term is Chonsky-adjoined to the $\overline{\bar{S}}$ made up of terms 2 through 6 :ithout making use of a bracket in the structural chain.
${ }^{6}$ Similar arguments exist for the complementizer status of velafive that in modern English. See footnote 11 below.
${ }^{7}$ The exact mechanism involved in the use of the returning pronoun is not crucial here, but a few observations are in order. First, if the returning pronoun is a copy of the moved material, it cannot be an exact copy. In (55) the relative pronoun is nominative, while the returni:g pronoun is genitive. In (56) and (57), the returning pronoun is personal pronoun, while the relative pronoun is of course demonstralive. One possibility is that an appropriate pronoun is simply inshed in the 'mole" left by the loved material, and its form is determined $b_{j}$ its role in tine lower clause, rather than directly by its relationship with the relative pronoun. Under the trace theory of movement, the trice left by the movement of the relative pronoun would mark the
spot for insertion.
The nominative case marking on the relative pronoun in (55) is rather problematic. Without a returning pronoun in the lower clause, a genitive relative pronoun would never "attract" into the case of the head of the relative, as appears to havo happened here. This fact suggests that perhaps there is no movenicnt in this example, and the relative pronoun is generated where it appears. In (56), on the other hand, there must be movement, since the relative pronoun has the case of its role in the lower clause, rather than the case of the head. The important fact for us here is that in exaniples such as (56), we have both novement and a returning pronoun, so the returning pronoun cannot be base generated.
${ }^{8}$ In is listed in Boswarth and Toller's dictionary as being only a preposition, although it is sometimes used as a variant of inn, which is an adverb meaning 'in, within.' Inne was only an adverb, meaning 'vithin, in, indoors.' Innan could be either an adverb or a preposition, meaning 'within, in, into, from within.'
${ }^{9}$ For a discussion of the form Haette, see section 3.3.1.
10 For a discussion of the use of taet with call in 01d and Middle Finglish, see McIntosh (1947).
$11_{\text {For }}$ arguments that Modern English that in relative clauses is not a pronoun, sce Bresnan (1972) and Jespersen (1904-1949).

12 As mentioned earlier, it was more common for daet to appear with neuter heads. It seems likely that this is due to the homiophony of the complementizer daet and the neuter nominative and accusative prorouns.
${ }^{13}$ The pronoun is in the dative case because dyrstan "to thirst" required a dative subject.

14 Hon!ever, such wheheaded relatives with preposition stranding were rare. I believe that this is because with w-relatives, left disloration was much more conmon than "in place" relatives, a situation exactly opposite to that with free relatives with demonstrative pronouns. There are no counterexamples that I have found to the generalization that preposition stranding was obligatory in "in place" wh-relatives. I have found pied piping of prepositions only in the Teftdislocated wh-relatives.
${ }^{15}$ rraugott (1972), evidently unaware of the fact that inversion Was possible in 0ld English in hwaeder questions when only part of the
sentence was being questioned, says (p. 119) that the order thethert verb+subject was an innovation of Middle [nglish. But the facts found in Chaucer's writings (upon which Traugott bases her statement) seen to be the same as those of Old English, with inversion when sub-part of the sentence is being questioned, and no inversion when the whole sentence is questioned:

Wher shal I calle you my lord daun John or daun Thomas, or elles
daun Albon?
(Whether shall I call you my lord Don John, or Don Thomas, or else Don Albon=Shall I call you my lord Don John, or Don Thorlas, or clse Don Albon?

$$
\text { Ch.B. Hk. } 3118
$$

Wheither scistow this is ernest or in play?
(Whether say you this in earnest or in jest=Do you say this in earnest or in jest?)

$$
\text { Ch.A.Kn. } 1125
$$

But whethir swiche men ben freendes at nede, as ben conscyled by fortune and nat be vertu?
But whether such men are friends at need, as are counseled by fortune and not by virtue?=But are such men, who are counseled by fortune and not by virtue, friends at need?)
Ch.Bo.3.5 735-40.

Lord, whether thou yit thenke upon Criseyde! (Lord, do you still think about Cressida?)

$$
\text { Ch.TC } 734
$$

16 I base this conclusion on my own observations of the texts, but it was also reached by Visser (1963) (p. 975).

01d English was far from unique in its restriction against questions within infinitival phiases. Modern German does not allow such questions, nor does Modern Swedish. I have been informed by Anke de Pooij and Annie Zacnen that such questions are also generally impossible in Dutch, although questions on simple neuter objects are much nore acceptable titan one on prepositional phrases or non-neuter objects.

# CHAPTERIV COIIPARATIVE CLAUSES III OL.D E:IGLISII 

### 4.0 Introduction

In this chapter we will explore certain aspects of comparative clauses in 01d English. Section 4.1 is a discussion of the heads of comparative clauses, in which we will see that there is no reason to postulate an underlying rore in 01d English compared adjectives. In section 4.2 I argue that 01d English had both a Comparative Deletion rule and a Conparative Hovenent rule, which applied to different structures.

### 4.1 The Structure of the Heads of Comparatives

In this chapter I will discuss certain aspects of the structure of the heads of conparative clauses in Old English. We will see that there is no reason to posit an underlying quantifier in the 01d English equivalents of taller, etc., an analysis which has been proposed for iodern English by Bresrian (1973).

Before discussing the question of whether compared adjectives in Did English had underlying quantifiers, it is necessary to see why one mifint want to adopt such an andlysis for Hodern English.
4.1.1 iuch deletion. In her iniportant investigation into the structure of hodern English comparative clauses, Bresnan (1973) noted that while most quantifiers may appear with determiners, the compara-
tive forms of those quantifiers may not:
(1) a. Too many apples
b. so much fruit
c. as many men
d. *so less fruit
e. *too fewer apples
f. *as fewer men

Bresnan proposed to account for this fact by analyzing the comparative ending ar as determiner like so, too, as, etc. ${ }^{1}$ This determiner is obligatorily shifted around the quantifier by a rule of er-Encliticizing, presented informally by Bresnan as follows:
(2) Er-Encliticizing (Bresnan)



Later rules of suppletion substitute more for manyter and muchter and less for littler.

With er as a determiner, the impossibility of *too more, etc. is accounted for since the underlying structures for these impossible combinations yould have two determiners in one determiner slot. On the other hand, too many more, so much less, and as many fewer are possible, since in these constructions there are two quantifiers, and one determiner per Mantifier:
(3)


Bresnan assumes that compared adjectives like nore intelligent and less intelligent are derived from underlying structures in which more and less are quantifiers:
(4)


As Bresnan notes, there is a problem with this analysis as it stands. If structure (4) is correct, we would expect non-coilpared quintifiers to be able to appear before adjectives, giving such ungrammatical sequences as *rucin intelligent, *little reasonable. This fact, Brosnan says, shows that one of the following alternatives must be true:
(5) a. Hore does not derive from er much, er many; or it derives from these forms everywhere except before adjectives.
b. More does dorive from er much, or many everywhere in decp structure, but there is a rule deleting nuch obligatorily whon it modifies adjectives and adveribs.

Eresnan adduces evidence in favor of the second alternative, noting that much remains before compared adjectives, but not before non-compared ones:
(6) *as much intelligent
as intelligent as much more intelligent as much taller *as taller

Since much can appear before a compared adjective whether it is compared by using nore or the suffix er, Bresnan concludes that compared adjectives like taller are derived from more tall, and proposes a rule of much deletion to account for the facts in (1):
(7) Ruch Deletion (Bresnan)

$$
\text { much } \longrightarrow \emptyset / \cdots-A]_{A P}
$$

Bresnan assumes that much deletion applies after cr-Encliticizing, so that nuch deletion does not apply if er has been encliticized to the quantifier, as in (8):
(8)


Buch deletion is blocked here because er intervenes between much and the adjective.

Some problems which have been raised with Much Deletion will be discussed in Chapter Eight. For the moment, let us address ourselves to the question of whether such an analysis can be justified for 01d English. For discussions about Modern English comparatives, see, besides

Bresnan's article just discussed, Selkirk (1970), Bresnan (1975a), findrens (1975), and Jackendoff (forthcoming).
4.1.2 0ld English compared adjectives.
4.1.2.1 Assumptions. As a preliminary to our discussion of 01d English comparatives, it is necessary to make explicit some assur.ptions about the structure of noun phrases, adjective phrases, and quantifier pirases. I will adopt here for 0ld English basically the system proposed for these phrases in Modern English by Jackendoff (forthcomino), ${ }^{2}$, it th some modifications which will be noted. It is beyond the scope of this discussion to go in detail into Jackendoff's system, but the basic features of interest to us here will be outlined.

Jackendoff postulates four levels to each of these types of phrases, the $x^{3}, x^{2}, x^{7}$, and $x$ levels. At the $x^{3}$ level of the noun phrase, for example, we find genitive phrases and determiners:
(9)

| it $^{3}$ | $N^{3}$ |
| :--- | ---: |
| Det | $N^{3}$ |
| John's |  |
| the |  |

Adjective phrases are generated at the in ${ }^{2}$ level, as are quantifier plirases:
(10)


At the is ${ }^{1}$ level are generated certain complements of nouns, such as partitive phrases ${ }^{3}$ :
(11)


The major difference between Jackendoff's structures and those of Bresnan is that in Bresnan's system, the determiner is generated at the $11^{2}$ level, while Jackendoff generates it at the $N^{3}$ level. Therefore, recursion within the quantifier phrase takes place at the $Q^{3}$ level within Bresnan's system, but wilhin the determiner in Jackendoff's:

## (12) (Bresnan)


(13) (Jackendoff)


Which of those formulations is correct is not crucial to our discussion here. The issue at stake is whether compared adjectives should De analyzed as containing in underlying quantifier.
4.1.2.2 Wiuch and little in Old English. The justification for nositing an underlying more in Modern Englisin compared adjectives is that.
semantically similur comparatives such as more intolliwent and thller have identical syntactic distributions. Hownerer, in Old English there is no such parallclism. Old English, in traditional terms, had only "synthetic" comparatives, that is, comparatives forned by means of a suffix, as opposed to "analytic" comparatives, that is, those buill up of more than one word, such as more intelligent. Thus, there is no justification for positing an underlying liore in Old English conpared adjectives.

The compardiun suffix for adjectives in 01d English was ra. For compared adverbs, it was or (witir some phonological variations). Compared acijectives could further be declined according to the weak adijectival declension.

Just as there were no analytic comparatives in 01d English, there were no analytic superlatives. ${ }^{4}$ The supcrlative suffix ost (or ast) was used for buth adjectives and adverbs.

For a discussion of the advent of analytic comparatives and superlatives in Middle Engi ish, see Chapter Eight.

Although the 0ld English cquivalent of more was not used to coillpare adjectives or adverbs in Uld English, the form "more" did exist, but only as the (suppietive) comparative form of the quantifier or adver'u micle "much" (and sometimes, "many"):
(14) Ar hi ofer:uunon micole ma tonne daer genamode waeron (But they conquered many more than there named were=but they conquered many more than were named there)

$$
\text { Alc. Th. vol. } 2 \text { p. } 218.26
$$

(15) St:a miccle ma da yesceaviad da opennysse tacre godcundan nilihtnysse
(so much more they behold the openness the-gen. divine
enlightenment-gen. = they behold so much more the upeniess of the divine enlightenuent)

Alc.S.XXIIIb. 41
(16) Hit mare daes landes forbaernde donne hit aefre aer dyde (It nore the-gen. Tand-gen. burned-up than it ever carlier did=it burned up more of the 1 ind than it ever did befure) Oros.p.220. 16
(17) Ic wolde giet his mare aet de gcheran
(I :rould yet it-gen. more at thee hear=I would hear noore of
it from you)
Boeth. XXXV. 2 p. 96.7
Micle was originally a form of the adjective micel "great, large,"
and it is sonletines difficult to distinguish the adverb or quantifier frow the adjective. ${ }^{5}$ The ordinary compared form of the adjective was mara, wile the normal form for the adverb or quantifier was ma, although rare is also found here. Miare seems to be especially used when the Quantifier modifies a noun, as in (16) and (17), as opposed to when it stands by itself, as in (14) and (15).

Notice that in (16) and (17) the noun phrases modified by mare are in the genitive case. Most quantifiers in Old English, along with numerals, induced genitive case marking on the noun phrases they modified just in case the noun phrase was definite (either a pronoun or containing a definite determiner), giving a partitive construction. This is parallel to the sltuation in Modern English where of is found between meny quantifiers (such as many) and definite noun phrases. In 01d English the genitive case was not normally (although it was occasionally) expressed by the preposition of, either after quantifiers or nouns:
 (.,ith manifold pains the-gen.
fleshind-gen. and the-gen CP p.251.11
(19) and ta dry getaciodon tone Aryfealdon dee deere benfullun sable and the three betokened the-mi.a.s. Hiperefold datin-il.a.s. the-f.g.s. sinful-f.g.s, soul-f.g.s. and the three betokened the threefold death of the simiul soul)

$$
\text { A1G.P.V. } 172
$$

(20) siva sha heora maenig dyde
(as they-yen. many did=as many of then did)

$$
\text { nlc.S.XXVII. } 183
$$

(21) Aelc daera de synne viyret, he bid dunne there syne deon TEach those-gen. that sin performs, he is then the-gen. sin's servant=each of those that performs $\sin$, lie is the servant of the $\sin$ )

$$
\text { Alc.Th.vol.2 p. } 223.3
$$

Note that in (17) and (20) the genitive pronoun precedes the quantfier. It was in general possible for a genitive now n phrase to either precede or follow the rest of the material in hie lip of which it was a daughter, wether the other material was a quantifier or other nominal material. Genitive pronouns nearly always preceded the material they modified or which modified their, while full noun phrases showed more flexibility. A reflex of this optionality in Modern English is the alternation between Julin's death and the death of John, etc. But with quantifiers, only the structure with of has survived.

When the quantifier precedes a (genitive) definite NP, there is no possibility of its being an adjective, since adjectives did not precede determiners or pronouns, nor induce genitive case marking on nouns.

If Old English compared adjectives are not to be analyzed as having an underlying micleter, how are they to be analyzed? One way l:ould be to analyze cr as a determiner, following Bresnan and Jackendoff. While Bresnan's system did not allow for determiners of adjectives, Jackendoff does postulate a determiner or degree node under $A^{3}$ comparable
to that under $\|^{3}$ and $Q^{3}$. In this way, so much and so tall, ctc. are generated in parallel fasinion, without ruch deletion:
(22)



Since there is no evidence for an underlying nuchter in 01d Emglish comparatives, if er is a deteminer, then it must be a determiner of $A^{3}$, as well as $Q^{3}$, just like so and too:


However, I will adopt the assumption that adjective phrases have deteminers (iin both 0!d and Modern English), but not the assumption that er is a determiner. Instead, I will analyze er as a simple suffix, both of quantifiers and adjectives, similar to other case endings. ${ }^{6}$ The only problem that I know of with this approach is the fact that it gives us no direct : :ily to account for the facts presented in (1). In Old English, às in Hodern English, quantifiers did not generally modify adjectives, unless the adjective was either compared or preceded by a determiner:
(24) Se laece bid micles
(The doctor is much $\frac{\text { beald }}{\text { too }} \frac{\text { bold) }}{}$
(25) Bara micles to feala wind wid gecynde

They-gen. much too many war with kind much too many of them war with their own kind)

Boeth.lict. 13.16
(26) ...dy laes hie siddan geearnigen swa micle hefigre wite (1est they afterwards earn so nuch heavier numisment.)

$$
\text { CP. p. } 247.9
$$

(27) \& he fordaem sua micle bet his agen dysig oncnew (and he therefore so much better his own folly realized= and therefore he realized his own folly so much better)

$$
\text { CP p. } 295.7
$$

Analyzing er as a deterniner like so or too, we could account for this fact by stipulating that while adjectives did not generally select for quantifiers, some determiners, such as too and er, did. If er is not a deterniner, this explanation is not available.

However, there is another possible approach. It could be that the semantics of the adjective phrase determine whether or not the arijective may be preceded by a quantifier. Hote that with both too and er, some kind of comparison is always being made. So, on the other hand, which does not imply comparison, does not allow cirantifiers; "much so tall is not possible. Also, the adjectives alike and different, which allow quantifiers, as in much alike, little different, are inherently comparative. It secms possible, then, that the comparative nature of some adjective phrases allows them to take quantifier phrases. At any rate, even if we postulate much deletion, we need some way to rule out *iluch so intelligent, etc., which should be generable as much so nuch intelligent. ${ }^{7}$

Given these assumptions, a compared adjective such as swa micle eat odre "so much humbler" (an attested form, St. Ben. p.107.5), would
have this deep structure:
(28)


The underlined adjective phrase in (24) vould have this structure:


The situation with laes "less" in Old English was similar to that of ma. Laes was the comparative of the quantifier lytle "little", 8 and was not used with adjectives. Instead, to make comparisons of smaller degree, our linguistic forbears simply attached the prefix un to a positively compared adjective or adverb. This is not possible in liodern Englisin, but in 01d English un was more productive than it is today, coilbining freely with words of nearly all categories. The following are a few exar,ples taken from Bosworth and Toller's dictionary on un used in ways in wich it cannot he used in Modern English:
(35) Form without un
amansumode: excormunicated
bletsunct: blessiny
dirne: secretly
cade: easy
bliss: happiness
deop: deep
wine: friend dom: judyment strang: strong feor: far away

Form with un
unamansode: un-excommanicated
unl) 7 etsung: cursing
undirnc: openty
uneade: difficult
unbliss: unhappiness
undeop: shallow
unwine: enenly
undom: unjust jurlgment
unstrang: weak
unfeor: not far off

The following are examples showing how untadjeer was used to form unfavorable comparisons:
(36) Leofre me is, daet he mec to deade sylle donne unactelra mion
(Liefer me is, that he me to death give than un-nobler man= I had rather that lio do me to death than a less moble man (did))

$$
\text { PC p. } 247.9
$$

(37) Ealle stcorran weordad gebirhte of daere summan, sume deah beorntor, sum? umbeorhtor
( .911 stars are illuminated of the sun, some though brighter some un-brightly-or=all stars are illuminated by the sum; some, homever, more brightly, some less brightly)

$$
\text { Boeth. XXXIV. } 5 \text { p. } 36.5
$$

The fact that laes never was used in comparing adjectives and adverbs lends even more support to the hypothesis that conparatives of adjectives and zdverbs did not have underlying quantifiers in 01d English.
4.2 Comparative movement and deletion. Now that we have an idea of the struiture of the hears of comparative clauses in 01d English, we mav preceed to an investigation of the rules extracting compared material from comparative clauses. I will argue that 01d English had two rules of comparative formiation, one of deletion, the other of movement, which applied to different structures.

### 4.2.1 Bonne comparatives. In 01d English, comparatives of

 inequality were generally formed by means of the complementizer fonne ${ }^{9}$ "than" and were generally parallel with than comparatives in liodern English:(38) Se waes betera donne ic
(He was better than I)
Beo. 469
(39) And deah de hi sumie lybban leng ${ }^{10}$ tomne hi sccoldan (And though they some live longer than they shomld-and though some of them live longer than they should...)

$$
\text { A. XIII. } 309
$$

(40) Wh is geduht daet him sy sumera Hinga eadlicor to araerenne tone deadan of dan duste, fonne him waere to wyrcenne calle gesceafta of nahte
(Ho:y is thought that him is some thing easier to raise the dead of the dust, than him was to make all creatures of nothing=now it scems that it would be easier for himi to raise the dead from the dust than it was to create all creatures out of nothing)

$$
\text { Alc.Th.vol.1 p. } 236.11
$$

(41) and Drihten hine bletsode swidor on ende donne on anyynne (and Lord him blessed wore on end than on beginning: and the Lord blessed him more at the end than at the beginning)

$$
\text { Alc.Th.Vol. } 2 \text { n. } 458.19
$$

(42) \& da eordlican gestreon swidor lufode donne he his gast dyde
(and the earthly acquisitions more loved than he his spirit= and loved earthle acquisitions more than he did his spirit)

Blickling p. 195.10
(43) Bonne hraem inwact cymd odde goodes odde yfles mare donne de dinced daet he wyrde sic, ne bid sio unrihtwisnes no on God
(When anyone-dat. anything comes either good or evil more than you seems that he worthy is, not is the unrighteousness not in God-whenever anything, either of good or of evil, comes to anyone more than you think that he is deserving of, the unrighteousness is not in God)

Boeth. XXXIX. 10
p. 132.28
(44) Beh ne geortriewe ic na Gode dact he us the menge getcildan to beteran tidun donne we nu on sint (ihough not despair I not God-dat. that he us nol ray shicld for better time than we now ill are but I do not despair of God that he may shield us to a better tim? than we now are in)

$$
\begin{aligned}
& \text { Oros.II.V } \\
& \text { p.86.3 }
\end{aligned}
$$

(45) ...ne aeac maran getilige to haldaenne donne is gelictice $\frac{\text { bi }}{\text { tordian scel }}$ liage, and da men on gehabban and hehealdan de ic Tordian scel
(nor also more strive to have than I moderately by be may, and the men on have and hold that I maintain shall=nor allso strive to have more than I may moderatcly live by and have and hold with $\qquad$ the wen that I shall maintain)

$$
\text { Sol. p. } 72.16
$$

Exarple (43) demonstrates that 01d English Comparative Fornation, like its Hodern English counterpart, allowed removal of the compared meterial more than one sentence down from the head, apparently violatiny Subjacency, tioe Tensed S Constraint, and the Specified Subject Condition. Examples (44) and (45) show that Comparative Fomation could strand prepositions. 11

There is one way in which donne comparatives differ with Modern English than comparatives. In Hodern English, than comparatives are nomally only used vimen the than clause contains material identical with its head. ${ }^{12}$
(46) *It was raining liarder than I was able to take a walk.
I."nen wo want to compare clauses with no shared material, we generally use the for-to construction with too:
(47) It was raining too hard for me to be able to take a walk.

In Old English, infinitives never had subjects, so full tensed clauses were used in places where infinitival clauses would be used in :Hown [nglish. One of the places was in comparative clauses in which
the comparative clause contained no material identical with time heid or part of it:
(48) Him waes Godes egsa mard in gemyndum, tonne he menniscum drymme deynan wolde
(llin was God's fear greater in miind than he hman glory wish would= the fear of God was too great in his mind for him to wish for human glory)

$$
\text { Exon.Th. } 112.6 \text { (BT) }
$$

(49) Seo is bradre donne aenig man ofer seon maege
(It is broader than any man over sce may=it is too broad for any man to see over)

$$
\text { Oros. I p. } 19.19
$$

Since nothing which has been moved ever appears on the surface with these comparatives, it is reasonable to assume that they are formed by means of a rule of deletion under identity over a variable, if such deletion rules exisi. This rule will be formulated after our !liscussion of comparatives of equality.

### 4.2.2 Swa comparatives

4.2.2.1 Ordinary swa comparatives. The 01d English equivalent of as was swa. We have already seen swa used in headless relatives. It was also used both as a determiner and a complementizer in comparatives of equality:
(50) Haes daet wite swa strang, swa Godes geteld aer mycel waes (Was that punishment as severe as God's forbearance earlier greater was=that punishment was as severe as God's forbearance had earlier been great)

$$
\text { Blickling p. } 79.27
$$

(51) Ba weart Tiberius Romanum swa wrad \& swa heard swa he him aer waes milde \& iede
(Then becane Tiberius Romans-dat. as angry and as hard as he them before was mild and easy=then Tiberius became as angry and hard to the Romans as he had earlier been mild and casy to them)
(52) Bonne naeg ic de secgan butan aelcun tweon dact du heafst: sila feola dara aricra begyte swa siu heafst dura lusta on wurlde forlaeten
(Then may I you say without any doubt that you have so many the-gen. anchors obtained as you have the-gen. pleasures in world abandoned= then may I say to you without any doubt that you have obtained as many of the anchors as you have abandoned the pleasures of the world)

$$
\text { Sol.p.6?. } 16
$$

(53) Nat ic nan ding me swa cua swa ic wolde dad me god were (ilot know I no thing me so known as I would that me Cod were $=$ I know of nothing so (well) known to me as I wish that God were)

$$
\text { Sol. p. } 57.1
$$

(54) Ba wolde se wisa mon his fandian, hwaeder he swa wis waere swa he sylf wende daet he waere
(Then would the wise man it examine, whether he as wise were as he self thought that he was=then the wise man desired to examine whether he was as wise as he himself thought that he was)

Boeth. XVIII. 4 p. 45.8
The last ti:0 examples ciemonstrate that as with dome comparatives, the compared naterial may be more than one sentence down from the head.

At times eall "all" combined with the determiner swa, giving eal1(1)swa:
(55) He is sodlice ddes Aelnihtigan Godes Sunu, ealswa mihtig swa his Faeder
(He is truly the Almighty God's Son, as mighty as his Father)

Alc.Th. Vol.I
p. 190.35

As a determiner eallswa changed phonologically into as, which later replaced swa not only as a determiner but also as a complementizer.

I will asume for 01d English swa comparatives with no apparent novement and for donne comparatives the following rule of Comparative Deletion. The possibility that these comparatives involve a movement rule similar to an independently needed rule moving phrases beginning
with sway will be discussed in section 4.2.?.4.
(56) Comparative Deletion

$$
\left.\left.\begin{array}{rrrrr}
\overline{\bar{X}}\left[\operatorname{Det} W_{1}\right] & W_{2} & \frac{\left[W_{3}\right.}{\bar{S}} & \overline{\bar{X}}[\operatorname{Det} & W_{4}
\end{array}\right] \quad W_{5}\right]
$$

This is a modified version of the rule of Comparative Deletion given in Bresman (1975a) and (1976). Since Bresnan was assuming an underlying much in all comparative clauses, her rule was formulated to delete only whole $x^{3 /}$ s. I have formulated the rule so that it can delete either an $x^{3}$ or just the deteminer of it to account for examples such as (50), in linich only the determiner is deleted because the rest of the $x^{3}$ is not identical with the head of the clause.

It should be noted here that only those parts of the compared plirase which are identical to the head are deleted, as noted by Bresnan, by recoverability of deletion. For a discussion of the identity condiLions for Comparative Deletion in Modern English, see Bresnan (1975a) and (1976).

By these assumptions, example (50) is derived from this deep structure: ${ }^{13}$


Comparative Deletion then applies to delete the lower determiner swa, and subject-verb inversion applies in the upper clause to give the surface form. The entire $A^{3}$ of the comparative clause is not deleted because of the lack of identity between gedeld and micel.

In the swa comparatives we have seen so far, there is no overt evidence of noveinent. However, there are swa comparatives in which something appears on the surface which has been moved:
(53) And daei tacn was da swa micel on gelcafullum mannum, swa micel swa nu is taet halige fulluht (and that token was as great on faithful men, as great as now is that holy baptism=and that token was then as great amony faithful men as baptism is now)
(59) Gregorius...cwaet tact swa micel werod nenniscra manna sceal astigan dact heofonlice rice, swa fol.1 swa daero gecorenra engla on heofonui belifoll aefter fatera moligra gasta hryre (Gregory said that as great (a) hand hulan-gen. Inen-gen. shall ascend that heavenly kingdon, as many as the-gen. beloved angels renained after the proud spirits' fall= Gregory said that as great a band of human beings would ascend to heaven as many of the beloved angels remained after the fall of the proud spirits)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 82.7
$$

(60) Ne mihte se manfulla ehtere mid ranre denunge dam lytlingum swa micclum fremian, s:la micclum swa he him fremode mid dacre redan chtnysse hatunge (Not might the wicked persecutor with no service the little ones so greatly favor, as greatly as he thom favored with the fierce persecution hate=the wicked persecutor could not favor the little ones with any service as greatly as he favored them with the hate of fierce persecution)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 84.10
$$

(61) fordan de hi geseod da fordonan swa micclun fram him geaelfremode, swa micclum swa hi beod fram heora leofan Drihtne ascofene
(because they see the condemned as greatly from them estranged, as greatly as they are from their dear Lord separated=because they see the condemned as greatly estranged from them as they are separated from their dear l.ord)

$$
\text { Alc.Th. Vol. } 1 \text { p. } 332.24
$$

(62) Se waes swa micclum mid leahtrum afylled swa micclum swa he :iaes mid eordicum welun gewelgod (He was as greatly with sins filled as greatly as he was with earthly wealth enriched=he was as greatly filled with sins as he was enriched with wordly wealth)

$$
\text { Alc.Th.Vol. } 1 \text { p. } 414.2
$$

In these examples, the compared material has been moved to the front of the complementizer swa. The underlying structure for (58), for example, must be something like (63), given in two parts: 14


The compared material is then moved to in front of the complementizer, giving the following derived structure for the comparative clause (after adverb placement and subject-verb inversion):


I will refer to the rule moving compared material in swa comparatives as "Swa Hovement." Before considering how this rule is to be formulated and whether what appears to be Comparative Deletion can really be Swa Hovement, with subsequent deletion of the moved material, let us see the operation of Swa liovement in another type of comparative clause.
4.2.2.2 Proportional comparatives. To express the idea of one quantity varying proportionally with another, Old English had a type of comparative with Swa Movement. Such sentences correspond roughly to Hodern English sentences such as the more linguistics articles Fred reads, the liore confused he gets. The following are a few examples of this construction, which I will refer to as "proportional comparatives," in O1d Engiish:
(65) for don swa micle swa he laes haefde, swa micle hie waeron beteran \& maran because as much as he less had, as much they were better and greater=because the less he had, the better and greater they were)

Oros.V.XIII. p.246.8
(66) Fordi swa miclan swa he furdur on weordmynte forlaeten bid, swa miclan he sceal geornlicor Godes gerihta healdan (Because as greatly as he further in honor granted is, as greatly he shall zealously God's writ hold=because the more honor he is granted, the more zeaiously shall he hold God's writ)

St. Ben. p. 135.19

In these examples, we have Swa Movement in both clauses. Semantically, these sentences consist of two clauses, one subordinate to the other, similar to construction such as when John ieft, Bill arrived; if John leaves, Bill will too, etc. In the proportional comparatives, we have two amounts, both of which vary, and one of which varies according to the other. The dependent amount is in the main clause, while the other amount, which we may refer to as the "controlling" amount, is in the subordinate clause.

There is evidence that the semantically dependent clause is also syntactically subordinate to the other. In the clause containing the dependent amount, we find the complementizer swa, but not in the other clause. For example, in (65), at the front of the dependent clause we find siva micle swa, which is a combination of a $Q^{3}$ and the complementizer swa. In the clause containing the controlling amount, however, there is no complementizer swa, but only a $Q^{3}$, swa micle. The rough (surface) structure of such comparatives with fronted subordinate clauses, therefore, I will assume to be as in (67):
(67)


Notice that in both of the clauses in the examples given so far, there is a fronted $Q^{3}$. In this way these comparatives seem to differ from ordinary swa comparatives with Swa Movement, in which a phrase is fronted only in the subordinate clause. However, the fronting in the main clauses in these examples is due to the fact that the subordinate clause is preposed. There is always fronting in the main clause in this
construction when the subordinate clause is preposed, but there also exist many examples of proportional comparatives in which the subordinate clause is not preposed, and in these examples we find Swa liovement only in the subordinate clause: ${ }^{15}$
(68) And wite ge daet eower med on dam ecan edleane slwa miccle mare bid, swa micclum swa ge mare for Godes willan siwincad (And know you that your meed in the eternal reward as much more is, as much as you more for God's will toil=and know that the more you toil for God's will, the greater will be your meed in the eternal reward)

$$
\text { Alc.Th.Vol. } 2 \text { p.128.4 }
$$

(69) Witodlice gif Godes oncnawennys us gearcad daet ece life, swa miccle swidor we efstad to lybbenne swa micclum swa we swidor on dissere oncnawennysse deonde beon
(Truly if God's knowledge us prepares that eternal life, so much more we hasten to live as much as we more in this knowledge thriving are=truly, if knowledge of God prepares the eternal life for us, (then) the more we are thriving in this knowledge, the more we hasten to live)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 364.1
$$

(70) and hi habbad swa miccle maran edlean aet Gode, swa micclum swa heora wuldor is laesse mid mannum (and they have as much greater reward at God, as much as their giory is less with men=and the less their glory is with men, the greater reward they will have at God)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 376
$$

(71) Wite he eac, daet he swa micle eadmodra beon sceal on regoles underdeodnesse, swa micclum swa he furdor forlaeten is (Know he also, that he as much humbler be shall in rule's submission, as much as he further granted is=and let him know also that the more he is granted, the humbler he must be in submission to the rule)

St. Ben. p. 111.23
We will return briefly to the matter of the differences in these constructions when the subordinate clause is preposed versus when it is not when we formulate the rule of Swa Movement.

Examples (68) through (71) are parallel to sentences in Modern English such as you get the fatter, the more pizza you eat, which many
speakers, myself included, find outrageously ungrammatical, but others find perfectly acceptable. I have noticed such examples in print. In both 01d and Modern English, fronting of the compared material in proportionate comparatives is obligatory in subordinate clauses, whether or not the subordinate clause is fronted: *you get the fatter, you eat the more pizza is not possible in any dialect, as far as I know, nor do corresponding examples exist in the 01d English texts.

In Modern English, the proportional comparative is limited to comparisons of inequality; that is, comparisons in which the comparative material contains more, less, or er. In Old English, however, this construction was also used for expressing simple proportions:
(72) Ac swa swide swa he for daere utran geornfulnesse weoruldlicra daeda dam cynge waes liciende, swa swide he for daere innlican gemeleasness Godes herenisse him seolfum mislicade (But as much as he for the outer zeal worldly deeds the-dat. king was pleasing, as much he for the inner carelessness God's obedience him self displeased=but he displeased himself for the inner carelessness about obedience to God as he was pleasing to the king for his outer zeal concerning worldly deeds)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 220.9
$$

(73) Swa micclum he bid andwerd anum gehwilcum men swa micclum swa he hine secd mid sodum geleafan
(As much he is present a-dat. given man as much as he him seeks with true faith=he is present to any given man to the extent that he seeks him with true faith)

Blickling p.185.5
(74) and fordi swa micclum swa hi her for Gode on hafenleaste wuniad, swa micclum hi beod eft on dam toweardan wuldre gewel gode
(and therefore as much as they here for God in indigence dwell, as much they are later in the coming glory enriched= and therefore they will be enriched in the coming glory in proportion to the indigence they live in here for God)

Alc. Th.Vol. 1
p. 550.16
(75) Swa micclum swa win is deomurdre tonne waeter, swa micclum is Cristes lare... deomurdre donne waere seo ealde gesetnys (As much as wine is precious-er than water, as much is Christ's teaching precious-er than was the old law $=$ Christ's teaching is as much more precious than the old law as wine is more precious than water)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 56.13
$$

We cannot translate (75), for example, as "the more precious than wine water is, the more precious than the old law Christ's teaching is," which would be a proportional comparative. Instead, this is really just an ordinary comparative with Swa Movement in which the subordinate (that is, comparative) clause has been preposed, inducing Swa Movement in the main clause also.

We can conclude from these facts that the semantics of the proportional comparative in O1d English, unlike that of Modern English, were identical to those of ordinary swa comparatives, since both types simply expressed equality between two amounts, the difference being that the ordinary swa comparative expressed equality between two absolute amounts, while the proportional comparative expressed equality between increases or decreases.

Since the proportional comparative, like the ordinary swa comparative, could either have the subordinate clause preposed or not, we may propose that the preposed type is derived from the non-preposed type. Sentence (65), for example, would have this deep structure (presented in two parts):
(76)



The $\bar{S}$ is then preposed, and Swa Movement takes place in both clauses:


So far we have been talking about Swa Movement in a general way, but have not formulated the rule. Let us now consider exactly how the rule operates.

In all the examples we have seen so far, what is moved is a $Q^{3}$ consisting of the determiner swa and a quantifier. In examples (59), (65), (66), (69) through (71), and (74), the $Q^{3}$ in question seems to be a left branch of another phrase; in (59), the left branch of an $\mathbb{N}^{3}$, in (65) and (69), of a $Q^{3}$, and in (66), (70), (71), and (74), of an $A^{3}$. From these examples, we might suggest that instead of removing the highest possible $X^{3}$ containing swa, Swa Movement takes the lowest, least inclusive $X^{3}$, and is not subject to the Left Branch Constraint, proposed by Ross (1967), which prohibits the removal of a left branch of a node. However, although it is much more common for Swa Movement to move the lowest $X^{3}$ containing swa, I have found a couple of examples in which a more inclusive node has been moved:
(78) Ac swa manegum leahtrum swa he gehyrsumiad swa manega deofla him beod to hlafordum gesette (But as many sins as he obeys, so many devils him are to
lords set=but as many devils are set as lords to him as he obeys sins)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 228.11
$$

(7.9) Bonne is wen, swa micle swidor swa he dence daet he hit adwaesce, daet he hit swa micle swidor ontyndre (Then is probable that as much more as he thinks that he it quenches, that he it so much more kindles=then it is probable that the more he thinks that he quenches it, the more he kindles it)

$$
\text { Oros.IV VII p. } 182.25
$$

It is possible that Swa Movement does not move left branches, but the highest $X^{3}$ containing swa, because it was in general possible for large phrases to split up in Old English. That is, an $X^{3}$ within another $x^{3}$ had a certain amount of freedom of movement out of the higher $x^{3}$. Common examples of this involve genitive noun phrases:
(80) Se engel hire saegde daet heo sceolde modor beon hire Scyppendes
(The angel her said that she should mother be her Creator's= the angel told her that she would be the mother of her Creator)

$$
\text { Blickling p. } 9
$$

(81) Baet du hlaford beo daera aehta and min
(That you lord be the-gen. treasure-gen. and me-gen.=that you be lord of the treasure and of me)

$$
\text { Alc.S.II. } 159
$$

(82) Baet des ys Haelend sodlice middaneardes
(That this is Savior truly world-gen. = that this is truly the Savior of the world)

Alc.P.V. 288
(83) Ac siddan Crist geboren waes, de ealles middangeardes is sibb \& frid...
(But after Christ born was, that all-gen. world-gen. is reconciliation and peace=after Christ was born, who is the reconciliation and peace of all the world...) Oros. p. 48.32

The ability of genitive noun phrases to split up was reflected in the apparent ability to relativize left branches of genitive noun phrases:
(84) Belumpun hi aer to Wintanceastre bysceopscire daere de Daniel se bysceop fore waes (Belonged they earlier to Winchester bishopric, whose that Daniel the bishop head was=they belonged earlier to the bishopric of Winchester, whose head was Daniel the bishop) Bede p.448.14
(85) da elreordan deode \& da redan \& da ungeleafsuman, dara de he furdum gereorde ne culon (the barbarous people and the savage and the unbelieving, whose that he even language not knew the barbarous, savage, and unbelieving people whose language he did not even know)

$$
\text { Bede p. } 56.4
$$

In the case of these genitive relatives, however, it is pussible that the relativized item is not a left branch since, as we saw in section 4.1.2.2, in genitive phrases it was possible for the genitivemarked item to appear to the right of the noun it modified.

Like genitive phrases, $Q^{3}$ 's could sometimes float away from the higher $Q^{3}$ which contained them, even in simple sentences:
(86) and hi swa miclum beod on maran gedingde
(and they so much are in greater rank=and they are so much greater in rank)

$$
\text { Alc.P.XVIII. } 165
$$

(87) He waes swa micclum mid leahtrum afylled
(He was so much with sins filled=he was so filled with sins)

$$
\text { Alc.Th.Vol. } 1 \text { p.414.2 }
$$

Such examples heighten the plausibility of explaining the leftbranch effects by appealing to a separate process breaking up large constituents. We may hypothesize, then, that Swa Movement applies to the highest $X^{3}$ containing swa and does not violate the Left Branch Constraint. The rule must also be formulated to apply both within subordinate and main clauses. As noted earlier, Swa Movement must apply in main clauses just in case the subordinate clause is preposed. I do not know how this
restriction is to be encoded in the granmar. One could propose two separate rules of Swa Movement, one applying within subordinate clauses, the other applying in main clauses following subordinate clauses, but since the effects of the rule are so similar in the two types of clauses, we would surely not wish to resort to using two rules. If it is true, as suggested in footnote 15, that fronting of material in a main clause is common in general when similar material is fronted in a preposed subordinate clause, it may be that the restriction on main-clause swa Movement should be a part of universal granmar. I will assume here a single rule of Siva Movement, and assume that some principle, rather than the form of the rule itself, prohibits swa Movement from applying in main clauses when the subordinate clause is not preposed. We may formulate the rule as follows:
(88) Swa Movement ${ }^{17}$
$\left\{\begin{array}{l}\bar{s} \\ s\end{array}\right\}^{\left[\begin{array}{ll}W_{1} & x^{3}\left[\begin{array}{ll}\text { swa } & W_{2}\end{array}\right]\end{array} W_{3}\right]}$

$2-3 \# \#$| 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: |
| $\left\{\begin{array}{l}\bar{S} \\ \text { S }\end{array}\right\}^{[1}$ | $\emptyset$ | $\emptyset$ | 4 |

4.2.2.3 Micle deletion. One more construction connected with Swa Movement remains to be discussed. Consider the following examples:
(89) and swa he mare haefa swa he graedigra bid (and as he more has, so he greedier is=the more he has, the greedier he is)

$$
\text { Alc.Th.vol. } 2 \text { p. } 220.9
$$

(90) And swa he forsewenlicor bed gewitnod for Godes naman, swa his wuldor bed mare for Gode (and as he ignominiously-er is tortured for God's name, so
his glory is greater for God=the more ignominiously he is tortured for God's name, the greater his glory for God) Alc.Th.vol. 1 p. 486.23
(91) \& ic de secge giet, swa he lengra bid swa hie biod ungesae$\frac{\text { ligran }}{\text { land I thee say yet, as it longer is, } s}$ and I tell you further , they are)

Boeth. p. 120.29
(92) Fordon de swa hi swidor dwelodon on dwyrlicum daedum, swa hi swidor fram dam Aermintigan Gode fyrr gewiton
(Because that as they more dwelled in perverse deeds, so they more from the Almighty God further went=because the more they dwelled in perverse deeds, the more they lurned further from the Almighty God)

$$
\text { Alc.Th.vol. } 2 \text { p. } 398.7
$$

In these examples we have swa by itself at the beginning of each clause, without a quantifier. How are these sentences to be analyzed? There are two possible approaches we might take. First, we might propose that the same rule of Swa Movement is involved in these sentences as in the proportional comparatives and other comparatives exhibiting movement. If this analysis is correct, we must propose an optional rule deleting micle after swa at the front of a clause. This is because Swa Novement, as formulated, only moves $Q^{3 \prime}$ s, not just determiners, and at any rate the underlying structures without micle would be ungrammatical, since swa graedigra "so greedier," swa forswenclicor "so more ignominiously," swa lengra "so longer," etc. were not possible base-generated strings in Old English, any more than their Modern English counterparts are. The rule of Micle Deletion could be formulated thusly:
(93)

$$
\begin{array}{ccc}
\frac{S}{S}
\end{array}{ }^{[ } Q^{\left.3^{[\text {swam micle }]}\right]} \begin{array}{cc}
\frac{S}{S} \\
1 & 2 \\
1 & 0
\end{array}
$$

This rule deletes micle only when the $Q^{3}$ containing it is Chomskyadjoined to an $S$ or $\bar{S}$, that is, only when Sway Movement has taken place.

By this approach, the sentences (89) through (92) would be derived exactly like other proportional comparatives or any sway comparatives with movement, except that these comparatives also involve Micle Deletion. Also, in the Micle Deletion sentences we need another rule deleting the complementizer wa when it is immediately preceded by the determiner wa, that is, when micle has been deleted.

By these assumptions, example (89) would have this structure after the subordinate clause is proposed:


Swap Movement then applies in both conjuncts, followed by Micle

Deletion in both conjuncts and Swa Deletion in the subordinate clause:


A variation on this approach which one might propose would be that the deep structures proposed here are correct, but that in the sentences under consideration, Swa Movement m-ves only the deteminer swa, instead of the largest $X^{3}$, and Micle Deletion does not take place in the preposed $Q^{3}$, but in a $Q^{3}$ which has remained in place, although its determiner has been extracted. By this approach, Swa Movement can move either a $Q^{3}$ or just the determiner swa, which under Jackendoff's system is in fact an $X^{3}$, being a Deg ${ }^{3}$, as noted in footnote 17. However, it is clear that Swa Movement in general could not just move the determiner, instead of the whole "major" $x^{3}$, because we never find the following configuration, where swa is the determiner associated with the $Q^{3}$, and $W$ is a variable:
(96) * swa.... $Q^{3^{[Q}}{ }^{[Q]}$

That is, we never find swa...lytle $N$, swa...micle $N$, swa...micle Adj.-er, etc. The only time when swa appears to move by itself away from the $x^{3}$ of which it is the determiner is precisely when the $X^{3}$ it
belongs to is a $Q^{3}$ containing micle underlyingly, and the micle must furthermore always be deleted.

To handle these facts under an approach in which either the determiner swa alone moved or the larger $x^{3}$ with swa moved, we need two rules of Swa Movement, one moving an $X^{3}$ containing swa, formulated in (87), and another, which I will call "Swa Det Movement," to move only the determiner swa, just in case it modifies micle:
(97) Swa Det Movement (hypothetical)

$$
\begin{aligned}
& \left\{\frac{S}{S}\right\}^{\left[\begin{array}{lll}
W_{1} & Q^{3}[\text { swa micle }] & \left.W_{2}\right]
\end{array}\right]} \\
& { }^{2 \#}\left\{\frac{s}{s}\right\}^{[1} \quad \begin{array}{llll}
1 & 0 & 3 & 4 \\
& & 3 & 4
\end{array}
\end{aligned}
$$

We furthermore need an obligatory rule of Micle Deletion which operates only if swa has been moved away:
(98) Micle Deletion (Swa Det Movement approach)

$$
\begin{array}{cccc}
Q^{3}[\text { swa }] & \left\{\frac{S}{S}\right\}
\end{array} \begin{array}{ccc}
{\left[\begin{array}{l}
W_{1}
\end{array}\right.} & Q^{3}\left[\begin{array}{ll}
t & \text { micle }]
\end{array}\right. & W_{2} \\
1 & 2 & 3
\end{array}
$$

The trace before micle is necessary to assure that micle is deleted only if the preposed swa is its determiner.

It seems rather odd that Swa Det Movement should only apply to determiners modifying micle, and at any rate the earlier proposal is
more appealing on the grounds of simplicity, since it only requires Swa Movement, Micle Deletion, and Swa Deletion, while the proposal under discussion here requires in addition to these rules (with the formulation of Micle Deletion modified as in (98)) a rule of Swa Det Movement. The important question for us here, however, is this: supposing the Swa Det Movement approach is the correct way to account for examples (89) through (92), can the rule of Swa Det Movement be the rule which is involved in ordinary swa comparatives which show no surface evidence of movement? The basic question we are concerned with is whether Comparative Deletion, along with some sort of Swa Movement, is necessary to account for all 0ld English comparatives. We will consider this question after exploring the other major approach to accounting for facts (89) through (92).

The second possible approach to these facts is to propose that (89) through (92) are not really parallel to proportional comparatives, but to sentences such as Modern English as you sow, so shall you reap. ${ }^{18}$ In such sentences the as and so are not determiners, but it is not completely clear exactly what they are. The so seems clearly to be an adverb. The as might be an adverb or a complementizer.

Analyzing sentences (89) through (92) as being parallel to this type of sentence in Modern English is plausible, because there clearly do exist in 01d English sentences in which a swa which is not the determiner of an $X^{3}$ appears at the beginning of two parallel clauses:
(99) Swa swa reaf wlitegad done man lichamlice, swa eac deo sode lufu wlitegad ure sawle mid gastlicre gaegernysse (As garment adorns the man bodily, so also the true love adorns our soul with spiritual fairness=as the garment
adorns the body, so also the true love adorns our souls spiritually)

$$
\text { Alc. Th. vol. } 1 \text { p. } 528.25
$$

(100) $\frac{\text { Swa }}{\text { synnaa }} \frac{\text { swa }}{}$ waeter adwaescd fyr, swa adwaescd seo aelmysse (As water extinguishes fire, so extinguishes the almsgiving sins=as water extinguishes fire, so alms-giving extinguishes sins)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 106.6
$$

Notice the double swa in the first clause of these sentences. This double swa clearly indicates that the first clause is a subordinate one, because neither the determiner swa nor the adverb swa (meaning "so") was ever doubled, but the complementizer swa could be, both in comparatives and relatives with swilc "such" or swa as determiners in the head, as the following examples show:
(101) Naeron gemette on ealre eordan swa wlitige wimmen swa swa waeron Iobes dohtra
(iNot-were found in all earth so beautiful women as were Job's daughters=as beautiful women as Job's daughters were not found in all the earth)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 458.31
$$

(102) Ac he ne com na swa swutellice swa swa he syddan dyde (But he not came not as openly as he Tater did=but he did not come as openly as he later did)

$$
\text { Alc.P.VII. } 70
$$

(104) Uton lufian ure gebrodra on Godes geladunge mid swilcum mode swa swa des cydere da lufode his fynd (Let-us $\frac{10 v e ~ o u r ~ b r e t h r e n ~ i n ~ G o d ' s ~ c o n g r e g a t i o n ~ w i t h ~ s u c h ~}{\text { ove }}$ spirit as this martyr then loved his enemy)

$$
\text { Alc.Th.Vol. } 1 \text { p. } 52.24
$$

(105) On swa hwilcum sunlicum monde swa swa se mona geendad, se bid his monad
(In so which solar month as the moon ends, that is its month=whatever solar month the moon ends in, that is its (i.e. the moon's) month)

Temp.Anni IV. 34
It seems probable that swa was optionally reduplicated when it
introduced a subordinate clause, to help distinguish subordinate from main clauses. Similar reduplication is found in 01d English with da and daer. By itself, da could mean either "then" or "when," but doubled, it meant only "when" (as a relative pronoun). Similarly, daer meant either "there" or "where" (again, in the relative sense), but daer daer meant only "where." This reduplication was optional, and I have been able to find no principle to predict when it happens. It seems to be especially common when the subordinate clause was preposed, probably because this gave the listener a perceptual clue as to the structure of the sentence.

This reduplication does not show that swa swa was itself a complementizer in (99) and (100), but only that it introduced a subordinate clause, since da and daer were not complementizers, although it is possible that they occupied the complementizer position, through Wh-Movement. There are also uses of swa swa (or just plain swa) where it is not clear that it is a complementizer:
(106) Dod swa swa ic inc bebeode, donne beo gyt swa swa God (Do as you-dual bid, then be you-dual as God=do as I bid you, and then you will be like God)

Blickling p. 29.23
(107) Drihten asette on sunnan his hus, \& of daem eode swa swa brydguma of his brydbure (Lord set in sun his house, and of it out-went as bridegroom of his bridal-chamber=the Lord set his house in the sun, and went out of it like a bride-groom from his bridechamber)

$$
\text { Blickling p. } 9.31
$$

It seems clear that the swa swa in (99) and (100) is to be analyzed the same way as those in (106) and (107), however that is. The analysis of this swa swa here is not crucial, but I will analyze it as
a complementizer. If (89) through (92) are to be analyzed in the same way as (99) and (100), then the surface structure of (89) would be (108), given these assumptions:


That the first clause is subordinate in these structures also is demonstrated by the fact that the first swa could be doubled, as in (99) through (104): ${ }^{18}$
(109) and swa swa se geleafa strengra bid, swa bid daes costneres (and as the faith stronger is, so is the tempter's power less=and the stronger the faith is, the less the tempter's power is)

$$
\text { Alc.Th.vol. } 2 \text { p. } 392.19
$$

I have no synchronic evidence to decide between the Micle Deletion approach and the other approach. It is cases like these which make the historical linguist wish for the ability to communicate with dead spirits, because a more precise notion of the semantics of (89) through (92) would help clear up the question of whether they were true proportional comparatives or closer in meaning to (99) and (100), and this is a question which cannot be answered by inspection of the texts. However, in Chapter Eight we will see some diachronic evidence suggesting that the

Micle Deletion approach may be the correct one. But again, the question we are most concerned with at this point is whether the sort of rule or rules needed to account for comparatives where movement is apparent on the surface can be extended to ones in which no movement is apparent. It is clear that the examples in (89) through (92) are of the as you sow, so shall you reap type, any rules involved in the placement of the swa in this construction are irrelevant to the question of how ordinary swa and donne comparatives, without apparent movement, are to be derived, since neither of the swa's in these examples, by this approach, are determiners.

Let us now take up the question of whether Swa Movement, as formulated in (87), or Swa Det Movement, as in (97), or both, can be extended to account for ordinary swa and donne comparatives in which nothing which appears on the surface has been moved.
4.2.2.4 Swa Movement and Comparative Deletion. Swa Movement, in conjunction with a rule deleting a fronted $Q^{3}$ containing swa (optionally in case the complementizer is swa, obligatorily with donne as the complementizer), could account for examples such as (52). The $Q^{3}$ swa fela could be generated in the comparative clause, then fronted to the beginning of the clause (perhaps in the complementizer position), and subsequently deleted. But now consider examples such as (50) and (51), in which only the determiner swa has been removed from the comparative clause. It is clear that Swa Movement, as formulated in (87), cannot derive these examples. The underlying structure of (50), for example, must be as in (57). Swa Movement would have to remove the entire A ${ }^{3}$ swa micel, and not just the determiner, so the rule removing swa in this
sentence cannot be Swa Movement.
Swa Det Movement also fails to account for such examples, because it must crucially be limited to moving swa just if it is the determiner of the quantifier micle. In (50), the underlying swa is the determiner of the adjective micel, rather than of the quantifier. Similarly, in (51) there can be no question of an underlying micle, since swa micle milde \& iede would be an ungrammatical sequence. It appears, then, that a rule of Comparative Deletion, as proposed earlier, is needed in addition to the Swa Movement rule, and also the Swa Det Movement rule, if all the types of comparative structures are to be accounted for. It would of course, still be possible to account for these apparent deletions by means of a Comparative Movement rule which differed from the Swa Movement rule by allowing the removal of a larger range of compared material. The point here, however, is that two different rules of Comparative Hovement would be necessary to account for all the facts, meaning that a movement-only approach to 01d English comparative clauses would not result in a simpler granmar by eliminating Comparative Deletion, as had been argued for Hodern English in Chomsky and Lasnik (forthcoming), for example. Two rules for comparative clauses were necessary in Old English, whether both were movement rules or one was a deletion rule.
4.2.2.5 日e in 01d English comparatives. We have seen that the 01d Engiish proportional comparative used swa, rather than de. However, in 01d English we can see the origins of the Modern English construction with the more...the more, etc. In 01d English, the instrumental case of the definite determiner or demonstrative pronoun se was used in quan-
tifier phrases, and meant roughly "so much" or "that much":
(110) Ac ic wylle eow gyt cudlicor secgan, daet ge hit magon de Swutelicor ongytan (But I will you yet certainly-er say, that you it may the clearly-er understand=but I will say it more certainly to you, that you may understand it the more clearly)
N.Wulf.II. p.15.7
(111) Ba het ic ceorfan da bearwas \& done wudu fyllan daet monnum waere dy edre to daem waeterscipe to ganganne (Then ordered I cut the woods and the forest fell that mendat. were the easier to the body of water to go=then I ordered the woods cut and the forest felled that it would be the easier for the men to go to the water) 3 OE p. 18.8
(112) Swa bid eac micle de winsumre sio sode gesaeld to habbenne efter da eormdum disses andweardan lifes (So is also much the pleasanter the true happiness to have after the misery this-gen. present life=so it is also much the pleasanter to have the true happiness after the misery of this present life)

$$
\text { Boeth. XXIII. p. } 52.7
$$

The same distribution for de seems to hold in 01d English as for the in Modern English (except in proportional comparatives). We find, for example, micle de winsumre in example (112), exactly parallel to much the pleasanter in Modern English.

Andrews (1975) analyzes this Modern English the as a determiner of quantifier phrases like so, as and too. I will adopt this analysis for 01d English also.

Now let us consider some examples in which de is used in a main clause, and the quantity modified by de is related in some way to something in a subordinate clause. In such cases, the complementizer of the subordinate clause is always de:
(113) He wolde daet da folc him dy swidor to buge de he haefde hiera ealdhlafordes sunu on his gewealde (He would that the folk him the quickly-er to turned that he had their old lord's son in his power=he wanted the
people to turn to him the more quickly because he had their old lord's son in his power)

> Oros.III.xi
p. 148.32
(114) And hit is ealles de wyrse, de his aenig ende ne cymd
aefre (and it is all the worse that it-gen. any end not comes ever=and it is all the worse that no end to it ever
comes)
N.Wulf.III. p.26.13
(115) Swa bid eac daes wisan med de mare, de him wradre wyrd \& redre to becyd
(So is also the wise's reward the more, that him angrier fate and fiercer to comes=so is also the reward of the wise the more, that an angrier and fiercer fate comes to him )

Boeth.XL. 3 p. 138.20
(116) Ac hio ne bid deah dy near daere sae de hio bid on midne
daeg
(But it not is though the nearer the sea than it is at midday=but it is not, nevertheless, any nearer the sea than it is at midday)

Boeth. XXXIX. 3
p. 126.12
(117) Nis sio ofer-fyll don betere de se hunger (Not-is the overfullness the better than the hunger= overfullness is not any better than hunger)

$$
\text { Ver.VII. } 108
$$

As these examples show, adjective phrases with the determiner de could appear with various sorts of sentential complements, but whatever the type of complement, these phrases always selected for the complementizer de. In (113) and (114), the complementizer must be translated as either that in a resultative sense or because or since. The translation of (115) is somewhat more problematic. It is not clear whether this sentence should be translated as I have translated it, or as the angrier and fiercer the fate that comes to him, the more the reward of the wise shall be. In (116) and (117), the quantifier de is preceded
by à negative, and the complementizer de must be translated as than. The obligatory selection of the complementizer de by phrases with the quantifier de is similar to the obligatory selection of the complementizer as in Modern English relative clauses with the determiner such in their heads.

We might ask whether the second de in example (104) is really a complementizer or is the quantifier de, moved to the front of the subordinate clause. However, it is clear that in examples (113) and (114), there is no possibility of an underlying quantifier de in the subordinate clauses. There is no evidence that de moved in Old English. It seems likely that examples like (115), which could be analyzed as involving movement of the second de, helped lead to a reanalysis whereby de, like swa, participated in movement, bringing about the modern construction. This reanalysis will be discussed in Chapter Eight.
4.3 Conclusion. In this chapter we have investigated some properties of comparative structures in Old English. We found that 01d English did not have an analytic comparative, and that there is no justification for postulating an underlying more in Old English comparatives of adjectives. We also saw that Old English had a comparative movement rule, Swa Movement, and that this rule must be distinct from the rule deriving comparatives in which there was no surface evidence of movement.

In Chapter Eight the history of some of the constructions considered in this chapter will be discussed. We will see there how the swa... swa type of proportional comparative was replaced by the more...the more type, and also how the analytically compared adjectives entered the language.

Footnotes to Chapter Four
${ }^{1}$ This analysis, first proposed, to my knowledge, in Selkirk (1970), is also adopted in Jackendoff (forthcoming).
${ }^{2}$ For other discussions of Modern English comparatives, see Selkirk (1970), Bresnan (1976a) and (1976b), and Andrews (1975), among others.
${ }^{3}$ For discussions of how partitive phrases are to be analyzed, see Selkirk (1977) and Jackendoff (forthcoming).
${ }^{4}$ There are a few counterexamples to this claim. However, as noted in Strang (1970), these rare examples of analytic comparatives are all translations of Latin analytic comparatives, and cannot be taken to indicate that this type of comparative was a real possibility in 01d English.
${ }^{5}$ Micle shows up in a rather bewildering varierty of forms. For example, it frequently appears as micclum. Micclum is a dative plural form of the adjective micel, but cannot be considered to be an adjective, since the dative plural form does not agree with any noun in the sentence, as in examples (60) through (62) below. Campbell (1959) (p.276) lists micclum as an adverb and gives other examples of the living caseforms used adverbally, such as unwearnum "irresistably," which also shows a dative plural ending.

The genitive singular neuter form micles is also sometimes used to mean "much," parallel with ealles "entirely" (from eall "all"), sumes "to some degree" (from sum "some"), etc. Thus the fact that an adverb or quantifier may decline to a certain extent does not show that it is really an adjective. True adjectives agree in case, number, and gender with what they modify, while quantifiers and adverbs do not.
${ }^{6}$ I am indebted to Lisa Selkirk for pointing out the feasibility of this approach to me.
${ }^{7}$ Note that under Jackendoff's system it is impossible to characterize the semantics of an adjectỉve plus its determiner in terms of one syntactic constituent, say $A^{3}$, because by this system the adjective and its determiner are sometimes a constituent, but sometimes not, since with recursion in the determiner, the deteminer of an adjective may be generated under Deg ${ }^{2}$, and not as a sister to its adjectives, as in (29) below. By Bresnan's system, however, det+Adj. is
always a constituent, so we could speak in terms of the semantics of $A^{2}$ in trying to characterize the types of adjective phrases allowing quantifiers.

8 Lytle was formed from the adjective lytel. The compared fomiin of lytel was laessa, while that of lytle was laes. Leest was the superlative form of both, but lytle also had the superiative laesest.
${ }^{9}$ In the $O E$ texts there are some instances of comparatives not employing the comparative particle donne, but rather using case marking to express comparison. According to Small (1929), the case marking construction was used only when the compared items were both nominative or both in the accusative relation to the same form of the same verb. I will not discuss this construction here. For an excellent discussion of this construction in Indo-European and the Germanic languages, see Small's study.
${ }^{10}$ Leng was the comparative form of the adverb lange, being originally formed with the suffix iz. The comparative of the adjective lang was lengra.
${ }^{11}$ Such examples of comparatives formed on the objects of prepositions are rare, however. I believe that this is because full comparative clauses are fairly rare, since it was more usual to reduce the comparative clause, as in He ate more than Bill.
${ }^{12}$ However, comparatives with rather have no shared material: I'd rather you went than he did.

13 It is not crucial here whether the determiner should be generated at the $X^{3}$ level, as proposed by Jackendoff, or the $X^{2}$ level, as proposed by Bresnan. The important thing is that no underlying micle in the adjective phrase is assumed.
${ }^{14}$ Bresnan (1973) assumes that the comparative clause is generated within the determiner of the upper clause, and then extraposed, but Andrews (1975) argues that these clauses are generated in their surface positions. I have assumed Andrews' position on this matter, but it is irrelevant here where the comparative clause is generated.
${ }^{15}$ Avery Andrews informs me that it is not unusual among the world's languages for a "sympathetic" movement to take place in a main clause when a subordinate clause with a similar movement is preposed, as with Swa Movement.
${ }^{16}$ It is possible that there is no splitting up in this example.

Mid leahtrum afylled could possibly be a constituent.
$17_{\text {Note }}$ that by Jackendoff's system, what I have been referring to as the "determiner" of a Q3 is often a Deg ${ }^{3}$, and is therefore an $X^{3}$. This means that Swa Movement, as it is formulated, and in the absence of conditions or constraints, should be able to apply to Swa alone, instead of only a higher $x^{3}$ containing the Deg ${ }^{3}$ swa. This incorrect result, however, is ruled out by both the A-over-A and the Left Branch constraints. It would furthermore be possible to use a feature, $\pm$ major to distinguish such categories as Deg ${ }^{3}$ from $Q^{3}$, etc. It seems more likely to me that the category Deg ${ }^{3}$ should be eliminated, since there is no good evidence for different levels of degree nodes.

The possibility that swa may move by itself sometimes will be discussed presently.

18 I am indebted to Lisa Selkirk for suggesting this possibility
${ }^{19}$ To account for the double swa in such examples under the Micle Deletion approach, we could postulate that the first swa is the determiner swa, and the second the complementizer, with Micle Deletion, but not Swa Deletion, having taken place to make them end up together.

# CHAPTER V <br> CHANGES IN RELATIVE CLAUSES AND QUESTIOIS 

### 5.0 Introduction

In this chapter we will trace a few changes in the relative clause and question systems from 01d to Late Middle English. The facts presented here are based on a study of the texts listed in the Appendix, rather than on the findings of others. Divergences between the facts presented here and the findings in studies by earlier investigators will be noted.

The facts presented here, besides being of interest in their own right to students of historical linguistics, will help us to understand some other changes which will be discussed in Chapters Six and Eight.

Section 5.1 is a discussion of the extension of the interrogative pronouns to their relative use, and the disappearance of the older setype relative. Section 5.2 traces the decline in the use of the se and se de relatives. Section 5.3 is a discussion of certain changes which took place in free relatives. In section 5.4 we will see a couple of changes which took place in questions.
5.1 Wh-words as Relative Pronouns

We saw in Chapter Three that in 01d English it was the demonstrative, rather than the interrogative, pronoun which was used in relative clauses (when any pronoun was used). This situation changed in Middle

English. In the twelfth century, the interrogative pronouns first began to be used as relative pronouns. Unfortunately, the tivelfth century is the poorest century for English texts, mainly because of the ascendency of French in England at this time. Most of the English texts which do exist from this period are copies of earlier works, and what is more, very faithful, word-for-word copies. This fact is very important in the study of which forms of pronouns are used. Comparing the few original compositions of the twelfth century with twelfth-century copies of eleventh century works, we find that the latter are quite archaic in their use of pronouns (among other things). ${ }^{1}$ In the copies, the demonstrative pronouns retain full (or nearly full) case marking, but this case marking has for the most part disappeared in the original works of the same period. The original works also show a few wh-words used as relative pronouns, while the copies do not. Thus we must not base our conclusions on the usage of the different kinds of pronouns on texts which are not original compositions of their period. ${ }^{2}$ By "original composition," I do not mean that the work in question must not be a translation from another language (in which case we have another problem, that of foreign influence), but only that it must not be a copy of a much earlier work in English.

The earliest examples I know of with wh-words as relative pronouns are from twelfth century entries (nearly contemporaneous with the events they describe) in the Peterborough Chronicle ${ }^{3}$ :
(1) Bis waes swide gedeorfsum gear her on lande durh gyld de se cyng nan for his dohter gyfte \& durh ungewaedera for hwan eordiwestmas wurdon swide amyrde
(This was very grievous year here in land through money that the king took for his daughter's dowry and through unweather, for which harvests became very spoiled=this was a very grevious year in the land because of the money which the king took for his daughter's dowry and because of the bad weather, on akcount of which the crops were badly spoiled)
P.C. 1111.23
(2) ...waes seo mycele eordbyfung on Lumbardige, for hwan manega mynstras \& turas \& huses gefeollan (was the great earthquake in Lumbardy, for which many monasteries and towers and houses fell=there was the great earthquake in Lumbardy, because of which many monasteries, towers, and houses fell)

$$
\text { P.C. } 1117.14
$$

(3) Ac syddan he afaren wes he wid done cyng geworhte, forhwan hine se cyng ealles benaemde
(But after he left was he against the king offended, for which him the king all-gen. deprived=but after he had left, he offended the king, for which the king deprived him of everything)

$$
\text { P.C. } 1103
$$

These three examples are the only examples of headed relatives with wh-pronouns in the Peterborough Chronicle. They all involve for hwan, "for which," "on account of which," as the relativized item.

We also find some wh-pronoun relatives in the early thirteenth century texts which are originally of twelfth century composition, although examples are still quite sporadic in these texts:
(4) Bis monne me mei sermonen mid godes worde for hwat he scal his sunne uor-saken (This man one may sermon with God's word for which he shall his sins forsake=one may preach God's word to this man, for which he will forsake his sins)
M.OEH VOI.I. p.81. 10 (12th cent.)
(5) Efter dan drihten him bitahte twa stanene tables breode on hwulche godalminti heofde iwriten da ten lage (After that Lord him gave two stone tablets broad on which God Almighty had written the ten laws=after that, the Lord gave him two broad stone tablets on which God Almighty had written ten laws)
M.OEH.Vol.I. p.11.16
(6) In toude sete of paradis from hwonne de engles adun follon (in to the seat of paradise from which the angels downfell (i.e. fell down))

$$
\text { M.OEH.Vol.I.VI. } 102
$$

Curiously, in these early Middle English texts, the interrogative pronouns were only used as relative pronouns in the genitive case or as the objects of prepositions. Occasionally, in the thirteenth century, they were also used as datives without prepositions. I have no explanation for this fact. Curme (1912) attributed it to the fact that the genitive and dative forms of the demonstratives, daes and daem, respectively, were similar to the corresponding forms of the interrogatives, hwaes and hwaem, while the nominative form of the demonstrative, se or de, was quite different from the nominative interrogative hwa. However, it should be noted that in Modern Dutch, the interrogative relative pronouns are still limited to the genitive (wiens and wier) ${ }^{4}$ and the objects of prepositions (for which the form is wie). In other cases, die, the feminine or masculine demonstrative, or dat, the neuter demonstrative, are used:
(7) Het boek dat $U$ mij geleend hebt, is erg interessant. (The book which you lent me is very interesting)
(8) Wie is die Amerikaan, met wie je gistern in de schouburg was? (Who is the American, with whom you were in the theatre yesterday?)
(9) De consul, die mijn vader kende, leende me het geld. (The consul, who knew my father, lent me the money)

Note that in Dutch, the case, number, and gender marking of the interrogative wie is exactly parallel to that of the demonstrative die, so Curme's explanation will not explain the distribution in Dutch. It
appears that there may be something special about genitives and objects of prepositions here, but I do not know what it is. At any rate, the interrogative pronouns in Middle English become fairly conmon by the middle of the thirteenth century:
(10) Cumm nu widd me to sen din Godd widd erdlig bodigsinhde, whamm du durrh Drihhtin sest nuggu widd innsihht off din herrte
(Come now with me to see they God with earthly body-sight, whom you through Lord see know with insight of thy heart= come now with me to see your God with physical sight, whom you see now, through the Lord, with the insight of your heart)

Orm. 13588
(11) and alle odere euele deden durch wyche dinkes man ofserueth det fer of helle (and all other evil deeds, through which things one deserves the fire of hell)

$$
\text { K.Serm.p. } 30
$$

(12) Eadi is his spuse, hwas meidhad is unwemmet (Blessed is his spouse, whose maidenhood is untouched)
H.M. 578
(13) habbe him...upo hwas nebscheft de engles ne beod neauer fulle to bihalden
(have him upon whose countenance the angels not are never full to look=have him upon. whose countenance the angels are never tired of looking)

$$
\text { H.M. } 587
$$

(14) And alle deos weren min eldre of wan we beod ispronge (And all these were my ancestors, of whom we are descended) L.Brut 25081
(15) Iesu al feir agein hiram de sunne nis boten a schadwe (Jesus, all fair, against whom the sun not-is but a shadow= Jesus, all fair, against whom the sun is but a shadow)

> T. Wohunge p.1.9

By this time, the old se relatives had died out, even though it had not been replaced by the wh-relative in the nominative and accusative (see section 5.2).

It is not clear exactly why the interrogative pronouns began to be used as relative pronouns. It is frequently suggested (as in Curme (1912)) that the interrogative pronouns were pressed into service in relative clauses on account of the decline in inflection in the determiner system (the determiners were identical to the demonstrative pronouns), since the interrogative pronouns were still fully inflected. Besides the disappearance of inflection in this system, the initial s of se and seo began to be replaced by $\underline{\underline{d}}$, making the descendent of se (the masculine nominative singular demonstrative) homophonous with the relative particle de. This new de began to be used for all genders and cases of the demonstrative pronoun. While it seems plausible that the loss of inflection in the determiner system should have played a role in the importation of the more highly inflected interrogative pronouns into the relative clause system, this was probably not the only or even the most important factor. Let us compare the situation in Middle English with that of Middle Dutch. Old Dutch, like Old English and the other Germanic languages, used demonstrative pronouns as relative pronouns. In Middle Dutch, the interrogative pronouns began to be used in relative clauses along with the demonstratives. ${ }^{5}$ However, at this time the inflections of the Dutch relative-demonstrative pronouns were exactly parallel to those of the interrogative pronouns. Since the interrogatives were no more highly inflected than the demonstratives, loss of inflection cannot have played a part in the spread of the interrogative pronouns into relative clauses in Dutch. Furthermore, note that even with the loss of inflection in Middle English, there was no real need for a
new relative pronoun, since the complementizers de and dact were perfectly serviccable relative markers.

Ancther possible reason for the spread of interrogative pronouns as relative pronouns is that these pronouns had always been used in "free" relatives. This was also true in Dutch. It is not clear why they did not stay confined to this usage. However, it scems likely that once the interrogative pronouns were used as relative pronouns in one sort of relative clause, it was natural for them to be extended to other relatives.

### 5.2 The Demise of the se and se de Relatives

It is hard to determine exactly when the se relative died out, because of the general difficulty in determining which occurrences of demonstrative pronouns were just demonstrative pronouns, and which were relative pronouns, and also because of the scarcity of twelfth century texts, the twelfth century being the period of decline in the se relatives. We can ascertain, however, that there was a great decline in the use of this relative pronoun during the tivelfth century, if it was still in fact a relative pronoun. This decline came about in spite of the fact that the use of wh-pronouns as relative markers was still quite sporadic, and the wh-pronouns did not really fill the gap left by the loss of the se relative. Instead, it was much more common in this period to use de or daet in all relative clauses, rather than using any relative pronoun. For more information on the use of daet as a relative complementizer, see Chapter Sevell.

The death of the se relative seems to have come about basically with the decline in inflections on the demonstrative pronouns (as nearly everywhere else). In the early twelfth century texts, we find great confusion in the cases of these pronouns - accusative forms used instead of nominative, nominative instead of the other cases, etc. Clark (1970) believes that the inflections on the determiners had already disappeared in the dialect (East Midlands) of the Chronicle, and the inflected forms were used in rather inept imitation of the earlier parts of the chronicle, or of West Saxon, which was still the more prestigious literary dialect, and which she hypothesizes to have still had inflected determiners (the copies in the West Saxon dialect of earlier compositions still show inflected determiners at this time, although the initial s of se, seo, has turned into $\underline{d}$, making the masculine nominative singular form identical to the indeclinable relative particle de). The inflections on these pronouns died out the earliest in the northern part of the country.

At any rate, at the beginning of the twelfth century there are still quite a few possible examples of se relatives in the nominative case, but se relative pronouns in other cases are quite rare. I have found these examples of possible se relatives on the objects of prepositions or genitives:
(16) \& sum wife hine underfeng into hire huse, daere waes to name Martha (and some woman him received into her house, whose was name Martha=some woman, whose name was Martha, received him into her house)

$$
\text { W.XLIII. p. } 134.2
$$

(17) \& his agene dohter Mariaen he geaf Alpheon of daere waes geboren Jacob se laesse
(and his own daughter Mary he gave Alphaeus, of whom was born James the Less=and his own daughter, of whom was born James the Less, he gave to Alphaeus)

$$
\text { W.XLIII. p. } 139.12
$$

(18) Seo waes bewedded Zebedeo, of daere waeron geborene Jacob se mycele, \& Johannes se godspellere
(She was wedded Zebedea, of whom were born James the Greater and John the gospel-writer=she was wedded to Zebedee, of whom were born James the Greater and John the gospel writer) W. XLIII p.139.19
(19) \& feng Iohan of Gaitan to dam Papdome, dam waes oder nama Gelasius
(and succeeded John of Gaeta to the Papacy, whom was other name Gelasius=then John of Gaeta succeeded to the papacy, whose other name was Gelasius)
P.C. 1118.19
(20) ....mid daes cynges Heanriges mannan, togeanes dan he manega - gewealc \& gewinn haefde
(against the king Henry's men, against whom he many struggles and contests had=with the king Henry's men, against whom he had many struggles and contests)
P.C. 1100.55

With the death of the se relative, the se de relative naturally disappeared also. It is usually assumed that the se de relative was the direct ancestor of the wh-that relative of later Middle English. However, this cannot be, because the se de relative was very clearly defunct by the end of the twelfth century, at the latest, and the first headed whthat relatives do not appear until the very end of the thirieenth century or the beginning of the fourteenth. Since there is a gap of at least a century between the last se de relatives and the first wh-that relatives, some other origin for the wh-that relative must be sought. This question will be taken up in Chapter Seven. For the moment, it remains to establish the lack of se de relatives in the twelfth century. I believe that the generally held assumption that the se de relative led
directly to the wh-that relative (apart from the fact that this seems a very reasonable progression, given the replacement of se by wh and de by that) is due to the fact that the twelfth century texts which are copies of earlier works do have se de relatives. Belfour's volume of twelfth century homilies, for example, has many examples of se de relatives:
(21) Ure Drihten arerde anes ealdormonnes dohtor deo de laeg
dead
(Our Lord raised an alderman's daughter, who (that) lay dead)

$$
\text { Bel.II.p. } 136.4
$$

(22) \& on his godcundnysse, on daere de he God is
(and in his godhead, in which he God is=and in his godhead, in which he is God)

Bel.II.p. 20.8
But most of these homilies are known to be copies of eleventh century texts, and the rest are thought to be. We have the eleventh century originals of some of these homilies, and when we compare the two versions, we find that the twelfth century manuscripts are not free renderings of the earlier ones, but rather word for word transcriptions. I have compared several of these homilies to ascertain that this is so, but here it will suffice to compare example (21) with the sentence in a homily of Aelfric's of which it is a copy:
(23) Ure Drihten araerde anes ealdormannes dohtor, seo de laeg dead

Thus we see that the twelfth century copyists, while they changed the spelling of words in the eleventh century manuscripts to reflect their own dialects, left the syntax intact, so the presence of se de relatives in these copies cannot be taken as an indication that these relatives
were a part of the spoken language. I have found no se de relatives in original compositions of the twelfth century, although it must be admitted that the data base is small, since the only original compositions we have of this period are parts of the Peterborough Chronicle and some isolated homilies. But at any rate, I have not found any clear examples of se de (or se dact) in the thirteenth century.

This discussion points up the importance of distinguishing between original texts of a period and copies.

### 5.3 Changes in Free Relatives

Another interesting change which took place in Middle English involved free relatives with wh-pronouns. We saw in Chapter Three that in 01d English free relatives with wh-pronouns, the pronoun was flanked on either side by swa. In the early twelfth century, this was still usually the case:
(24) Ba bed se kyng heom daet hi oldon cesen hem aercebiscop to Cantwabyrig swa hwam swa swa hi wolden (Then bade the king him that they should choose them archbishop to Canterbury so whom as they would=then the king bade them to choose for them as archbishop to Canterbury whomever they pleased)
P.C. 1123.8

During the twelfth century, however, swa frequently weakened to se, and the first swa began to drop off:
(25) Wa se seid daet he bo hal him solf wat best his smirte (Who so says that he is heal thy himself knows best his pain)

Poema Morale 114
(Lambeth 487,
late 12th cent.)
(26) Luue dine nexte al swa de seleun, hwat manne swa he
aeuere bie!
(Love thy neighbor al so thy self, what man as he ever is= love thy neighbor as thyself, whatever man he is!) V\&V p.67.5
(27) Gaet hwuch of ham swa is lest lateliche \& grureful, mihte he such as he is to monkin him scheawe
(that which of them as is least loathsome and horrible, might he such as his is to mankind him show=that whichever of them is the least loathsome and horrible, he might show himself to mankind such as he is)
T.Wohunge 127
(28) Whamm $\frac{\text { se }}{}$ du seost datt Godes Gast inn aness cullfress heowe of heoffne cumedd uppon himm \& upponn himm bilefedd, he fullhtneds all datt fullhtnedd is (Whom so you see that God's spirit in a dove's shape of heaven comes upon him and upon him remains, he baptizes all that baptized is=whomever you see such that God's spirit comes upon him in the shape of a dove and renains upon him, he baptizes all that is baptized)

Orm. 12604
(29) What se haefde richedom, he hine maked wraecche mon (What so had riches, he him made a poor man=whoever had riches, he made him a poor man)
L.Brut 6555
(30) Baet hwa swa halt dis write and dis bode, da wurde he efre wuniende mid God
(That who so holds this writ and this command, then be he ever dwelling with God=that whoever holds this writ and command, may he ever dwell with God)

$$
\text { P.C. } 675
$$

By the beginning of the thirteenth century, the first swa of the swa hw swa construction had completely disappeared, even in the dialects in which swa did not weaken phonologically. We will see in Chapters Six and Seven that this change in headless relatives had far-reaching effects in relative clauses with heads, and even in questions.

In 01d English, the complementizer swa always appeared in these free relatives with wh-words because the swa in the head selected for it. However, once the first swa disappeared, there was no longer any need
for the complementizer to be swa, and this complementizer began to be replaced with that or de:
(31) Al Albanakes folk folden iscohten but whilc dat der atwond durh wode
(All Albanaca's folk ground sought but which that there escaped through wood=all of Albanaca's folk sought the ground, except whoever escaped from there through the wood)
L. Brut 2165
(32) $\frac{\text { Hwilce }}{\text { doligen }}$ dai de he tobreke godes forbode, he scolde dead (What day that he broke God's command, he should death suffer=whatever day he broke God's command, he should suffer death)

$$
\text { V\&V p. } 113.17
$$

(33) Hwa dat sehe denne hu de engles beod isweamed... stani were his heorte gif ha ne mealte i teares
(Who that saw then how the angels are disturbed, stony were his heart if it not melted in tears=then whoever saw how the angels are disturbed, his heart must be stony if it did not melt in tears)

$$
\text { H.M. р. } 23.233
$$

(34) \& hwilc $\frac{\text { abbot }}{}$ de bed daer coren of de munecan daet he beo gebletsad (and which abbot that is there chosen of the monks, that he be blessed=and whichever abbot is chosen by the monks there, that he be blessed)
P.C. 675

Since de and dat could generally be optionally deleted, they sometimes deleted in these relatives:
(35) Hwa ne dod hwen ha mei, ne scal ha hiven ha wolde (Who not does when they may, not shall they when they would=whoever does not do it when they could, they will not (be able to) when they would)

$$
\text { T.A.Wisse p. } 153.24
$$

(36) De holi gost....hine dealed to wam him beod lofue (The holy ghost it gives to whom him is pleasing=the holy ghost gives it to whomever is pleasing to him)
L. Brut (Otho) 9081
(37) Hiram ich biteche dat bred dat ich on wyne wete, he me schal bitraye (Whom I give the bread that I in wine wet, he me shall betray=whoever I give the bread that I wet in wine, he
shall betray me)

Jesus Ms. Passion 103
(38) Bat is min red, wid quam du is findes, dat he be be dead (That is my advice, with whom you them find, that he be dead=this is my advice: whoever you find them with, he should be killed)

G\&Ex. 1768
(39) Ac seid to hwam he wid speked, hwi sholde ich him luuien? (But says to whom he with speaks, "Why should I him love" $=$ but says to everyone he speaks with "Why should I love him?")
M.OEH VOl. 2 XXIX
p. 183.32

As these examples show, there were still two types of free relatives, one in which the wh-word had the case marking of its role in the subordinate clause and the subordinate clause was fronted, with a returning pronoun in the main clause, and the other in which the pronoun had the case of its role in the main clause, and preposition stranding was possible.

The fact that free relatives now did not have to have a complementizer (either swa or that) made them superficially extremely similar to the new headed wh-relatives. The effects of this fact will be discussed in Chapters Six and Seven.

Another change which took place in the free relatives invoive the word ever. In 0ld English, ever was used in free relatives only incidentally, with ever retaining a full temporal meaning. However, in Middle English, ever began to be associated with the pronoun in free relatives, even when there was little or no temporal meaning.
(40) Luue dine nexte al swa de seluen, hwat manne swo he aeuere
bie! (Love thy neighbor all so thy self, what man so ever is= love thy neighbor as thyself, whatever man he is) V\&V p. 67.5
(41) Hwat weole oder hwat wunne se der eauer of cume, to deore hit beod aboht (What good or what joy so there ever of comes, too dear is it bought=whatever good or joy comes of it, too dearly is it bought)

$$
\text { H.M. } 388
$$

(42) Beo he cangun oder crupel, beo he hwuch-se he eauer beo, du most to him halden (Be he idiot or cripple, be he which-so he ever he be, you must to him hold=be he an idiot or a cripple, be he whatever he is, you must hold to him)

$$
\text { Н.І. } 479
$$

(43) Son se du telest te betere den an oder-beo hit hweruore se hit eauer beo-...du merrest din meidhad (Soon as you count you better than an other, be it wherefore so it ever is, you mar your maidenhood=as soon as you count better than another for whatever reason it may be, you mar your maidenhood)

$$
\text { H.M. p. } 60.639
$$

In the early thirteenth century, the ever in such free relatives clearly still belonged to the lower clause, since it was frequently separated from the wh-pronoun, as in these examples. However, ever began to occur more and more frequently at the beginning of the subordiriate clause:
(44) Bench get det hwo se euer hermed de oder eni wo ded de, scheome, grome, oder teone, dench det he is godes gerd (Think yet that whosoever harms you or any woe does you, shame, anger, or suffering, think that he is God's rod= think yet tha- whosoever harms you or does you any woe, shame, anger, or suffering, think that he is God's rod)

$$
\text { A.Riwle p. } 81.26
$$

(45) Mai nogt longe me ben for-holen quat-so-euere on londe wurd stolen
(May not long men be hidden whatsoever on land is stolen= whatever is stolen on land cannot be long hidden from men)

When ever appeared at the front of such clauses, it was possible to mistake ever as being a part of as or so, resulting in the use of ever before the complementizer in the late fourteenth century:
(46) And what as evere that ye seie, rint as ye wole so wol I (And whatsoever that you say, just as you will so will I) Gower CA. i. 1830
(47) This mayden... as hastily as ever that she myghte, shal wedded be unto this Januarie (This maiden as hastily as ever that she can, shall be wedded to this January)

Ch.E.Mch. 1693
However, when these first examples of ever before the complementizer occur, it is still more common for the ever to follow the complementizer:
(48) But natheles I wole not blame religious folk, ne hem diffame, in what habit that ever they go (But nevertheless, I will not blame religious folk, nor defmae them, whatever habit they go in)

Ch.RR 6151
(49) 'Who so that evere,' quod I, 'douteth of this, he ne mai nat consider the nature of things' (Whosoever, I said, doubts this, he cannot consider the nature of things)

$$
\text { Ch.Bo. } 4 \text { p. 2.1205-10 }
$$

Thus it appears that in Chaucer's time, there were two competing analyses of ever, even with the same speaker. Sometimes ever was treated as belonging to the subordinate clause, other times it was treated as part of the head of the clause or the wh-pronoun.

During Chaucer's period, that was the most frequent complementizer in free relatives, when any complementizer was employed. However, so, the descendent of swa, and as, a new form which was a reduction of also, may have also been complementizers at times in free relatives, because
they sometimes appeared separated from the wh-pronoun:
(50) what man so ye smyte, thurghout his amure it wol kerve and byte (what man so you smite, throughout his armor it will carve and bite=whatsoever man you smite, throughout his armor it will carve and bite)

$$
\text { Ch.F.Sq. } 157
$$

(51) ...or in what wise so you leste (or in what manner
you please) Ch.TC.III. 1045
On other occasions, however, the so or as is clearly part of the wh-pronoun:
(52) But what-som-ever woo they fele, they wole not pleyne (But whatsoever woe they feel, they will not complain) Ch.RR. 5041

It is not clear whether the so or as in the cases in which these items are separated from the wh-word are truly complementizers, or fill a new slot in the relativized NP, but at any rate it seems that so and its variant as, like ever, were analyzed in two ways for a while. The situation will be discussed a bit further in Chapter Ten.

### 5.4 Changes in Questions

5.4.1 Questioned infinitives. It was mentioned in Chapter Three that in 01d English, it was not possible to question within an infinitive phrase. This situation changed in Middle English. The earliest examples of questions within infinitival phrases (as opposed to questions out of infinitival phrases to the front of the sentences, which were always possible) are from the Katherine cycle, around or a little before the middle of the thirteenth century:
(53) ...ant nuste hwet seggen
(and not-knew what say=and did not know what to say)
St.Kath. 1535
(54) Elewsius ward wod ut of his witte ant nuste hwet seggen (Elewsius became crazy out of his wits and not-knew what say= Eleusius became crazy, out of his wits, and did not know what to say)

$$
\text { St.Jul. R. } 216
$$

These examples are the only ones I know of from this period. There is another example near the end of the thirteenth century from the later (Otho) manuscript of Layamon's Brut:
(55) For nusten hii wa mene
(For not-knew they to whom talk=for they did not know to whom to talk)

Brut (Otho) 11114
Notice that in these examples the infinitive is bare, rather than being preceded by to. The earliest examples of questions on to infinitives are from the very end of the thirteenth century and the beginning of the fourteenth:
(56) Heo nusten hwat for to do
(They not-knew what for to do=they did not know what to do)
SEL 27.1624
(57) and bispeken bi hwulche feolonie to don dis ludere dede (and spoke by which felony to do this evil deed=and spoke about which felony to do this evil deed)

SEL 17.62
(58) He nuste hwat with dat bodi to do (He not-knew what with that body to do=he did not know what to do with that body)

SEL 15.227
In the South English Legendary, at the beginning of the fourteenth century, such examples are fairly common. In this work we also find examples of questions of bare infinitives:
(59) So wroth was de prince dat he nuste hwat for wrathde do (So wroth was the prince that he now-knew what for wrath do=the prince was so wroth that he did not know what to do, for wrath)

SEL 15.26
(60) He nuste hwat for Ioye do
(He now-knew what for joy do=he did not know what to do,
for joy)
SEL 18.388
(61) Ne he nuste hware heom finde (Nor he not-knew where them find=nor did he know where to
find them)

SEL 47.64
As far as I can determine, the to infinitive and the bare infinitive were in free alternation in this construction during this period. In Chaucer's time, such questions on to infinitives were quite common:
(62) But trewely myn herte is troubled with this sorwe so grevously, that I noot what to done (But truly, my heart is troubled with this sorrow so greviously that I do not know what to do)

$$
\text { Ch.B.Me1. } 2190
$$

(63) So glad he was, he niste what to seye (So glad he was, he did not know what to say)

Ch. B. MLawe 384
(64) My righte lady, my salvacioun, is in affray, and not to whom to pleyne
(My right lady, my salvation, is in fright, and does not know to whom to complain)

Ch.Mars. 214
(65) and now wote y neuer what forto done
(and now know I never what for to do=and now I never know what to do)
B. Brut p. 19.14
(66) and wist nouht what to done (and knew not what to do=and did not know what to do) B. Brut p. 55.32
(67) ...dat dai nist wher forto abide
(that they did not know where to stay)
B. Brut p. 158.15

Examples of questions on bare infinitives seem to be rarer at this time, but there are some:
(68) And of al this I not to whom me pleyne
(And of all this I not-know to whom me complain=and I do not know to whom to complain of all this) Ch.Comp.L. 50
The use of the bare infinitive was greater in the fourteenth century than at any time before or after that period. In Old English, the bare infinitive was restricted to almost exactly the same environments as in Modern English - after verbs of perception, modals, etc., but the fourteenth century saw a short-lived expansion of the bare infinitive into constructions where it had not been possible earlier, nor is it possible any longer:
(69) God hath suffred yow have this tribulacioun (God has allowed you (to) have this tribulation) Ch.B.Mel. 2684
(70) But it is good a man been at his large (But it is good (for) a man to be at his large (i.e., generous with money)

$$
\text { Ch. Kn. } 2287
$$

It seems very likely that the profusion of bare infinitives in the fourteenth century was due to French influence, since French does not have a to infinitive, and since the bare infinitive in these constructions died out after the period of greatest French influence. ${ }^{7}$ It seems likely, in fact, that the possibility of forming questions on infinitives is due to French influence, since this is not possible, in general, in the other germanic languages and was not possible in Old English. The possibility of French influence in questions on infinitives is suggested by Visser, who gives the following example illustrating the same
construction in French from Ware's Brut during the Middle English period:
(71) La fille ne sotque respondre
(The girl not knows what answer=the girl did not know what
to answer) All questions on infinitives in Middle French were on bare infinitives, as they still are in Modern French. It is striking that the first examples of questioned infinitives in Middle English are bare infinitives, suggesting that the construction was originally borrowed directly from French. The bare infinitive never really took hold in English, however, and although the questioned infinitive quickly became a real part of the language, the more native to infinitive was the one which came to be used in this construction.

Another possible explanation for the advent of questioned infinitives is that in 01d English, infinitives never had subjects, while in Late Middle English they began to. It is possible, therefore, that in 01d English infinitival phrases were merely verb phrases, but became full sentences in Middle English, and once they were full sentences, it was possible to form questions on them. This seems a plausible explanation, but it is not clear whether the infinitive with subject preceded the questioned infinitive, as this hypothesis would predict. Rather, it seems that the questioned infinitive became common slightly before the infinitive with subject did. Furthermore, the fact that Modern French, which has questions on infinitives (as did Middle French), does not allow subjects with infinitives, shows that subjects with infinitives are not a necessary precondition for questioned infinitives.

Related to the questioned infinitive is the infinitival relative
using a wh-pronoun. In Old English, it was not possible to form an infinitival relative with a pronoun, although infinitival relatives with no pronoun (and with preposition stranding) were possible, as we saw in Chapter Three. The pronominal infinitival relative has apparently never been as common as the questioned infinitive, and is still much more limited today. While the object of an infinitive can be questioned (within the infinitival phrase) in Modern English, it cannot be relativized by means of a pronoun:
(64) a. I don't know what to do.
b. I need a friend to visit.
c. *I need a friend who(m) to visit.

Only prepositional phrases may be relativized pronominally in infinitival phrases:
(65) a. I need a friend to whom to talk.
b. *I need a friend who(m) to talk to.

For a discussion of these facts, see Emonds (1976).
The pronominal infinitival relative appeared a little later in English than the questioned infinitive. The first examples are from Chaucer's period, and such examples are not common in that period:
(66) $\ldots$ and seide he nade no more lande wherwid her for to marie (and said he not-had no more land wherewith her for to marry=and said he had no more land with which to marry her)
B.Brut. p.17.24
(67) She hath no wight to whom to make hir mone (She has no man to whom to make her moan=She has not man to whom to complain)

Ch.B.ML. 656

If it is true that the advent of the questioned infinitive was due to French influence, rather than to the expansion of infinitival phrases in to full sentences, we can describe the change as a change in the structural description of the wh-Movement rule. Under the movement-into-COMP approach to Wh-Movement, we vould have to postulate some sort of infinitival complementizer if infinitives were not full sentences, since for Wh-Movement to take place there must be some sort of complementizer. By the approach that wh-Hovement merely moves the affected item to the front of the clause, however, we could formulate the new Wh-Movement rule in the following way:
(68) Question-Movement (Late Middle and Modern English)

$$
\begin{aligned}
& \left.\left\{\begin{array}{c}
\bar{s} \\
v p
\end{array}\right\}^{\left[\begin{array}{l}
w_{1}
\end{array}\right.} \begin{array}{c}
x^{3} \\
\text { twh }
\end{array} \quad w_{2}\right] \\
& 123 \\
& 2 \# \quad\left\{\begin{array}{c}
\bar{S} \\
V P
\end{array}\right\}^{\left[\begin{array}{lll}
1 & \emptyset
\end{array}\right]}
\end{aligned}
$$

The change from Old to Middle English in this construction is expressed by the addition of the VP to the structural description of the rule.

As for the infinitival pronominal relatives, we could either account for them with the same rule as for questions, with surface filters to rule out the bad sequences, or else we could restrict the Relative Movement rule to applying only within tensed sentences, and postulate another rule especially for pronominal infinitival relatives, moving only prepositional phrases:
(69) Infinitival Relative Movement

| $V^{\left[W_{1}\right.}$ | $\begin{gathered} \text { PP } \\ \text { trel } \end{gathered}$ | $W_{2}$ |
| :---: | :---: | :---: |
| 1 | 2 | 3 |
| ${ }_{\text {2\# }}^{\text {VP }}[1$ | $\emptyset$ | 3 |

5.4.2 Locative Shift in Questions. We saw in Chapter Two (section 2.1.2) that in Old English, only the aemonstrative (including relative) pronouns underwent Locative Shift, the rule permuting locative pronouns and the prepositions of which they were the objects. In Middle English, Locative Shift, and also Locative Replacement (the rule optionally substituting a locative pronoun for a neuter pronominal object of a preposition) were generalized to interrogative pronouns:
(70) Hare confort \& hare delit, hwerin is hit...?
(Their comfort and their delight, wherein is it=their comfort and their delight, what is it in?)

$$
\text { Hali M.p. } 39.1
$$

(71) He sahh dat sho widd childe was, \& nisste whaeroffe (He saw that she with child was, and not-knew whereof=he saw that she was with child, and did not know from what) Orm. 2931
(72) He mai seon hweruore he ah to siken sare
(He may see wherefore he ought to sigh sorely=he may see what he ought to sigh sorely for)
A.Wisse p. 160.6
(73) Sc dinked euerlic wis man de wot quor-of man kin bigan (So thinks every wise man that knows whereof mankind began) Gen \& Ex. 2407

The first examples are from the early thirteenth century. At the same time when Locative Shift began to apply to interrogative pronouns, it was also beginning to apply to wh-relative pronouns:
(74) We don no ding ne ne siggen hwar duruh hire silence muwe beon i sturbed (Not do no thing nor say wherethrough here silence may be disturbed=do not do or say anything through which her silence may be disturbed)
A.Riwle p. 194.32
(75) Of dinges wid uten hwer of scandle ne cume nis navit much strengde (Of things without whereof scandal not comes not is not much strength=outer things which scandal does not come of
A.Wisse p. 11.7
(76) Bat in de haues all ding hwer fore mon ah beo luuewordi to
oder
(That in thee have all things wherefore one ought to be love-worthy to another=that you have all the things for which one person should be worthy of love to another) T.Wohunge 621

It is striking that Locative Replacement and Locative Shift were extended to wh-pronouns (both interrogative and relative) at just the time when the wh-pronouns were first being used frequently as relative pronouns. It seems clear that the reason for this extension was the now morphological identity between the interrogative and relative pronouns. Since Locative Shift and Locative Replacement could always apply to relative daer, and since relative daer and relative hwaer were now in competition with each other, it was natural to generalize these rules from applying only to demonstrative pronouns to applying to all relative pronouns, and furthermore to interrogative pronouns, since these were now identical in form to the relative pronouns. For more discussion, see Chapter Ten. The new Locative Replacement rule, differing from the old one only by the loss of the feature +demonstrative, may be formulated thusly:
(77) Middle English Locative Replacement

| $W_{1}$ | $P P$ | $\left[\begin{array}{cc}\mathrm{P} & \mathrm{NP} \\ \text { +pro } \\ \text { tneut }\end{array}\right.$ | $W_{2}$ |
| :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 |
| 1 | 2 | $+10 c$ | 4 |

The new Locative Shift rule also differs from its ancestor only in the loss of the feature + demonstrative:
(78) Middle English Locative Shift
\(\left.$$
\begin{array}{cccc}W_{1} & P P\end{array}
$$ \begin{array}{ccc}{[P} \& \begin{array}{c}NP <br>
+pro <br>

+10 c\end{array} \& \end{array}\right] \quad\)| $W_{2}$ |
| :---: |
| 1 |

In Chapters Six and Seven we will see other cases where the morphological identity of the relative and interrogative pronouns brought about a change.

### 5.5 Conclusion

In this chapter we have traced a few changes in the relative clause and question systems. We have seen how the wh-pronouns were extended to relative clauses, and how this change brought about a simplification of the Locative Replacement and Locative Shift rules. Another result of the replacement of the demonstrative relative by the wh-relative, in conjunction with the loss of swa in headless relatives, was that headless relatives became superficially similar to headed ones. This change had
important effects which will be discussed in later chapters. Finally, We have seen that the Middle English period, a time of so much syntactic change in English, was the period in which the questioned infinitive entered the language, along with the pronominal infinitival relative.

## Footnotes to Chapter Five

$l_{\text {For a }}$ list of original works and copies of earlier works in the twelfth ceritury, see the Appendix.
${ }^{2}$ There is also some possibility of dialect difference here, since the original texts of this time are in the East Midlands dialect, while most of the copies are in the West Saxon dialect. There are not enough texts to determine how much the differences in these texts are due to dialect differences, as opposed to differences between copies and originals. One dialect difference, however, is well known: the northern dialects began to lose the inflections on the demonstrative pronouns earlier than the southern one, so we would expect the se relative to linger longer in the southern dialects.
${ }^{3}$ There are, however, a couple of examples of wh-relatives in the Vercelli homilies. These examples both involve for hwon "for which" and are copies of similar constructions in Latin, so it seems that Latin influence is involved here, especially since these examples are so isolated.
${ }^{4}$ The genitive pronoun, however, is confined to the written language. In speech, die is used with a returning genitive pronoun for genitive relatives.
${ }^{5}$ For details, see Frank (1910), Te Winkel (1898) and Loey (1951).
${ }^{6}$ It is impossible to tell whether daere is genitive or dative here, since the forms were identical for the feminine pronoun, and since the dative case was sometimes used instead of the genitive to express inalienable possession, as in example (19).
${ }^{7}$ For a discussion of when French influence was at its height in English, see Chapter Eight, and also Baugh (1951) and Jesperson (1955).

# CHAPTERVI <br> CHANGES IN PREPOSITION STRANDING 

### 6.0 Introduction

In this chapter we will see how preposition stranding came about in wh-relatives and questions in Middle English and also how passives of the sort he was laughed at came about. We will also examine a couple of possible reasons for these changes.

### 6.1 The Changes

Before discussing preposition stranding in Middle English, it is appropriate to review briefly the 01d English preposition stranding facts.

We saw in Chapier Two that preposition stranding was not possible in Old English Topicalization, unless the prepositional object was a pronoun, in which case the preposition stranding could be attributed to the effects of an independently needed rule permuting pronominal objects of prepositions and their prepositions, after which the pronoun and the preposition could split up freely. We also saw that passivization of the object of a preposition was not possible. In Chapter Three we saw that preposition stranding was obligatory in de relatives, but nor-existent in se and se de relatives. Apparent counterexamples to this generalization involving locative pronouns were accounted for by an independently motivated rule permuting locative objects of prepositions with those prepositions, in conjunction with the PP Split rule motivated
in Chapter Two. Preposition stranding was obligatory in infinitival relatives, which in Old English never had relative pronouns on the surface. Preposition stranding was not possible in questions. In free relatives, we found that preposition stranding was possible in free relatives of the sort in which the pronoun independently must be analyzed as being the head of the relative clause, while it was not possible in free relatives which must be analyzed as involving movement of the pronoun. To summarize, preposition stranding was not possible in any construction in which the moved object of the preposition was apparent on the surface, unless PP Split had applied. On the other hand, in constructions in which there was nothing on the surface which had been moved, preposition stranding was obligatory.

Let us now see how this situation changed in Middle English.
The first sporadic examples of preposition stranding in wh-relatives with movement and questions appear at the very beginning of the thirteenth century: ${ }^{1}$
(1) Nuste nan kempe whae he sculde slaen on
(Not-knew no soldier whom he should strike on=no soldier knew whom he should strike at)
L.Brut 27487
(2) Her is whamm guw birrd follgenn, whamm all mannkinn birrd lefenn onn (Here is whom you behooves follow, whom all mankind behooves believe in=here is the one whom it behooves you to follow, who it behooves all mankind to believe in)

Orm. 12887
The second of these examples is a headless relative, but the dative case of the wh-pronoun indicates that the wh-word has been moved. However, this example is dubious, since in Middle English, as in 0ld English,
the headless relative with movement of the pronoun was ordinarily restricted to the left dislocation construction. Some confusion with case marking was setting in at this time, and it is possible that the oblique case marking here is due merely to the post-verbal position of the whpronoun. If this is so, then the pronoun is the head, and deletion, rather than movement, is involved. At any rate, clear examples of preposition stranding at the beginning of the thirteenth century are very rare in the literature, as attested by the fact that these two examples are the only ones to be found in these two exceedingly long works.

By the middle of the thirteenth century, examples of stranding in wh-relatives and questions become a bit more common, although still rare:
(3) And getenisse men ben in ebron quilc men mai get wundren on (And giant men are in Hebron, which men may yet wonder on (i.e. at))

$$
G \& E x .3715
$$

(4) Wiste noman of werlde do quat kinde he was kumen fro (Knew no man of world then what kind he was come from=no one in the world then knew what kind he had come from)

G \& Ex. 901
(5) Hwam se heo biseched for is sikerliche iborhen (Whom so she prays for is surely saved)

$$
\text { M.OEH.VOI.I p. } 261
$$

The last example is somewhat dubious. The case marking makes it appear to be a movenerit headless relative, but the lack of a returning proncun suggests that this is really an 'in place' free relative with a pronominal head, and the case marking is a mistake.

During this same period, a few rare examples of preposition stranding in topicalized and passivized structures are also found:
(6) Ah de gode ich ga aa bisiliche abuten
(But the good I go ever busily about)
St.Marg.p. 30.35
(7) Hosen wid ute yampez ligge in hwa se liked
(Hose without feet, sleep in whoso pleases=whoever cares to may sleep in hose without feet)

$$
\text { T.A.Wisse p. } 214.27
$$

(8) Heo schal beo greattre ibollen, leafdiluker leoten of den a Teafdi of hames
(She shall be greater honored, lady-like-er thought of than a lady of home=she shall be more greatly honored, more lady-like thought of, than a house-wife)

$$
\text { T.A.Wisse p. } 58.7
$$

Visser mentions exampie (8) as being the first example of a passive formed on a verb+preposition. ${ }^{2}$ It is the only occurrence of this construction in the thirteenth century. In the fourteenth century, such passives become more common. Visser finds passives with 24 new combinations of verbs and prepositions in this century, and 57 more in the fifteenth century. It is striking that at just the time when sporadic examples of preposition stranding in wh-relatives and questions are found, sporadic examples of preposition stranding are also found in Topicalization and Passivization. And in the fourteenth century, when preposition stranding was becoming more common in the former types of construction, it was also becoming more common in the latter types.

In the early fourteenth century, preposition stranding was still rare in Topicalization, Passivization, wh-relatives, and questions. I have found no examples of preposition stranding in these constructions in several manuscripts of the fourteenth century. However, Richard Rolle de Hampole, born c. 1300, was an entinusiastic preposition strander. Several examples of preposition stranding in wh-relatives are found in his short volume of prose treatises edited by Perry: ${ }^{3}$
(9) and make de free fra charge of besynes whilke dou ert bounden to (and make you free from the care of business which you are bound to)

Hampole XI.p. 32.4
(10) A scolere at Pares had done many full synnys, de whylke
he hade schame to schryfe hym of he hade schame to schryfe hym of (A scholar at Paris had done many foul sins, the which he had shame to shrive him(self) of)

$$
\text { Hampole IV p. } 7.16
$$

(11) and dat es de lossyng of thy ryght-wysnes whilke dou was mad in (and that is the losing of thy righteousness which thou wast made in)

$$
\text { Hampole XII.p. } 44.4
$$

Rolle's dialect was a northern one, and it is possible that preposition stranding in movement rules became common earlier in the north than in the south, as was the case with many innovations. It is also possible that Rolle, writing for religiously oriented people, was less influenced by French than those writing for an audience at court, such as Chaucer.

In the later fourteenth century, preposition stranding in movement rules became more common. In Chaucer's writings, as noted in Grimshaw (1975), preposition stranding was fairly common in wh-relatives and questions with inne:
(12) Now have I told what peril he is inne

$$
\text { Ch.TC } 3.9111
$$

(13) And thoughte anon what foly he was inne Ch.TC 1.820
(i4) For nadde they but a sheete, which that they myghte wrappe hem inne a-nyght

$$
\text { Ch.6.CY. } 879
$$

However, there are also a few examples of preposition stranding
with other prepositions in these constructions which apparently escaped Grimshaw's notice:
(15) His lady, certes, and his wyf also, the which that lawe of love accordeth to

Cil.F.Frank. 797
(16) But to king Alla, which I spak of yore...I wol retourn

Ch.B.M.Lawe. 984
(17) What sholde I tellen ech proporcioun of thinges whiche that we werche upon

$$
\text { Ch.G.CY. } 754
$$

(18) Yet hadde I lever payen for the mare which he rit on, then he sholde with me stryve Ch.H.Man. 78
These four examples are the only ones that I have found with stranding of prepositions other than inne in wh-relatives in the Canterbury Tales. 4 I have also noted one example of preposition stranding with Topicalization:
(19) Now swich a wyf I pray God kepe me fro! Ch.E.March. 2419
In the writings of Lydgate, ${ }^{5}$ born in 1371 (thirty one years after Chaucer's birth), we also find a few examples of preposition stranding in wh-relatives:
(20) But had he ete and take his part of this fruyt which I of telle...
(But if he had eaten and taken his part of this fruit which I tell of...)

$$
\text { Lyd. R\&S. } 4416
$$

(21) The fruit of thys ilke tre, which that I to forn of spake, sodeynly was torned to blake (The fruit of this same tree, which I spoke of before, was suddenly turned to black)

Lyd. R\&S. 3998
During this period, it was also fairly common for pied piping to
occur, but for a copy of the preposition to be left behind:
(22) Til that the kinght of which I speke of thus, ... shoop him to goon (Until the knight that I spoke of thusly prepared to leave) Ch.F.Frank. 807
(23) And eek in what array that they were inne
(And also what array they were in)

$$
\text { Ch.Pro. } 41
$$

It is possible that such examples represent a sort of intermediate stage between pied piping and preposition stranding.

It is unfortunate that our late fourteenth century texts are so heavily influenced by French, a language which does not permit preposition stranding. Chaucer and Lydgate show tremendous French influence in their lexicons, and the Brut belonging to this period (edited by Brie), which shows no preposition stranding in the constructions discussed, is translated from the French Brut d'Angleterre. It seems very probable that preposition stranding in the language of those not speaking French was much freer than these works indicate. At any rate, by the end of the fifteenth century, preposition stranding in movement rules was firmly rooted, and we find examples in nearly all texts:
(25) That mervayle we off

$$
\text { Malory VIII p. } 447.5
$$

(26) Yet made he an heed to speke which answerd of alle that whiche he was demanded of (Yet he made a head which answered all things that which he was asked of)

Caxton XIII. 48
(27) and what jouparte I have been in (and what jeopardy I have been in)
(28) \& so to Lorayn, de place wher she come first fro (and so to Lorraine, the place where she first came from)
B.Brut G.512.3

It was not until the seventeenth century, when writers looked to Latin as their model, that the modern prejudice against preposition stranding (not only in wh-relatives and questions, but also in that relatives, where preposition stranding has always been possible) set in.

How can the changes in preposition stranding in Middle English be accounted for? One possibility, and the one which I will adopt, is that in Old English there was a prohibition against movement, but not deletion, of NP out of PP. Assuming that de relatives, infinitival reiatives, and other constructions in which there is a gap, but no surface evidence of movement, involve deletion, rather than movement, we can account for the preposition stranding in Middle English as being the result of the loss of the prohibition against movement out of PP. This approach will be argued for in Chapter Nine, where two other approaches to the preposition stranding facts will be considered. For the moment, let us assume that the approach adopted here is correct, and consider what might have brought about the change in preposition stranding in Middle English.

### 5.2 Possible Causes for the Changes

### 5.2.1 The possibility of Scandinavian influence. The modern

Scandinavian languages all have preposition stranding in movement rules, and since England was subjected to repeated invasions by Danes and Norwegians, one might propose that it was Scandinavian influence which
brought about the freedom of preposition stranding in English. Let us now consider the extent of Scandinavian influence and the plausibility of attributing English preposition stranding to it. ${ }^{6}$

In 850 there were invasions by large armies of Danes and Norwegians and extensive settlement in the eastern part of England by the invaders. In 878, King Alfred managed to subdue the invaders, who were then confined to eastern England, which became the Danelaw, subject to Danish rule. The Danish incursions continued until the early elevenih century, and a Danish king, Cnut, even occupied the English throne in 1014. Soon after the restoration of the throne to the English, the Norman invasion put an end to further Danish invasions. Since there was a large population of Scandinavians in eastern England for an extended period, the question arises as to whether Scandinavian influence may not have played a role in the introduction of preposition stranding into movement rules in English. The plausibility of this hypothesis is enhanced by the fact that the Danish and English languages were very similar, making borrowing from one to the other easy. That the Danish language did have a strong influence on English is shown by the fact that English borrowed very basic words, such as deyy "they" 7 from Danish. Therefore, the possibility that preposition stranding was borrowed from Danish deserves attention.

First let us consider the possibility that Danish was responsible for the stranding in de relatives in 01d English. Since our oldest English texts are from after the first invasion (the first taking place in 787), this is not out of the question. Unfortunately, the oldest
lengthy Scandinavian texts date from the twelfth century, so we do not know exactly what the syntax of these languages was like during the old English pcriod. Let us assume for the sake of argument that it was not significantly different from that of the 01d Norse sagas of 1150 through 1350. In these sagas, there is preposition stranding in the relative clauses which use an indeclinable relative particle es: ${ }^{8}$
(29) $\ldots$ sa madr es hann tok arf efter (the man rel he took inheritance after=the man that he took inheritance after)

$$
\text { AM } 315 \text { D 2:9 }
$$

(30) ...pat es hann styGvesc wid (that rel he would be offended with=that which he would be offended with)

Holm 15
Could this have influenced the similar English construction with de? The answer seems to be no. Most Old English texts are written in the West Saxon dialect, but it was precisely in Wessex that Danish had the least influence, since Wessex was the stronghold against the invasions. During the Old English period, Scandinavian loan-words were generally limited to the northern and eastern dialects, and we would expect that where lexical influence is small, syntactic influence will be even less.

In the eleventh century, when the Danes were becoming assimilated with the English, Danish influence was more persuasive. Although the eastern and northern texts exhibit the largest number of loan-words, even the southern and western manuscripts have some. Nevertheless, there is no reason to attribute the spread of preposition stranding in the thirteenth century to Scandinavian influence, for two reasons. First, it appears that Danish of the eleventh century did not have prepo-
sition stranding in questions or relative clauses with pronouns. of course, the earliest texts are from a century later, but let us assume for the sake of argument that the Scandinavian languages did not change significantly during this century. At any rate, it is most unlikely that they changed from having such preposition stranding to not having it, and then back again in modern times. In Blaisdell's study of prepositions in 01d Norse, he gives examples of preposition stranding is es re?atives and in comparatives, but none in questions. He does not specifically say that there are no examples in questions, but since he is only concerned with what does not appear, the question of preposition stranding in questions is not mentioned. It seems certain that if such examples existed in the texts he examined, he would have included them. Therefore it appears that preposition stranding in the Scandinavian languages at this time was restricted in the same way as in 01d English, and cannot have been responsible for the change in Middle English.

The second consideration against Scandinavian influence is the fact that Early Middle English texts such as the Ormulum written in the very heart of the Danelaw and exhibiting many Danish loan words have no clear examples of preposition stranding in movement rules. Even supposing Danish did have such preposition stranding, these texts, which are the ones we would most expect to reflect Danish influence, show no such stranding. We therefore conclude that the spread of preposition stranding in English was parallel to a similar development in the Scandinavian languages, rather than derived from it.
6.2.2 Influence of the free relatives. If the spread of prepo-
sition stranding into new constructions is not to be attributed to foreign influence, we must look for a language-internal explanation for the facts. I believe that the loss of ihe prohibition against movement out of PP can best be attributed to the combined effect of a couple of the changes in the relative clause system which we have already discussed. We saw in Chapter five that in the thirteenth century two factors conspired to greatly increase the differences between free and headed relatives. First, the wh-pronouns, which had always been used in free relatives, began to be used in headed relatives. Secondly, the swa preceding the wh-word in free relatives dropped off, meaning that the complementizer swa following the wh-word, which used to be selected for by the first swa could be replaced by that, which could in turn be deleted. With no determiner before the wh-word and no complementizer after it in headless relatives, and with wh-words now being used in headed relatives, the free and headed relatives became superficially very similar.

We saw in Chapter Three that in 01d English preposition stranding was possible in free relatives which were "in place" and which were hypothesized there to involve deletion under identity to the head, which was the wh-pronoun. Since preposition stranding was possible in these relatives, and since these relatives were now superficially much more similar to ordinary wh-relatives, it would be very easy for a language learner, hearing preposition stranding in one construction with wh-pronouns, to extend preposition stranding to other constructions, such as ordinary relatives involving Wh-Movement. Once this step was taken, there was no
longer any evidence for a prohibition against movement out of PP. And when this prohibition was dropped, we would expect preposition stranding in not oniy relative clauses and questions, which used wh-words, but also in other constructions involving movement, such as Topicalization and Passivization. As we have seen, this is precisely what happened, since preposition stranding began to occur in all these constructions at pretty much the same time, as we have seen. It seems, then, that the morphological identity of the pronouns used in free and headed relatives may have caused the two constructions to be confused, bringing about preposition stranding in movement rules.

### 6.3 Conclusion

In this chapter we have seen how preposition stranding spread from constructions in which no movement was apparent on the surface into ones in which there was clearly movement. A possible explanation for this change, based on the new similarity of headed relatives, which formerly did not allow preposition stranding, and a type of free relative which did, was proposed. The possibility of Scandinavian influence was consiciered and ruled out.

In Chapter Nine the theoretical importance of the preposition stranding facts will be discussed, and the assumption that the 0ld English facts are to be accounted for by a prohibition against movement out of PP will be justified.

Footnotes to Chapter Six
$1_{\text {Visser }}$ (1963) makes a couple of statements which are inconsistent with this statement. First, he says (p. \#400):

When the relative pronoun is whom of (the) which the preposition is placed either before the pronoun or at the end of the clause. Both types are represented in English from the beginning of the Middle English period on.
Despite Visser's claim that preposition stranding occurs with wh-relatives from the beginning of the Middle English period, he fails to back up his assertion with examples. His first example of such preposition stranding is the sentence presented as example (2) of this chapter, which is from the early thirteenth century. I have searched the earlier texts listed in the Appendix and References here, and have found no earlier examples. Without examples, there is no reason to accept Visser's claim.

Concerning questions, Visser says (p. 406):
When an interrogative sentence or dependent clause opens with whom or what the preposition has end-position. The putting the preposition before these pronouns has always been less usual.
As it stands, this statement is grossly inaccurate. As noted, I have found no examples of preposition stranding in questions before the beginning of the thirteenth century. Perhaps what Visser means is that once the option of preposition stranding was available, it was then widely used in indirect questions. At any rate, the earliest example which Visser gives illustrating the point he is making here is from Shakespeare. In another place, he gives the example presented here as (1) in this chapter, which is from the beginning of the thirteenth century, and this is the earliest one I have found, either in the texts or in Visser's examples. Therefore, Visser's claims about preposition stranding are not to be accepted, unless relevant examples are brought forth. It is significant that Visser fails to give early examples here, since he generally gives a wide range of examples, including early and late ones.
${ }^{2}$ For a discussion of the possibility that the lack of preposition stranding in passives was due to a lack of "compound verbs" comprised of verbs plus prepositions, such as laugh at, see Chapter Nine.
${ }^{3}$ The manuscript from which these treatises are edited is unfortunately a later copy (c. 1430), so there is some possibility that the frequency of preposition stranding in this work is due to the work of the copier. However, a comparison of these treatises with others of Rolle's which are extant in a fourteenth century manuscript reveals that the earlier manuscript has similar examples of preposition stranding,
such as the following:
... and of contemplaytif lyfe, de whilk dou hase taken de till at mens syght
(and of contemplative life, which you have taken yourself to in the sight of men)
This example is taken from the fourteenth century MS Cambridge Dd V.64, edited by Horstman. We would at any rate expect less changes by a scribe in something like preposition stranding than in something like the form of the pronouns.
${ }^{4}$ Stranding in wh-relatives seems to be considerably more common than in questions in this period. This is probably because preposition stranding was also possible in that relatives. Preposition stranding aiso seems to have spread a bit more quickly in passives than in other constructions, which could be due to the fact that if the speaker wished to passivize the object of a preposition, he had no choice but to strand the preposition, since Passivization did not apply to prepositional phrases, but only to noun phrases.
${ }^{5}$ My data base here is small, as I have read only the first volume of Reson and Sensuallyte, so preposition stranding could be more common in Lydgate's work than my data indicates.
${ }^{6}$ The following facts are taken from Geipel (1971).
${ }^{7}$ In Old English, the third person plural pronoun was heo, identical with the feminine nominative singular pronoun.
${ }^{8}$ These examples are taken from Blaisdell (1959). Blaisdell's study is on Old Icelandic, not 0ld Danish, but the North Germanic languages were not greatly differentiated at this time, and we have no Danish texts before c. 1250.

# CHAPTERVII <br> THE SPREAD OF THAT IN SUBORDINATE CLAUSES 

### 7.0 Introduction

In this chapter we shall see how the complementizer daet spread in Middle English into types of subordinate clauses in which it was not found in Old English, and how it came to co-occur with wh-pronouns in questions and relative clauses in the fourteenth century. We shall see that the morphological identity of the rela-ive and interrogative pronouns in Middle English played a crucial role in the historical reanalysis of certain data. One of the main points brought out here is that contrary to the general assumption, the wh-that construction in Middle English (that is, the use of both a pronoun and that to introduce a relative or interrogative clause) cannot be a continuation of the Old English se de relative construction.

We will begin with a description of the distribution of daet in Early Middle English, see how this situation changed in the fourteenth century, and finish up with a discussion of the loss of that in many subordinate clauses.

### 7.1 Baet in Early Middle English

We saw in Chapter Three that in 01d English there was a gencrally clear-cut distinction between de and daet, with de being limited to relative or relative-like clauses, and daet introducing indirect statements,
clauses of extent and purpose, etc. However, we also saw that even in 01d English, daet was beginning to encroach upon de's territory, being used occasionally in relative clauses. In Middle English, daet began to appear in more relatives and also in different sorts of clauses. Let us first see how daet was used in relative clauses in Early Middle English. 7.1.1 Baet in headed relatives. In the twelfth century, daet, which was found only in a few types of relatives in 0ld English (see section 3.1.1.6), began to be used more generally as a relative marker, in competition with de. For a while, there was still some distinction between the two complementizers in relatives. In a study of the distribution of relative de and daet in certain late twelfth century texts, MacIntosh (1947) found that in the Peterborough Chronicle, de was used only with animate antecedents, while daet was used with inanimates. The obvious explanation for this fact is that daet was originally a neuter demonstrative pronoun, and was therefore frequently used as a relative complementizer with neuter antecedents in Old English, so when grammatical gender was replaced by natural gender in late 01d English, the use of daet was naturally extended to all inanimate antecedents. MacIntosh found, however, that the use of daet varied considerably in the different dialects. Gramnatical gender disappeared in the north and east before it did in the south, and as one might expect, there was a strong correlation between the loss of grammatical gender and the frequency of daet. In the Ormulumi, a northeastern text written around 1200, de has been completely replaced by datt. On the other hand, the Book of Vices and Virtues, written about the same time in the extreme south of the midlands,
has retained de, rarely using daet as a relative complementizer. Finally, in the Katherine cycle, texts of the southwest midlands, MacIntosh found that relative de was generally used after inanimate antecedents, and sometimes after plural inanimates (the reason for this presumably being that demonstrative daet was singular only). It was also used after a few inanimate singular antecedents, but mostly ones which were grammatically masculine or feminine in 01d English. On the other hand, det "that" was used after some animate, but grammatically neuter heads, in addition to being used with indefinite heads like alle, as in Old English, and also after antecedents which were either personal names or personal pronouns. Thus we see that although the facts are a bit fuzzy in some dialects, the distinction between relative de and daet (or det according to the dialect) in Early Middle English was basically an animateinanimate one. MacIntosh suggested that this distinction was important roughly between 1130 and 1230. After this, de was completely replaced by daet in relative clauses in all dialects.

It seems likely that the triumph of daet over de was due to the fact that daet, unlike de, was used as a complementizer in clauses other than relatives in Old English, so when its use as a relative complementizer increased, it had a much wider distribution than de. It was also used as a relative complementizer with temporal and indefinite heads in 01d English, widening its distribution in Middle English and giving it the edge over de, which had become the minority relative complementizer.

We saw in Chapter Five that the se de relative died out in the
twelfth century. ${ }^{2}$ I have found no examples of daet co-occurring with se in either 01d or Middle English. In the twelfth century, the se relative also died out and was replaced by the wh-pronoun relative. In Early Middle English daet did not co-occur with wh-pronouns, either in questions or relatives, but in the fourteenth century it did. We will see how this situation came about in section 7.2. Now let us see how daet behaved in free relatives in Early Middle English.
7.1.2 Baet in free relatives. Baet (and in the southern diaiects, de) first began to be found in free relatives with wh-pronouns in the thirteenth century. We have already noted this development in Chapter five, but let us review it here.

We saw in Chapter Three that in Old English free relatives involved an indefinite wh-pronoun preceded and followed by swa. This was true whether the pronoun was to be analyzed as being the head of the relative clause or as having been moved to the front of the clause. We saw in Chapter Five that this situation remained stable into the early twelfth century, but that by the beginning of the thirteenth century, the first swa was frequently dropped. By the middle of the thirteenth century, this swa was always dropped. Since the determiner swa (the first swa) selected for the complementizer swa, once the determiner disappeared in free relatives, there was no longer anything to force the complementizer swa to be used, and de or daet, the ordinary relative complementizers, began to be used in free relatives in competition with swa:
(1) Bonne de cumd eft sum euel oder sum ungelimp, an $\frac{\text { hwilces }}{\text { kennes wise de hit aeure cumd, ne gelief du naht. }}$ al swa $\frac{\text { kennes }}{\text { sume }} \frac{\text { wise }}{}$ de hit aeure cumd, ne gelief du naht. al swa
(When you comes then some evil or some misfortune, in whatever kind way that it ever comes, not believe you not as some=when some evil or misfortune comes to you, whatever way it comes in, don't believe as some...)

$$
\text { V\&V p. } 29.6
$$

(2) and whader unkere de maei of odere dat betere biwinne habben al dis oderes lond (and which-us-two that may of other the better win have al the other's land=and whichever of us wins the better of the other (shall) have all the other's land)
L.Brut 23597
(3) Hwo det bere a deorewurde licur... in a feble uetles...nolde heo gon ut of drunge bute gif heo were fol
(Who that bore a precious iiquid in a frail vessel, not would she go out in crowd but if she were fool=whoever bore a precious liquid in a frail vessel, she would not go into a crowd unless she were a fool)
A. Riwle p. 72.35
(4) $\frac{H w i l c h}{\text { du art }}$ harm oder $\frac{\text { hwilc }}{\text { wel }}$ ungelimp de de to-cumd, dench dat (Which harm or which misfortune that you comes, think that you are well worthy the evil-gen. =whatever harm or misfortune comes to you, think that you are well deserving of this)

V\&V p. 29.10
At the time when daet first began to be used in free relatives, swa was still used sometimes as a complementizer in these relatives:
(5) Be wilde bor ne mei nout buwen uorte smite hwam se ualled a dun
(The wild boar not may not bow for to smite whom so falls down=the wild boar cannot bow down to smite whomever falls down)

$$
\text { A.Riwle p. } 126.15
$$

(6) $\frac{\text { Hwam }}{\text { swo }} \frac{\text { din wille was te senden dis loc to ofrien, he was }}{}$ geherd
(Whom so your will was to send this sacrifice to offer, he was heard=whoever it was your will to send this sacrifice to offer, he was heard)

V\&V p. 85.22
(7) Hwat weole oder hwat wunne se der eauer of cume, to deore hit beod aboht
! What good or what pleasure so there ever of comes, too dear-

## ly it is bought=whatever good or whatever pleasure that comes of it, too dearly it is bought)

$$
\text { H.M. } 388
$$

(8) Whatt mann se wile cwemenn me, to winnenn eche blisse, datt ilke mann birrd draghenn fra gluterrnessess esstess (What man so will please me, to win eternal bliss, that same man behooves take from glutony's delicacies=whatever man will please me, to win eternal bliss, it behooves him to take himself from gluttony's delicacies)

$$
\text { Orm. } 11543
$$

At this time, both swa and daet were complementizers in these headless relatives, as evidenced by the fact that whenever the wh-pronoun was not the last item in the relativized NP (or head, as the case may be), they appeared after the last item, rather than directly after the wh-pronoun. We saw in Chapter Five that this situation changed in the fourteenth century, when so began to be reanalyzed as part of the relative pronoun.

The replacement of swa by daet in the free relatives led to a situation where the wh-pronouns and the complementizer daet frequently co-occurred. However, even though wh-daet was a possible combination in free relatives, it was still not possible at this time in headed relatives ${ }^{3}$ or questions. Before seeing how wh-that became possible in these constructions, let us see how daet spread into other constructions in Early Middle English.
7.1.3 Other subordinate clauses. As daet was replacing de in relatives, it was also replacing it in the sentential complements of prepositions (for a discussion of these in Old English, see section 3.3.2.1):
(9) Schrift shal makien dene mon alswuch ase he was biuoren det he sunege
(Confession shall make the man as such as he was before that
he sinned)
A.Riwle p. 136.11
(10) and halden dene wraecche a dat he for-wurde (and hold the wretch until that he dies=and hold the wretch
until he dies)
L.Brut 19488
(11) \& hu seinte peter efter dat he hefde forsaken him... was wid him isahtnet
(and how Saint Peter after that he had forsaken him was with him reconciled=and how Saint Peter, after he had forsaken him, was reconciled with him)
A. Wisse p. 171.26

As noted in section 3.3.2.1, in the Ormulum we find many examples of double datt after a preposition, with the first datt replacing the demonstrative pronoun and the second replacing de:
(12) Affter datt datt te Laferrd Crist de waterr haffde wharrfedd til win...for he widd hise posstless intill an oderr tun (After that that the Lord Christ the water had turned to wine went he with his apostles to another town=after the Lord Christ had turned the water into wine, he went with the apostles to another town)

$$
\text { Orm. } 15538
$$

(13) For durhh datt tatt teyy wolldenn ba gaen Godd wurrshipe winnenn, daerdurrh hemm oferrcomm de fend (For through that that they would both come against God honor win, therethrough them overcame the fiend=for through the fact that they would both win honor against God, through that the fiend overcame them)

Orm. 12372
For more examples, see section 3.3.2.1. This double datt construction is limited to constructions which in Old English had both a demonstrative pronoun and a complementizer. In other sentential complements of prepositions, such as the descendent of od daet 'until', which had only the complementizer in Old English, we find only one datt:
(14) Forr nollde nohht te Laferrd Crist beginnenn forr to spellenn...till datt he wass fullwaxenn mann

> (For not-would not the Lord Christ begin for to preach until that he was full-grown man=for the Lord Christ would not begin to preach until he was a full grown man) Orm. 10890

This indicates that the double datt construction is a continuation of the demonstrative+de construction. The Ormulum is the only text in which I have found this use of double datt. In other dialects of this period (the early thirteenth century) there is only one daet in these constructions. It seems likely that one daet was deleted in these dialects because of the phonological identity of the pronoun and the complementizer. Even in the Ormulum there are examples with only one datt alongside of similar double datt constructions:
(15) tatt he ne cneow himm nohht biforr datt he wass fullhtnedd (that he not knew him not before that he was baptized= that he did not know him before he was baptized)

Orm. 12692
In Orm's dialect, this deletion was optional, while in others it was obligatory. When this deletion became obligatory, there was no longer any reason to analyze these complements of prepositions as having nominal heads as in O1d English. For convenience, I repeat here the structure proposed in Chapter Two for such constructions in Old English:
(16)


When de was replaced by daet, and the demonstrative pronouns were also
levelled to daet in all cases in the singular, resulting in the deletion of one daet for phonological reasons, the language learner hearing before daet, etc. but not before daet daet, etc. must have analyzed this construction in a new way:
(17)


This reanalysis may have played a role in the spread of dact in to the complements of adverbs, such as now, since with the NP head no longer appearing in the complements of prepositions, such complements were now much more similar to the complements of adverbs than formerly.

Two other places where daet replaced de were the constructions da hwile de and deah de:
(18) For mi fader Uther mile dat he was king her louede swide his dohter (For my father Uther while that he was king here loved greatly his daughter)

$$
\text { L.Brut (Otho) } 22199
$$

(19) Be wile dat de worle steond me wole of him telle (The while that the world lasts men will of him tell=while the world lasts, men will tell of him)
L. Brut (Otho) 18850
(20) Whil datt gho wass widd hire kinn att hame, com Godess enngell
(While that she was with her kin at home, came God's angel) Orm. 2393

As examples (18) and (20) illustrate, wile was losing its determiner at this time.
(21) Banne arrt tu swa bikahht durrh himm dohh datt tu swa ne
wene (Then are you so caught through (i.e. by) him though, that you so not think= then are you so caught by him, though you do not think so)

$$
\text { Orm. } 12288
$$

(22) \& tohh datt Sannte Peterr wass aer borenn her to manne, dohnwheddre com he lattre till to fefenn uppo Criste (and though that Saint Peter was earlier born her as man, nevertheless came he later to believe in Christ=and though Saint Peter was born here as a man earlier, nevertheless he came to believe in Christ later)

$$
0 \mathrm{rm.} 13204
$$

Another construction in which daet began to appear was with da

## 'when':

(23) $\frac{\text { Do }}{\text { he }} \frac{\text { dat }}{\text { fond wit wa ayen dan euen so ha kam into de Marcatte so }}$ (When that it was approaching evening as they came into the market, so they found workmen that were idel=when it was approaching evening, as they came into the market they found workmen that were idel)

$$
\text { K.S. p. } 33.33
$$

(24) Bo dat de time com disne cnaue ich hadde (When that the time came, this boy I had)

Brut (Otho) 15729
This construction is a descendent of $O E$ da da "when." One da by itself usually meant "then," but could mean "when." It is difficult to determine how the 01d English da da construction should be analyzed. In particular, it is not clear how the second da should be treated. The da da construction was very similar to a locative construction with double faer:
(25) and afylde taet hus daer daer hi inne saeton
(and filled the house there where they within sat= and filled the house where they sat within)

$$
\text { Alc.P.XI. } 58
$$

(26) and ge secgad daet on Hierusalem si seo stow daer daer gedafenad to gebidenne
(and you say that in Jerusalem is the place there where it behooves to pray=and you say that in Jerusalem is the place where it behooves (one) to pray)

$$
\text { Alc.P.V. } 42
$$

It may be that these constructions involve reduplication, to distinguish the demonstrative da and daer from their subordinating counterparts. Whatever the origins of these constructions, in the twelfth century the second da became phonologically weakened to de:
(27) Ba de Crist gann arst to spellen, dat was, do de he giede fram flumen Iordan, da sade he... (When Christ began first to preach, that was, when he went from (the) river Jordan, then said he...)

ViV. p. 121.5
(28) Ba de iwepned wes de rahge da gon he to uarene When armed was the stern-man, then began he to $g o=$ when the stern man was armed, then he began to go)

$$
\text { L.Brut } 23787
$$

It seems probable that when daet began to replace relative de, it also replaced this de, which was not related to relative de, giving rise to da dat, as in examples (23) and (24). When da was replaced by its interrogative counterpart, we find hwan det:
(29) Bote mare schome du doledes hwen dat te sunefule men idi neb spitted
(But more shame you suffered when that the sinful men in your face spat=but you suffered more shame when the sinful men spat in your face)
T.Wohunge VI. 388
(30) alle da buffetes dat tu doledest ...hwen dat iudes scarioth brohte da helle bearnes de to taken
(all the buffets that you suffered when that Judas Iscariot brought the hell children thee to take=all the buffets that you suffered when Judas Iscariot brought the children of hell to take you)
T.Wohunge VI. 459

However, in most dialects the adverbial demonstratives were used as relative fronouns long after the other demonstrative pronouns were
replaced by the wh-pronouns in relatives. Chaucer, for example, frequently used there as a relative pronoun even though he never used demonstrative pronouns instead of whom, which, etc.
(31) And ther I lefte I wol ageyn bigynne (And where I left I will again begin)

$$
\text { Ch.A.Kn. } 892
$$

(32) Er that the wilde wawes wol hire dryve unto the place ther she shal arryve (Before that the wild waves will her drive to the place where she shall arrive=before the wild waves drive her to the place where she shall arrive.)

$$
\text { Ch.B.ML. } 467
$$

The temporal demonstrative pronoun did not last quite so long as a relative pronoun, but was still widely used in this function in the thirteenth century. Since hwan was not frequently used as a relative pronoun in that period, we find few examples of hwan dat.

So far, all the constructions with daet can be traced back to an 01d English ancestor with de, or else a construction which involved something later replaced by de, as with da de. Now, however, we come to a construction in which daet appears for no apparent reason. This is the if daet construction:
(33) Ac gif dat he forlost his wit donne is his redpurs al toslit (But if that he loses his wit, then is his idea-bag all slashed up=but if he loses his wit, then his idea-bag is all slashed up)

$$
\text { OW1 \&N. } 693
$$

(34) For giff datt tu forrwerpesst her din faderr \& tin moderr, du best forrworrpenn att te dom (For if that you despise here they father and they mother, you are despised at your judgement=for if you despise here your father and your mother, you will be despised at your judgement)
(35) Gef dat ha denched wel o de dom of domesdai... lihtlice nule ha nauwt folhi flesches licunge (If that they think well on the judgement of judgement-day, lightly not-will they not follow flesh's desire= if they think well on the judgement of the judgement day, they will not lightly follow the desire of the flesh)

$$
\text { A.Wisse p. } 63.2
$$

(36) Gef det tu wilnest were de muche wlite habbe, nim him of hwas wlite beod awundret-of de sunne \& te mone (If that you desire man that much beauty has, take him of whose beauty are astonished the sun and the moon=if you desire to have a man that has much beauty, take him of whose beauty the sun and the moon are astonished)

$$
\text { H.M. } 587
$$

It should be noted here that in the thirteenth century if that was almost entirely limited to conditional clauses, and did not generally appear in indirect questions, although if by itself did. This is in accord with the fact that that never appeared in indirect wh-questions until the very end of the thirteenth century. There are two counterexamples in the ormulum to this generalization about if that:
(37) Ba dreo kingess i deyyre dohht o Drihhten haffdenn bonedd, datt he deyym gaefe rad datt nahht durrh Halig Gastess rune giff datt teyy sholldenn oderr nohht eff wendenn till Herode
(The three kings in their thought on Lord had prayed that he them gave counsel that night through Holy Ghost's counsel if that they should or not again return to Herod= the three kings prayed in their thoughts to the Lord, that he give them counsel that night through the counsel of the Holy Ghost, whether or not they should return to Herod)

Orm. 7469
(38) Loc nu giff datt tu narrt rinht wod
(Look now if that you not-are right crazy=look now whether you are not right crazy)

Orm. 4676
Whether these examples are just mistakes, caused by the existence of if that in conditional clauses, or reflections of a real possibility
in the language, is difficult to determine. I incline to the former hypothesis for two reasons. First, it is only in this text that such examples occur in the thirteenth century, while if daet in conditional clauses is found in various other early thirteenth century manuscripts. The Ormulum is very long, and the fact that only two examples of this construction are found in it, as compared with a large number of conditional giff datt (such examples occur approximately every other page in this text) indicates that if this construction was grammaticai, it was at least very rare. Secondly, datt does not occur in any other indirect questions in the Ormulum including whether questions, semantically nearly identical to if questions. These facts seem to indicate that these two examples were merely the result of confusion of the two types of if. It seems likely that such confusion helped pave the way to the spread of daet into indirect questions and headed relative clauses. For more discussion along these lines, see the next section.

It is not completely clear why daet began to appear in conditional clauses at this time, since nothing which would be mistaken for if daet appeared in the data which the language learner of this period had to deal with (as far as we can determine from the texts). If daet must have been either a generalization from another construction or a deliberate innovation on the part of a group of speakers. It is possible that if daet was built on the analogy of deah datt. Such a generalization could have occurred at any point, but it may be that the replacement of de by daet facilitated the change, since now instead of being governed by fairly simple rules, the distribution of daet now depended in part on
lexical contexts, such as with da, destroying any simple guidelines for its use. Since there was no longer a simple rule to govern the use of daet, it was easier to extend daet to new contexts.

Because the facts about daet in the thirteenth century are complicated and vary from dialect to dialect, I include here a chart showing in what sorts of subordinate clauses daet and de occurred in the texts of this period, excluding those constructions in which these complementizers also occurred in Old English:
(39) That in subordinate clauses in thirteenth century texts
a. The Ormulum (c. 1200, N. E. Midlands)
giff datt (if)
till datt (until)
before datt (datt), after datt (datt) etc.
doh datt (al though)
while datt
1 possible free wh-relative with datt
Note: mostly swa in free relatives. Also, used the strong forms of the adverbial demonstratives-danne, daer, so no de or datt with these
b. The Book of Vices and Virtues (S. E. Midlands, c. 1200)
$\frac{\text { Dar }}{\text { da }} \frac{\text { de }}{}$ (where)
Eo de (though)
Hwich $N$ 日e (headless relatives. Note: only has de in head? ess relatives when the wh-word is separated from de by something)
Note: This text rarely has daet as a relative marker.
c. Layamon's Brut (Two MSS-A. is from West Midlands, c. 1200-25, but composition c. 1200. MS Otho is from S. W. Midlands c. 1250-75. Only facts from i MS A are given here)

```
a dat (until)
da de, da da (when)
while dat
who dat, etc. (headless relatives-2 examples)
```

d. The Katherine Group (West Midland, c. \#1200. Since all the works in this cycle are of the same dialect (in MS Bodley 34), they are not differentiated here. See footnote 1)

Gef det (if)
hwil det (while)
$\frac{\text { after det, before det }}{}$
for hwon det (Note: there is some disagreement about what this means - "when" or "because")
hwa det, etc. (headless relatives -2 exariples)
e. Be Wohunge of ure Lauerd (West Midlands, c. \#1225)
gif det
$\frac{h w e n}{\text { hwil }} \frac{\text { det }}{\text { det }}$
hwil det
hwa det (headless relatives - 1 exaniple)
f. Ancrene Riwle (MS Nero A 14, West Midlands, 1225-50, composition C. 1200)

Biuoren det (before)
for hwon det
hwo det (headless relative - 1 example)
g. Ancrene Wisse (Independent version of Ancrene RiwleMS Corpus Christi Coll. Camb. 402, West Midlands, 1225-50)
gef det
efter det (after), biuore det (before)
for hwon det
hwil det
for di det (because-c.f. OE for dan de)
h. The Story of Genesis and Exodus (MS c. \#1300, composition c. 1250, East Midlands)
quan dat (when)
til dan dat (until)
quiles dat
i. The OWl and the Nightengale (SW Midland, c. \#1225-50, composition early thirteenth century)
gif dat
j. Kentish Sermons (Kentish, MS 1250-1300)

$$
\begin{aligned}
& \frac{\text { so }}{\text { for } \frac{\text { dat }}{\text { det }} \text { (when) }} \text { (because) } \\
& \text { k. Layamon's Brut (0tho MSS-see (c) above) } \\
& \frac{\text { wile }}{\frac{\text { dat }}{\text { do }} \text { (while) }} \begin{array}{l}
\text { dat } \text { (when) } \\
\frac{\text { dat }}{\text { dat. (headless relatives) }}
\end{array} \text { etc. }
\end{aligned}
$$

As far as I can determine, there is no structural explanation for the distribution of daet in the thirteenth century. The presence of daet in many cases stems from the replacement of some other complementizer, such as de or swa, by daet, leading to a very complex situation. Let us now see how this situation was simplified in the fourteenth century.

### 7.2 That in the Fourteenth Century

At the very end of the thirteenth century and the beginning of the fourteenth, we find the first instances of that in indirect questions (other than the two if that questions noted in the Ormulum) and headed relatives:
(40) Sone heo wende to hire fader and bad dat he ire telle scholde gwy dat he so mourninde geode
(Soon she went to her father and asked that he her tell should why that he so mourning went=soon she went to her father and asked that he should tell her why that he went so in mourning)

SEL 24.45
(41) Ban myght dey wyte redly what shame dat dey were wurdy (Then might they know readily what shame that they were worthy (of))
H.Synne 2139
(42) Ban askede he here, why dat hyt was dat she suffred swyche peyne
(Then asked he her, why that it was that she suffered such pain)
(43) ...a yong man wiche dat wowen hir bigan

A\&M. A. 770
(44) with a gastely syghte of it, how foule, how uggly, and how paynfull dat it es

Hampole XI.p. 35.7
(45) He tolde what day dat he shuld deye (i.e. die)
H.Synne 2335
(46) Vor der ne is non toyans huam det dou ne hest agelt (for there not is none against which that thou hast not sinned=for there is none agsinst which you have not sinned)

Ayen.p. 20.20
(47) And wyted wel huas det hi byed (And know well whose that they are)

Ayen.p.\#38
At the beginning of the fourteenth century, there are only sporadic examples, but by the middle of that century, such examples are quite common:
(48) I am she which that saved hath youre lyf Ch.D.WB. 1092
(49) And telle you, as pleynly as I kan, the grete effect for which that I bygan

Ch.A.Kn. 2481
(50) Tel me what that ye seken (i.e. seek)

Ch.D.WB. 1002
(51) Nat wot I wel wher that I flete or synke (Not know I well whether that I float or sink=I do not well know whether I am floating or sinking) Ch.PF. 7
(52) As for Britaigne \& Fraunce which dat he helde, odere truage he wolde none paie
(As for Britain and France which that he held, other tribute he would none pay=as for Britain and France which he held, he would not pay any other tribute)
B.Brut p. 87.30
(53) And after dai say to ham dat dai go into anoder contre, wher dat dai mowen leue (And $\frac{1}{\text { after that they said to them that they go into another }}$ country where that they might live=and afterwards they told them to go into another country where they might live)
B.Brut p. 50.27
(54) Coppa turnede ageyene to de host fro whens that he come (Coppa turned again to the host from whence that he came)
B. Brut p. 63.19
(55) For men weten nought wheder dat he leued or is dede (For men know not whether that he lives or is dead)
B.Brut p. 90.25
(56) ...dat noman wist who dat hade de better partie (that no one knew who that had the better part) B.Brut p. 90.13
(57) For that belongeth to thoffice of Prest. whos ordre that I bere

Gower CA 243
A plausible explanation for the spread of that into these constructions is that the wh-that found in free relatives was generalized to all wh-words. This is especially plausible in view of the fact that some free relatives involved movement, making them quite similar to headed relatives or questions. Hearing that in many types of clauses, and especially in free relatives, which began with wh-pronouns and seemed very similar to headed relatives and questions, the language learner's generalization was that that could appear in any subordinate clause. By extending the that insertion rule to insert that in any subordinate clause complementizer position, the language learner simplified the grammar and did away with the complicated distribution of that noted for the thirteenth century.

The fact that that begins to appear in relative clauses with heads and in indirect questions at the same $\operatorname{time}^{4}$ is evidence that in neither
of these constructions was wh-that a generalization from the other cunstruction, but rather, both are due to a single generalization of the that insertion rule to all subordinate clauses.

It was suggested in Chapter Three that the origin of the se de relative in preliterary 01d English was similar to that of the wh-that relative and indirect question in the fourteenth century; that is, it seems probable that the se de relative was the result of a reanalysis of the type of relative clause with a demonstrative pronoun as its head. It is interesting to note here that in Old English there was no generalization of de to indirect questions; questions with wh-de are not found in 01d English. It seems very likely that the differerce has to do with the fact that in Old English the relative pronouns were quite distinct from the interrogative pronouns, while in Middle English they were morphologically identical. In Old English, the environment for deinsertion was (58):
(58) $\quad W_{1} \begin{array}{cc}(\overline{\bar{X}}) & \begin{array}{l}\text { Comp } \\ \text { +dem }\end{array}\end{array} W_{2} \quad \begin{aligned} & \text { where Comp is in a } \\ & \text { trel }\end{aligned}$

If de nad been generalized to all subordinate clauses, this environment would have been slightly simpler, omitting the feature +dem and $+r e l$, but there was no reason for the language learner to make such a sweeping generalization from his data. In Middle English, on the other hand, with the language learner hearing wh-that in relatives, it was easy to generalize to all wh-words, and since that was also already found in many other types of clauses, the complicated thirteenth century environment for that insertion was simplified to (59):
(59)

$W_{1}$ Comp $W_{2} \quad$| where Comp is in a |
| :--- |
| subordinate clause |

### 7.3 Demise of the Wh-That Construction

The wh-that construction was thriving in the middle and late fourteenth century. In the works of Lydgate, that is found in all sorts of subordinate clauses:
(60) For thingys which that be dyvyne unto deth may nat enclyne (i.e. give way)

$$
\text { Lyd. R\&S } 4671
$$

(61) For Palla, which that ys goddesse, and of wevyng (i.e. weaving) chef maistresse, wrought hyt

$$
\text { Lyd.R\&S. } 1161
$$

(62) to deme lych thy fantasye wher that Paris, to thyn entent, gaf a ryghtful Iugement (to judge according to your opinion whether that Paris, to your mind, gave a rightful judgement)

Lyd.R\&S 2065
(63) For the nerer that they went, ay the more her herte brent (For the nearer that they went, ever the more their hearts burned)

Lyd.R\&S 2954
(64) I shal shortly specefye what that I am Lyd.R\&S 2954

Such examples are also common in the early fifteenth century. By the end of the fifteenth century, however, wh-that was much less frequently used than a century ear!ier. Mustanoja (1960) notes that the combination which that became rare by the end of the fifteenth century. Caxton's and Malory's works show a few examples of that in headed relatives and indirect questions, but the examples are much rarer in these works than in those of the late fourteenth and early fifteenth centuries.

While that was disappearing in headed relatives and indirect questions, it was still very common in some other constructions. It still occurred frequently with after, before, though, lihile, etc. In the Tretyse of Love (translated from French in 1493), there are no examples of wh-that in indirect questions or headed relatives, but examples of after that, etc. abound:
(65) Now sease ye your wepynges and your sorowes, fayr swete moder, syth that I goo now to my fader (Now cease you your weeping and your sorrows, fair sweet mother, since that I go now to my father)

Tretyse p. 61.36
(65) I am lefte allone wythoute comforte tyll that I be passed oute of this mortall lyf

Tretyse p. 55.28
(67) Though that I coude speke wy tongue of angell \& man...all thys shuld nothynge profyte

Tretyse p. 2.11
(68) Haste you to go oute of sodom, for befor that ye be gone may I do them none harme

Tretyse p. 6.3
(69) $\frac{\text { The ofter that }}{\text { fynde in theym }}$ ye beholde them the more of fruyte ye shal Tretyse p. 126.1
Poutsma noted that these combinations occur roughly to the end of the seventeenth century (see also Keyser (1975)).

One fact about the disappearance of wh-that which is not generally noted is that that was still frequently found in headless wh-relatives when it had disappeared in headed relatives and in indirect questions. In the Tretyse of Love (late fifteenth century) we find many instances of free relatives with wh-that:
(70) And who that is wythoute mercy \& pyte, god wyll haue noo
mercy nor pyte on him
Tretyse p. 74.21
(71) Who sholde ete ouermoche by wyll or custome, or drink wherby that the naturel forces of the soule or body sholde be destourbed...
(Whoever should eat too much by will or custom or drink anything by which the natural forces of the soul or body
should be disturbed...)

Tertyse p. 99.25
(72) Fyrst who that entendeth to be proude, bethynke him of the grete humylite of our lorde Ihesu cryst Tretyse p. 90.15
That was also still used frequently at this time in indefinite comparatives, as in example (69). In the texts which have a few, but not many instances of wh-that in indirect questions and headed relatives, such as Caxton's and Malory's works, that is found much more frequently in headless relatives and indefinite comparatives than in the former constructions.

How can we account for the facts in texts like the Tretyse of Love? Keyser (1975) suggested that in the stage where wh-that did not occur, but after that, etc. did, English had the following output condition:
(73) No clause may contain a relative pronoun directly followed by that

This constraint may work for a later stage (i have not investigated that in subordinate clauses weyond the end of the fifteenth century) but it clearly does not account for the facts in the Tretyse, since this constraint would also incorrectly rule out that in headless relatives. The restriction on that in this period depends on other factors than just surface strings.

One way in which headless relatives differ from headed ones is that the wh-pronoun in the headless relative behaves semantically as the head of the clause, even if it is not structurally the head, as in the movement free relatives. It may be that during this period, that could be inserted into a non-clause-initial complementizer position just in case the phrase preceding the complementizer behaved semantically as the head of the clause. Such an approach would also account for why that appeared in the first conjunct of indefinite comparatives, since this construction is very relative clause-like, and the fronted item is semantically the head of the clause. For discussion of these comparatives, see Chapter Four and Chapter Eight.

As for after that, before that, etc. it seems probable that in these constructions the word preceding that is part of the higher clause. We can characterize the two stages in the loss of that by saying that at one stage, that could be inserted in any clause-initial complementizer position (and non-initially following a head-like phrase) while in another stage that became limited to occurring in the complements of verbs and noun phrases. Even in Modern English, however, the distribution of that does not follow absolute rules, since there are lexicallygoverned exceptions to the general rule that that may not occur in the complements of adverbs, such as now that. Al so notice that in Modern English, that sounds much better in certain relative clauses and indirect questions if it is separated from the wh-word by a sizable amount of other material:
(74) a. *Tell me who that she likes best.
b. ?Tell me which of those three men that she liked best
(75) a. *I gave him what that I could find.
b. ?I gave him what leftover turkey and cranberry sauce
that I could find.

While the (b) examples may not be completely grammatical, they are markedly better than the (a) examples, and I have noticed that such examples occur fairly often in speech. A possible perceptual explanation for this difference is that when the relativized or question item is lengthy, it is helpful to have something to signal the beginning of the subordinate clause.

The facts discussed here for Middle English can be accounted for by the addition in English of an obligatory that deletion rule or a surface filter (such as a modified version of Keyser's output condition), but we are left with the question of why such a rule or constraint should enter the language. I must confess that I have no idea of why this happened. I would, nevertheless, like to comment briefly on one proposed explanation for the disappearance of wh-that.

Bresnan (1972) suggested that the loss of wh-that might be connected with the development of for from a preposition to a complementizer. She suggested that in Middle English, that was not a full-fledged complementizer, but only some sort of marker of subordination which could occur with complementizers. When for became a complementizer, that also became a full complementizer.

It is not unreasonable to suppose that one change in the complementizer system, the introduction of for as a complementizer, may have
been involved in another change, the loss of wh-that, and it is true that these changes did take place at approximately the same time (although wh-that did appear occasionally in headed relatives and indirect questions in texts where for first behaves like a complementizer). However, it is not clear just why the use of for as a complementizer should cause that to become a complementizer. Furthermore, there is little reason to believe that that was not a complementizer in Middle English. It was clearly one in 01d English, and did not co-occur with interrogative or question pronouns in that stage of the language. It would be quite odd if that changed from being a complementizer to not being one and then back again.

One consideration against attempting to connect the loss of whthat to the emergence of the for complementizer is that such an explanation cannot be correct for a similar change in Dutch. In Middle Dutch, dat 'that' could be used in both indirect questions and pronominal relative clauses:
(76) In een uutgehouwen graf, in dien dat noch niemant gheleit was.
(77) Haers sceppers met wien dat si keren ter glorien.
(78) Dat ghi moghet sien ende horen, wanen dat ghi sijt gheboren
(79) Daer wildi weten weder dat die beelden waren so hol so vol.
(80) Te vraghene wie dat hi ware.
(These examples are taken from Stoett (1923)). These constructions are no longer possible in standard Modern Dutch. In Modern Dutch, while there is a construction similar to the for-to construction, subjects
never occur with the equivalent of for (om):
(81) Deze berg is te gevaarlijk om te kunnen beklimmen (This mountain is too dangerous to be able to climb)
(82) *Deze berg is te gevaarlijk om jou te kunnen beklimmen (This mountain is too dangerous for you to be able to climb)

Example (81) is taken from van Riemsdijk (1977)). Thus there is no reason to suppose that om is a sentential complementizer in Dutch, so it is unlikely that the loss of wh-dat in Dutch was due to the introduction of om. The situation in Modern Dutch is similar to that of for in Middle English. There is every reason to assume that for was not a complementizer in Middle English in the for-to construction, since it never occurred with subjects (in early Middle English) and was frequently preceded by the object of the infinitive:
(83) E wende dat he ilad weore limen for to leose (He thought that he led was limbs for to lose=he thought that he was being led (away) to lose his limbs)

Brut 15636
(84) For he dude him seoluen bitweonen us \& his feader de dreatte us forte smiten (For he put him self between us and his father that threatens us for to smite=because he put himself between us and his father, who threatens to smite us)
A.Wisse p. 187.3
(85) He badd himm brinngenn aenne cnif an appell forr to shraedenn (He bade them bring a knife an apple for to pare=he bade them bring a knife to pare an apple (with)

$$
\text { Orm. } 8117
$$

It may be that for in Middle English and Dutch om are VP complementizers, but it is clear that the rise of such a complementizer in English had nothing to do with the loss of wh-that, since this sort of for-to was exceedingly common long before wh-that first appeared. Thus,
it appears dubious that the demise of wh-that had anything to do with the emergence of for as a complementizer.

### 7.4 Conclusion

To conclude this chapter, we have traced the spread of that into various types of subordinate clauses in Middle English, and have found that no clear-cut generalization about the distribution of that can be mate for any stage, except the one in which that could appear in any subordinate clause. It was demonstrated that the appearance of that in indirect questions and headed wh-relatives cannot be a continuation of the Old English se de pattern, as is generally assumed, because the se de relative died out by the beginning of the thirteenth century, while the wh-that headed relative and indirect question did not appear until the beginning of the fourteenth century. An alternative explanation based on the replacement of swa by that in headless relatives and the new morphological identity of the pronouns in headed and free rela tives was proposed. Since various Germanic languages have had at some time in their history a construction similar to the wh-that construction, and some, such as Swedish, still do, it would be worthwhile to investigate the origins of these constructions in these langauges to see if a similar explanation is plausible for them. An investigation of languages such as Dutch which have also lost this construction might help shed light on the question of why wh-that was lost in English, if some similar condition in the two languages at the times of these changes can be found.

Footnotes to Chapter Seven
${ }^{1}$ The Katherine cycle is found in MS Bodley 34 (c. 1210, probably Herefordshire) and consists of the following works: St. Katherine, St. Margaret, St. Juliana, Hal i Meidhad, and Sawle's Warde.
${ }^{2}$ I have found one example of a se de relative in the Book of Vices and Virtues:
on da hali drinnesse, se de is on sod godd in onnesse, se de lived and rixed aure ma a woreld
(in the holy trinity, which that is one true god in eternity, which that lives and reigns ever more to world (i.e. forever))
However, this was a standard closing in Old English, being a translation of the Latin doxology, and so was a stock phrase. This example no more indicates that se de relatives were a part of the language of this time than the line our Father which art in Heaven, still used in the Lord's Prayer, indicates that which is still used with human antecedents or that art is a living verb form.
${ }^{3}$ Even though I am assuming that some free relatives have (wh) heads, I will use "headed relative" to refer to relatives with fulT noun phrase heads and "free relative" or "headless relative" to refer to those with wh or demonstrative pronominal heads.
${ }^{4}$ That seems to be more common in indirect questions than in headed $\frac{\text { wh }}{\text { relatives }}$ in the earlier texts. This may be due to the fact that at this time, the wh-words were still not as common as relative markers as they became in the later fourteenth century, a simple that being the more frequent relative marker.

# CHAPTERVIII <br> CHANGES IN COMPARATIVE CLAUSES 

### 8.0 Introduction

Comparative clauses in 01d English were discussed in Chapter Four. In this chapter we will see a couple of ways in which comparative clauses changed in Middle English. Section 8.1 is a discussion of the arrival of the analytic comparative, and section 8.2 traces the history of the proportional comparative to Late Middle English.
8.1 The Advent of Analytic Comparatives in Middle English

We saw in section 4.1.2.2 that in Old English adjectives were compared only synthetically, by means of the suffix ra (Modern English er). Ma "more" and laes "less" were not used to compare adjectives. In Middle English, this situation changed, almost certainly because of $F$ French influence. The normal comparative in Middle French, as in Modern French, was an analytic one. According to Ewert (1933)(p.135):

The Comparative and the Superlative were normally expressed in Classical Latin by means of synthetic forms (Major, Maximus, etc.). In Vulgar Latin the analytic forms consisting of the adverbs Magis or Plus+adjective, which were rare in Classical Latin, are gradually extended, and plus+adj. is the regular form in 01d French. This development is in accord with the general analytic trend of the language.

In the early thirteenth century we find a very few analytic comparatives in English texts. There is one analytic comparative in the Ancrene Riwle, as opposed to 88 examples of comparatives with er. In

Hali Meidhad there are 26 instances of er comparatives and one more comparative. The situation is similar with superlatives; 29 with est in the Ancrene Riwle and one with most. In Hali Meidhad there is only one of each. The Ancrene Riwle also has one instance of less+adjective. St. Juliana has seven er comparatives and seven est superlatives, with no more or less comparatives, and one most superlative.

In the fourteenth century the use of the analytic comparative increased greatly. In Perry's collection of the prose treatises of Hampole, there are none er comparatives and fifteen more comparatives, and four est superlatives as opposed to eight with most. Strang (1970) has pointed out that when the analytic comparative first began to be commonly used, there was no rule concerning number of syllables for the use of more and er, as there is in Modern English. In Chaucer's works, for example, we find more brode "broader", but unworthiest and rewefulleste "most rueful", etc.

At the same time when analytic comparatives and superlatives were coming in with more and most, they were also appearing with less and least. In Chaucer's works we find lesse wondirful, lasse fre (free), lasse mannish, leest worthy, leest agast, and leeste grevous, among others.

The timing of the increase in the use of analytic comparatives follows that of the increase in Frerich loan words in English. In a study of the number of French loan words in the different periods of Middle English, Jesperson (1905) found that the highest rate of borrowing is found between 1251-1400. Baugh (1957), elaborating on Jesperson's findings, says (p. 214),

For a hundred years after the Conquest there is no increase in the number of French words being adopted. In the last half of the twelfth century the number increases slightly and in the period from 1200 to 1250 somewhat more rapidly. But it does not become really great until after 1250 . Then the full tide sets in, rising to a climax at the end of the fourteenth century. By 1400 the movement has spent its force. A sharp drop in the fifteenth century has been followed by a gradual tapering off ever since.

Jesperson notes that his findings demonstrate that the linguistic influence of French on English did not occur immediately after the conquest. Baugh notes further that 'It is a striking fact that so far as surviving records show the introduction of French words into English follows closely the progressive adoption of English by the upper classes. ${ }^{1}$ It was not until the group of people who had been speaking French adopted English that French made a significant imprint on the language. This fact should be kept in mind whenever the question of whether a construction is due to French influence arises.

Now that we have seen a plausible reason for why Modern English has two types of comparatives, let us consider how the French analytic comparative was assimilated into English. The upper classes newly speaking English presumably alternated between the French and the English type, and the new generation of language learners, ignorant of the fact that one type was alien to English, had to assign some sort of analysis. Two possible analyses for more and less at this stage come to mind. First, there could be determiners of adjectives like so and too, since they appear in some of the same environments, as in much too intelligent, much more intelligent, etc. Jackendoff (forthcoming) proposes such an analysis of more and little for Modern English. Jackendoff further proposes that
more and less are always determiners (or in his terminology, "degrees"), even in quantifier phrases. For more bread, for example, he proposes the underlying structure:
(I)


The motivation for supposing that more is a degree in quantifier phrases is that Jackendoff wishes to give parallel structures for all nodes of the same level, such as $Q^{3}$ and $A^{3}$. There is no independent motivation for this structure, as far as I can see, and it necessitates the postulation of an underlying quantifier much which must be deleted by ad hoc rules turning more much and more many into simply more, etc.

Whether or not Jackendoff's analysis of the more appearing in compared quantifier phrases is correct or not for Modern English, it is clearly incorrect for Old English, since in Old English there is no evidence that ma or laes were degrees on adjectives. Since ma and laes were only found in quantifier phrases, it seems better to analyze them simply as the compared form of the quantifiers in Old English.

In the fourteenth century, then, it could be that the child learning the language, hearing more as the comparative form of the quantifier
and also hearing it before adjectives, analyzed more (and less) as compared quantifiers in all cases. There does exist evidence that more and less were not degrees at this time. First, more and less sometimes separated from the adjectives which they modified, while the degrees too and so did not:
(2) Hy moye wene det more byed zuete an lostuoller de guodes det comed by de bodye
(They may know that more are sweet and pleasant-er the goods that come by the body=they may know that the goods that come of the body are sweeter and more pleasant)

Ayen.p. 92.24
(3) Vor de more dat de guodes byed greate, de more zoryed de envuious
(For the more that the goods are great, the more sorrows the envious=for the greater the goods are, the more the envious sorrows)

Ayen p. 28.26
(4) Ac more is worse wydstondinge
(But more is worse rebellious conduct=but rebellious conduct is (more) worse)

Ayen.p. 28.26
In (3), de more is moved out of the adjective phrase containing greate by the descendent of the Swa Movement rule, which will be discussed in section 8.2. It seems more plausible that this rule moved a quantifier phrase consisting of de more rather than the quantifier, or QP determiner de, and a degree or determiner, more. In (2) and (4), more is simply participating in the general ability of $x^{3 /}$ s containing other $x^{3}$ 's to break up. Note that in (4) we have a double comparative, using both the suffix er and more. This type of comparative will be discussed presently.

The second consideration against analyzing more and less as degrees during this period is that at this time we find examples of non-
compared quantifiers appearing with adjectives:
(5) Thy request is not too mochel dishonest (Your request is not too (much) dishonest) Ch.R.R. 3442
(6) I am so litel worthy

Ch.Comp.L. 88
(7) and to muche defouled

Ch.I.Pars.270-5
(8) ...so moche embosed

Ch. BD. 353
(9) And saynt Iob det wes zuo moche grat (And Saint Job that was so (much) great

Ayen.p. 137
(10) to libbe ine werre and wyyte mid dyeulen det zuo moche byed wyse
(to live in war and fight with devils that so much are wise=to live in war and battle with devils that are so wise)

Ayen.p.131.8
(11) Hi ne moye $y$-wyte how moche det hi weren uayre
(They not may know how much that they were fair=they may not know how fair they were)

Ayen.p. 126.24
Assuming that more and less were analyzed as quantifiers, we could explain this fact by saying that because compared quantifiers could appear with adjectives, other quantifiers could; that is, the general restriction against adjectives taking quantifier phrases was loosened. The problem is to explain why this restriction is back in force in Modern English. It could be that quantifiers (except compared quantifiers) before adjectives were always somewhat artificial, and that after a period of flux, a modified restriction, allowing only compared quantifiers before most adjectives, won out, or else that more and less were later re-
analyzed as degrees, and the restriction against quantifiers before adjectives won out. Another possibility is that what we are really observing with these differences in too much tall, etc. is a dialect difference, and that too much tall was never possible in some dialects. Due to limitations of time, I have not closely observed these phenomena in the fifteenth century, and it would be helpful to look more closely at the dialects of the fourteenth century, as well as those of later times, to see how long quantifiers before adjectives remained. The point here is that if it is true that the rise of too much tall, etc. is to be connected with the advent of more tall, it is difficult to see how they could be connected if more were a degree, but the connection is straightforward if more was a quantifier.

Note that in examples (9) and (10) the quantifier phrases are separated from the adjectives they modify in just the same way in which we saw that more could be separated from the adjective it modified. This parallelism between quantifier phrases and more is further evidence for analyzing more as a quantifier.

It is interesting that during the period when quantifiers were first being used in comparatives with frequency, we often find "double" comparatives employing both more (and sometimes even less) and er:
(12) ...the moore gretter the merite

$$
\text { Ch.I.Pars. } 525-30
$$

(13) Mare gratter noblesse ne may ich habbe (More greater nobility not may I have=greater nobility I may not have)

$$
\text { Ayen.p. } 100.25
$$

(14) For loue is more stranger danne drede (For love is more stronger than dread)

Such examples seem to be particularly common in the Ayenbite of Inwit, a Kentish work written in 1340.

Given the assumption that more was a quantifier, rather than a degree at this time, the $A^{3}$ in example (12) would have the following structure:
(15)


In fact, there is no syntactic way to rule out such structures with the assumptions we have made. The question arises as to how such combinations are to be ruled out in Modern English. It could be that some structural change came about which prevented them, but it seems more likely to me that they died out merely because they were redundant. Even supposing more were reanalyzed as a degree after the fourteenth century, more taller should still be structurally possible if er is not also a degree, as we are assuming. It seems probable that more tireder, etc. appear in the fourteenth century because the comparative system was in flux at this time, with more and less before adjectives still being an innovation whose exact role remained to be defined. Strang (1970) has pointed out that such combinations are conmon when a new construction
enters a language. Once moretadjective became a real part of the grammar, the role of the compared quantifier in comparing adjectives became defined more clearly, and double comparatives died out. This is all very speculative, since I have not checked on how long the double comparatives lingered in the language with any frequency. I know that some examples are still found in Shakespeare's works:
(16) The enuy of lesse happier lands (The envy of Tess happy Tands)

Shaks.Rich.II.i. 49 (OED)

I do not know how common such examples were at this time. It would be interesting to see how long the double comparative remained, and whether the loss of this construction correlates at all with the loss of too much tired, etc.

We saw in Chapter Four that there is no motivation for positing a rule of Much Deletion for adjective phrases corresponding to too tall, etc. in Old English. There is also a telling argument against positing such a rule for Nodern English, as proposed by Bresnan. Andrews (1975) noted that while Nuch Deletion can account for the ungramaticality in Modern English of too much tall, etc. it cannot account for the ungrammaticality of too little tall. There can be no rule of Little Deletion to rule out such sequences, because such a rule would involve unrecoverable deletion, and too tall could be derived from too little tall, involving a very drastic change in meaning. Furthermore, the same adjectives which allow themselves to be modified by much also permit modification by little: much alike, little alike, much different, little different, etc. This fact demonstrates that much and little before most adjectives
should be ruled out by the same mechanisms, and allowed for the same reason before the exceptional adjectives such as alike and different. Andrews suggested a filter preventing quantifiers from modifying adjectives. The adjectives which are exceptions to this filter will naturally permit both much and little to modify them, accounting for the fact that all adjectives allowing much also allow little. However, there are also problems with this approach, such as the fact that this filter has to be ordered between a couple of transformations, which we need not go into here. Jackendoff (forthcoming) proposes another solution to this problem. He suggests that most adjectives do not permit quantifiers as modifiers in deep structure, but alike, different, etc. do. Whatever the exact mechanism for ruling out quantifiers before most adjectives, and allowing them before the exceptional ones, the point here is that there is reason to reject a rule of Much Deletion for Modern English, even though English apparently went through a stage in which much and little could modify adjectives.

This concludes our discussion of changes in the heads of comparative clauses. The discussion has been very sketchy and speculative due to the fact that I have not had the opportunity to collect much data in this area, but the facts I have discovered are presented here with the hope that they may be of use as a starting point for further research.

### 8.2 Changes in the Proportional Comparatives

In this section we will see how the Oid English swa... swa type of proportional comparative changed into the Modern English the...the type
comparative. We will see that there was at least one dialect difference with respect to this type of comparative in Middle English.

Let us first briefly review the facts about 0ld English proportional comparatives which were presented in section 4.2.2.2. "Proportional comparative" was the term we vere using to describe comparatives in which the idea of one quantity increasing or diminishing in proportion to changes in another quantity is expressed, as in Modern English the more Hortense revised her thesis, the longer it got, and so on.

We saw in section 4.2.2.2 that in Old English, proportional comparatives were formed by means of a rule of Swa Movement which moved an $x^{3}$ containing the determiner swa. I repeat here for convenience example (65) of Chapter Four to illustrate the rule of Swa Movement:
(17) for don swa micle swa he laes haefde, swa micle hie waeron beteran \& maran (because as much as he less had, so much they were better and greater=because the less he had, the better and greater they were)

Oros.V.XIII.p.246.8
We saw that the rule of Swa Movement involved in these proportional comparatives was the same rule needed to derive swa comparatives not involving proportions or movement in the main clause, but involving movement in the subordinate clause, as in example (58) of Chapter Four, repeated here as (18):
(18) And daet tacn was da swa micel on geleafullum mannum, swa micel swa nu is daet halige fulluht (And that token was as great in faithful men, as great as now is that holy baptism=and that token was then as great among faithful men as baptism is now)

$$
\text { Alc.Th.Vol. } 1 \text { p. } 94.1
$$

We further saw that in Old English, de "the" was a quantifier
(or at least part of a quantifier phrase), although it did not participate in proportional comparatives, as it does in Modern English. I repeat here example (1!2) of Chapter Four to show how de was used:
(19) Swa bid eac micle de winsumre sio sode gesaeld to habbenne (So is also much the $\frac{\text { pleasanter the true happiness to have= }}{\text { a }}$ so is the true happiness much the pleasanter to have)
Boeth. XXIII p.52.7

Finally, we saw that sometimes it appeared that only swa had been moved to the front of the sentence:
(20) and swa he mare haefd swa he graedigra bid (and as he more has, so he greedier is=and the more he has, the greedier he is)

$$
\text { Alc.Th.Vol. } 2 \text { p. } 220.9
$$

We noted that it was not possible that only the determiner swa moved here, because the underlying sequences which such a hypothesis would predict, such as swa mare in the above example, were ungrammatical. Two explanations for this phenomenon were discussed. First, it could be that in such constructions where only swa appeared at the front of the sentence, the swa's were not determiners. In this case these constructions would be parallel to as you sow, so shall you reap. The first swa could be a complementizer, and the second an adverb.

The other possible analysis for these constructions was that they were truly proportional comparatives involving Swa Movement, but that in these cases an optional rule had applied deleting micle at the front of the clause after swa. In this way we could derive (20) from a grammatical underlying string containing swa micle mare and swa micle graedigra by means of Swa Movement and Micle Deletion.

By the beginning of the thirteenth century, it had become much
more common for swa to appear by itself at the beginning of the clause, without micle:
(21) Bote swa du eldere wex swa du pourere was (But as you older grew, so you poorer were=but the older you grew, the poorer you were)
T. Wohunge 330
(22) Se me deoppre waded i de feondes leiuen, se me kined up Teatere
(As one deeper wades in the fiend's swamp, so one comes up later=the deeper one wades into the fiend 's swamp, the later one comes up)
A.Wisse p. 168.4
(23) So me ear beginned her uorte don his penitence, so he haued lesse uorto beten
(As one earlier begins her for to do his penitence, so he has less to mend=the earlier one begins to do his penitence, the less he has to mend)

$$
\text { A.Riwle p. } 148.21
$$

(24) And eauer se du strongluker stondest again him, se he... wodeluker weorred (And ever as you strongly-er stand against him, so he furiously-er wars=and ever the more strongly you stand against him, the more furiously he wars)
H.M. p. 21.201

At this time, examples of swa micle, rather than just swa, at the front of the sentence are extremely rare. I have only noted one:
(25) Swa much qd daet meiden ic beo him de leoure swa ich derfre ding for his luue drehe (So much, said the maiden, I am him the dearer as I crueler things for his love endure=the maiden said, "The crueler the things I endure for him, the dearer I am to him")

St. Jul.Bod. 152
It seems likely that the reason for the retention of the much here might be that the fronted material is separated from the sentence by parenthetical material. In general, we may say that Micle Deletion had become obligatory, or nearly obligatory, by the early thirteenth century,
assuming the Micle Deletion approach to accounting for the Old English examples with only swa at the beginning of the clause. The general loss of swa micel in proportional comparatives cannot be attributed to a loss of the Swa Movement rule, because we still find full adjective and quantifier phrases fronted in ordinary swa comparatives at this time:
(26) for ase softe as he is her, ase heard he bid der (Because as soft as he is here, as hard he is there=because he will be as hard there as he is soft here)
A.Wisse p. 157.15
(27) Ase neih $\frac{\text { is }}{\text { is }} \frac{0}{}$ ase mud is to world-liche speche, ase ueor he (As near as our mouth is to worldly speech, as far it is God= our mouth is as far from God as it is near worldly speech) A.Riwle p. 33.5

In the thirteenth century, the proportional comparative still employed swa. Around the beginning of the fourteenth century, however, de replaced swa in this construction: ${ }^{2}$
(28) de swuddore de grece boillede de gladdore he i made (the more the grease boiled, the gladder he him made=the more the grease boiled, the gladder he became)

D'E SEL C.9.93
(29) Be better dou prayes, de wyseleere dou thynkis (The better you pray, the wisely-er you think=the better you pray, the more wisely you think) Hampole XI p. 34.29
(30) This is to seyn, that the more that clooth is wasted, the more it costeth to the peple This is to say that the more the cloth is wasted, the more it costs to the people)

Ch. I. Pars. 420
(31) For ever the moore hataundance that he hath of richesse the moore he desireth
It appears that the use of de in this construction appeared in the South earlier than in the Midlands. In the Book of Vices and Virtues, we find proportional comparatives with de, although in a rather strange form:
(32) Be he more is swaint mid deules... de he strengere and betere is on gode werkes (The he more is troubled with devils... the he stronger and better is in good works=the more he is troubled with devils, the stronger and better he is in good works)

$$
\text { V\&V p. } 29.22
$$

(33) Full gewiss de du heiger art, de warliker de seluen wilt nederin
Full certainly, the you higher are, the cautiously-er you self will humble=certainly, the higher you are, the more cautiously you will humble yourself)

$$
\text { V\&V p. } 49.19
$$

The curious thing about these examples is that de is fronted by itself, whereas in all the other texts I know of having de in proportional comparatives, either de+quantifier or de+adjective is fronted. In example (33) here, de is fronted by itself in the subordinate clause, but det adverb is fronted in the main clause. Why should it happen that only de is fronted? It could be that the new generation of language learners, which was substituting de for swa for the first time, based the distribution of de on the surface, rather than on the deep, distribution of swa. Since swa in the proportional comparatives nearly always appeared by itself at the beginning of the clause, if de were merely plugged into the surface position of swa, the result would be that de would appear by itself at the beginning of the clause. This would lead to an analysis whereby the 旦 Movement rule moved de alone, rather than the whole $Q^{3}$. It is also possible that before de replaced swa in the proportional comparatives, the Swa Movement rule was reanalyzed as moving only the determiner swa. This could have happened because of the increasing obligatoriness of Micle Deletion, which could have led to a complete loss of the Micle Deletion rule. The reason for the loss of this rule would be that with Nicie Deletion always being applied, the proportional compara-
tives could be reanalyzed as involving only movement of the siwa. If this is what happened, the Be Movement rule could be modeled directly on the new version of Swa Movement. Since in comparatives other than proportional comparatives, Swa Movement still moved swa plus something else in the adjective or quantifier phrase, this approach would necessitate two rules of Swa Movement (one moving only swa, the other moving the whole $x^{3}$ ).

While the Be Movement rule could be modeled on the surface distribution of swa in proportional comparatives or on a new Siwa Det Movement rule, the language learner also had at his disposal the possibility of modelling his Be Movement rule on the Swa Movement rule moving entire $x^{3 /}$. It seems possible that when de first began to substitute for swa in the proportional comparatives, the new language learners were uncertain as to how exactly to treat de and sometimes modeled their Be Movement rule on the basis of the surface distribution of swa, and at other times on the Swa Movement rule itself. In the Book of Vices and Virtues, it appears that the surface distribution of swa was what was more important, since de is usually by itself in the proportional comparatives. We shall see that in other dialects, Be Movement was modeled on Swa Movement.

We can express the nomal behavior of de in proportional comparatives in the Book of Vices and Virtues by means of the following rule:

> (34) Be Movement-the Bcok of Vices and Virtues

| $W_{1}$ | $\bar{s} 5]^{\left[W_{2}\right.}$ | de |  | $W_{4}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 |
| 1 | 3+2 | 0 | 4 | 5 |

Why should de have replaced swa in the proportional comparative? We saw in Chapter Four that in Old English, if de was used as a quantifier in the main clause of a sentence and was related semantically to something in a subordinate clause, the complementizer of the lower clause was always de, even though it might have a meaning that would usually be expressed by either daet or donne. Consider again a couple of examples from Chapter Four, repeated here:
(35) And hit is ealles de wyrse, de his aenig ende ne cymd aefre
(And it is all the worse that it-gen. any end not comes ever= and it is all the worse because no end to it ever comes) Wulf.N.III p.26.13
(36) Swa bid eac daes wisan med de mare, de him wradre wyrd \& redre to becyd
(So is also the wise's reward the more, that him angrier fate and fiercer to comes=so is also the reward of the wise the more, because an angrier and fiercer fate comes to him) Boeth. XL. 3 p. 138.20

In both cases, the second de must be translated as "because" or "that." In the subordinate clause of (35), there can be no possibility of de being a quantifier, since as a quantifier it always had to modify either another quantifier or an adjective. Be is clearly a complementizer here. On the other hand, in (36) there is a compared adjective in the subordinate clause with which the second de, as a quantifier, could be related. It seems probable that sentences such as (36), in which a de at the front of the clause could possibly be construed as a quantifier, led to a reanalysis whereby de was seen as being a fronted quantifier. This reanalysis would be aided by the fact that swa was beginning to appear more frequent$l y$, and in fact nearly always, by itself at the beginning of clauses in proportional comparatives. A de by itself at the beginning of a construc-
tion which could be a proportional comparative could easily be interpreted as being exactly like a swa by itself, and being put at the front of the clause by means of a Be Movement rule. We would expect such a reanalys is only if such ambiguous sentences were common in the language learner's data, which is unfortunately difficult to determine from the texts.

The introduction of a Be Movement rule did not lead (at least immediately) to the eradication of the Swa Movement rule. In the Book of Vices and Virtues, even though the Be Movement rule moved only de, the Swa Movement rule still moved quantifier phrases with swa:
(37) all swo sodliche swa bread and win feded dane lichame... swa sodliche fett dis hali corpus domini bade saule and lichame
(as truly as bread and wine feed the body, as truly feeds this holy corpus domini both soul and body=this holy corpus domini feeds both the soul and the body)

V\&V p.53.2
Although de was used in proportionat comparatives in the Book of Vices and Virtues in the thirteenth century, it was not until the fourteenth century that we find this use of de in most dialects. Also, in these later texts, I have found no examples of de by itself at the front of a proportional comparative. Instead, a larger phrase is always moved. However, there was still clearly a dialect difference in the proportional comparatives at this time. In the Ayenhite of Inwit, we find that only a $Q^{3}$, not an $A^{3}$, may be moved by the Be Movement rule. If a compared adjective is involved, rather than moving the adjective, the analytic comparative is used, with only the more being moved:
(38) Vor de more dat de guodes byed greate, de more zorged de enuious
(For the more that the goods are great, the more sorrows the envious=because the greater the goods are, the more the

## envious sorrows)

$$
\text { Ayen.p. } 28.26
$$

(39) Vor de more det de herte is clene and de uayer i zuo moche he yzeyhd the face of Iesu Crist de more openliche (For the more that the heart is clean and the fairer, in so much he sees the face of Jesus Christ the more openly= for the cleaner and fairer the heart is, the more openly he sees the face of Jesus Christ)

$$
\text { Ayen.p. } 88.7
$$

(40) and de more det he his ysyhd openliche de more he him loued de stranglaker (arid the more that he it sees openly, the more he him loves the stronger=and the more openly he sees it, the more strongly he loves him)

$$
\text { Ayen.p. } 88.10
$$

For the Ayenbite, we may propose the following formulation of the Be-Movement rule:
(41) Be Movement-Ayenbite

| $W_{1}\left\{\begin{array}{l} \bar{s} \\ s \end{array}\right\}^{\left[W_{2}\right.}$ | $Q^{3}$ [de |  | $W_{3}$ | $W_{4}$ |
| :---: | :---: | :---: | :---: | :---: |
| 12 | 3 | 4 | 5 | 6 |
| $13-4 \#\left\{\begin{array}{l} \bar{s} \\ s \end{array}\right\}^{[2}$ | $\emptyset$ | 0 | 5 | 6 |

In other dialects of the same time or a generation earlier or later, the Be Movement rule was more general, applying not only to quantifier phrases, but also to adjective, adverb, and noun phrases:
(42) De better dou prayes, de wyseleere dou thynkis (The better you pray, the wisely-er you think)

Hampole XI p. 34.29
(43) For it may fall sumtyme dat de trubylyere dat dou hase bene outwarde with actyfe werkes, the mare brynnande desyre dou sall hafe to Godd
(For it may happen sometime that the more-troubled (that) you have been outwardly with active works, the more burning

## desire you shall have to God)

Hampole p. 32.21
(44) $\frac{B e}{}$ lengore dat he dare heng de more ioie he made
(The longer that he there hung, the more joy he made)
D'E SEL C.9.65
In these dialects, the $Q^{3}$ in the rule above is replaced by $X^{3}$, and the $Q$ within the $Q^{3}$ is replaced by a variable.

The Ayenbite is the only text that I know of with the less general Be Movement rule. It is a Kentish text. The other examples represent other dialects; the South English Legendary is from the southwest midlands, Hampole wrote in a northern (Yorkshire) dialect, and Chaucer's dialect was that of London (east midlands). It appears, then, that the more restrictive 日e Movement rule was a Kentish phenomenon.

If our proposed explanation for the introduction of de in the proportional comparative, based on the morphological similarity of the complementizer de and the quantifier de is correct, then it must be the case that this usage of de originated in the southeastern part of England (the area of origin of the Book of Vices and Virtues) because this was the only dialect in which de was still in vigorous use as a complementizer at the beginning of the thirteenth century. MacIntosh (1947) noted that daet was rarely used as a relative particle in the Book of Vices and Virtues. Be was also still used in this text in for dan de, etc. Therefore it is only $i r_{1}$ this dialect that the complementizer de could be reanalyzed as a quantifier. The validity of the hypothesis that the use of de in proportional comparatives spread from this dialect to others is indicated by the fact that this type of proportional comparative does not appear in the other dialects until later.

It is unfortunate that other texts of the dialect of the Book of Vices and Virtues from this same period are not available, so we cannot tell for certain whether de in proportional comparatives originated here, or the usage of the author of this work was simply aberrant.

Supposing this construction did originate in the southeastern midlands, it seems that when other dialects borrowed the construction, they made the rule more general, applying not just to de, but to a higher phrase in which de occurred. In the southeastern dialect itself the rule also became more general. Although all the dialects made the rule more general, they did not all generalize in the same way, as we have seen. In the Kentish dialect, Be Movement applied only to quantifier phrases, while in others it applied to any $x^{3}$ with de.

In section 4.2.2.3 it was noted that it was possible that sentences in O1d English which seemed to be proportional comparatives but which had only swa, rather than swa micle, at the front were not really proportional comparatives, but rather, parallel to sentences such as as you sow, so shall you reap. We have seen that the type of proportional comparatives in which micle appeared with swa died out, or nearly did so, before the proportional comparatives with de entered the language. If we analyze the type of proportional comparative with only swa as not involving Swa Movement, as is entailed by analyzing them as parallel to as you sow, so shall you reap, we must describe the loss of the type of proportional comparative with both swa and micle as a loss of Swa Movement in proportional comparatives. That is, we must say that the proportional comparative with Swa Movement was replaced by the as you sow type construction,
in which the first swa was probably a complementizer, and the second an adverb. This is rather problematic because it is clear that the rule of Swa Movement itself did not die out at this time in ordinary comparatives, as we have seen. In fact, the Swa Movement comparative seems to have lingered on even after the Be Movement comparative replaced the swa-type proportional comparative. I have found an example of a Swa Movement comparative as late as 1493:
(45) $\frac{\text { As many }}{\frac{\text { salelites }}{\text { sacefyces }} \text { dide she had in hyr of synnes, soo many hyrself for amendes of hyr }}$

$$
\text { Tretyse p. } 78.35
$$

By the non-Micle Deletion approach, then, we would have to say that Swa Movement in the thirteenth century must somehow be limited to quantifier and adjective phrases with swa which did not modify compared adjectives or quantifiers. It is possible that the proportional comparatives beginning with just swa were reanalyzed as being of the as you sow type due to the increasing obligatoriness and subsequent loss of Micle Deletion. However, by the non-Micle Deletion approach it is difficult to see why de should have begun to participate in proportional comparatives on the analogy of swa. If swa was not analyzed as a part of a quantifier phrase in sentences such as swa du eldere wex swa du pourere was (example 21), then why should de, which was clearly not an adverb, even if it could be a complementizer, begin to replace swa in a construction where one instance of swa must be an adverb?

On the other hand, if we assume the Micle Deletion approach to 01d English examples with only swa at the beginning of clauses which appear to be proportional comparatives, the Middle English changes can be acccuint-
ed for in a straightforward manner. First, Micle Deletion, which had been optional, became obligatory. With a quantifier phrase consisting only of Swa at the beginning of the proportional comparative, the proportional comparative was superficially very similar to certain constructions with de as a quantifier in the upper clause and de as a complementizer of the lower clause. When the lower clause with de as a complementizer contained a compared adjective or quantifier, it was possible to analyze de as bearing the same relationship to that compared item as swa to a compared item in a proportional comparative. In this way the second de was reanalyzed as a quantifier, instead of a complementizer, and began to participate in a process similar to Swa Movement.

Assuming the validity of the hypothesis that the introduction of de into proportional comparatives was due to a reanalysis of some instances of de on the lines of swa, it would appear that the Micle Deletion approach to the 01d English facts is to be preferred to the as you sow, so shall you reap approach.

When the de-type proportional comparative became common, the proportional comparative with swa was still occasionally found, often in combination in the same sentence with the de type:
(46) Vor asemoche ase de zenne is more uoul and more grislich, de more is word de ssrifte (Because as much as the sin is more fould and more grisly, the more is worth the shrift=because the more foul and grisly the sin is, the more shrift avails)

$$
\text { Ayen.p. } 49.28
$$

(47) as moche more as man understondeth \& sayth of his merueylous godenes, soo moche more loueth he \& hath Ioye in him (as much more as one understands and sees of his marvelous goodness, so much more loves he and has joy in him=the more one sees and understands of his marvelous goodness, the more he loves and has joy in him) Tretyse p.90.5
(48) Vor de more det de herte is clene and de uayer, zuo moche he yzyd the face of lesu crist de more openlich
(For the more that the heart is clean and the fairer, so (For the more that the heart is clean and the fairer, so he sees the face of Jesus Christ)

$$
\text { Ayen.p. } 88.7
$$

Note that much appears with as in these comparatives. While the rule of Micle Deletion was obligatory in the early thirteenth century, it appears that it died out by the fourteenth century. The explanation for this could be that since the de proportional comparative was by far the dominant type of proportional comparative at this time, when swa was used in these comparatives, the distribution of swa was modeled on that of de. Since de by this time never appeared at the beginning of a clause without an adjective or quantifier, swa in the proportional comparative also began to appear with a following quantifier (which it had to have at any rate in the deep structure).

I do not know exactly when the Swa Movement comparative died out. Examples become considerably rarer once de begins to appear in proportional comparatives. It seems likely that the replacement of swa by de in the proportional comparative led to the decline and fall of Swa Movement. Ordinary comparatives with Swa Movement were always much less common than swa comparatives with deletion, and the proportional comparative in Old Er.glish was the only comparative in which Siwa Movement was really necessary; that is, in ordinary comparatives, Comparative Deletion could apply instead of Swa Moverient, but in proportional comparatives, movement was the only possibility. Since the proportional comparative was the only construction in which Swa Movenent was really common, it is not surprising
that when Be Movement replaced Swa Movement in this construction, Swa Movement died out.

A final fact of interest about the proportional comparative in Middle English is that the complementizer that frequently appeared in the subordinate conjunct of the de-type proportional comparative:
(49) \& also the more peyne and harme that a man suffryth for hys frende the more hys to be beloued
(and also, the more pain and harm (that) a man suffers for his friend, the more he is to be loved)
Tretyse p.14.15
(50) The more dat du thynkis and felis de wrechidnes of dis lyfe the more frequently sall dou desire de loye and de riste of dat blyssede lyfe

Hampole p. 40.35
(51) Be lenger dat he leuede, de more wikkede he bicome B. Brut p. 138.31
(52) For certes, the moore that a man chargeth his soule with venial synne, the more is he enclyned to fallen into deedly synne
Ch.I.Pars.360-5

Such examples with that in the semantically subordinate clause are extremely common, but we never find that in the clause containing the amount which varies according to the other amount. Examples of proportional comparatives are extremely common in the texts of the fourteenth century, so we have enough data to feel confident in asserting that it was not possible to have that in the non-controlling (or main) clause. In this way, Middle English proportional comparatives are similar to those of Old English. In Old English, the complementizer (as opposed to the determiner) swa was only found in the clause which was semantically the "controlling" clause. Furthermore, similar facts in proportional comparatives obtain in at least one other (modern) Germanic language. In Modern

Icelandic, where the complementizer used is sem, we find a complementizer in the first (semantically controlling clause, but not in the second: ${ }^{3}$
(53) 㘶vi meira sem pu bordar, pvi meira (*sem) vilttu (The more (that) you eat, the more (that) you want)
There iis good reason, therefore, to believe that the clause which was semanticality controlling in the Middle (and 01d) English proportional comparatives wars syntactically subordinate, and that the structure suggested for the Dld English proportional comparative, which I repeat here, is also correct for the Middle English de-type proportional comparative:
(54)


It coulld be that the second (main) clause is not dominated by an $S$ of its own, as in (54), but rather that the material of the main clause is generated immediately under the top $S$ :
(55)


This matter is not crucial here, and I have no way of choosing between the two structures. The important fact here is that the swa or de in the main clause cannot be moved into the complementizer position, because this clause has no complementizer. Given Chomsky's hypothesis that apparent violations of Subjacency, the Tensed S Constraint, and the Specified Subject Constraint are to be explained in terms of movement into COMP. That such apparent violations were possible in the main clause of this construction is illustrated by the following example:
(56) Eut the more that I love yow, goodly free, the less fynde I that ye loven me

It is not surprising to find such examples, because similar apparent violations of the constraints are possible in the Modern English construction:
(57) The more Mary flatters Fred, the handsomer he thinks that The surface structure of (56) must be something like (58):



If it is true, as it appears to be, that violations of the constraints are possible in this construction, and that there is no complementizer in the second clause to "escape" through, these facts are problematic for the movement into COMP approach.

A final word needs to be said about the placement of the proportional comparative under $S$, rather than $\bar{S}$. The motivation for this is that as in Modern English, proportional comparatives could be embedded:
(59) This is to seyn, that the more that clooth is wasted, the more it costeth to the peple

Ch. I. Pars. 420
This sentence must have a structure something like (60):
(60)


For a discussion of the proportional comparative in Modern English, and arguments that the the in this structure cannot be a complementizer to which quantifiers attract, see Andrews (1975).

### 8.3 Conclusion

In this chapter we have seen how the analytic comparative came in in Middle English. This development is of interest because it seems to be a clear case of French influence in English syntax. We have also seen how the modern proportional comparative with de arose in Middle English. It appears that the complementizer de was reanalyzed as a quantifier. A bit more about this development will be said in Chapter Ten. We have finally seen that the fact that there appears to be unbounded movement in the proportional comparatives is problematic for Chomsky's hypothesis
that there are no "unbounded" movement rules, assuming that one clause of the proportional comparative has no complementizer, as seems to be correct. It would be worthwhile to investigate the characteristics of the proportional comparative in Modern Icelandic, since this language also permits an overt complementizer only in the first clause in this construction.

## Footnotes to Chapter Eight

${ }^{1}$ For a discussion of the extent of knowledge of French among the lower classes and English among the upper classes in the twelfth and thirteenth centuries, see Baugh (1957). French was the language of the upper classes in the twelfth century, but in the early thirteenth century England lost Normandy, so the nobles electing to remain with their property in England, rather than their property in Normandy, began to adopt English.
${ }^{2}$ I have found one example of a proportional comparative with de, however in the twelfth century:

Oc aefre de mare he iaf heom de waerse hi waeron him (But ever the more he gave them, the worse they were (to) him)

$$
\text { P.C. } 1140
$$

${ }^{3}$ I am indebted to Joan Maling for this fact, which she obtained from a native speaker of Icelandic.

# CHAPTERIX <br> CONSEQUENCES FOR SYNCHRONIC LINGUISTIC THEORY 

### 9.0 Introduction

In this chapter some theoretical consequences of the facts presented in the earlier chapters will be discussed. The next chapter will be a discussion of what the facts have to offer to the theory of diachronic syntax; this chapter will be devoted to the synchronic theory, and diachronic facts will be considered only insofar as they help clarify the synchronic analysis of some stage.

The major portion of this chapter is a discussion of the theoretical importance of the facts about preposition stranding presented in chapters Two, Three, and Six. I will argue that these facts indicate that English had rules of unbounded deletion under identity. It will be shown that the surface filters suggested in Chomsky and Lasnik (forthcoming) to deal with the Old English preposition stranding facts under a movementonly approach fail on the grounds of both descriptive and explanatory adequacy.

Another filter suggested by Chomsky and Lasnik to replace Bresnan's Fixed Subject Constraint will be discussed in section 9.2, where I will argue that this filter is also incorrect. Finally, in section 9.3 the theoretical importance of the Old and Middle English comparative clause facts will be reviewed.

### 9.1 Preposition Stranding

9.1.1 Theoretical approaches. Before discussing the 01d and Middle English preposition stranding facts, let us discuss briefly a couple of theoretical approaches to pied piping and its flip side, preposition stranding.
9.1.1.1 Ross' approach. As far as I know, it was Ross (1967) who made the first attempt to describe the preposition stranding facts of English within a transformational framework. For Ross, preposition stranding was part of a larger phenomenon. Ross was concerned with accounting for the fact that movement rules often display some optionality in how large a phrase they move into a particular sentence. In particular, Ross noted that more than one phrase could be relativized from a sentence like (1):
(1) The government prescribes the height of the lettering on
the reports. If this sentence is embedded as a relative clause with reports as its head, not only the noun phrase the reports may be relativized, but also various other noun phrases and prepositional phrases (Ross's judgements):
(2) a. Reports which the government prescribes the height of the lettering on the covers of are invariably boring.
b. Reports the covers of which the government prescribes the height of the lettering on almost always put me to sleep.
c. Reports the lettering on the covers of which the government prescribes the height of are a shocking waste of public funds.
d. Reports the height of the lettering on the covers of which the government prescribes should be abolished.

Ross termed the phenomenon of additional material being dragged along with a relativized item "pied piping." Note that there are two types of pied priping. First, a higher noun phrase may be moved along with the relativized item, as in all the examples in (2). Secondly, a preposition may tag allong, as in he is the man to whom I spoke. Ross, however, considered thatt prepositional phrases were really noun phrases which began with a preposition, probably at least partly because prepositional phrases often plarticipate in rules nomally operating on noun phrases. Ross assigned the following structure to sentences like those in (2), before relativization:


Of the sentences in (2), (a) is formed by moving $N P_{7}$, (b) by moving $N P_{5}$, (c) by moving $N P_{3}$, and (d) by moving $N P_{1}$. Ross proposed to account for the facts of $(2.1)$ by the following convention:
(4) Ross's Pied Piping Convention (his (4.80)):

Any transformation which is stated in such a way as to effect the reordering of some specific node NP, where
this node is preceded and followed by variables in the structural index of the rule, may apply to this NP or to any NP which dominates it, as long as there are no occurrences of any coordinate node, nor of the node $S$, on any branch connecting the higher node and the specified node.

This is not an explanation, but merely a description of the facts, and as Ross himself notes, this convention does not account for all the facts about relative clauses formed on his celebrated sentence. As it stands, this convention will allow the movement of NP's 2, 4, and 6 in tree (3), giving these ungrammatical sentences (Ross's judgements):
(5) a. *Reports of which the government prescribes the height of the lettering on the covers are invariably boring.
b. *Reports on the covers of which the government prescribes the height of the lettering almost always put me to sleep.
c. *Reports of the lettering on the covers of which the government prescribes the height are a shocking waste of public funds.

To account for these facts, Ross supplemented his convention with a constraint against moving NP's beginning with $P$ (in other words, prepositional phrases) when they directly follow the NP they modify.
9.1.1.2 Bresnan's approach. A new approach to accounting for the facts noticed by Ross was proposed by Bresnan (1976). This approach was designed not only to account for Ross's pied piping facts but also to deal with other diverse phenomena. The basic ingredient in this new approach is a revised or "relativized" version of the A-over-A principle first proposed by Chomsky in 1962. Bresnan's relativized A-over-A principle, which is formulated as a condition relating the forms of transformations to their functions, does away with various counterexamples to
the old "absolurte" A-over-A principle and gives an account of why pied piping is sometizimes obligatory, sometimes optional. Because Bresnan's approach is quitte recent and has not had time to become generally known, I will summarize her article here in some detail. To make the discussion less technical, I will paraphrase most of Bresnan's formalism in the definitions used.

Chomsky"'s 1973 version of the A-over-A principle is as follows:
(6) Chromsky's A-over-A Principle

> If a transformation applies to a structure of the form $\left[\ldots{ }_{A}[\cdots]_{A} \cdots\right]_{\alpha}$ where o is a cyclic node, then it must apply to the maximal phrase of the type $A$.

One example of the application of this principle would be this: if a transfomarition applies to noun phrases, and in a given structure there are two noun phrrases which fit the structural description of that transformation, and cone noun phrase is within the other, only the most inclusive noun phrase may be moved by that transformation. For examples, suppose we had a turansfomation like (7) which was to be applied to a structure like (8):

(7) | $X$ | $N P$ | $Y$ |
| :---: | :---: | :---: |
| 1 | 2 | 3 |
| $2+1$ | 0 | 3 |

(8)


This structure has two proper analyses with respect to this transformation. Either $N P_{1}$ or $N P_{2}$ could be interpreted as being term 2. But the A-over-A principle will allow only $N P_{1}$, the more inclusive $N P$, to be analyzed as term 2. Bresnan points out that this principle reduces the possible proper analyses of a given structure with respect to a given transformation. While the structural condition of the hypothetical rule we have been discussing gives two proper analyses of structure (8), the proper analysis picking out $\mathrm{NP}_{2}$ as term 2 is discarded. Bresnan stresses that this is not an absolute prohibition against moving a node out of a larger node of the same type. It only prohibits such movement when the larger node fits the structural description of the rule. Suppose rule (7) were to have the following structural description instead of that given in (7):
(9)

| $X$ | $P P$ | $N P$ | $Y$ |
| :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 |

In this case the rule could not apply to $N P_{1}$, since an analysis of (8) assigning NP $p_{1}$ to term 3 would not be a proper analysis of this structure with respect to this structural description, and the rule would instead apply to $\mathrm{NP}_{2}$ with impunity.

Bresnan points out an interesting paradox which Chomśky's.formulation of the $\dot{A}$-over-A principle raises. It is theoretically possible for there to be more than one maximal proper analysis of a given structure for a given structural description. She gives this example: suppose we have a rule involving the structural description given in (10):
(10)

| A | B | C |
| :--- | :--- | :--- |
| 1 | 2 | 3 |

Suppose furthermore that this rule is to be applied to this structure:
(11)


There arre two proper analyses of this structure with respect to (10). We can aessign term 1 to $A_{1}, 2$ to $B_{2}$, and 3 to $C_{2}$. Let us call this analysis "proper analysis 1." Or we can assign 1 to $A_{2}, 2$ to $B_{1}$, and 3 to $C_{1}$. Let us icall this "proper analysis 2." While proper analysis 1 gives us a maximal assignment of $A$, it does not give a maximal assignment of C. Conrversely, proper analysis 2 gives a maximal proper analysis of $C$, but not oif $A$. Thus the proper analysis of $A$ is maximal if and only if the proper amalysis of $C$ is not.

Bresnam goes on to say that while we cannot define a maximal proper analysis off a structure for a structural description as one that assigns maximal values to all the predicates of a transformation, we can define it as one that assigns maximal values to all the target predicates of the structural description. The predicates of a transformation are the parts of the structural description and the structural change. 1 Target predicates are those deleted by the structural change or predicates identical to something to be deleted; in other words, the predicates involved in the deletion operation.

I will skip some steps in Bresnan's article and merely say that
she eventually replaces the notion of maximal proper analysis with that of "r-maximal proper analysis" which defines a proper analysis that is maximal relative to all proper analyses that agree with that proper analysis on all context predicates (all predicates which are not target predicates and not included in a target predicate) in the transformation. To paraphrase Bresnan's definition, a proper analysis $\pi$ of a structure with respect to a structural description is r-maximal if and only if for every proper analysis of that structure for that rule where the context predicates remain fixed, $\pi$ assigns the maximal proper analysis for each of the target predicates. Bresnan then incorporates this concept of "r-maximality" into a new "relativized" A-over-A principle. This principle can be paraphrased as (12):
(12) Paraphrase of Bresnan's Relativized A-over-A Principle

No transformation can apply to a structure under a given proper analysis unless that proper analysis is an r-maximal proper analys is of that structure for that transformation.

Note that by the definition of r-maximality, we must fix the context predicates before "ciaximizing" the target predicates. It is this proviso which allows the relativized A-over-A principle to account for some apparent violations of the A-over-A principle. Let us consider VP Deletion. Bresnan gives as examples the following sentences:
(i3) a. Frankie will seem to want to leave St. Louis, but Johnny won't seem to want to.
b. Frankie will seem to want to leave St. Louis, but Johnny won't seem to.
c. Frankie will seem to want to leave St. Louis, but Johnny won't.

Bresnan gives (14) as the underlying structures for these sentences:


VP Deletion may apply to $V P_{1}, V P_{2}$, or $V P_{3}$. This cannot be accounted for by Chomsky's A-over-A principle, which, if it applied to VP's at all (which it does not because VP is not a cyclic node), would only allow the topmost $V P, V_{1}$ to be deleted. But under Bresnan's relativized A-overA principle, these facts are explicable. In the rule of VP Deletion, VP is the target predicate. Aux is a context predicate. By the new principle, it is only for each assignment of the context predicate Aux that the target VP must have maximal value. If we assign the context predicate Aux to the to before $V P_{3}$, the assignment of the target predicate $\underline{V P}$ to $V P_{3}$ is $r$-maximal. But for the assignment of Aux to the to before $V P_{2}$, the assignment of $\underline{V P}$ to $V P_{2}$, is maximal, and for the assignment of Aux
to won't the assignment of $\underline{V P}$ to $V P_{1}$ is maximal. Thus $V P$ Deletion allows three r-maximal proper analyses of (14), and hence three possible choices for deletion.

Bresnan goes on to give applications of the relativized A-over-A principle to other transformations, but what concerns us here is a sort of loophole provided by this principle where pied piping of prepositions is concerned.

In her discussion of pied piping, Bresnan uses Chomsky's $\bar{X}$ schema which breaks down categories into features. Under this approach, noun phrases and prepositional phrases form a natural class. Nouns are -verb, +noun, while prepositions are -verb, -noun. Adjectives and adverbs are both +verb, so the feature -verb separates noun phrases and prepositional phrases from adjective and adverb phrases. Some rules apply to either noun phrases or prepositional phrases. The rule forming relative clauses is such a rule. To capture the fact that pied piping is optional in this rule, Bresnan fomulates the rule as in (15):
(15) Bresnan's Relative Clause Formation

| NP | $[\text { Comp }$ | $W_{1}$ |  | W |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |
| 1 | 5-6-7 | 3 | 4 | $\emptyset$ | $\emptyset$ | 0 |  |  |

It should be pointed out that this is merely an informal representation of the rule. Formally, the variables are not predicates. Rather, it is stated that terms 1 and 2 must be an NP and a Comp, respectively, but what occurs between the second and fourth terms is left unspecified.

It is the context predicate $(P)$ which commands our attention here. Since $P$ is optional, if the item to be relativized is within a prepositional phrase, the preposition may either be treated as part of the variable $\|_{1}$ or as the optional $P$ of the structural description. Consider the structure (16):


In relativizing the NP whom, if we assign the optional $P$ in the structural description to to, the $\overline{\bar{X}}$ mentioned in the rule can only be assigned to the NP whom, so pied piping will not occur. But since $P$ is optional, we do not have to assign it to anything. Instead, the preposition to can be interpreted as being part of the variable $W_{2}$. And since PP is also an $\overline{\bar{X}}$, the rule can move the prepositional phrase to whom. Because there are two ways to fix the context predicates, there are two options for movement.

We can now see how Bresnan's approach accounts for Ross's facts. Structure (3) has three distinct maximal proper analyses where the predicate $P$ is assigned to something. But where the $P$ option is not taken, there are four proper analyses (one each for $N P_{1}, N P_{3}, N P_{5}$, and $N P_{7}$ ), bui
only one which iis maximal, that is, the one assigning $N P_{1}$ as the target. The reason that there is only one maximal proper analysis where the $P$ option is not taken, but three where it is taken, is that when the $P$ option is utilized, there are three different ways of fixing the context predicate $P$. But when the predicate $P$ is not assigned, there is only one way of fixing the target predicates, since variables are not predicates. And there is onily one maximal proper analysis for each way of fixing the target predicates. So Bresnan's principle not only predicts the grammaticality of Ross's good sentences, but the ungranmaticality of the bad ones. For example, *Reports of which the government prescribes the height of the lettering on the covers are inevitably boring is impossible because it is an attempt to move $N P_{2}$ in structure (3), and if the $P$ option is not taken, $N P_{2}$ is a non-maximal $\overline{\bar{X}}$. On the other hand, if $\underline{P}$ is assigned to of, it will be $N P_{3}$ which is moved.

Bresnan argues convincingly for the superiority of her approach over the general convention proposed by Ross. First, her principle accounts for phenomena not dealt with by Ross's convention, such as options found in VP deletion. Second, in order to account for pied piping facts in English other than the relativization facts discussed by Ross, more than one pied piping convention would be necessary under Ross's approach. For example, Question Movement exhibits a different pattern of pied piping fram Relative Clause Formation (RCF). In questions, unlike relative clauses, only PP's, and not NP's, generally move along with the relativized NP:
(17) a. Of which reports did you see the covers?

## b. *The covers of which reports did you see?

Ross did not discuss the problem of pied piping in questions. Under Bresnan's approach, this difference is explicable. The Question Movement rule can be formulated so that the wh word must be either the first predicate or the second (the first one being an optional P) of the phrase to be moved. This prevents a higher noun phrase from moving along. Third, we have seen that Ross had to supplement his convention with a constraint on moving prepositional phrases out of noun phrases. We have already seen how the relativized A-over-A principle automatically accounts for Ross's ungrammatical examples. Finally, the relativized A-over-A principle gives a principled approach to pied piping, while Ross's convention is essentially just a description of the facts. Nevertheless, there are some problems with Bresnan's approach as formulated.

> 9.1.1.3 Problems with Bresnan's approach. While Bresnan's rela- tivized A-over-A principle accounts very neatly for many different facts, there are some problems involved in the assumption that the A-over-A principle applies to all nodes that meet the structural conditions of a rule, rather than only to nodes of the same category. One problem is that Bresnan's formulation of the relative clause formation rule, taken in conjunction with the relativized $A-o v e r-A$ principle, predicts that it is never possible to relativize a prepositional phrase out of a noun phrase, since the relative clause rule applies both to prepositional and noun phrases. We have just seen that this assumption is borne out in Ross's sentences. However, there are cases in which it is possible to relativize PP out of NP:
(18) This is the church of which he is the pastor.
(19) This is the botulin-contaminated soup of which he ate three cans.

Notice that in the cases where this relativization of PP out of NP is possible, the preposition is always of. Nanni (1976) has pointed out that other prepositions do not allow relativization of PP out of NP.
(20) *This is the porch on which I painted the chairs.

This sentence, of course, is perfectly acceptable on the reading whereby the activity of painting took place on the porch. But in this case, the PP on the porch is not dominated by the NP dominating the chairs:
(21)


The reading which is bad is the one in which the chairs on the porch is a constituent:
(22)


On this reading, what has been painted are the chairs on the porch, and the site of the painting job is left unspecified.

It seems in general that PP can be reordered out of NP, just in
case the preposition involved is of. But since pastor of the church must also have a structure in which a noun phrase dominates the prepositional phrase 《although the structure may not be parallel to that of the chairs on the porch), the relativized A-over-A principle, by itself, cannot account forr the possibility of relativizing the PP with the PP in pastor of the shurch. It is likely that semantic factors play a large role in the possibility of extracting PP from NP, since it is generally only a specifice preposition, of, which permits such extraction. By appealing to semantic factors, we could probably maintain the relativized A-over-A princiiple in the face of this apparent counterevidence. However, sentence (20) raises a worse problem. This is that the relativized A-over-A princiiple predicts that while (20) should be ungrammatical (as it is), a variiant of it with on stranded should be acceptable, which it is not:
(23) *This is the porch that I painted the chairs on.

Again, we are not concerned with the acceptable reading whereby the painting took place on the porch, but only in the reading in which the PP on the porch is dominated by the NP containing chairs. Bresnan's use of ( $P$ ) incorrectly predicts that in general, any object of a preposition may be relativized, leaving the preposition behind. But the facts indicate that this is only possible if the relativized noun phrase is not dominated by another noun phrase (except, as we have seen, when the preposition involved is of). Bresnan's approach cannot account for this fact, since with the context predicate $\underline{P}$ fixed, the only NP in (22) which fits the structural description of RCF is the lower NP the porch. The rule
should be oblivious to the higher NP. Notice that this particular problem does not arise if there is no $\underline{P}$ option, since the A-over-A principle (in either its absolute or its relativized form) will prevent a lower NP from being extracted out of a higher one. It appears, then, that the RCF rule should not mention $\underline{P}$ as a context predicate because of the $i n-$ correct prediction this device makes that any object of a preposition may be relativized. I will therefore assume that while the A-over-A principle is "relativized" to ali proper analyses of a structure that agree in all context predicated, $(P)$ is not a context predicate in the RCF rule. We might propose that only obligatorily present context predicates are possible, such as Aux in the VP Deletion rule. I will assume that the ability of prepositions to strand in relative clauses and questions in English when the PP is not dominated by NP is due to the fact that RCF and Question Formation apply to both NP and PP in English, and English simply does not have a prohibition against moving NP out of PP. Other languages do have such a prohibition, which has nothing to do with the A-over-A principle. I will demonstrate in the next section that 01d English had a prohibition against the movement, but not deletion, of NP from PP. I will argue that such a prohibition, rather than the relativized A-over-A principle, gives the best explanation for the facts not only of preposition stranding in 01d English, but also for the changes which took place in Middle English.

A third approach to preposition stranding has been proposed in Chomsky and Lasnik (forthcoming). By this approach, preposition stranding is assumed to be free, but surface filters rule out bad cases of prep-
osition stranding. This approach will be discussed in detail in section 9.1.5. Since the 01d English facts are the ones which this approach is most directly concerned with, let us first review these facts.
9.1.2 Review of the historical facts. We saw in chapters Two and Three that in 01d English, preposition stranding was not possible in any construction in which there was overt surface evidence of movement. Preposition stranding was not possible in Topicalization, Passivization, se and se de relatives, or questions (either direct or indirect). Apparent counterexamples to this generalization were seen to be the result of a rule of PP-Split which allowed "inverted" prepositional phrases to break up. In constructions in which there was no overt evidence of movement, such as de relatives and infinitival relatives, preposition stranding was not only possible, but obligatory.

In Chapter Six we saw that in the thirteenth century the first sporadic examples of preposition stranding in Topicalization, Passivization, Relative Clause Formation (with wh-pronouns) and Question Movement begin to occur, and preposition stranding became more common in all these constructions in the fourteenth century.

Any theoretical approach to the phenomenon of preposition stranding in the world's languages should be able to account not only for the distribution of preposition stranding in 01d English, but also the way preposition stranding changed in Middle English. Let us now consider various approaches to preposition stranding and how they deal with these facts. I will first present my own approach to the Old and Middle English prepnsition stranding facts.

### 9.1.3 The no-movement-out-of-PP approach. Since preposition

 stranding in 01d English was only possible in constructions in which there was no surface evidence (at least, overt evidence, such as a pronoun which had clearly been moved) of movement, there is a straight-forward way of accounting for the 01d English facts if we assume a theory in which unbounded rules of deletion under identity are allowed. We could say that all the constructions in which preposition stranding was possible involved deletion, while preposition stranding was not possible in movement rules. We could account for this distribution by assuming that 01d English had a prohibition against movement, but not deletion, of NP out of PP. ${ }^{2}$ The Middle English facts could be accounted for by the loss of this prohibition. Such an approach would account for the fact that preposition stranding began to appear in all rules which by this approach are the only movement rules at the same time. In particular, it would account for the fact that passives of the sort John was laughed at appear at just the time when preposition stranding was beginning to appear in other movement rules. In 01d English, such passives would not be possible because of the prohibition against movement out of PP. But in Middle English, when the prohibition was dropped, there would no longer be anything to prevent such passives. No change in the rule of Passivization itself would be necessary, since this rule applied to the first NP after the verb.9.1.4 The relativized A-over-A approach. Let us now consider how the relativized A-over-A principle, as formulated by Bresnan, would deal with the 01d and Middle English preposition stranding facts. We
have already seen that the optional $\underline{p}$ context predicate which Bresnan proposes as an explanation for the possibility of preposition stranding in Modern English makes incorrect predictions in Modern English. Now we will see that the use of this context predicate does not allow for a satisfactory explanation of the 01d and Middle English facts.

As far as the relative clause facts are concerned, Bresnan's approach could account for the change from 01d to Middle English. We could say that in 01d English, the Relative Movement rule contained no optional $\underline{P}$, so preposition stranding was not possible, because the relativized A-over-A principle would stipulate that the PP, being more inclusive than the relativized NP, must be moved. We could further say that in Middle English, the Relative Movement rule was reformulated with an optional preposition in the structural description, so that preposition stranding became possible in this construction.

Although Bresnan's approach could deal with the relativization facts, it runs into trouble with Question Movement. This is because by Bresnan's approach, Question Movement must have always had an optional $\underline{P}$ in its structural description, meaning that the historical change in this rule cannot be attributed to the addition of such a context predicate. To see this, let us consider Modern English Question Movement briefly.

As we mentioned earlier, Bresnan pointed out that pied piping of NP in questions is not possible in Modern English. There are no questions like (24):
(24) *The covers of which reports did you see?

To account for this fact, Bresnan proposed that the structural
description of Question Movement stipulates that the wh-item is the first member of the phrase to be moved:
(25) Structural description of Bresnan's Question Movement

$$
\left.\bar{s}^{[Q} \begin{array}{lllll}
W_{1} & \overline{\bar{x}}\left[\begin{array}{lll}
w h & W_{2}
\end{array}\right] & W_{3}
\end{array}\right]
$$

At the point in the paper where Bresnan formulated this rule, she had not yet discussed pied piping of prepositions, so this formulation makes no provisions for pied piping or preposition stranding in questions. Bresnan later noted that this structural description needed to be modified slightly to accomodate preposition stranding, but she did not formulate the modified version. I do so here:
(26) Modified Question Movement ${ }^{3}$
$\left.\begin{array}{rrrrrr}\bar{S}[Q & W_{1} & \overline{\bar{x}}[(P) & w h & \left.W_{2}\right] & W_{3}\end{array}\right]_{\bar{S}}$

Note that $(P)$ is both a target and a context predicate in this rule. Consider how this rule will apply to the following structure:
(27)


This structure has two maximal proper analyses with respect to the structural description of (26). Treating the preposition to as part of term 2, only the NP whom is analyzable as the $\overline{\bar{X}}$ of the structural description, and Whom did he talk to results. But if the preposition is analyzed as term 3, the whole PP is the $\overline{\bar{X}}$, and To whom did he talk is the result. The important thing to remember here is that the optional $P$ is necessary to allow pied piping in questions. It is not possible to substitute a variable for this $\underline{P}$, since that would wrongly allow NP pied piping. This is problematic since Old English also did not allow NP pied piping in questions, and therefore the 01d English question rule had to be essentially the same as the Modern English one. The problem is that since it is possible to analyze a preposition as part of the variable $W_{j}$, there is no way to prevent preposition stranding here by the relativized A-over-A principle alone. However, a simple prohibition against movement of NP out of PP does prevent preposition stranding here for 01d English, as in Relativization, Topicalization, and Passivization. Notice that such a prohibition is not incompatible with the relativized A-over-A principle, which can still be used to prevent the movement of NP out of NP and also PP out of NP, if the problems mentioned above in section 9.1.3 can be overcome. The point is that it is not possible, contrary to Bresnan's suggestion, to use the conterit predicate $(P)$ to explain the variation in preposition stranding in different languages. Rather, it seems preferable to assume that some languages, such as 01d English, have a prohibition against movement of NP out of PP, and others, such as Modern English, do not. We shall see presently that some languages may have a
prohibition against both movement and deletion out of iiP, although Old English had only the restriction against movement. With this prohibition for 01d English, we can retain (26) as the Question Movement rule for Old English (since the optional P is necessary to allow pied piping of prepositions), and the fact that $\underline{P}$ could be analyzed as part of the variable will still not allow preposition stranding, since the prohibition against movement of NP out of PP will prevent this factorization of a structure from being used.

Another problem with the relativized A-over-A approach to preposition stranding is the fact that preposition stranding became possible in passives at the same time as in other movement rules, as we have seen. Since Passivization always applied only to noun phrases, and not to prepositional phrases, the relativized A-over-A principle does not rule out passives of the sort John was laughed at in Old English. There is nothing to prevent Passivization out of PP in O1d English by this approach, nor is there any way to account for the change in Passivization in Middle English which connects this change with the advent of preposition stranding in other constructions.

One might suggest that the advent of this type of passive had nothing to do with the greater freedom of preposition stranding in other rules at this time. It might be argued that the impossibility of passivizing out of PP in Old English was due to a lack of "compound verbs" in Old English consisting of a yerb and a preposition which formed a semantic unit. It is true that it is not possible to passivize any object of.a prepositional phrase following a verb:
(28) a. The play was run through by the cast.
b. *The bridge was run through by the troops.

The object of the preposition must be the direct object of the verb, in some semantic sense, in order for Passivization to take place. However, this restriction is not really different from the restriction that the noun phrase following the verb must be the direct object of the verb to be passivized. For example, when the noun phrase yesterday follows a verb, it cannot be passivized in English.
(29) *Yesterday was danced.

It seems, then, that semantic, rather than structural, considerations rule out passives in which the passivized object is not in close enough association with the verb. Therefore, we may propose that Passivization applies freely to the objects of prepositions, but semantic factors rule out some such passives.

While the hypothesis that passives such as John was made a fool of appeared in the language when compound verbs appeared is a plausible one, the facts do not accord with this hypothesis. This fact was pointed out in Visser (1963), who says (p. 391) concerning passives in which the object of a preposition is passivized:

That the earliest of them date from the fourteenth century does not warrant the conclusion that before that time combinations of verb+prepositional object did not exist, for there are many combinations in the language before that time which show all the characteristics of a verb+prepositional object, e.g. Paris Ps (Bright) 32,17 'on hine blissiad ure heortan' [in him rejoice our hearts/C.L.A.]; Elene 959 'wundrade ymb daes weres snyttro' [wondered about the man's wisdom/C.L.A.]...

It is important to note here that Visser explicitly states that the verb+prepositional object combinations he is discussing are ones like
they laughed at him, and not he sat under the tree, where under the tree is simply a prepositional phrase, and does not behave as the object of the verb. The characteristics of the verb+prepositional object combination which Visser alludes to are such things as the ability of the combination to be replaced by a simple transitive verb.
9.1.5 The surface filter approach. As noted in Chapter One, Chomsky has developed a theory of grammar in which all transformations are subject to certain constraints, the Specified Subject, Subjacency, and Tensed $S$ constraints. When a transformation appears to violate these constraints, but does not violate the Complex NP or Wh-Island constraints ${ }^{4}$, the transformation must involve movement into COMP. This means that many rules which have been considered to involve unbounded deletion, such as comparative formation and complement object deletion, are to be analyzed as involving movement into COMP, and subsequent deletion of the affected phrase, rather than controlled, "in place" deletion.

Of themselves, Chomsky's constraints do not disallow unbounded deletion rules. ${ }^{5}$ This is because Chomsky defines the phrase "involves $\underline{X}$ and $\underline{Y}^{\prime \prime}$ used in the constraints as meaning either that $\underline{X}$ is moved to position $\underline{Y}$, or, in the case of anaphora rules, $\underline{Y}$ is assigned a feature indicating that it is anaphoric to $\underline{X}$. Thus it is theoretically possible for a deletion rule to violate not only Subjacency, the Specified Subject Condition, and the Tensed S Condition, but also the Complex NP and Wh-Island constraints, since by Chomsky's theory these are merely results of Subjacency. Thus, it is predicted that there will be an asymmetry between deletion and movement rules, if unbounded deletion rules under
identity exist at all. Although Chomsky's theory does not outlaw unbounded deletion rules, he suggests that such rules may not exist, since many rules thought to belong to this class must be analyzed as Wh-Movement by his theory.

What does all this mean for 01d English? The question arises as to whether the de type relatives, along with complement object deletion and comparative formation in Old English, should be analyzed as involving Wh-Movement, as in the se and se de relatives and questions, or unbounded deletion. There are really two questions here. First, do the constructions where preposition stranding occurs involve unbounded deletion? Secondly, assuming they do involve unbounded deletion, do the deletion rules behave differently with respect to the constraints from known movement rules? With regard to the first question, Bresnan (1976), on the basis of pied piping facts in Old and Middle English found in Allen (1976), Grimshaw (1975), Traugott (1972), and Vizzer (1963), argued that the difference in preposition stranding in de and se (de) relatives in 01d English, and that and wh(that) relatives in Middle English, demonstrated that an unbounded deletion rule is needed for the de and that relatives. Chomsky and Lasnik (1977) replied that these facts did not prove a need for such a rule, since a surface filter could account for the pied piping facts even if both types of relatives involved movement. Furthermore, they assert, even if the de and that relatives involved deletion, these facts are of no theoretical interest since "no one has the slightest idea" whether these relatives obeyed the Complex Noun Phrase Constraint and the Wh-Island constraint. Let us defer for the moment the question of
whether surface filters could be used to account for the pied piping facts in the event that these relatives are to be analyzed as involving movement, and consider this statement about the theoretical interest of the facts under discussion. First, it scems clear that even supposing we cennot determine whether or not these constraints hold for these rules, the facts still are of interest, since if there is no way to account for them under a move-ment-only approach, we will have established the need for an unbounded deletion rule which has recently become a moot question. We have already seen (in Chapter Three) that the de and daet relatives in Old English cannot be simple cases of pronoun dropping, since 01d English had no general pronoun dropping rule, and also because full prepositional phrases could delete under identity. Therefore, if these relatives do not involve movement, they must involve unbounded deletion, since relativization indefinitely far from the head was possible.

Now let us consider the question of whether we can tell if the Complex NP Constraint and the Wh-Island Constraint held in Old English (I limit myself to 01d English here because the preposition stranding facts are clearer in 01d than in Middle English). Chomsky and Lasnik claim that the fact that no examples violating these constraints have been found does not indicate that such violations were not possible because "the relevant structures are quite rare." However, it is not at all clear why sentences like *The man that John wondered who saw should be rarer in a language which allowed such constructions than ones like Who did John say that Bill saw, which occur frequently in Old English. Joan Maling (1977) has noted that in 01d Icelandic texts, examples of relativization into wh-questions are found, just as in Modern Norwegian,
while examples of relativization into complex NP's are not found, again in accordance with the intuitions of speakers of Modern Norwegian. This indicates that texts of this sort do faithfully reflect the possibility of violating constraints in the languages they record. Thus there is every reason to believe that if it was possible to violate the wh-island constraint in Old English, examples of such violations would occur in the texts, which are quite rich and numerous. While we can never be absolutely certain of whether the fact that a certain construction does not occur in a large corpus indicates that that construction was not a possibility in the language, there is certainly much more reason to believe that violations of the wh-island constraint were not possible in Old English than to believe they were. Furthermore, let us suppose for a moment that it was possible to violate the Complex Noun Phrase and Wh-Island constraints in de relatives in 0ld English. This would mean that, according to Chomsky's theory, somewhere between 01d and Modern English the relative using a particle, which had been a deletion relative, became reanalyzed as a movement relative. This seems unlikely, in light of the fact that there is no evidence for such a change. What sort of data would cause a child to make such a reanalysis? Therefore, I will assume that there is justification for believing that de relatives in 01d English behaved in the same way as that relatives in Modern English with respect to the Complex NP and Wh-Island constraints. However, I repeat that even if this assumption is rejected, we can still at least demonstrate the need for an unbounded deletion rule, because the filters proposed by Chomsky and Lasnik fail to provide the movement-only analysis with an adequate way of
accounting for the 01d English pied piping facts. Let us now see why this is so.
9.1.5.1 The local filter. Chomsky and Lasnik (forthcoming) deny that the 01d English pied piping facts present any problems for the move-ment-only analysis of 01d English relatives. They claim that these facts can be dealt with either by a local or a non-local surface filter. Let us first consider the local filter they propose. This filter works in the following way: 01d English will be assumed to have a rule which marks the objects of prepositions with some feature, say $+P$. Let us refer to this rule as "P-marking." This rule must apply before Wh-Movement. Then there would be a surface filter ruling out a +Pronoun in the complementizer if that pronoun is not preceded by a preposition:
(30) Local Filter (Chomsky and Lasnik)


Comp
This filter would allow preposition stranding in constructions where there was no overt pronoun at the surface, assuming pied piping was always optional, because when no pronoun was in evidence, there would be no violation of the filter. So the possibility of stranding prepositions in de and daet relatives, infinitival relatives, complement object deletion, and donne relatives is accounted for. Stranding in pronoun relatives and questions, on the other hand, would be ruled out by the filter. I present here a couple of sample derivations to make this approach completely clear:

First let us consider an 01d English de relative with preposition
stranding:
(31) ealra dara deoda de ge nu wilniad swide ungemetlice daet ge scylon eowerne naman ofer tobraedan
(all the-gen. people-gen. that you now will very irmoderately that you shall your name over extend=all the peoples that you now want very immoderately to extend your name over)

Boeth.XVIII.1 p. 42.24
Due to limitations of space, I present the underlying structure of this example in two parts:
(32)

(33)


On the $\bar{S}_{2}$ cycle, the relative pronoun daere will be marked $+P$ by virtue of being the object of a preposition. Since Chomsky and Lasnik assume a step-cyclic Wh-Movement rule, Wh-Movement will also apply on this
cycle, moving daere into the $\overline{\mathrm{S}}_{2}$ complementizer. At the end of the $\bar{S}_{2}$ cycle, $\bar{S}_{2}$ has this structure:
(34)


On the $\bar{S}_{1}$ cycle, Wh-Movement applies again, moving the relative pronoun into the $\bar{S}_{1}$ complementizer. The pronoun is then deleted, and de is inserted into the complementizer, giving this surface structure:
(35)


There is no violation of the filter here, since the filter applies at the surface, and the pronoun is removed before the surface.

Instead of just moving the relative pronoun, it would have been possible in this structure to move the PP containing the relative pronoun, yielding daere deoda ofer daere (de)..., which is also grammatical. However, it should be possible to delete the relative pronoun here, all other
things being equal, giving the ungramatical daere deoda ofer (de). Chomsky and Lasnik claim that this possibility is ruled out somehow by the principle of recoverability of deletion, which they do not formulate. It is quite unclear, however, why the recoverability of deletion should have anything to do with this matter, since such a deletion would in fact be quite recoverable. In the ungrammatical sequence given, the only thing which could have been deleted is a relative pronoun, and there seems to be no reason why the deletion of a relative pronoun should be recoverable if that pronoun is not the object of a preposition, but recoverable if it is. Rather, it seems that another local filter will be needed to rule out such deletion:
(36) $\underset{\text { comp }}{*}[\mathrm{P}]$

Now let us consider a case where the filter would apply. The example must of course be hypothetical, since such an example would be ungramatical. The following are a hypothetical ungrammatical example of preposition stranding in a question and the attested grammatical example with pied piping on which it is based:
(37) *Hwaet twaeost du nu ymbe?
(38) Ymbe hwaet twaeost du nu?
(About what doubt you now=about what do you doubt now?)

$$
\text { Sol.p. } 85.16
$$

The deep structure for both of these examples would be (39):
(39)


First the wh-pronoun hwaet is marked $+P$, since it is the object of a preposition. Since pied piping is assumed to be optional, it is possible to move only the NP hwaet, giving example (37), which has this structure:
(40)


The surface filter (30) rules this out. If, on the other hand, the PP, rather than just the NP, is moved, we get the grammatical (38), which is not ruled out by the filter.

Chomsky and Lasnik admit that the rule of P-Marking is quite ad hoc. However, they claim that it is no more ad hoc than proposing two types of relativization. Let us examine this claim. First consider the fact that while there is evidence from living languages, such as Basque (see the introduction, section 1.3 ) that the theory of grammar must allow
unbounded delttiions which obey the Complex NP and the Wh-Island constraints, there is no evidence for the need of rules such as P-marking. Note that allowing such rules as a part of grammatical theory greatly increases the power of the theory and the possible grammars available, which is the very thing which Chomsky and Lasnik wish to avoid. What sort of evidence would lead a language-learner to postulate the existence of such a rule in his language? Secondly, consider the fact that this rule violates ©homsky and Lasnik's own proposed restrictions on transformations. The basic motivation for surface filters is to reduce the power of the theory of transformations by eliminating ordering, obligatoriness, and contextual dependencies of rules. However, the rule of P-Marking involves 2 inl these devices. First, it must be ordered before whmovement, or eilse the filter would not be able to prevent the impossible preposition strranding. Furthermore, we shall see presently that this rule must be onrdered after Locative Shift (See Chapter II) if the filter is to permit stranding in daer relatives. Therefore it is not possible to claim that this rule applies before all transformations and is somehow part of the base rules and therefore not subject to the restrictions on transformational rules. Secondly, this rule must be obligatory, or else we would expect some instances of preposition stranding in se relatives, in which case there would be no need for a filter to begin with. Third$l y$, this rule is contextually dependent, since the context $\underline{P}$ is a crucial part of it. Therefore we see that this filter does not help to restrict the power of the grammar, and in fact adds to it by allowing rules such as P-marking. Finally, note that Chomsky and Lasnik's approach necessi-
tates a rule of pronoun deletion in the complementizer, which is not necessary under the movement-or-deletion approach, and possibly a filter to prevent a lone $P$ in Comp, as mentioned before. Thus, under their system we need the following:
(41) a. P-Marking rule
b. Filter (30)
c. Wh-Pro Deletion in Comp
d. Filter (36) (possibly not)

Under the movement-or-deletion approach we need the following:
(42) a. Relative Movement
b. Relative Deletion
c. Prohibition against movement out of PP

Note that while it is difficult to imagine how a child could learn a rule like P-Marking, there is no such problem with the relative deletion rule in a theory of universal grammar which provides that no ghost WhMovement rules are possible. If we restrict grammars to allowing movement which is apparent on the surface, which seems a reasonable restriction, the language learner must analyze de relatives as deletion. Similarly, we can easily include a principle to assure that the language-learner deduces the existence of a prohibition against movement out of NP. We can stipulate as part of the theory of universal grammar that a languagelearner will assume that his language does not permit the movement of NP out of PP, unless he hears evidence to the contrary, i.e. stranded prepositions in movement rules. Such a universal principle ${ }^{6}$ is quite reasonable in light of the fact that many languages do not permit preposition strand-
ing. In any event, such a principle would also be necessary under the filter approach. The language-learner must assume the existence of filter (30) in his language until he hears contrary evidence, as in English, if the filter is to be learnable.

Apart from the theoretical arguments against the rule of P-Marking just advanced, there is another objection to the surface filter, which is that it cannot be extended to account for all the pied piping facts in 01d English. Before seeing how this filter fails, however, let us consider how the facts about preposition stranding in daer relatives must be handled under the filter approach.

The reader will recall that in section 3.2.1.5, we saw that preposition stranding was optional in daer relatives. Under the filter approach, if P-Marking were to occur before the Locative Shift rule, such relatives with preposition stranding should be ruled out by the filter, because daer, as the object of a preposition, would be marked $+P$. We might try to account for the possibility of stranding in these relatives by adding the feature -locative to the pronoun in the filter, preventing the filter from applying when the $+P$ pronoun in the complementizer was locative. However, this solution will not work, because locative questions, unlike locative relatives, could not strand prepositions in 0ld English, as we have seen. A filter with the feature -locative would predict that they could. Since the question word hwaer never appeared with a preposition, either before or after it, one might argue that hwaer was never generated as the object of a preposition, but only as an adverb, and so was never in the position to strand prepositions. This move would
also save the filter from another problem, which is that if hwaer is generated as the object of prepositions, every hwaer question should be blocked by the filter, since hwaer would be marked $+P$ and would not be preceded by its preposition when the filter applied, because preposition deletion would have applied earlier. But it is very unlikely that hwaer was not generated as the object of a preposition, since its relative counterpart daer clearly was, and furthermore, when locative shift generalized to interrogative locatives in the thirteenth century, we do find where with prepositions after it:
(43) Mi deorewurde dohter hwerfore uorsakestu di sy (My precious daughter, wherefore forsakest-thou thy victory=my precious daughter, what do you forsake your victory for?)

St.Jul. 69 (Royal Ms)
(44) So dinked euerilc wis man de wot quor-of mankin bigan (So thinks every wise man that knows whereof mankind began) G\&Ex. 2407

It is very unlikely that this change was the result of a deep structure change in the distribution of hwaer. Rather, the Locative Shift rule must simply have generalized to wh-pronouns. The reason for this change was presumably that at this time, there was no longer a clearcut morphological distinction between the interrogative and the relative pronouns, since the interrogative pronouns were beginning to be used as relative pronouns. See section 5.4 .2 for a discussion of this change.

It seems clear, therefore, that the fact that hwaer could not strand prepositions, but daer could, is closely related to the fact that hwaer did not undergo Locative Shift, while daer did. We can accomodate this fact under the local filter approach by ordering the P-Marking
rule after Locative Shift. In this way, daer which has undergone locative shift will not be marked $+P$ and so not offend the filter. If the rule deleting prepositions before locative pronouns is also ordered before P-Marking, the preposition will always delete before hwaer, since hwaer did not undergo Locative Shift, and $P$-marking will not apply. Since $P$ Marking does not apply, the filter is not violated by hwaer questions. In this way we account for the grammaticality of stranding in daer relatives, the impessibility of stranding in hwaer questions, and the goodness of hwaer questions with no preposition. Let us run through a couple sample derivations to make this perfectly clear. First, consider the following relative clause with a preposition separate from the relative pronoun daer:
(45) ymb da beorgas de man haet Parnasus, daer se cyning Theuhale on ricsode
(around the mountain that one calls Parnassus, where the king Deucalion on (i.e. over) ruled=around the mountain called Parnassus, where the king Deucalion ruled (over) Oros.p.36.8

Let us first establish that this is a true example of preposition stranding. First, it should be noted that Bosworth and Toller do not list onricsian as a verb (and they do generally list all verbs with adverbial prefixes). Secondly, it is clear that ricsian could take prepositional objects with on:
(46) On dam dagum rixode Aedelbyrht cyning on $\frac{\text { Cantwarebyrig }}{\text { (In those days ruled Ethelbert king in Kent) }}$ Alc.Th.vol. 2 p.128.17

Therefore it is clear that daer in (45) is the object of on. The underlying structure for (45), ignoring non-crucial phrases, is (47):
(47)


Locative Shift must first apply, switching the positions of on and daer. Then the rule marking prepositional objects $+P$ does not apply, because daer no longer follows its objects. Wh-Movement then applies, moving daer into the complementizer, and giving the surface structure (48):
(48)


Since daer is not $+P$, there is no violation of the filter:
Now let us consider a hwaer question:
(49) Hwar byd donne heora wela?
(Where is then their wealth=where is their wealth then?) Angl.Hom. XIV. 35

Since beon normally took aet, in, or on with an NP to express location, we hypothesize a structure like (50) as the deep structure of (49):
(50)


Locative Shift does not apply, since only -wh locatives are subject to it. Preposition Deletion does apply, being obligatory, and therefore P -marking does not apply, since hwar no longer follows a preposition after preposition deletion. Hwar then moves into the complementizer, giving this surface structure after subject-verb inversion:


The important fact here is that even under the filter approach, it is necessary to order Locative Shift before the relativization rule. The only alternative is that daer is simply an exception to either the pied piping convention or the filter, which would be quite uninteresting and leave as a coincidence the fact that preposition stranding only occurs in relatives in the very case where a noun phrase can separate from its preposition in a simple sentence also.

Now that we have seen how the filter works, let us see how it runs into problems when we try to extend it to facts about pied piping in constructions other than relatives and questions.

First, let us consider Topicalization. As we have seen, preposition stranding in Topicalization was not possible in 01d English, except when the object of a preposition was a pronoun which could invert with a preposition and separate from it. Chomsky (forthcoming), noting that Topicalization behaves in the same way with respect to the constraints as Wh-Movement, proposes a new analysis of Topicalization to accomodate it to his theory that all constructions which behave in this way involve Wh-Movement. It should be noted here that 0ld English Topicalization also apparently violated the Specified Subject and Tensed $S$ constraints (see section 2.1), so Old English Topicalization must be analyzed in the same way as the Modern English rule. In Chomsky's analysis, a phrase which appears to have been moved to the front of a sentence by Topicalization is actually generated in a special topic position before $\bar{S}$, under a new node $\overline{\bar{S}}$. A wh-pronoun is generated in the place where the topic appears to belong in the sentence, and is then moved into the complementizer and later deleted. Under Chomsky's approach, the deep structure for (52) would be (53):
(52) Ac das ding ic spraec to eow (But these things I said to you)

$$
\begin{equation*}
\text { Alc.P.IX. } 18 \tag{53}
\end{equation*}
$$



The reason for the new node $\overline{\bar{S}}$ is that it is possible to topicalize in embedded sentences, as in (54):
(54) Harold retorted that his subscription to Linguistic Anguish, he would never cancel.

This was also possible in Old English:
(55) ...de wende daet him ne mihte nan werod widstandan (who thought that him not might no army withstand= who thought that him, no army could withstand) Alc.S.XXVI. 29
(56) fordam de him nan man done godcundan geleafan ne taehte (because that him no man the divine faith not taught= because him, no one taught the divine faith)

$$
\text { Alc.S.XXx. } 12
$$

According to Chomsky, such sentences have the following structure:
(57)


If Topicalization is to be analyzed in this way, the local filter cannot account for the fact that pied piping was obligatory in Topicalization. Consider a hypothetical ungrammatical Old English sentence with Topicalization and preposition stranding and the attested sentence with pied piping upon which it is based:
(58) * Baes lichaman life, de langsum beon ne maeg, swincad menn
(59) For daes lichaman life, de langsum beon ne maeg, swincad menn swide (For the body's life, that long be not may, toil men great-
$l y=$ for the life of the body, which cannot be long, men
toil greatly)

$$
\text { Alc.P.VI. } 145
$$

To derive (59), the prepositional phrase which appears at the beginning of the sentence is generated in the topic slot, and Wh-Movement applies, after which the wh-pronoun is deleted. The problem here is that there appears to be no way to prevent just the NP daes lichaman life from being generated in the topic spot, with a corresponding whpronoun in the sentence. The wh-pronoun would be marked $+P$ by $P$-Marking, but it would delete before the filter applied, since the filter is a surface filter, which means that the filter would not be violated, and the ungrammatical (58) would result. The only way the filter could rule out preposition stranding in topicalization by this analysis would be if the filter applied before pronoun deletion. But this is impossible, for two reasons. First, Chomsky and Lasnik explicitly state that such filters must be limited to the surface level. Otherwise, the power they add to the theory, and the resulting possible grammars, would be tremendous. Secondly, such a move would undo the work the filter is designed to do. If the filter applies before pronoun deletion, there is no way to allow preposition stranding in de relatives and other constructions in which "ghost" Wh-Movement is assumed to have applied. Therefore, the local surface filter fails completely to account for the facts about pied piping in Topicalization, under this analysis of Topicalization proposed by Chomsky.

Another problem with this filter is that it cannot account for the fact that preposition stranding was not possible in passives. Note
that it is not possible to revise this filter to deal with the passive facts, because the Comp brackets are an essential part of the filter. It is these brackets which express the fact that the $+P$ pronoun must be preceded by a preposition for the sentence to be grammatical. If the brackets are removed, there is no way to express this fact. The filter cannot simply be revised as (60), since this would rule out all prepositional phrases:

$$
*\left[\begin{array}{c}
N P  \tag{60}\\
+P
\end{array}\right]
$$

That the passive facts should be dealt with by whatever accounts for the other pied piping facts is indicated by the fact that preposition stranding became possible in passives at the same time as it was becoming possible in other constructions involving movement, as we have already seen.

Now that we have seen the problems involved in postulating a local surface filter to deal with the 01d English preposition stranding facts, let us see how the non-local filter proposed by Chomsky and Lasnik fares.
9.1.5.2 The non-local filter. Chomsky and Lasnik proposed a nonlocal filter as a possible alternative to the local filter we have just discussed. This filter makes use of the trace theory of granmar and is formulated by Chomsky and Lasnik as follows:

$$
\begin{equation*}
\text { *[wh...Pt] where } t \text { is the trace of wh } \tag{61}
\end{equation*}
$$

It should first be noted that this filter must be revised in two ways if it is to work at all. First, we need brackets around Pt to show that they constitute a prepositional phrase. This is because in 01d

English, as in Modern English, there are intransitive prepositions or particles: ${ }^{7}$
(62) Ba eode Petrus ut \& byterlice weop (Then went Peter out and bitterly wept=then Peter went out and bitterly wept)

St.Luke 1383
(63) Ba ahof Paulus up his heafod
(Then raised Paul up his head=then Paul raised his head up) Blickling p. 187
(64) Ba eode he aweg unrot
(Then went he away unhappy=then he went away unhappy)
St. Mat. 1093
(65) Gif munuc inne on his heortan eadmod bid (If monk within his heart humble is=if a monk is humble within, in his heart)

Ben.p. 31.2
(66) Ba abraed Petrus bealdlice his swurde, and gesloh heora anum daet swidre eare of
(Then drew Peter boldly his sword, and struck them-gen. one the right ear off=then Peter drew his sword boldly, and struck off the right ear of one of them)

$$
\text { Alc.Th.vol. } 2 \text { p. } 246.22
$$

As it stands, the filter would wrongly rule out the possibility of relativizing, topicalizing, or questioning an NP which happened to follow one of these intransitive prepositions. Labelled brackets must be used to express the fact that the configuration in (61) is bad only if the trace is bound to the object of the preposition. Secondly, since the strarded preposition, when there was one, nearly always preceded the verb in Old English, we need to allow for material after the trace, giving this revised filter:
(67) Revised Non-Local Filter

* [wh... $\left.{ }_{P P}[P t] \ldots\right]$ where $\underline{t}$ is the trace of $\underline{w h}$

This filter works in the following way: when a noun phrase is moved, it leaves a trace, which is indexed and "bound" to the noun phrase of which it is the trace. This filter prevents any wh-word from binding a trace in a prepositional phrase.

Before seeing some problems with this filter, let us consider its theoretical status. Chomsky and Lasnik suggest that it may be possible to limit all surface filters to being local filters, which would be a desirable result. A non-local filter like the one under discussion is a very powerful device, greatly increasing the class of possible grammars. Chomsky and Lasnik wish to restrict transformational theory, and consequently the possible grammars of a language, by eliminating rule ordering, obligatoriness, unbounded deletion rules, etc. However, it seems clear that as noted in Bresnan (1976b), the power taken away from one part of the grammar is added to another part under Chomsky's theory, here in the form of a non-local filter. Bresnan notes that the filter needed for the 01d English facts makes crucial use of variables and labelled brackets, which are devices which Chomsky has argued should, not be allowed in transformational theory. Therefore it is not at all clear that a theory which must permit non-local filters is in any way more restrictive than a theory allowing such devices in transformations, but dis-allowing non-local filters.

Now let us consider some problems with this filter. First, it is immediately apparent that this filter runs into the same problem with Topicalization as the local filter, under Chomsky's formulation of this rule. Assuming Chomsky's analysis, it would be possible to generate a
simple NP in the topic position, corresponding to a wh-word within a PP in the sentence, and move the wh-word into the complementizer. Since the wh-word is deleted before the filter applies, there is no longer any wh-word binding the trace after the stranded preposition, so there should be no violation of the filter. ${ }^{8}$ It is, of course, impossible to revise the filter as (68), since this would wrongly rule out preposition stranding in de relatives, etc. under the assumption that they involve whMovement:
(68)

$$
{ }^{*} \ldots{ }_{P P}[P t]
$$

The only way a non-local filter like the one under consideration could deal with the preposition stranding facts in Topicalization would be to abandon the hypothesis that Topicalization is literally Wh-Movement, and postulate instead that it moves into the complementizer, in a different slot from the wh-word, as discussed in footnote 8. Under such revised assumptions, the non-local filter would have to be revised to deal with any NP leaving a trace after its preposition, rather than just whwords:
(69) Non-local Filter-Final Revision

$$
\text { *...NP.... }{ }_{P P}[P t] \ldots \quad \text { where } t \text { is the trace of } N P
$$

If a variable is included before the NP, as in the above formulation, this filter will also now deal with the Passive facts, and the fact that preposition stranding became possible in Topicalization, Passivization, Wh-Relativization, and Question Formation at the same time. However, there is a problem with this filter. The reader will recall that
preposition stranding was generally possible in Topicalization just in case the topicalized item was a pronoun. The local filter was able to deal with this fact by ordering P-Marking after P-Shift. However, this filter does not have recourse to such devices. By the trace theory, it is assumed that the rule of P -Shift involves movement of the NP, which leaves a trace after the preposition, whence it was moved. When the NP is then topicalized after P-Shift and PP Split, the filter (69) will be violated. Let us consider a sample derivation.
(70) and him com daet leoht to durh paules lare (and him came that light to through Paul's teaching=and him, the light came to through Paul's teaching)

Alc.S.XXIX. 18
The underlying structure would be (71):
(71)


Assuming P-Shift leaves a trace, ${ }^{9}$ after P-Shift and PP Split, we have the following structure:
(72)


Topicalization will move the NP him into the complementizer, and Subject-Verb inversion ${ }^{10}$ applies:


Since the NP him binds $\underline{t}$, the filter should wrongly rule out this sentence.

A similar problem arises with Locative Shift. Assuming that this rule also leaves a trace, daer relatives with preposition stranding should be impossible, for similar reasons. I know of no reason why Locative Shift should not leave a trace.

Of course, one might be able to handle these facts in a mechanical way by adding features and angle brackets to the $N P$ in this filter to provide that if the NP is a pronoun, it is -locative and -personal, meaning that only non-locative relative and question pronouns, along
with full noun phrases, violate the filter. However, such a move would greatly increase the power of the theory by allowing angle brackets in filters, and would furthermore have absolutely no explanatory value, but would merely be a statement of the facts. By this approach, there is no reason why locative and personal pronouns should behave in this manner. On the other hand, under the assumption that these very items separate from their prepositional phrases by an independent rule, which seems to be necessary in any case to explain their behavior in simple sentences, these facts fall out automatically.

I would like to corment briefly here on Chomsky and Lasnik's assertion that these surface filters actually give a more principled explanation for the facts than the assumption that the rules which strand prepositions in 01d English are deletion rules. They claim that if 01d English de relatives were subject to the same constraints as Wh-Movement but involve deletion, we will have to make the ad hoc stipulation that this rule obeyed the Complex NP Constraint and the Wh-Island Constraint, since "there is no compelling evidence, to our knowledge, that any deletion rule meets these constraints, and it is well known that some do not." However, as already noted, Basque does present compelling evidence for a deletion rule obeying these constraints, since the Basque relativization rule cannot be analyzed as Wh-Movement. Furthermore, as far as I know, the deletion rules not obeying the constraints which they allude to all involve the deletion of specific lexical items, such as relative or personal pronouns in languages having free deletion of pronouns, and do not involve deletion under identity. If we postulate that not only move-
ment rules, but also rules of deletion under identity, obey the constraints, and that where there is nothing on the surface which appears to have been moved, there is no movement, but deletion, 11 the assumption that all rules in Old English which allowed preposition stranding are deletion rules follows naturally, since in just these rules there is no surface evidence for movement. Such assumptions, as noted in Maling (1977), would allow us to reduce the abstractness of syntactic derivations.

### 9.1.5.3 Typology of proposition stranding in the Germanic lan-

 guages as an argument against the filters. Joan Maling (1977) has pointed out that there seems to be "a direct correlation between the development of preposition-stranding and the prior existence of a relative clause construction with invariant complementizer in the Germanic languages." She concludes that preposition stranding seems to occur in some languages, such as 01d English and Old Icelandic, in exactly those constructions where there is no surface evidence for movement, and that this is unexplained by any theory which must analyze all these constructions as involving Wh-Movement. Let us see how this filter approach would deal with the typology of the Germanic languages. First let us get an overview of preposition stranding in the Modern Germanic languages. ${ }^{12}$Swedish has an indeclinable relative particle som, which also means as in comparatives. It can never be preceded by a preposition, and preposition stranding is possible in these relatives:
(74) Jag känner inte den person, som ni talar om.
(I know not the person that you talk about)
(75) *Jag känner inte den person, om som ni talar. *(I know not the person about whom that you talk)

The interrogative pronouns are also used in relative clauses, in which case pied piping is optional:
(76) Den nya eleven, om vilken jag talade, var ocksa dar. (The new pupil of whom I spoke was also there)
(77) Den nya eleven, vilken jag talade om, var ocksa dar.

Pied piping is also optional in questions:
(78) Med vem talade du?
(With whom spoke you=with whom did you speak?)
(79) Vem talade du med?

It is also possible to strand prepositions in Topicalization and certain passives in Swedish:
(80) Johan talade jag med (John spoke I with=John, I talked with)
(81) Med Johan talace jag.
(82) Man talade om honom.
(One talked about him)
(83) Han talades om.
(He talked-passive about=he was talked about)
Similar facts obtain in Norwegian:
(84) Det var mannen (som) jeg snakket til.
(That was man I talked to=that was the man (that) I talked to)
(85) Hva taler han om?
(What talks he about=what is he talking about?)
However, in Norwegian pied piping has become impossible, and preposition stranding has become obligatory, according to Haugen's Beginning Nonwegian. Haugen says, "only in older written usage does one occasionally find a sentence like Om hva taler han..." Also, the use of the relative pronoun has disappeared. According to Haugen,

Corresponding to English who, whom, which and that when these are used as relative pronouns, there is only one word: som. ... In older written usage one also finds der (only as subject), as well as the interrogative hvem, hva, hvilken and hvis.

I have no data about passives and Topicalization in Norwegian.
The facts in Danish are also similar:
(86) en mand pa hvem man kan stole
(a man on whom one can rely)
(87) en mand hvem man kan stole pa
(88) en mand som man kan stole pa
(89) *en miand pa som man kan stole

In Faroese, we find the following:
(90) Her er madurin, sum hann eitur eftir.
(Here is man, that he called-passive after=here is the man that he is called after)
(91) Hvonn tosi eg vid?
(Whom talk I with=who am I talking with?)
(92) Men ti doydi hann ikki av.
(But that-dat. died he not of=but that he didn't die of)
(93) Maer bleiv ofta flent at.
(Me was often laughed $\overline{a t}=I$ was often laughed at)
(94) Hann flenti at maer.
(He alughed $\frac{\mathrm{t}}{\mathrm{at}} \frac{\mathrm{me}}{\mathrm{me}}$
Lockwood's grammar gives no examples of pied piping and does not mention whether it is possible.

In Frisian, diar "there, where" is used as an invariable relative particle, and preposition stranding is possible with it:
(95) At as'n ding, diar arken degelks brükt.
(That is a thing that everyone daily uses=that is a thing that everyone uses every day)
(96) Hü wiar det'r am me di kinning, diar di ual präster fan fertelld?
(How was that then with the king that the old priest of told=how was that with the king that the old priest told of?)

In contrast to these languages, Dutch has no invariable relative particle. Instead, the demonstrative pronouns die (for masculine and feminine nouns) and dat (for neuters) are used as relative pronouns. After prepositions, the interrogative pronoun wie is used (except if the object is neuter, in which case it must be waar and invert with the preposition). It is not possible to strand prepositions in Dutch relative clauses, except when the pronoun waar, which, as we have seen, inverts with its preposition, is used. These facts are discussed in section 3.1.1.5, so the examples are not repeated here. The important thing to remember here is that in Dutch, as in Old English, the locative pronouns could separate from their prepositions not only in relative clauses and questions but also in simple sentences.

Like Dutch, Standard German, which has no invariable relative particle, allows no preposition stranding in ordinary relatives and questions:
(97) Der Mann, mit $\frac{\text { dem ich gestern gesprochen habe... }}{\text { ich }}$
(The man with whom I yesterday spoken have=the man with whom I spoke yesterday...)
(98) *Der Mann, dem ich gestern mit gesprochen habe...

German also has Locative replacement and Locative shift:
(99) Er sprach von der Sache. (He spoke about the matter)
(100) Er sprach davon.
(He spoke thereof=he spoke about that)
(101) Von wem sprechen sie?
(Of whom speak they=of whom do they speak?)
(102) Wovon sprechen sie?
(Whereof speak they=of what do they speak?)
Unlike Dutch, however, Standard German does not permit the locative pronouns to separate from their prepositions in simple sentences:
(103) Davon sprach er.
(Thereof spoke he=about that he spoke)
(104) *Da sprach er von.

Since we attributed the preposition stranding in locative relatives in Dutch and Old English to the ability of locative pronouns to separate from their prepositions in simple sentences, we predict that in German, preposition stranding will not be possible in locative relatives or questions. This prediction is borne out:
(105) *Wo sprechen sie von?
(106) Die Sache, wovon er sprach...
(The matter, whereof he spoke=that matter of which he spoke...)
(107) *Die Sache, wo er von sprach...

Riemsdijk (1975) has suggested that the ability of locative pronouns in Dutch to separate from their prepositions is due to an automatic consequence of the structure of the prepositional phrase after Locative Shift has applied. By his analysis, the rule we have referred to as Locative Shift Chomsky-adjoins the pronoun to the prepositional phrase, with the foun phrase leaving a trace, giving this derived structure:
(108)


Riemsdijk's explanation for the Dutch facts is that extraction from $\bar{P}$ is not permitted in Dutch. As it stands, this restriction will prevent extraction from structure (108). However, Riemsdijk revises this restriction to prohibit extraction from $\bar{P}$ only when the extracted item is dominated by the category immediately dominating the head of the PP (that is, the preposition). Since in (108), the NP to be extracted is not dominated by $\overline{\mathrm{P}}_{2}$, which immediately dominates the preposition, extraction of this NP is possible. Thus, under this approach, it is the Locative Shift rule which makes locative pronouns in Dutch available for extraction, because it Chomsky-adjoins the pronoun to $\bar{P}$.

Since the preposition stranding facts are only slightly different in German, one would hope to give a similar explanation for the facts in these two languages. However, in German the Locative Shift rule does not make the locative pronoun available to extraction. Therefore, by Riemsdijk's approach we must claim either that the Locative Shift rule in German must be different, sister adjoining the NP to the $P$, or else the constraint must be different, mentioning nothing about immediate domination. In the interest of language-learnability, one would prefer to have the Locative Shift rules, which yield similar data in the two languages, have the same formulation in German and Dutch.

There are also difficulties with attributing the difference to the presence or lack of the stipulation about immediate domination in the particular language. In this case we cannot postulate that the language learner assumes the existence of a constraint or a part of a constraint (in this case the immediate domination stipulation) unless there is positive evidence to the contrary. In this case, negative evidence, that is, the lack of extraction after Locative Shift, it is necessary for the language learner to deduce that his language does not have the rider about immediate domination attached to this constraint. It would be preferable to restrict the theory by hypothesizing that a language learner deduces the absence of a constraint only by positive evidence. At any rate, the stipulation about immediate domination is totally ad hoc, since there is no independent evidence that it is necessary. One might just as well postulate that extraction is possible because the pronoun precedes the head, etc. Therefore it seems preferable to assume that Dutch and German have the same formulation of the Locative Shift rule and the same constraint against extraction from PP, but that German lacks the PP-Split rule. Remember that in Old English, at least, there is some independent evidence for a PP-Split rule, since adverbs intervene between pronouns and their prepositions even when there is no evidence that the pronoun has been moved.

In conclusion, it appears that an indeclinable relative particle is a necessary precondition for preposition stranding in relative clauses, in the Germanic languages at least, as noted by Maling. It is easy to see how this fact could be accounted for by the assumption that some lan-
guages have relativization by deletion or movement, and that others have only relativization by movement. If we postulate that whenever there is no surface evidence for movement in relatives, deletion is involved, it follows that the languages with no invariable relative particle have only movement. We can further postulate that Proto-Germanic had a prohibition against movement out of PP. It may also have had a similar prohibition against deletion from PP, but this prohibition was liable to be dropped, because deletion of an entire PP was generally impossible due to recoverability of deletion. ${ }^{14}$ In the languages which had relativization by deletion, the relaxation of the prohibition against preposition stranding by deletion led to a similar relaxation of the prohibition against stranding in movement. ${ }^{15}$ In the other languages, since there was never deletion relativization, preposition stranding never developed.

Now let us consider how this typology might be dealt with by the movement-only approach. Assuming that the non-local filter can be amended to work, we might postulate that Proto-Germanic had this filter. Some of the Germanic languages did not have a pronoun deletion in Comp, that is, the languages having no invariable relative particle.

Note, incidentally, that by this approach it is accidental that the languages which have only pronominal relatives, such as Dutch and German, have no pronoun deletion rule, while the languages which have an invariable particle, such as English and Swedish, do. Under the approach advocated in this thesis, however, this typology is predicted, since relatives like He's the man $\underline{I}$ saw are assumed to be the result of the deletion (or non-insertion) if only the complementizer, rather than
deletion of both a complementizer and a pronoun. Deletion of a pronoun in Comp is assumed not to exist, and since there is no relative complementizer in the languages having only pronominal relatives, there are no relatives without overt markers. Be that as it may, in the languages which had the pronoun deletion rule, preposition stranding was sometimes possible, since if the pronoun deleted, there was no violation of the filter. The presence of preposition stranding in some relatives led to the eventual loss of this filter in these languages.

It appears, then, that the movement-only approach can account for the typology of preposition stranding if we assume a surface filter. However, there is a Germanic language which does not quite fit into this typology, namely Yiddish. Let us see whether the filter approach can give a unified explanation for the Yiddish facts and the facts in the languages already discussed.

Yiddish, ${ }^{16}$ like English and the Scandinavian languages, has an invariable relative particle, identical to the complementizer vos:
(109) Der yid vos ikh ze iz basheftikt.
(The man that I see is busy)
(110) Es iz a glik vos er redt khinezish. (It is a good (thing) that he speaks Chinese)

Yiddish, however, does not allow preposition stranding in vos relatives, just as it prohibits it in pronominal relatives, questions, Topicalization, and Complement Object Deletion:
(111) *Dos is der yid vos ikh hob geret mit.
(This is the man that I have spoken with)
(112) *Dos is der yid vemen ikh hob geret mit.
(113) Dos is der yid mit vemen ikh hob geret.
(114) Mit vemen hostu geret?
(115) Vemen hostu geret mit?
(i16) *Zi iz interesant tsu redn mit (She is interesting to talk with)
(117) Oyf im farloz ikh zikh
(On him depend I=on him, I depend)
(118) *Im farloz ikh zikh oyf.

Notice that neither the local nor the non-local filter discussed here can account for the lack of preposition stranding in vos relatives and complement object deletion in Yiddish, if these constructions are to be analyzed as involving movement. Lowenstamm (to appear) has argued for a movement analysis for these relatives. The problem is that since there is no pronoun ${ }^{17}$ on the surface in these relatives, neither filter can rule out preposition stranding in this construction.

There is, of course, another surface filter which could be used to rule out such preposition stranding:

$$
{ }^{*}{ }_{P P}\left[\begin{array}{ll}
P & t \tag{119}
\end{array}\right]
$$

Assuming that vos relatives and Complement Object Deletion in Yiddish involve movement, this filter will rule out preposition stranding in these constructions, as well as in those with overt movement. There are two objections to this filter, however. First, Chomsky and Lasnik noted that all the filters they discussed had to do with the complementizer system, and suggested that it may be possible to restrict the theory so that surface filters can only affect phrases in the complementizer. Without such a restriction, the device of the surface filter becomes extremely strong, and all sorts of filters become possible,
greatly expanding the number of possible grammars for a language. Secondly, one would hope to give a unified explanation for these facts and the other facts discussed. By the filter approach, the Yiddish facts must be accounted for by a filter very different from the one needed for the other Germanic languages.

Now let us consider how the movement-or-deletion approach could account for these facts. Under this approach, we can postulate that the language learner assumes that his language has a restriction against both movement and deletion of NP from PP, unless he hears positive evidence to the contrary. If he hears evidence only that this prohibition does not hold for deletion, he assumes that movement, but not deletion, out of PP is prohibited. On the other hand, if he hears evidence against both restrictions, he simply drops the assumption that his language has any restriction against extraction from PP. We can then say that while the presence of an invariable relative complementizer is a necessary condition for the development of a deletion relative and therefore preposition stranding in deletions, it is not a sufficient condition for the development of preposition stranding in deletions. In Yiddish, the strong form of the restriction against extraction from PP has been kept, while in the other Germanic languages which have developed deletion relatives, the deletion proviso of this restriction was first dropped, and after that, the movement proviso was also abandoned. Thus this approach provides a unified explanation for the pied piping facts in the different Germanic languages.

To summarize the findings of this section, we have seen arguments
against analyzing de relatives and other 0ld English constructions in which there is nothing on the surface which appears to have been moved as involving movement. We have seen that two surface filters which have been proposed to deal with the 01d English pied piping facts fail on the grounds of descriptive and explanatory adequacy. The local filter seems completely hopeless. The non-local filter might be made to work with sufficient tinkering, but such a filter would add undesirable power to the theory of grammar, and at any rate, it appears that such a filter could not capture the relationship between PP-Split and preposition stranding in locative relatives. Furthermore, we have seen that the surface filter approach to preposition stranding fails to give a unified account for the preposition stranding facts in the other Germanic languages.

### 9.2 Filters and the Fixed Subject Constraint

In this section I will discuss the theoretical importance of some of the facts (other than preposition stranding facts) about questions and relative clauses which have been presented in the earlier chapters. We will see how these facts bear on the question of whether Bresnan's Fixed Subject Constraint should be reformulated as a surface filter.

We saw in Chapter Three that in Old English it was possible to question or relativize the subject of a clause, leaving an overt complementizer. We noted that this is not possible in Modern English:
(120) a. *Who did he say that left?
b. *He's the man who Fred said that left.

I repeat here a few examples of such sentences in Old English:
(121) Mine gebrodra, ne lufiga ge disne middangeard de ge geseod daet lange wunian ne maeg (My brethren, not love you this world that you see that long last not may=my brethren, do not love this world that you see can not last long)

$$
\text { Alc.Th.XL.p. } 614
$$

(122) \& of dam ilcan bocum tyn capitulas, da ic geond stowe awrat \& ic wiste daet swidost neddearflecu waeron, sealde ic him
(and of the same book ten chapter, which-f.a.p. I passage-by-passsage transcribed and I thought that most needful were, gave I them=and I gave them ten chapters of the same book which I transcribed passage-by-passage and thought were most needful)

Bede p.278.1
(123) Ac hwaet saegst du donne daet sie forcudre donne sio ungesceadwisnes?
(But what say you that is wickeder than foolishness?=But what do you say is wickeder than foolishness?)

Boeth. XXXVI. 8
Such examples are quite common and occur in virtually all texts, so there is little possibility that these are simply performance errors.

The restriction against extracting the subject of a clause when a complementizer is present is not limited to English. This phenomenon was studied in various languages in Perlmutter (1968), who suggested a language-specific surface filter ruling out any non-imperative $S$ not containing a subject. The details of Perlmutter's analysis which allow him to analyze a subordinate clause without a complementizer as not being an S need not concern us here. An alternative solution was proposed in Bresnan (1972), who suggested a language-specific constraint (the Fixed Subject Constraint) against the extraction of a subject adjacent to a complementizer.

Recently, Chomsky and Lasnik (forthcoming) have suggested a new
approach to accounting for these facts, which I will refer to as the "Fixed Subject Constraint" facts, although this constraint may not be the appropriate way to account for them. Chomsky and Lasnik propose a universal surface filter to account for these facts:
(124)
*[ that

## [e]]

, except in the context NP ${ }^{[N P . . .]}$

A few words of explanation about this filter need to be said. First, the NP containing $\underline{e}$ is to be understood as the trace of the extracted NP (which, being next to the complementizer, must be the subject NP). Secondly, the exception clause is included to allow the relativization of a subject when the head of the clause is adjacent to the complementizer in question, as in the man that left. ${ }^{18}$ Thirdly, Chomsky and Lasnik assume the filter to be universal because they feel that it would be unlikely that such a filter could be learned, so it must be part of the universal innate knowledge of the language learner. The that in the filter must of course be understood to represent similar complementizers in all languages.

Chomsky and Lasnik note that some languages appear to violate this supposedly universal filter. They claim, however, that all languages which appear not to obey the filter are languages which have subject pronoun drop rules, such as Spanish. They propose that subject drop rules also can delete traces. In this way, the traces of extraction of subjects next to complementizers are eradicated, meaning that the filter is not violated in these languages.

Since Chomsky and Lasnik's account of the Fixed Subject Con-
straint facts depends crucially on a correlation between a language's having a pronoun drop rule and its allowing violation of the fixed Subject Constraint, the existence of a language not obeying this constraint (or filter), but also not having a subject pronoun drop rule, would be counter evidence to their analysis. We have seen that 01d English was such a language. Fortunately, there is also similar evidence from some living languages that there is no necessary correlation between pronoun drop rules and disobecience to the Fixed Subject Constraint. Modern Norwegian, Icelandic, and (at least) one dialect of Dutch ${ }^{19}$ allow such extraction of subjects, but do not have pronoun drop rules, as we saw in footnote 4 to Chapter Three. Therefore, Chomsky and Lasnik's surface filter cannot be the correct explanation for the facts about extraction of subjects next to complementizers, at least on a universal level.

### 9.3 Comparative Clauses

We have already discussed some of the theoretical importance of the facts about Old English and Middle English comparative clauses in Chapter Eight. However, it is appropriate to review and expand upon this discussion a bit here.

One fact of interest was that the O1d English compared adjective with ra cannot have been derived from ma + adjective. There is also no reason to postulate an underlying ma in the 01d English equivalents of too tall, etc. Since the fact that more alternates with er in Modern English comparatives is basically a historical accident, there is little reason to assume that the latter Modern English construction is derived
from the former. The language learner, of course, does not know that the more he hears in front of adjectives was borrowed from French, so it is logically possible that he would analyze more and er as having the same deep structure. However, there is no a priori reason why two constructions with the same meaning should have the same deep structure. Since er seems to have been just a suffix in Old English, there is no reason why it could not still just be a suffix, rather than a deteminer.

A fact of great theoretical interest is the fact that Old English had a comparative movement rule (Swa Hovement). There are a couple of interesting facts about this rule. First, Swa Movement moved the affected item before the swa which we have been calling the complementizer of the comparative clause. This fact is of interest because it shows that this second swa must have really been a complementizer, and not a preposition introducing the comparative clause. Chomsky and Lasnik (forthcoming), on the other hand, argue that Modern English than and as in comparatives are not complementizers. It would be extremely odd to have a rule moving something out of a clause to the front of a preposition in a higher clause. On the other hand, there is nothing odd about a rule moving something to the front of $\bar{S}$.

Secondly, we have seen that Swa Movement cannot be responsible for many comparatives, particularly those in which only a determiner is missing, because Swa Movement could not move a determiner alone. To postulate two rules of Comparative Movement, one to account for the Swa Movement cases and comparatives in which a whole $X^{3}$ has disappeared, and another to account for comparatives in which only a determiner is miss-
ing, would certainly be worse than postulating a rule of Comparative Deletion and another rule of Swa Movement, since it would be odd to have two movement rules which were so similar, especially when there is no overt surface evidence for the existence of a rule moving only determiners. ${ }^{20}$

### 9.4 Conclusion

One would not wish to base a theory of (synchronic) syntax solely on evidence from a dead language, because of the lack of negative data, the fact that some instances of a construction may merely be mistakes, and so on. However, as one is studying the history of a language, it is necessary to make hypotheses about the structures found in the various stages of the language, because without analyses of the different stages, no interesting description of the changes can be given. In so far as the facts of the various stages support or present problems for the synchronic theory, these facts may add to the weight of evidence in living languages for or against a particular theory. Also, a particular analysis of a construction at one stage may make a change in that construction in another stage more plausible, and indirectly support a theory which forces that first analysis.

The facts presented in this thesis are brought forth with the hope that they may help in the development of a theory of diachronic syntax. However, the facts that we have found also bear on questions of synchronic theory. In particular, the facts brought out here support a theory which permits unbounded deletion under identity. Further-
more, we have seen that it does not seem possible to eliminate obligatoriness, contextual dependency, and ordering of transformations.

There are many other constructions not covered, or merely touched on, here whose histories would undoubtedly make contributions to the evidence for or against various theories. For example, Chomsky and Lasnik (forthcoming) have proposed surface filters to deal with the peculiarities of infinitival constructions, such as the fact that no pronoun may appear in an infinitival relative unless it is the object of a preposition which has been pied piped. It seems likely that an investigation in greater depth into the history of various infinitival constructions would show whether such a filter approach could be extended in a natural fashion to account for the changes which have occurred within these constructions, such as the advent of subjects with infinitives and questioned infinitives. It would also be useful to trace the history of such things as the development of preposition stranding in movement relatives in other Germanic languages to see if the proposed explanation given here for the change in Middle English (that is, the new similarity between free relatives and wh-movement relatives) holds up for other languages. When parallel, but independent, changes have taken place in related languages, we may hope to narrow down the possible reasons for these changes by noting what conditions the different languages had in common, and how they differed, at the time when a given change took place.

In the next and final chapter we will discuss the changes we have seen from a diachronic point of view, and make some tentative remarks on the types of changes which may be expected in syntax.

Footnotes to Chapter Nine

It is important to note here that variables are not predicates under Bresnan's system.
${ }^{2}$ We will see in section 9.1.5.3 that in some languages, there may be a prohibition against both movement and deletion out of PP. The approach to preposition stranding by means of a prohibition like this extends well to the other Germanic languages, as we shall see.
$3_{\text {I }}$ have altered Bresnan's rule (in addition to the modification under discussion) to move the wh-word to the front of $\overline{\mathrm{S}}$, rather than into the complementizer. This is not relevant here.
${ }^{4}$ Under Chomsky's approach, the Complex NP and Wh-Island constraints are not separate constraints, but manifestations of the Subjacency Condition. However, it is useful to refer to these constraints to distinguish the facts they were originally intended to account for from other facts having to do with Choinsky's constraints. When I say that a transformation does not violate the Complex NP Constraint, therefore, I mean merely that the transformation does not extract things out of Complex NP's, and am not necessarily endorsing the idea that the Complex NP Constraint is the appropriate device for capturing this fact.
${ }^{5}$ By "unbounded deletion rules," I mean unbounded deletion under identity, in contrast with deletion of specific items, such as relative pronouns in languages which have free pronoun drop rules. Chomsky and Lasnik (forthcoming) suggest that deletion rules are very limited and apply after other transformations.
${ }^{6}$ To be more precise, this principle should provide that the language allows neither movement nor deletion of NP out of PP, unless evidence to the contrary exists. This provides for the fact that in some languages, preposition stranding is impossible in both movement and deletion constructions, while in others (such as 0ld English) it is possible only in deletion, and in still others, such as Modern English and the Scandinavian languages, it is possible with both types of rules. For further discussion, see section 9.1.5.3.
${ }^{7}$ Strang's (1970) claim (p.275) that verb+particle combinations were practically unknown in 01d English is an exaggeration. Her statement is based on Kennedy's (1920) study of verb-adverb combinations in English. In the first 3-0 lines of Beowulf, Kennedy found only five examples of the verb used with a separate adverbial modifier, as opposed
to twenty-five examples of verbs with inseparable prefixes. However, it should be noted that any construction which appears five times in 300 lines of 01d English poetry cannot be considered rare. What this does how is that verbs with inseparable prefixes were much more common than verb+particle combinations, but this does not mean that the latter construction was rare. It is true, however, that this combination is much more widespread in Modern than in Old English.

8
To make the filter work here, one would have to abandon the hypothes is that Topicalization involves Wh-Movement, and assume instead that the topic is generated in the sentence and then moved into the complementizer. This would entail having a three-place complementizer, with a slot for the wh pronoun, a slot for daet and de, and a slot for the topic, since the fact that topicalization occurs in subordinate clauses shows that the topics and wh-words cannot occupy the same position in the Comp:


While the topic must follow daet, the wh-word must precede it, as attested by se de relatives in 01d English and wh-that relatives and questions in Middle English.

Note that under this analysis, the facts which are explained by the wh-Movement analysis of Topicalization, such as the impossibility of topicalizing out of indirect questions, can no longer be explained by the fact that the slot which the topic must move into is already occupied. Instead, one would have to stipulate that no movement into either slot in comp is possible when one slot is already filled.
${ }^{9}$ As proposed for the Dutch version of the Locative Shift rule in Riemsdijk (1975). For details of P-Shift and Locative Shift, see sections 2.1.1 and 2.1.2, respectively.
${ }^{10}$ Subject-Verb Inversion was optional in Old English after Topicalization when the subject was a full noun phrase, but was not possible when the subject was a pronoun. This is similar to Modern English away ran John vs. *away ran he. However, when an adverb or negative particle was fronted in Old English, Subject-Verb inversion nearly always occurred with both pronominal and full NP subjects.
${ }^{11}$ We would not want this "no ghost" principle to rule out all deletion of things which have been moved. For example, we saw in Chapter Four that micle must be deleted in some cases after being moved. However, in the case of Micle Deletion, there is overt surface evidence for movement, because swa remains, and it is furthermore clear in these cases that swa has not moved by itself, because the underlying structures would be ungrammatical. We might propose that no construction may be
analyzed as involving movement when all overt traces of movement are lacking. Such a principle would allow Micle Deletion, but prohibit a movement analysis of relative clauses with no pronoun on the surface. This principle would furthermore impose obligatory deletion of an entire moved item (as opposed to deletion of part of it), as in the movement analysis of "tough" sentences, which never have overt pronouns:
a. *Mary is pretty at whom to look at.
b. Mary is pretty to look at.

Such a principle of "recoverability of movement" is suggested in Maling (1977).
${ }^{12}$ I am indebted to Joan Maling for helpful discussions about pied piping in the various Germanic languages. I am also grateful to Elisabet Engdahl for information about Swedish, and to Annie Zaenen and Anke de Rooij for facts about Dutch.
${ }^{13}$ The node "Spec" is a specifier node which Riemsdijk assumes, and is not important here.
${ }^{14}$ However, we have seen that in Old English, a full NP could be deleted by Relative Deletion just in case it was identical to a PP of which the head of the relative was the object.

15 I have suggested that the timing of the loss of this prohibition in English is due to the new similarity in Middle English of ordinary pronominal relatives to headless ones, which could always have stranded prepositions.

16 I am very grateful to Jean Lowenstamm, a native speaker of an eastern dialect of Yiddish, for help with these facts.
${ }^{17}$ Lowenstarm presents convincing arguments that vos is a complementizer, rather than a pronoun.

18
Bresnan allows for such relatives by formulating the Fixed Subject Constraint to apply only when the complementizer in question is not mentioned in the structural description of the rule extracting the subject. Since RCP mentions the complementizer next to the head of a relative clause, the man that left is allowed.
${ }^{19}$ Chomsky and Lasnik (forthcoming) claim that Perlmutter is simply wrong in asserting that Dutch does not obey the Fixed Subject Constraint. Chomsky and Lasnik's claim about Dutch is based on information given by a native speaker. However, other native speakers do allow violations of the Fixed Subject Constraint, but still have no subject
pronoun-drop rule. It seems clear that there is a dialect split in Dutch here, particularly since the native speaker who supplied Chomsky and Lasnik with their information has other systematic differences with Annie Zaenen, the native speaker who has supplied me with most of my facts.

That Icelandic also permits violations of the Fixed Subject Constraint, but does not have a pronoun drop rule, was pointed out to me by Avery Andrews.

20 By "overt" surface evidence, I mean a pronoun which appears on the surface, for example. By Chomsky's approach, the fact that a construction behaves in a certain way with respect to the constraints is indirect evidence of movement, but it would of course be circular to simply assert that only movement rules behaved in this way, so any rule behaving this way was a movement rule.

# C HAPTERX <br> TYPES OF CHANGES DISCUSSED 

### 10.0 Introduction

In this concluding chapter we will review the types of changes noted in this study and speculate on what they have to say about diachronic syntax in general. We will be particularly interested in two major questions. First, what role does reanalysis play in syntactic changes, and what brings a reanalysis about? Second, how far beyond the data he hears is a language learner willing to go in constructing a grammar? When a child generalizes a rule, for example, how sweeping a generalization will he make?

### 10.1 Review of the Major Changes

Let us now review the major syntactic changes which have been noted in this study. The following is a list of these changes:
(1) Changes Noted in this Study
a. Changes in relative clauses and questions

1. The replacement of de by daet in relative clauses
2. The replacement of the demonstrative pronouns by the interrogative pronouns in relative clauses
3. The generalization of Locative Shift and Locative Replacement to wh-pronouns
4. The loss of the first swa in free relatives
5. The replacement of the second swa in free relatives

## by dact

6. The reanalysis of swa and ever in free relatives as part of the wh-promoun
7. The spread of that in subordinate clauses; the advent of wh-that
8. The loss of the prohibition against movement out of PP
9. The advent of questioned infinitives and infinitives with subjects
b. Changes in comparative clauses
10. The advent of analytic comparatives
11. Micle Deletion becomes obligatory
12. Replacement of swa by de in proportional comparatives
13. The loss of Swa Movement

It would be helpful at this point to review the explanations proposed for the various changes, and how these changes tie in with each other. We will first review the changes in relative clausea and questions.
10.1.1 Changes in relative cla::ses and questions. First we will consider the replacement of de by dact in the relative clause system. As we have seen, this change falls into the category of simplification, involving the generalization of one complementizer to all positions in which an overt complementizer is found, replacing the old system of tiro different complementizers. Various factors conspired to bring about this simplification. First, daet was originally used as a complementizer in a wider range of constructions than de, making it, rather than de, the logical candidate if either of the complementizers was to generalize.

Secondly, daet could always appear in relative clauses with neuter heads, since it was also the neuter nominative and accusative singular form of the demonstrative pronoun. As grammatical gender declined, daet came to be used with all non-human heads, and the demonstrative pronouns lost much of their case and number marking, meaning that daet was now more widespread in relatives than before, which made it easier for its use to become even more general. It seems, then, that the replacement of de by daet was due to a combination of the homophony of the demonstrative pronoun daet and the complementizer with a general trend towards simplifying the complementizer system.

Another change in the relative clause system, the replacement of the demonstrative pronouns by their interrogative counterparts as relative pronouns, led to further, far-reaching changes in relative clauses and questions, as we have seen. As we have noted, it is not exactly clear why this change took place. The Germanic languages generally seem to be susceptible to this particular change. There are a couple of possible reasons for this. First, the interrogative pronouns are generally used in these languages as indefinite pronouns, and as such appear in free relatives, which gives them a foot in the door in the relative clause systen to begin with. Secondly, the relative and interrogative structures have syntactic and semantic similarities. They involve similar movement rules and have similar semantic interpretations as logical operators. In 01d English, there was the further factor of the loss of case marking in the demonstrative, but not the interrogative, pronouns. We have seen that although this may have been a contributing factor, it
cannot be the main reason for the replacement of the demonstrative pronouns by their interrogative counterparts, since similar replacements took place in other languages, such as German and Dutch, when the inflections of the two sets of pronouns were entirely parallel.

One of the side effects of the generalization of wh-pronouns to relatives was the generalization of two rules formerly involving only demonstrative pronouns, Locative Shift and Locative Replacement, to the interrogative pronouns, both relative and interrogative. It seems clear that this change, which must also be regarded as a simplification, since it is best described in terms of the loss of a feature in a couple of rules, was due to the new morphological similarity of the interrogative and relative pronouns. This is a cse of the language learner generalizing beyond the data he hears. Although the first generation of speakers to generalize these rules never heard interrogative pronouns or even wh-relative pronouns in these constructions, they generalized to this usage from the fact that they heard non-wh-relative pronouns (the demonstrative pronouns) in these constructions. Since both interrogative and demonstrative locative pronouns were used in relatives at this time, the language learners generalized rules involving demonstrative relative pronouns not only to relative wh-pronouns, but to all wh-pronouns, ignoring the fact that it was only relative pronouns they had heard in the Locative Shift and Locative Replacement constructions.

The loss of swa before the wh-pronoun in the free relatives was a very simple change which was probably brought about by the phonological weaking of swa in some dialects, but it nevertheless had far-reach-
ing effects. It led to the optional replacement of the complementizer swa in these relatives by daet, since without swa in the head, there was no need for swa in the complementizer. This replacement further led to the complete loss of the complementizer in the free relatives, since daet could normally be deleted in relatives.

Two other changes in the free relatives, the reanalyses of swa and ever as part of the wh-pronouns, were gradual ones. These changes are interestirig because they indicate that a particular lexical item may be analyzed in two different ways by the same speaker, even in the same construction. As we have seen, in Chaucer's time both swa and ever appear to have double analyses. Swa was originally a complementizer in the free relatives, but as we have seen, it was being replaced by daet in Middle English, on account of the loss of the first swa in this construction. With swa no longer being required as a complementizer in free relatives, and with the increasing use of daet in this construction, there was less reason to analyze swa as a complementizer than before. In Chaucer's time, it sometimes behaved as a complementizer, being separated from the wh-pronoun by other material, and at other times behaved as part of the wh-pronoun, co-occurring with daet, and not being separated from the complementizer. Similarly, ever began as a purely temporal adverb, but lost its temporal meaning and began to migrate to the front of the sentence in the free relative construction. Appearing at the front of the sentence, it was often adjacent to the wh-pronoun, and could therefore be analyzed as part of the pronoun itself. In Chaucer's works, ever sometimes appeared before daet in free relatives, and sometimes after it.

The interesting thing about the reanalyses of swa and ever is that at the time when a new generation of language learners began to use these items as part of the wh-pronoun, they did so in defiance of the fact that there was evidence in the data they heard that this was not the correct analysis of these words. There was evidence that swa was a complementizer, because whenever the relativized item in a free relative consisted of more than just a pronoun (as in what man, for example), the swa would not be next to the wh-pronoun, but would follow the entire relativized phrase. Nevertheless, it was considerably more common for the relativized phrase to consist only of a pronoun, in which case the proper analysis of the swa was not clear.

With ever, the reanalysis involved two changes. First, it was reanalyzed as part of the relativized phrase, rather than as part of the relative clause. This was brought about by the fact that it always occurred at the beginning of the relative clause. When there was no complementizer, it was possible to analyze ever as part of the relativized phrase, since it was adjacent to that phrase. This reanalys is took place despite the occurrence in the language learner's data of free relatives with complementizers, which made it clear that ever was a part of the lower clause. The second part of the reanalysis of ever was the change from occurring after the entire relativized phrase to becoming part of the wh-word. This is similar to the change with swa. Again, examples in which the relativized phrase consisted of more than just a pronoun clearly indicated that ever belonged after the entire relativized phrase. We saw that the spread of daet in subordinate clauses was due to
a number of factors. First, daet was always used in certain types of relative clauses and later generalized to all relative clauses. Secondly, daet replaced de not only in relative clauses, but also in the sentential complements of prepositions. Phonological weakening reduced da (when) to de, which was in turn replaced by daet. Finally, swa was replaced by daet in free relatives. These changes led to a situation in which it was simpler to allow daet in all sorts of subordinate clauses, rather than to try to follow complicated rules for its distribution.

The loss of the prohibition against movement out of PP we attributed to the changes in the free relatives and headed relatives which made the two types of relatives so similar to each other. Because these constructions were so similar, and because preposition stranding was possible in free relatives involving deletion, a reanalysis took place whereby preposition stranding became possible not only in wh-relatives, but also in questions, Topicalization, etc. This change, the loss of a constraint, is similar to rule loss in a way. However, it differs from rule loss in one way. Rules are presumably lost when there is no longer strong enough evidence that they exist. But a constraint of this sort probably cannot be learned, so we must assume that it is a universal, in some form. We have hypothesized that this constraint is lost not when there is merely no evidence that it exists, but rather when there is positive evidence that it does not exist.

Concerning the advent of questioned infinitives and pronominal relatives, we have had little to say. One interesting fact about these changes is that they may be a case of foreign influence in a language's
syntax.
10.1.2 Changes in comparative clauses. The advent of the analytic comparative in English is another change which we attributed to French influence. It is interesting that the influx of analytic comparatives did not completely drive out the indigenous synthetic comparative. Instead, the two types remained in free distribution for a while, and then the modern roles for the two types developed, with the synthetic type used for short words, and the analytic for longer words.

Other changes in comparative constructions were language-internal changes, as with the switch from optional to obligatory Micle Deletion. The new obligatoriness of Micle Deletion meant that swa nearly always appeared alone at the beginning of proportional comparatives. It was hypothesized that this fact, combined with the phonological identity of the de used in quantifier phrases and the complementizer de used in certain constructions, led to the reanalysis of certain instances of the complementizer de as a quantifier phrase, bringing about the substitution of de for swa in proportional comparatives. Since the proportional comparative was the construction in which Swa Movement was the most common, and since these comparatives no longer employed swa, the evidence for a rule of Swa Movement became very sparse, leading to a loss of Swa Movement.

### 10.2 Discussion of the Types of Changes

Let us now summarize the changes noted by type, and consider briefly their importance for a theory of diachronic syntax.
10.2.1 Summary of types. The changes we have seen fall into five major types, although some of the changes can be regarded as fitting into more than one category. For example, some instances of reanalysis also involve simplification.

The five types of changes just alluded to are as follows: (1) generalization or simplification, (2) reanalysis, (3) rule loss, (4) a switch from optionality to obligatoriness, and (5) changes due to foreign influence.

The changes which may be regarded as instances of generalization or simplification are the replacement of de by daet in relative clauses, the subsequent spread of daet through the subordinate clause system, and the generalization of Locative Shift and Locative Replacement to the whpronouns. The replacement of the demonstrative pronouns by their interrogative counterparts in relative clauses may also be regarded as a type of generalization, since interrogative pronouns were always used as relative pronouns in free relatives.

Two clear cases of reanalysis involve the swa and ever in free relatives. Both of these were reanalyzed as being part of the relative pronoun. In these cases, we have the reanalysis of specific lexical items in a specific construction. The reanalysis of the complementizer de as a quantifier phrase in constructions superficially similar to proportional comparatives is another reanalysis of a particular lexical item. It is also possible that whole constructions, rather than just specific lexical items in constructions, may also be reanalyzed.

The change in Micle Deletion is the only case we have seen of an
optional rule becoming obligatory. We have seen no examples of an obligatory rule becoming optional. We have also noted only one example of rule loss; the loss of Swa Movement, which was brought about by other changes which severely reduced the evidence for this rule. We have also noted one case of the loss of a constraint, the constraint against movement out of PP. In this case, the loss was occasioned not by the lack of evidence for such a constraint, but by the apparent presence of positive evidence against this constraint (that is, the possibility of preposition stranding in some free relatives, and the similarity of this construction to ordinary relatives). We have seen no examples of rule addition.

We have attributed the advent of the analytic comparative and the generalization of Question Formation and Relative Clause Movement (in a less general form) to infinitival phrases to French influence, since no language-internal reasons for these changes seem to exist, and since these constructions are parallel to French constructions. It is sometimes claimed that French influence did not go beyond the level of the word in Middle English, and if it is correct to attribute these two changes to French influence, we must discard the idea that there was no lasting French influence in English syntax. Examination of further constructions which seem to be due to French influence should help us get an idea of the limits of foreign influence in the syntax of a language. As a hypothesis, we would expect syntactic influence only when the two languages had a good deal of syntactic similarity to begin with. The changes which we have attributed to French influence were not changes
which brought about radically new constructions in English. More and less were always used to compare nouns, as in more men, so extending this construction to adjectives was not too difficult. English always had a Question Movement rule, so extending Question Movement to infinitival phrases was not too drastic.

Some changes do not fit neatly into any category mentioned. The loss of the first swa in free relatives seems to have been the result of phonological weakening. The resulting replacement of the second swa by daet in this construction represents a change only in the language data, rather than a change in the grammar. The rules stayed the same, with swa as a determiner, demanding swa as a complementizer, and daet inserted as the ordinary relative complementizer. Baet was not inserted because of a change in the rules of complementizer selection or insertion, but simply because the determiner swa was no longer present. However, swa did sometimes still occur as the complementizer in free relatives, so one change in the rules of selection of complementizers did occur at this time. The complementizer swa could optionally be selected for in free relatives instead of daet.
10.2.2 Implications for a theory of diachronic syntax. Let us conclude with a few observations on the contributions the changes discussed in this thesis might make towards developing a theory of syntactic change. Such a theory would hopefully help us predict, among other things, what sorts of simplification to expect in syntax. Under what conditions does simplification take place, and how extreme may we expect generalization and simplification to be? Related to this question is
the question of when we should expect a reanalysis to take place. Finally, in searching out the roots of syntactic change, we need to concern ourselves with the question of how much evidence in his data the language learner must hear to insure that he will analyze a construction in a certain way. Related to this question is the matter of how far beyond his data the language learner is willing to go. Some language changes involve the construction by language learners of a grammar which does not account for precisely the data they hear, but a grammar which may be a simpler one than that needed to correctly account for the data. One thing which we have seen in this study is that while simplification may be an important force in syntactic change, it seems that simplification may need a catalyst. For example, consider the extension of Locative Replacement and Locative Shift to wh-pronouns, which we have analyzed as the loss of the feature +demonstrative in these rules. This change could logically have come at any time in the history of English. However, the fact is that it came at just the time when the interrogative pronouns were beginning to be used as relative pronouns. The language learner now heard both hwaer and daer as locative relative pronouns. There was no necessity, logically, for this fact to cause the language learner to generalize Locative Shift and Locative Replacement to hwaer, but this is what happened. It is striking that this simplification took place in spite of the fact that the language learner presumably never heard hwaer participating in these rules (except perhaps in free relatives). The fact that one relative pronoun (daer) was subject to Locative Shift and Locative Replacement was sufficient to cause a relative pronoun
which alternated with it (hwaer; to also become subject to these rules. It is interesting that the real interrogative hwaer began to participate in these rules at precisely the same time when relative hwaer did. One might have predicted that first relative hwaer would be used in Locative Shift and Locative Replacement, because relative daer was, and then these rules were simplified to include interrogative hwaer, on the analogy of relative hwaer. But instead, the rules were generalized at once to both uses of hwaer, relative and interrogative. A possible reason for this is that to fomulate Locative Shift and Locative Replacement to apply to both inierrogative and relative hwaer resulted in simpler rules than to fommlate them to apply only to relative hwaer. The latter alternative would require rules which applied to either +relative or +demonstrative locative pronouns (since non-locative daer, her, etc. still participated in these rules), while the former only required the rules to apply to any locative pronoun.

A similar simplification involving both the interrogative and relative uses of the wh-pronouns is the generalization of daet to the complementizer position of both headed wh-relatives and questions. Again, there was a catalyst in this case. The combination wh-that did occur in free relatives, due to changes which took place in these constructions, plus daet was spreading into other sorts of subordinate clauses. It seems likely that the language learner, hearing daet with a wh-pronoun in free relatives, generalized the daet insertion rule to any subordinate clause beginning with a wh-pronoun. Again, one might expect an intermediate stage here, with wh-that first occurring in headed relatives, due
to the influence of free relatives, and then generalizing to indirect questions, but this is not what happened.

In trying to fix the limits of diachronic simplification, it is instructive to compare the Middle English wh-that with the Old English se de. It was suggested in Chapter Two that in preliterary 01d English the headed se de relative developed from the "he who" sort of relative in which the demonstrative pronoun was the head of the relative clause. This is parallel to the development of wh-that in headed relatives from free relatives. There is a striking difference, however, between the Old and Middle English facts. In Middle English, that did not remain confined to just relative clauses, but spread into indirect questions at the same time as it appeared in headed wh-relatives. It is logically possible that in 01d English, when de began to cooccur with se in headed relatives, it would also cooccur with interrogative pronouns in indirect questions. In fact, a slightly simpler grammar would result if de could be inserted in all subordinate clauses, rather than just in relative clauses. However, de did not generalize to all subordinate clauses, as daet later did. The difference seems to be due to two factors. First, in Middle English the relative and interrogative pronouns were morphologically identical. This meant that wh-that in free relatives could easily lead to wh-that not only in headed relatives, but also in questions. On the other hand, in Old English the interrogative and relative pronouns were quite distinct. Although it was logically possible for the language learner to generalize from se de to wh-de, the pronouns were not similar enough to cause such a drastic generalization. Second-
ly, in Middle English, that had become the all-purpose complementizer. In Old English, te retained a distinct role as a relative complementizer, making it less likely to generalize to indirect questions.

By comparing such similar, but somewhat different, changes in the same language or in different languages, we may hope to gain an understanding of how far the language learner is willing to generalize beyond the data he hears. One factor which, from the facts discussed here, seems to play an important role in simplification is that of the morphological identity of tivo lexical items. Besides the generalization of Locative Shift and Locative Replacement and the spread of wh-that, we have hypothesized that the morphological identity of the pronouns used in free relatives with those used in headed relatives was crucial in the loss of the prohibition against movement out of PP. It was proposed that because preposition stranding was possible in free relatives in which the wh-pronoun was the head, it became possible in ordinary relatives, which because of the new use of wh-pronouns as relative pronouns, along with changes in the free relatives, were now superficially quite similar to these free relatives.

While morphological identity seems to play an important part in syntactic change, we would not expect such identity alone to be enough to cause a simplification involving morphologically identical items or to cause one such item to be reanalyzed as syntactically identical to the other. In the case of the wh-pronouns, we have morphologically identical items which also share some semantic and syntactic similarities. They both participate in similar movement rules, both may be treated se-
mantically as logical operators, etc. We have seen, however, one case in which the morphological identity of two very different items syntactically and semantically led to the reanalysis of one as being like the other, if our analysis of the replacement of swa by de is correct. However, in this reanalysis of the complementizer de as a quantifier phrase, there was a circumstance which made it reasonable to regard de as a $Q P$ in this construction. Because swa, which was similar syntactically and semantically to de, occurred at the beginning of the clause in proportional comparatives, it was reasonable to analyze de at the beginning of a clause as the determiner of a quantifier phrase when there was a compared adjective which could be analyzed as being modified by the de. If such a construction with swa did not exist, we would expect this reanalysis of complementizer de to take place.

To summarize the most important findings of this study, from the point of view of developing a theory of diachronic syntax, two facts stand out. First, the morphological identity of lexical items plays an important role in generalization and reanalysis. Even when two constructions still clearly have distinct analyses, as with free versus headed relatives, the identity of the pronouns in these constructions caused them to be treated in the same way with respect to preposition stranding and that insertion. Furthemore, even questions were treated in the same way. Secondly, it seems clear that reanalysis may come about even when there is evidence in the language learner's data against the new analysis of a construction. While one might reasonably propose a theory of syntactic reanalysis which stipulated that a construction would be reanalyzed
only when the evidence for the earlier analysis had disappeared (through rule loss, for example), such a theory fails in the face of the reanalyses of swa and ever as being part of the indefinite relative pronoun. In both cases, there was evidence against such an analysis. However, the fact that these items were frequently juxtaposed with the pronoun outweighed the fact that there was evidence (in cases where they were not juxtaposed) against their being part of the relative pronoun. It is also interesting that competing analyses of swa and ever appear to have existed in the gramnars of the same speakers. It may be that such competing analyses are an intermediate step in reanalysis. At any rate, it seems clear that a theory of syntactic change which allows for a new analys is of a construction only when there is no longer evidence for the old analys is will be inadequate. Our theory must allow for a certain amount of initiative on the part of the language learner not only in simplifying rules and dropping rules, but also in reanalyzing structures in ways apparently not forced by the data. How much the evidence for the older construction needs to be depleted before a new analysis may appear is an open question.

These remarks are all tentative, being made on the basis of only a few changes. The analyses of the changes discussed here are, of course, only as good as the analyses of the individual stages. Many more careful studies of changes in constructions in different languages will be necessary before we can develop a true theory of diachronic syntax.

> 10.3 Concluding Remarks
of changes proposed here, I hope to have demonstrated to the reader at the least that interesting syntactic changes have occurred in the history of English, and furthermore that it is possible to analyze these changes and draw interesting conclusions for linguistic theory from them. However, it is my feeling that although interesting and important work can be carried out in a large corpus, the final key to understanding syntactic change will come from the study of language acquisition and studying syntactic differences between generations in livirig languages. Through such study we may hope to discover how much people's gramars change through their lifetimes, and in what ways, exactly what the relationship is between the data the language learner hears and the grammar he constructs, and other questions of this sort. With texts, it is impossible to tell for certain what the nature of the data of the language learner was, because of the time-lag between changes in spoken and written language and the interference of stylistic conventions. The texts may be used in conjunction with the study of currently occurring changes to develop a theory of syntactic change. It is my feeling that too little is known about the specifics of syntactic change to attempt more than a very general theory at this point.

## APPENDIX

I. Some O1d English Morphology
A. Nouns
a-stems

Masculine
Sing. Nom. daeg "day"
Acc. daeg
Gen. daeges
Dat. daege
P1. Nom. dagas
Acc. dagas
Gen. daga
Dat. dagum

Neuter
scip "ship" word "word"
scip
scipes
scipe
scipu
scipu
scipa
scipum

0 -stems
(feminine only)
Sing. Nom. giefu,-o "gift" lar "lore"
Acc. giefe
lare
Gen. giefe lare

Dat. giefe lare
P1. Nom. giefa,-e lara,-e

Acc. giefa,-e lara,-e

Gen. giefa,-ena lara,-ena
Dat. giefum larum

## i-stems



## radical consonant declension

## Masculine

S. N. monn "man"
A. monn
G. monnes
D. menn
P. N. menn
A. menn
G. monna
D. monnum

Note: This is by no means a complete account of the nominal declensions, and length of vowels, which plays a role in determining the presence or absence of certain suffixes, has been ignored.

Masculine
S. N. god "good"
A. godne
G. godes
D. godum
P. N. gode
A. gode
G. godra
D. godum
godum
godum



Note: The demonstrative pronouns also served as definite articles and also as relative pronouns. The masculine and neuter demonstratives also had instrumental forms: either dy, don, or de for both maculine and neuter.

## interrogative

|  | Masculine | Neuter |
| :--- | :--- | :--- |
| S. N. hwa "who" | hwaet |  |
| A. hwone | hwaet |  |
| G. hwaes | hwaes |  |
| D. hwaem, hwam | hwaem, hwam |  |
| I. hwi, hwon | hwi, hwon |  |

## Abbreviations of Texts

A\&M="Of Arthur and of Merlin," ed. Macrae-Gibson. Line no.
A. Riwle $=$ Ancrene Riwle, ed. Day. Page and line.
A.Wisse $=$ Ancrene Wisse, ed. Tolkien. Page and line.

Alc.Gr. $=$ Alfric's grammar, ed. Zupitza.
Alc.P. =Pope's edition of Aelfric's homilies. Roman numerals=no. of homily; arabic numerals=line no.

Alc.S. $=$ Skeat's edition of Aelfric's lives of saints. Roman rumerals=no. of homily; arabic numerals=line no.

Alc.Th. =Thorpe's edition of Aelfric's homilies. Vol. no., page and line.
Angl. Hom. $=$ Angelsächsische Homilien und Heilgenleben, ed. Assmann. Homily no. and line no.

Ayen. =Ayenbite of Inwyt, ed. Morris. Page and line.
B.Brut=Brie's edition of the Middle English Brut. Capital letters refer to Brie's abbreviations for the MSS. If no capital letter, the MS is MS Rawlinson (the first volume of Brie's ed.). Page and line.
$\mathrm{BT}=$ Bosworth and Toller Anglo-Saxon dictionary, found in bibliography under Toller. Further abbreviations are found in the preface to the dictionary.

Bede $=0 \mathrm{E}$ version of Bede's Ecclesiastical History, ed. Miller. Section, subsection, page, and line.

Bel.=Belfour's collection of twelfth-century homilies. Homily and line no.

Ben. =Benedictine rule, ed. Schröer.
Beo.="Beowulf," ed. Klaeber. Line no.
Blickling=Blickling homilies, ed. Morris. Page (and line).
Boeth. $=$ King Alfred's Boethius, ed. Sedgefield. Section, subsection (page and line).

Bright=Bright's Anglo-Saxon reader. Page and line.
$\mathrm{CP}=$ King Alfred's translation of Gregory's Pastoral Care (Cura Pastoralis), ed. Sweet. Page and line.

Ch. =Chaucer. Abbreviations of his works are those found in the Tatlock anć Kennedy concordance.

Chad=Life of St. Chad, ed. Napier. Line no.
Ex. $=$ Exeter book, ed. Gollancz and Mackie. Names of individual poems follow' "Ex." Line nos.

Exam. $=$ Exameron Anglice, ed. Crawford.
Gen \& Ex. =Story of Genesis and Exodus, ed. Morris. Line nos.
Gower C.A. ="Confessio Amatis" of John Gower, ed. Macauley.
Jesus MS=MS Jesus College, Oxford E 29, in Morris' Old English Miscellany.
K.Serm. $=$ Kentish Sermons, in Morris' 01d English Miscellany.
L.Brut=Layamon's Brut, ed. Madden. Line no.
L.Brut (Otho) $=0$ tho MS of Layamon's Brut, 50 or 75 years later than earlier MS. Ed. Madden.

Lyd. R\&S=Lydgate's "Reson and Sensuallyte," ed. Sieper.
M.Halgan Rode=Legends of the Holy Rood, ed. Morris.
M.OEH=Morris' Old English homilies. Volume, homily no., page and line.

Malory $=\frac{\text { The }}{\text { als }} \frac{\text { Works }}{\text { refer }} \frac{\text { of }}{\text { to }} \frac{\text { Sir }}{\text { sections. }} \frac{\text { Malory, vol. I, ed. Vinaver. Roman numer- }}{\text { Page and line. }}$
Mart. $=0 \mathrm{E}$ martyrology, ed. Herzfeld. Page and line.
3 OE=Three Old English Prose Texts, ed. Rypins.
OET=01d English Texts, ed. Morris. Further abbreviations are those used by Morris.

Orm. $=0$ rmulum, ed. Holt. Line no.
Oros. $=$ King Alfred's Orosius, ed. Sweet. Section, page, and line.
OWl\&N. = "The Owl and the Nightengale," ed. Stanley.
P.C. =Peterborough Chronicle, ed. Clark; also Earl and Plummer. By year of entry.

SEL=South English legendary, ed. Horstmann.
Sol. $=$ King Alfred's translation of St. Augustine's "Soliloquies," Ed. Carnicelli.

St.Guth. =Life of St. Guthlac, ed. Gonser. Section and line.
St. John=Gospel of St. John, in the West-Saxon gospels, ed. Grunberg. Line no. Also Chapter and verse in parentheses.

St.Jul.=The life of St. Juliana, ed. D'Ardenne. Line no.
St.Kat.=The life of St. Katherine, ed. Einenkel. Line no.
St.Luke=Gospel of St. Luke, in the West-Saxon gospels, ed. Grunberg. Line no.

St.Marg.=Life of St. Margaret, ed. Mack. Page and line.
St.Mark=Gospel of St. Mark, in the West-Saxon gospels, ed. Grunberg. Line no.

St.Mat. =Gospel of St. Matthew, in the West-Saxon gospels, ed. Grunberg. Line no. Also Chapter and verse in parentheses.
T. Wohunge=Be Wohunge of Ure Lauerd, ed. Thompson, No. of piece and line
no.

Tretyse=Tretyse of Loue, ed. Fisher.
$V \& V=\underline{V i c e s}$ and Virtues, ed. Holthausen. Page and line.
Wulf. $=$ Homilies of Wulfstan, ed. Bethrum. Page and line.
Wulf.N. $=$ Homilies of Wulfstan, ed. Napier.

## Notes on the Texts Examined

An asterisk following the title of a text indicates that that text has not been fully, but only partially, examined for the purposes of this study. The abbreviation EETS indicates that the text in question is a publication of the Early English Text Society. Unless otherwise noted, all EETS volumes listed are publications belonging to the original series of EETS publications. Those of the extra series are indicated by the abbreviation EETS ES. No attempt has been made to list all the manuscripts containing any work. Rather, the manuscript upon which the edition used in this study is based is mentioned and described briefly. For further details of any manuscript or information about other manuscripts containing any work, see Ker's catalogue. Following Ker, I have indicated the approximate dates of manuscripts, when no more accurate date is known, by the half century. $\underline{S} \cdot \underline{X}^{\top}$, for example, indicates that the manuscript belongs to the first half of the tenth century. S. X/XI indicates that the manuscript is from the end of the tenth or the beginning of the eleventh century. The notation $\underline{S} . \underline{x}$ med indicates that the manuscript belongs to the middle of the tenth century.

## I. Old English

## A. Early Poetry

1. Beowulf. MS British Museum, Cotton Vitellius A.XV, ff. 94-209. S.X/XI. Composition 700-50. Ed. F. Klaeber, 1922 .
2. Exeter Book. MS Exeter, Cathedral 3501, ff. 8-130. S.X-2. Ed. Gollancz, 1895 (first volume) and Mackie, 1934 (second voiume). Miscellaneous poems.
3. Vercelli Book. MS Vercelli, Biblioteca Capitolare CXVII. S.X-2. Miscellaneous poems. Also contains prose, listed below. Ed. Krapp, 1932.

## B. Prose and Later Poetry

1. Works of King Alfred
a. . Boethius. King Alfred's translation from Latin of Boethius' De Consolatione Philosophiae. MS British Museum, Cotton 0tho A.vi., ff. $1-129$ (damaged by fire). S.X med. Supplemented with Bodleian 180 (2079), S.XII-1. Ed. Sedgefield, 1899.
b. Orosius. King Alfred's translation from Latin. MS British Museum, Additional 47967. S.X-1. Supplemented with MS British Museum, Cotton Tiberius B.i (containing the account of Othere's and Wulfstan's voyages). S.XI-1-XI-2. Ed. Sweet, 1883.
c. Pastoral Care. King Alfred's translation from Gregory's Regula pastoralis. Bodleian, Hatton 20 (4113). 890-7. Ed. Sweet, 1871-2.
d. King Alfred's Version of St. Augustine's "Soliloquies."
2. Other tenth-century compositions (and earlier prose)
a. Oldest $\frac{\text { English }}{\text { mainly }} \frac{\text { Texts. A collection of the earliest manuscripts, }}{\text { chat }}$ wills, ed. Sweet, 1885 . mainly charters and wills, ed. Sweet, 1885.
b. Three Old English Prose Texts. Three prose texts in MS British Museum, Cotton Vitellius A.XV (same MS as Beowulf). S.X/XI. Ed. Rypins, 1924.
c. Blickling Homilies. Tenth century collection of sermons, belonging to a private collection. c.971. Ed. Morris,
1880 .
d. Vercelli Homilies. Ms Vercelli, Biblioteca Capitolare CXVII. S.X-2. Parts edited by Forster, 1913.
e. Parker Chronicle. The oldest manuscript of the Anglo-Saxon chronicle. MS Cambridge, Corpus Christi College 173. S.IX/ X-XI-2. The entries from 892-1001 are thought to be nearly contemporary with the events they describe. The remaining entries (up to the year 1070) were written in the eleventh and early twelfth centuries.
f. Bede's Ecclesiastical History. The translation into AngloSaxon of Bede's Latin history. Main text, MS Bodleian Library, Tanner 10. S. X-1. Ed. Miller, 1890.
g. Martyrology. Fragments of a ninth century Anglican manuscript exist, but best MS is British Museum Cod. Cotton Julius A. X, a West-Saxon transcript of a Mercian MS. S.X-2.
3. Works of Aelfric, Abbot of Eynsham (late tenth and early eleventh century composition)
a. Homilies-first series. Main MS, Cambridge, University Library Gg.3.28. S.X/XI. Ed. Thorpe, 1844.
b. Homilies-second series. A collection of Aelfric's homilies from many manuscripts, ed. Pope 1967. For a description of not only the manuscripts edited in Pope's collection, but all the manuscripts with Aelfric's homilies, see Pope's comprehensive introduction to this collection.
c. Lives of Saints. Main MS, British Museum, Cotton Julius, E.7. S.XI in. Ed. Skeat, 1881-1900.
d. De Temporibus Anni. MS Cambridge University Library Gg.3.28. S.X/XI. Ed. HeneT, 1942.
e. The Heptateuch. A translation of the first six books of the Bible, at least partly by Aelfric. MS British Museum, Cotton Claudius B.iv. S.XI-1. Ed. Crawford, 1922.
f. Exameron Anglice. Aelfric's Old English Hexameron. MS. Bodley Hatton 115 - (1075-1100?) Ed. Crawford, 1921.
g. Grammar and Glossary. Aelfric's grammar of Latin for English speakers. MS Oxford, St. John's College 154. S.XI in.

Ed. Zupitza, 1880.
4. Works attributed to Wulfstan, Bishop of Worcester and archbishop of York 1003-23.
a. Canons of $\frac{\text { Edgar. }}{201-11 \text { th }} \frac{\text { Ed. Fowler, 1972. MS. Junius } 121 \text { and } C C C C}{\text { cent. }}$
b. Homilies. A collection of homilies attributed to Wulfstan, found in various MSS, edited by Napier 1883, and Bethrum 1957. Main MSS are Bodleian, Hatton 113, 114 (5210, 5134), S. XI (3rd quarter), Cambridge, Corpus Christi College 419+421, S.XI-1, and Cambridge, Corpus Christi College 201, pp. 8-160, 167-76, S.XI med.
5. Miscellaneous eleventh century manuscripts.
a. West Saxon Gospels. The West-Saxon version of the gospels. Main MS, Cambridge University Library Ii.2.11. Ed. Grunberg, 1967. The gospel of Saint John also edited from this MS by Bright, 1904. Referred to by abbreviations for the individual gospels.
b. Rule of St. Benedict. MS Cambridge, Corpus Christi College 162, pp . T39-60, S.XI-1. Translation from Latin. Ed. Schröer, 1885-88.
c. St. Guthlac. A translation of the Latin life of St. Guthlac. A fragment of this is found in the Vercelli book, but best complete MS is Bodleian, Cotton Vespasian D.xxi, ff.18-40, S.XI-2. Ed. Gonser, 1909.
d. Be Domes Daege. Ed. Lumby, 1896. Cambridge, Corpus Christi College $201 \mathrm{~S} . \mathrm{XI} \mathrm{in}$.
6. Twelfth century manuscripts containing copies of works of eleventh century (or earlier) works
a. Peterborough Chronicle. MS Bodlean Laud Misc. 636, S.XII med. A copy of the Anglo-Saxon Chronicle made in the early twelfth century, with contemporary original additions in the midtwelfth century. Entries up to year 1121 are in the same hand and ink, and entries 1122-31 are also probably by this same scribe. The entries from 1121-31 are more or less contemporary. The entries from 1132-54 are made by another scribe. Ed. Clark, 1970. Also edited as MS E in Plummer, 1899.
b. St. Chad. A translation of the life of St. Chad from Bede's Ecclesiastical History. MS Bodleian, Hattori 116 (5136), S.XII-7. Nearly all the articles in this manuscript are copies of Aelfric's homilies, so it seems likely that this piece was also composed much earlier than the date of this copy. Ed. Napier, 1887.
c. Morris' $\frac{12 \text { th }}{}$ and 13 th Century Collection. Items IX and $X$ in Morris' first volume of OVd English Homilies, 1868, are from MS Lambeth 487, S.XII/XIII. These items are transliterations of Aelfric's homilies.
d. History of the Holy Rood. A twelfth century copy of the crosslegend, composition as early as beginning of the eleventh cent. Article 12 of MS Bodley $343(2406)$, c.1175. Ed. Napier, 1894.
e. Belfour's Homilies. A collection of twelfth-century transliterations of earlier homilies, some of which are known to be compositions of Aelfric. MS Bodley 343 (2406), c. 1175. The items which are copies of Aelfric's homilies are very faithful to Aelfric's syntax. Ed. Belfour, 1909.

## II. Early Middle English

## A. Twelfth Century

1. Manuscripts of the twelfth century containing twelfth century compositions.
a. Warner's Homilies. Most of the homilies in this collection are copies of Aelfric's homilies, but item XLIII, the only one used here, is a translation made about $1100-50$ of a Latin sermon. MS Vespasian D.xiv, 1125-50. Ed. Warner, 1917.
b. Peterborough Chronicle. All the entries were made in the twelfth century (see 1.6.a), so the entries for years in the twelfth century are more or less contemporaneous. Most of the interpolations are also from the twelfth century. Ed. Clark, 1970. Also edited as MS E in Plummer, 1899.
2. Early thirteenth century manuscripts containing works of late twelfth century composition
a. Poema Morale. Several MSS: MS Trinity College B.14.52, c. 1200 , ed. Morris 1873; Lambeth MS 487 (see I.6.c above), ed. Morris 1868. Also Ureisun Louerde \& Homilies.
b. $\frac{O w l}{\text { and }} \frac{\text { Nightengale. MS Cotton Caligua A.ix. Kentish rhyme, }}{}$ but Southwest Mid. forms. MS first half of thirteenth century, composition 1189-216. Ed. Stanley, 1960.
c. Morris' $\frac{01 d}{}$ English Homilies of the Twelfth Century (volume 2). MS Trinity College B.14.52. c. 1200, composition ?c. 1175., mainly West Saxon. See 2a. above. Ed. Morris, 1873.
3. Early thirteenth century manuscripts containing works of thirteenth century composition
a. Layamon's $\frac{\text { Brut. A lengthy chronicle of England in verse. }}{\text { MS }}$ Two MSS: MS Cotton Caligula Aix, 1200-25, Southwest Mid. dialect, and Cotton Otho C.xiii, about 50 years later, Southwestern dialect. Composition c.1205. Unless specified, all examples are from the earlier MS, designated by 'L.Brut'. Examples from later MS are designated 'L.Brut(Otho)'. Both MSS ed. Madden, 1847.
b. Book of Vices $\frac{\text { and }}{\text { Virtues. MS Stowe 34, c.1225, composition }}$ c.1200. East Mid. dialect.
c. Ormulum. Lengthy religious poem, composition and MS both c.1200, Northeast Mid. dialect. Ed. Holt, 1878.
d. Katherine Cycle. All found in Bodley 34, c. 1200, composition c. 1200 . Some also found in other MSS. West Mid.
4. St. Katherine. Bodley 34, ed. Einenkel, 1884.
5. St. Juliana. Bodley 34, ed. D'Ardenne, 1961.
6. St. Margaret. Bodley 34, ed. Mack, 1934.
7. Hali Meidenhad. A diatribe against marriage. Bodley 34, ed. cockayne, 1866.
8. Sawle's Warde. Bodley 34, ed. Morris 1868, item XXVIII.
e. Ancrene Wisse. A rule for nuns. MS Corpus Christi College Cambridge 402, 1225-50. Comp. early 13th, c.1200. Language identical with Bodley 34. Ed. Tolkien, 1962.
f. Ancrene Riwle. Independent version of the Ancrene Wisse. MS Cotton Nero A.xiv, second quarter of 13 th. Ed. Day, 1952.
g. Wohunge of Ure Lauerd. MS Cotton Titus D.xviiis c. 1220,
comp. early 13th. Ed. Thompson, 1958. Also ed. Morris, 1868, item XXIX.
h. Lofsong Lefdi. HS Cotton Nero A.xiv (see II.3.f above). Ed. Morris, 1868 . Also Lofsung Louerde.
9. Later (mid or late) thirteenth century manuscripts containing thirteenth century compositions
a. Genesis and Exodus. An East Midland rendering of the story of Genes is and Exodus into verse, c. 1300, comp. c. 1250. Ed. Morris, 1865.
b. Bestiary. MS Arundel 292, mid 13th. Comp. 1200-50. East Mid. dialect. Ed. Morris, 1872.
c. Kentish Sermons. MS Bodleian Laud 471, 1250-1300. Ed. Morris,
d. Jesus MS. MS Oxford, Jesus College E 29 c. 1276, comp. probably after 1244. West. Mid. Ed. Morris, 1872.
e. Harrowing of Hell and Nicodemus. MS Digby 86, c. 1280, comp. not later than 1250. West Mid. Ed. Hulme, 1907.
f. South English Legendary. A collection of lives of Saints from many manuscripts. Oldest MS is MS Laud 108, 1280-90, comp. earlier. Southwestern dialect. Ed. Horstmann, 1887. Other MSS (early 14th century) ed. D'Evelyn, 1956-59.
g. Miscellaneous collection. A collection of various ME pieces from different MSS, ed. Hall, 1930.
10. Fourteenth century manuscripts containing compositions of the late thirteenth or early fourteenth century
a. Arthour and Merlin. Verse, MS Auchinleck, 1330-40, comp. 13th $\overline{\text { century }}$. East Mid. Ed. Macrae-Gibson, 1973.
b. Harley 2253 . A collection of poems found in MS Harley 2253, c. 1325. MS is West Mid., but many of the poems were originally composed in other dialects. Composition mostly thirteenth century. Ed. Brook, 1958.
c. Handlyng Synne. Verse, translated from French. MS British Museum Harley 1701, c. 1360, composition a. 1303. Lincolnshire. Ed. Furnivall, 1901.
d. Ayenbite. Dan Michel's Ayenbite of Inwyt, original manuscript
translated from French in 1340. Kentish. British Museum, Ed. Morris, 1867.
e. Havelok. Verse, MS Bodleian Laud Misc. 108, 1310-20. MS East liid., but composition Northeast Mid., perhaps 1275-80. Ed. Skeat, revised ed. Siam, 1915.
f. Rolle. Various works of Richard Rolle of Hampole, who died in 1349. MS Cambridge Dd V.64, 14th century. Horthern. Only piece from this MS used here is "Be forme of liuying." Other pieces by Rolle are found in a later MS, HS Lincoln Cathedral, Thornton, c. 1430, ed. Perry, 1866. The syntax of the later $: 4$ does not appear to differ significantly from that of the earlier.
11. Later fourteenth century works
a. Chaucer. Only the Canterbury Tales have been fully examined here, although other examples have been taken from the Tatlock and Kennedy concordance. HS Ellesmere. Ed. Skeat, 18891900.
b. Brie's Brut. A later chronicle of England, compiled from many MSS, ed. Brie, 1906. The first volume of Brie's edition is taken from MS Rawlinson B.171, c. 1400. Composition, 2nd half of the fourteenth century.
c. Wicliffe. Only the Apology for Lollard Doctrines has been examined here. iAS Trinity College, Dubl in C.5. Fourteenth or early fifteenth century. Wicliffe lived from 1320-1384. Ed. Todd, 1842.
12. Early fifteenth century
a. Lydgate. Only his Reson and Sensuallyte has been examined here. 14S Fairfax 16. Lydgate was born in 1371. Ed. Sieper, 1901.
b. Brie's Brut. The second volume of Brie's edition is taken from fifteenth century MSS. Brie's MS B is MS Cambridge, Corpus Christi College 174, beginning 15th.
13. Later fifteenth century
a. Brie's Brut. The remaining MSS used in Brie's edition (see 6.b. and 7.b. above) are from the middle or late fifteenth century.
b. Treytyse $\frac{\text { of }}{\text { Ed. Fisher, }} \frac{\text { Loue. Printed. Translated from French in } 1493 .}{1957 .}$
c. Caxton. Only his Book of Curtesye and the selections printed in BTake, 1973 have been examined here. Book of Curtesye, 1477-8, ed. Furnivall, 1932.
d. Malory. Only the first volume of his Morte d'Arthur has been examined here. Ed. Vinaver, 1947.

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